ANMI

SYNCHRONOUS SOLUTION

AN MI TOOLS

CATALOGUE

ANMI

TRIẾT LÝ KINH DOANH

• Cống hiến hết mình vì một nền công nghiệp mạnh mẽ, hiệu quả thông qua kiến thức, sự tử tế, gắn liền với kinh tế tuần hoàn

BUSINESS PHILOSOPHY

• *Dedicated to a strong and eficient industry through knowledge and kindness, associated with circular economy*

SỨ MỆNH

• Xây dựng thành công chuỗi sản phẩm dịch vụ công nghiệp chất lượng cao
• Khởi tạo giá trị và sự khác biệt ưu thế kỹ thuật, khẳng định đẳng cấp và sức mạnh người Việt

MISSION

• *Successfully building a chain of high quality industrial products and services*
• *Create value from technical advantages, affirm the class and strength of Vietnamese people*

TẦM NHÌN

• Mang đến cho thế giới danh mục các dụng cụ CNC chất lượng, có thể đón đầu và đáp ứng nhu cầu của khách hàng
• Là một tổ chức hiệu quả cao, tinh gọn và hoạt động nhanh - tối đa hóa lợi nhuận lâu dài cho đối tác, đồng thời lưu tâm đến trách nhiệm chung

VISION

• *Bringing to the world a portfolio of quality CNC tool that can anticipate and fullfill the needs of our customer*
• *A highly efficient, learn and agile organization maximize long term profits for partners while keeping shared responsibility inmind*

GIÁ TRỊ CỐT LÕI

• Hợp tác: Tận dụng "thiên tài" tập thể
• Chính trực: Trung thực, trách nhiệm,
chuyên nghiệp, đạo đức
• Đam mê: Dấn thân bằng cả trái tim và khối óc
• Đa dạng: Chuỗi sản phẩm dịch vụ đồng bộ
• Chất lượng: Những gì chúng tôi làm, chúng tôi làm tốt

CORE VALUES

• *Cooperation: Leveraging the collective "genius"*
• *Integrity: Honesty, responsibility, professionalism, ethics*
• *Passion: Commited with all your heart and mind*
• *Diversity: Synchonous product and service chain*
• *Quality: What we do, we do well*

TINH THẦN CÔNG NGHỆ CAO

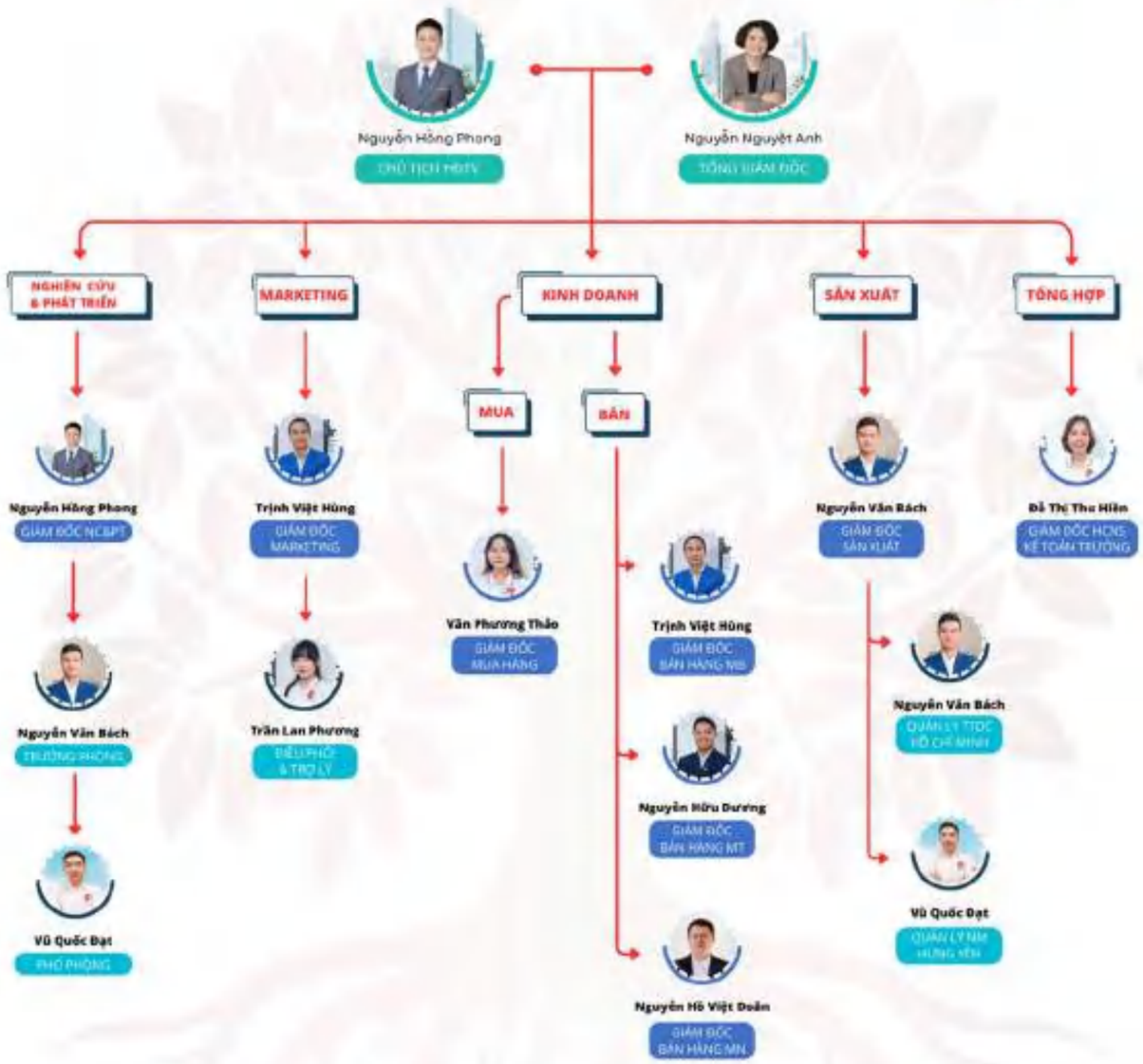
• Cống hiến phục vụ tổ quốc, luôn tiên phong
• Không ngừng đổi mới, tư duy sáng tạo
• Phát triển lâu dài, lấy chữ tín làm đầu
• Tôn trọng sự thật, lấy thực tế làm nền tảng, sống hết mình với tuổi trẻ, không ngừng phấn đấu

HIGH-TECH SPIRIT

• *Dedication to serving the country, always pioneering*
• *Continuous innovation and creative thinking*
• *Long-term development, taking credit first*
• *Respect the truth, take reality as the foundation, live your youth to the fullest, constantly striving*

QUÁ TRÌNH HÌNH THÀNH & PHÁT TRIỂN

Development milestone



QUÁ TRÌNH HÌNH THÀNH & PHÁT TRIỂN

Development milestone

2024
Kỷ niệm 15 năm thành lập công ty
Mở rộng quy mô NM Hưng Yên
15th company anniversary
Hung Yen factory expansion

2023
Mở Rộng Nhà Máy Miền Nam
Khai Trương Chi Nhánh Hải Phòng
Southern Factory expansion
Opening Hai Phong Branch

2018
Khánh Thành Nhà Máy
Tại Hưng Yên
Inauguration of Hung Yen factory

2016
Thành Lập Xưởng Dịch Vụ
Tại Tp. HCM
HCM worship establishment

2015
Trở Thành Đối Tác Chiến Lược
Với Công ty 21C - HQ
Becoming strategic partner of 21C KOREA

2014
Đại Diện Hãng Dormer
& Pramet Tại Việt Nam
Becoming Dormer – Pramet authorized distributor in Vietnam

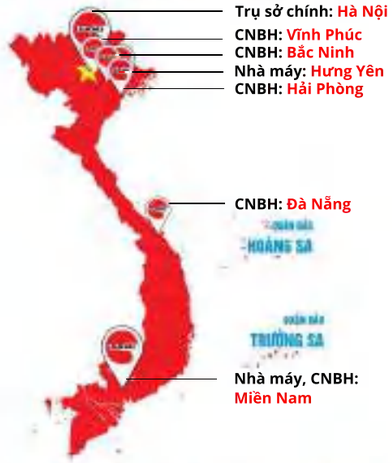
2011
Thành lập Chi Nhánh An Mi
Tại Tp. HCM
Foundation of An Mi Tools Co., Ltd – HCM branch

2010
Xưởng Hưng Yên Đi Vào
Hoạt Động
Operation of An Mi Tools – Hung Yen worship

2009
Thành lập Công ty TNHH
Dụng Cụ An Mi
Foundation of An Mi Tools Co., Ltd

VỀ CHÚNG TÔI

ABOUT US



ANMI Tools tự hào với trụ sở chính tại Hà Nội và mạng lưới nhà máy, chi nhánh rộng khắp các tỉnh thành.
Với niềm đam mê và khát vọng tiên phong cùng chiến lược đầu tư và phát triển bền vững, AN MI phấn đấu trở thành công ty sản xuất, kinh doanh dụng cụ cắt gọt, cơ khí chính xác hàng đầu Việt Nam và vươn tầm thế giới.

ANMI Tools proudly has its headquarters in Hanoi and an extensive network of factories and branches across provinces and cities. Driven by passion, a pioneering spirit, and a strategy of sustainable investment and development, ANMI strives to become the leading manufacturer and distributor of cutting tools and precision mechanical equipment in Vietnam, with aspirations to expand globally.

CHỨNG CHỈ VÀ THÀNH TÍCH
Certifications & Achievements

Giấy chứng nhận hệ thống quản lý chất lượng tiêu chuẩn quốc tế

Certificate of International Quality Management System

Giấy chứng nhận hệ thống quản lý môi trường tiêu chuẩn quốc tế

Certificate of International Environmental Management System.

Giải thưởng Doanh nhân trẻ Việt Nam tiêu biểu 2022

The Top 10 Outstanding Enterprises Award in Hanoi City, 2022

Giải thưởng SAO ĐỎ Doanh nhân trẻ Việt Nam tiêu biểu 2022

Red Star Award – Vietnam's Typical Young Entrepreneur 2022

THIẾT BỊ & CON NGƯỜI
Equipment & human

Hệ thống máy móc hiện đại, đa dạng và hàng đầu thế giới: Rollomatic, Anca, Zoller...

The machinery system is diverse and among the best in the world: Rollomatic, Anca, Zoller...

Đội ngũ nhân viên chuyên nghiệp, tận tâm và sáng tạo, đảm bảo mỗi sản phẩm của ANMI đều đạt chất lượng cao nhất đến tay khách hàng.

Our team of professional, dedicated, and creative staff ensures that each product from ANMI meets the highest quality standards delivered to our customers.

CỨ ĐIỂM / NHÂN SỰ
Equipment & human

7

Hà Nội - Hưng yên
Vĩnh Phúc - Bắc Ninh
Hồ Chí Minh
Hải Phòng - Đà Nẵng

Ha Noi – Hung Yen
Bac Ninh - Vinh Phuc
Ho Chi Minh
Hai Phong - Da Nang

27

Doanh thu
$27 triệu USD

$27 million dollars revenue

+207

Hơn 207 nhân sựvới nền tảng kiến thức vững chắc và được đào tạo về nghiệp vụ lẫn phong thái làm việc chuyên nghiệp.

Over 207 employees with a strong foundation of knowledge, trained in both professional skills and a professional working attitude

NHÓM CÔNG TY & ĐƠN VỊ LIÊN KẾT
Company's group & Associates

- **TRỤ SỞ HÀ NỘI**
  Hanoi's headquarter
- **CHI NHÁNH BÁN HÀNG VĨNH PHÚC**
  Vinh Phuc sales branch
- **CHI NHÁNH BÁN HÀNG HẢI PHÒNG**
  Hai Phong sales branch
- **CHI NHÁNH BÁN HÀNG BẮC NINH**
  Bac Ninh sales branch
- **CHI NHÁNH BÁN HÀNG ĐÀ NẴNG**
  Da Nang sales branch
- **CHI NHÁNH BÁN HÀNG TP. HCM**
  Ho Chi Minh sales branch
- **NHÀ MÁY AN MI HƯNG YÊN**
  An Mi Hung Yen factory
- **NHÀ MÁY AN MI MIỀN NAM**
  An Mi Southern factory
- **NHÀ MÁY ĐỐI TÁC 21C KOREA**
  Partnered factory 21C KORE

CÔNG NGHỆ CỐT LÕI
Core technologies

Cùng với việc đẩy mạnh đầu tư và hoàn thiện 6 công nghệ cốt lõi như thiêu kết hợp kim để tạo phôi, gia công đa trục, erosion, laze, Phủ PVD, đánh bóng siêu âm. Chúng tôi đã khép kín hoàn toàn việc chế tạo dụng cụ CNC chính xác cao tại Việt Nam.

Along with promoting investment and perfecting six core technologies such as metal sintering for mold creation, multi-axis machining, erosion, laser processing, PVD coating, and ultrasonic polishing, we have completely closed the loop on high-precision CNC tool manufacturing in Vietnam.

DỤNG CỤ LIỀN KHỐI
Solid tools

MŨI KHOAN / *DRILLS*

• Có thể gia công với tốc độ và độ chính xác cao
• Phù hợp với đa dạng loại vật liệu như nhôm đúc, thép
• Độ chính xác gia công xuất sắc và hiệu suất cao
• Lớp phủ cải thiện khả năng chịu nhiệt, chống mài mòn và tiết kiệm chi phí

• High speed and precision machining are possible
• Suitable for processing a variety of materials such as aluminum, casting and steel
• Excellent machining accuracy and high performance
• Coating technology to improve heat resistance, abrasion resistance and save cost

DAO DOA / *REAMERS*

• Hoàn thiện bề mặt xuất sắc và độ chính xác cao
• Tốc độ cắt và tuổi thọ của dụng cụ được cải thiện nhờ lớp phủ chất lượng cao
• Cắt chính xác cao với thiết kế tối ưu hóa

• Excellent surface finish and high precision
• Cutting speed and tool life increased by high quality coating
• High precison cutting with optimized design

DAO PHAY / *ENDMILL*

• Giải pháp cho gia công thép cũng như các vật liệu cứng
• Công nghệ lớp phủ để cải thiện khả năng chịu nhiệt, chống mài mòn và tiết kiệm chi phí
• Phạm vi rộng về các loại và kích cỡ phù hợp với nhiều yêu cầu khác nhau

• Solutions for machining steel, aluminum, stainless and plastic,
as well as hard milling and deburring
• Coating technology to improve heat resistance, abrasion resistance and save cost
• Wide range of types and sizes suitable for many different milling requirements

DỤNG CỤ LIỀN KHỐI
Solid tools

DAO PHAY REN / *THREAD MILL*

• Độ chính xác và ổn định cao về hình dạng ren
• Tốc độ cắt và tuổi thọ của dụng cụ được cải thiện nhờ lớp phủ chất lượng cao
• Đáp ứng tốt các yêu cầu gia công tiêu chuẩn và không tiêu chuẩn

• High profile accuracy and stability
• Cutting speed and tool life increased by high quality coating
• Respond well to standard and non-standard machining requirements

DAO ĐÁNH VIA / *ROUTER BURRS*

• Thiết kế tối ưu cho việc loại bỏ via trên nhiều loại vật liệu
• Tư vấn chế độ cắt, phương pháp gia công hiệu quả

• Optimally designed for removing burrs from various materials
• Cutting mode consultation and effective machining methods

DAO LIỀN KHỐI ĐẶC BIỆT / *SPECIAL SOLID CARBIDE*

• Sản xuất theo biên dạng đặc biệt yêu cầu của KH
• Lớp phủ tương ứng tối ưu hiệu suất cắt
• Dịch vụ mài phục hồi lưỡi cắt tiết kiệm chi phí

• Manufactured to meet specific profile requirements from customers
• Corresponding coatings for optimal cutting performance
• Cost-effective sharpening service for cutting edges

DAO MÔ ĐUN / *MODUL TOOLS*

• Đa dạng chủng loại
• Giải pháp tiết kiệm chi phí
• Dễ dàng thay thế với các mối ghép tiêu chuẩn

• Diverse types
• Cost-saving solutions
• Easily replaceable with standard fittings

DAO TARO / *THREADING TAPS*

• Thiết kế - sản xuất cho nhiều dạng ren tiêu chuẩn và đặc biệt
• Tối ưu hiệu suất, tuổi thọ sản phẩm
• Lớp phủ tăng cứng đa dạng

• Designed and manufactured for various standard and special thread forms
• Optimized performance and product lifespan
• Diverse hardening coatings

DAO HÀN
Welding tools

KHOAN / *DRILLS*

- Độ chính xác cao
- Năng suất cao

- *High accuracy*
- *High productivity*

DOA / *REAMERS*

- Độ chính xác cao
- Chất lượng bề mặt cao

- *High accuracy*
- *High surface quality*

PHAY / *ENDMILL*

- Độ chính xác cao
- Năng suất cao

- *High accuracy*
- *High productivity*

DAO NGÀNH 3C / 3C INDUSTRY

- Thiết kế riêng
- Đáp ứng nhanh
- Chế tạo theo yêu cầu

- *Custom design*
- *Fast response for the 3C sector*
- *Manufacturing according to requirements*

DAO XỌC
Broaching tools

BIÊN DẠNG NGOÀI / *EXTERNAL PROFILE*

- Chế tạo theo yêu cầu
- Giao hàng nhanh

- *Custom manufacturing*
- *Fast delivery*

BIÊN DẠNG TRONG / *INTERNAL PROFILES*

- Chế tạo theo yêu cầu
- Gia công được nhiều vật liệu

- *Custom manufacturing*
- *Capable of processing various materials*

GẮN MẢNH / *INSERTED*

- Lựa chọn cho nhiều ứng dụng
- Đa dạng thiết kế

- *Options for various applications*
- *Diverse designs*

LIỀN KHỐI / *SOLID*

- Phù hợp rãnh nhỏ
- Độ cứng vững và độ chính xác cao

- *Suitable for small grooves*
- *High stability and accuracy*

MẢNH DAO
Insert tools

MẢNH MCD, CVD, ND / *MCD, CVD, ND INSERT*

• Độ cứng cao nhất
• Khả năng gia công vật liệu siêu cứng
• Khả năng gia công ở tốc độ cao
• Tuổi thọ, hiệu suất cắt gọt cao

• *Highest hardness*
• *Capability to machine Ultra-hard materials*
• *Ability to operate at high cutting speeds*
• *Long tool life and high cutting performance*

MẢNH CARBIDE / *CARBIDE INSERT*

• Độ cứng trung bình
• Chất lượng bề mặt gia công tốt
• Phổ biến, giá thành vừa phải

• *Average hardness*
• *Excellent surface finish*
• *Commonly used, reasonablely priced*

MẢNH PCD / *PCD INSERT*

• Độ cứng, độ bền cao thường dùng gia công nhôm, composite, gốm,...
• Chất lượng bề mặt gia công tốt
• Giảm ma sát, giảm nhiệt độ khi gia công

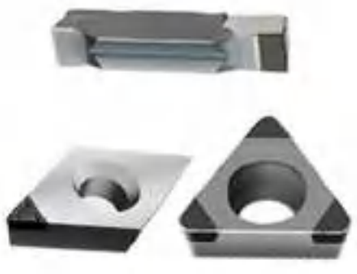
• *High Hardness and Durability*
• *Excellent Surface Finish*
• *Reduced Friction and Lower Temperature During Machining*

KHOAN GẮN MẢNH
INDEXABLE HEAD

• Một thân có thể lắp được nhiều mảnh
• Một vật liệu cho cắt P, M, K

• *One body can be fitted with multiple inserts*
• *One material for cutting P, M, K*

MẢNH CBN / *CBN INSERT*



• Độ cứng, độ bền cao thường dùng gia công thép cứng, hợp kim cứng,...
• Chất lượng bề mặt gia công tốt
• Giảm ma sát, giảm nhiệt độ khi gia công

• *High hardness and durability*
• *Excellent surface finish*
• *Reduced friction and lower temperature during machining*

KHOAN GẮN MẢNH (KHOAN-U)
INDEXABLE DRILLS (U-DRILLS)

• Hiệu suất cao cho cả lỗ thông và lỗ tắc
• Khoan được đa dạng các loại vật liệu

• *High performance for both through holes and blind holes*
• *Capable of drilling various types of materials*

DAO CẮT CÔNG NGHIỆP
Industrial cutting Tools

DAO CẮT LENS
LENS CUTTER

• Độ chính xác và hiệu suất cao
• Chế tạo mới theo kích thước, nhu cầu của khách hàng
• Dịch vụ mài lại sản phẩm cũ, tiết kiệm chi phí

• High precision and performance
• New manufacturing according to the customer's size and needs
• Service for re-sharpening old products, saving costs

DAO CẮT CAP, DÂY ĐIỆN, CẮT VẢI
CUTTING TOOLS, ELECTRICAL WIRES, FABRIC CUTTING.

• Độ chính xác và hiệu suất cao
• Chế tạo mới theo kích thước, nhu cầu của khách hàng
• Dịch vụ mài lại sản phẩm cũ, tiết kiệm chi phí

• High precision and performance
• New manufacturing according to the customer's size and needs
• Service for re-sharpening old products, saving costs

CÁC LOẠI DAO KHÁC: CHẤN TÔN, CẮT TÔN,...
OTHER CUTTING TOOLS:

• Độ chính xác và hiệu suất cao
• Chế tạo mới theo kích thước, nhu cầu của khách hàng
• Dịch vụ mài lại sản phẩm cũ, tiết kiệm chi phí

• High precision and performance
• New manufacturing according to the customer's size and needs
• Service for re-sharpening old products, saving costs

PHỤ KIỆN, DƯỠNG KIỂM, ĐỒ GÁ
Machine part, pin gauge, fixture

PHỤ KIỆN CHO MÁY GIA CÔNG
MACHINE PART COLLET, HOLDER, SOFT JAW

• Độ chính xác cao
• Sản xuất theo tiêu chuẩn
• Tư vấn giải pháp, chế tạo mới theo nhu cầu của khách hàng

• High accuracy
• Manufactured according to standards
• Consulting on new solutions and manufacturing according to customer needs

DƯỠNG KIỂM
PIN GAUGE

• Độ chính xác cao
• Chất lượng bề mặt tốt

• High accuracy
• Good surface quality

ĐỒ GÁ
JIG, FIXTURE

• Tư vấn giải pháp
• Gia công theo yêu cầu

• High accuracy
• Good surface quality

MÁY MÀI
Grinding machine

1 Máy mài CNC 5 trục

2 Máy mài CNC 4 trục

3 Máy mài me mũi khoan nòng súng

4 Máy mài tròn CNC 3 trục

5 Máy mài thân mũi khoan nòng súng

6 Máy mài tròn chính xác CNC 2 trục

7 Máy mài dụng cụ sửa đá CNC

8 Máy mài PCD&PCBN CNC 3 trục

9 Máy mài PCD

10 Mày mài PCD/CBN

MÁY SET DAO
Tool presetter

Chất lượng cao
Chất lượng đảm bảo – sử dụng nhất quán các thành phần cấu thành có thương hiệu chất lượng cao
Chính xác
Trục chính SK 50 độ chính xác cao, đầu soi quang học chất lượng cao, công nghệ xử lý hình ảnh hàng đầu
Linh hoạt
Bộ điều khiển có thể điều chỉnh, thiết bị vận hành một tay tiện dụng »eQ«, bàn phím màng và bộ phận kẹp công cụ có thể sử dụng đơn giản.
Dễ sử dụng
Dễ dàng đọc các thông số đồ họa từ phần mềm quản lý công cụ trọn gói »pilot«
Hiện đại & hiệu quả
Thiết kế hiện đại đảm bảo dễ sử dụng dẫn đến hiệu suất tốt hơn
Có thể kết nối mạng
Truyền dữ liệu trực tiếp đến thiết bị điều khiển máy gia công của bạn.

High quality
Quality assured – consistent use of high quality branded components
Precision
High precision SK 50 spindle, high-quality optical probe, leading image processing technology
Flexible
Adjustable controls, ergonomic one-handed operation »eQ«, membrane keyboard and tool clamping unit for easy use.
Ease of use
Easy to read graphical parameters from the all-inclusive tool management software »pilot«
Modern & efficient
Modern design ensures ease of use leading to better performance
Networkable
Transfer data directly to your machine control device

DỤNG CỤ THÁO LẮP
ANMI Clamp

Thiết bị tháo lắp dụng cụ
- Lắp ráp dụng cụ an toàn
- Chức năng thay nhanh cho các dạng chuôi côn: BT-SK-ISO, HSK, CAPTO, VDI, KM...
- Chốt khóa chịu tải lò xo – lực kẹp nhỏ.
- Mặt tiếp xúc côn bằng đồng an toàn cho chuôi côn và có thể thay thế.
- Kích thước nhỏ gọn, linh hoạt.
- Tích hợp thước đo cao

Tool Assembly and Disassembly Device
- *Safe tool assembly*
- *Quick change function for various types of tool holders: BT-SK-ISO, HSK, CAPTO, VDI, KM, etc.*
- *Spring-loaded locking pin – low clamping force.*
- *Brass contact surface for tool holders, safe and replaceable.*
- *Compact and flexible design.*
- *Integrated height gauge.*

- **Sản phẩm bao gồm**
- Holder tháo lắp chuôi BT
- Holder tháo lắp chuôi NC
- Holder tháo lắp chuôi HSK

The product includes:
- *BT chuck holder*
- *NC chuck holder*
- *HSK chuck holder*

TỦ DỤNG CỤ THÔNG MINH
Smart ANMI box

ƯU ĐIỂM VƯỢT TRỘI

- Giảm thời gian, nhân công quản lý
- Loại bỏ vấn đề chọn nhầm - lẫn dao cụ
- Quản lý chính xác số lượng, người mượn - trả
- Quản lý tuổi thọ dụng cụ, giảm lãng phí
- Bảo cáo dữ liệu tự động, chính xác
- Thẩm mỹ, cải thiện 5S
- Tiết kiệm 20% chi phí dụng cụ

KEY ADVANTAGES

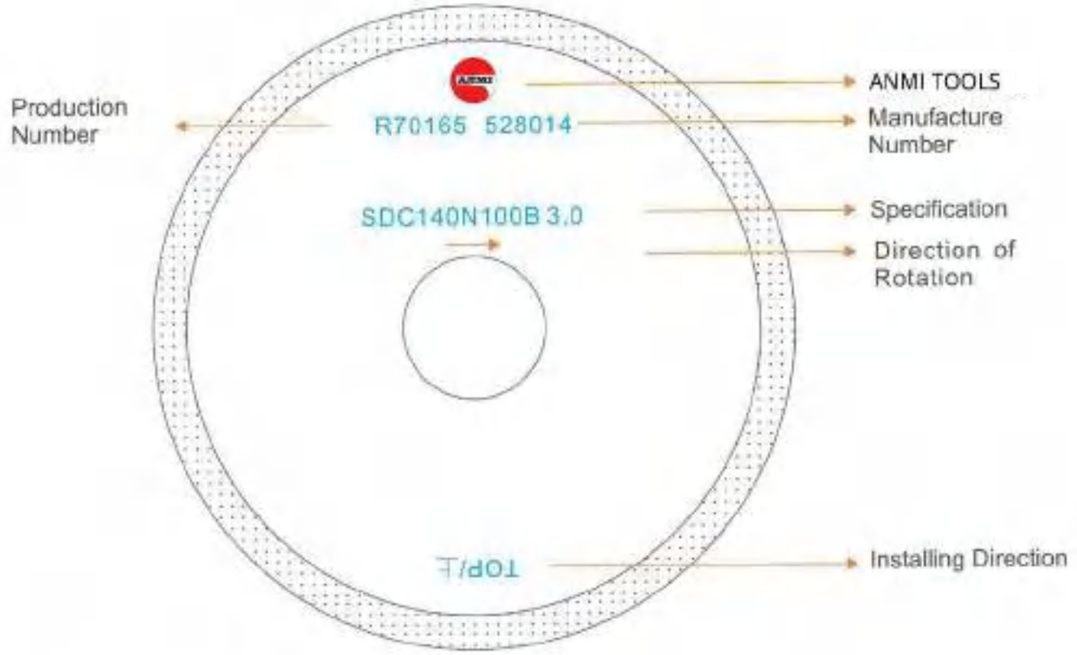
- *Less time and labor*
- *Eliminate confusion*
- *Accurate quantity management*
- *Manage lifespan, reduce waste*
- *Auto generate report*
- *Neater and more aesthetic*
- *Save 20% costs*

ĐÁ MÀI
Grinding wheels

Mài chính xác với độ bóng bề mặt cao là 1 bước rất quan trọng trong quá trình chế tạo và hoàn thiện sản phẩm. Công việc này cần có kiến thức và kinh nghiệm tư vấn chuyên sâu của chuyên gia kỹ thuật trong lĩnh vực này. An Mi với ưu thế vượt trội là có kinh nghiệm 15 năm cung cấp dịch vụ mài và chế tạo dụng cụ chính xác bằng việc sử dụng đá mài PCD,CBN nên chúng tôi hiểu rất rõ việc sử dụng đá mài để đạt hiệu quả cao nhất cho khách hàng.

Diamond & CBN Wheels

Precision grinding with a high surface finish is a crucial step in the manufacturing and finishing of products. This process requires indepth knowledge and expertise from technical specialists in the field. An Mi, with over 15 years of experience in providing grinding services and manufacturing precision tools using PCD and CBN grinding wheels, understands how to utilize these tools effectively to achieve optimal results for our customers.



JIS B4130(DIA & CBN mesh size regulation)

Interpretation of the markings

Abrasive Type	Mesh Size	Hardness of Bond	Concentration	Bond Type	Depth of Super Abrasive Section
D: Natural Diamond	16 100 400	J Softer	25 Lower	B:Resin	1.5mm
SD: Synthetic Diamond	18 120 600	L ⇧	50		
SDC: Metal Coated Diamond	20 140 800		75 ⇧	V:Vitrified	2.0mm
BN: Cubic Boron Nitride*	30 170 1000	N Medium	100		
BNC: Metal Coated Cubic Boron Nitride*	40 200 1500		125	M:Metal	3.0mm
	50 230 2000	P ⇩	150 ⇩		
	60 270 2500		175		
(*Also can be described B.)	80 325 3000	R Harder	200Higher	P:Electr-oplated	5.0mm

NGUYÊN VẬT LIỆU
Materials

ISO Code	Co (±0.5%)	Density (g/cm³)	Hardness		TRS (MPa)
			HRA	HV30	
Ultrafine					
K05 - K10	9.0	14.34	93.8	1,970	3,600
K10 - K20	12.0	14.10	92.4	1,680	4,000
K10 - K20	11.5	14.15	92.2	1,650	3,800
Submicron					
K20 - K40	9.0	14.48	91.8	1,580	3,600
K20 - K40	10.0	14.35	91.6	1,580	3,800
K20 - K40	10.0	14.40	91.3	1,510	4,000
Fine					
K10 - K20	6.0	14.83	92.2	1,650	3,000
K10 - K20	5.8	14.80	92.2	1,650	3,000

Khuôn luyện kim
Powder Metallurgy Die

Sử dụng rộng rãi để sản xuất các bộ phận, chi tiết khác nhau bằng cách đúc bột hợp kim, cung cấp giải pháp tiết kiệm chi phí cho KH

Widely used for manufacture various parts of alloy powder molding, in order to provide customer cost saving solution

Khuôn tạo hình
Forming Die

Sử dụng rộng rãi cho gia công thép dạng ống, cũng như phù hợp với gia công thép, thép tấm có hình dạng đặc biệt.

Drawing dies are widely used for processing steel wire and tube, pulling process and shrinking process, as well as suitable for process the special-shaped steel.

Khuôn ngành quang học
Optical mold

Để đáp ứng yêu cầu của khách hàng môi trường khắc nghiệt (nhiệt độ cao và áp suất cao trong quá trình ép thấu kính thủy tinh), AN MI Tools đã phát triển dòng sản phẩm CBN mới, tránh quá trình oxy hóa và có độ chính xác cao hoàn chỉnh.

In order to meet customer request harsh environment (high temperature and high pressure during pressing glass lens, AN MI Tools developed new CBN grade series, which can avoid oxidation and fog during customer processing; at the same time,we offer completeset of high precision, tool fitting clearance molds.

Khuôn đóng lon
Can tooling

Quy trình xử lý chuyện nghiệp với độ chính xác cao, tùy chỉnh kiểu dáng, kích thước theo nhu cầu khách hàng

Professional processing with high precision, customize design and size according to customer needs

DỊCH VỤ
Service

Mài lại / Regrinding

Sẵn sàng sử dụng
Ready to use

Mài lại (AN MI)
Regrinding

Dụng cụ cũ (Khách hàng)
Old tools (Customers)

Tại AN MI Tools, chúng tôi hiểu rằng việc duy trì hiệu suất của các dụng cụ cắt là rất quan trọng để đảm bảo sản xuất chất lượng cao và hiệu quả. Đó là lý do chúng tôi cung cấp dịch vụ mài sắc dụng cụ toàn diện nhằm giúp bạn tiết kiệm chi phí và tối ưu hóa quy trình làm việc.

At AN MI Tools, we understand that maintaining the performance of your cutting tools is crucial for ensuring high-quality and efficient production. That's why we offer a comprehensive tools sharpening service to help you save costs and optimize your workflow.

Phủ PVD / PVD coating

Chúng tôi là doanh nghiệp Việt Nam tiên phong trong việc phát triển công nghệ phủ PVD thế hệ mới bằng việc đầu tư 2 dây chuyền phủ với đa dạng lớp phủ.

We are a pioneering Vietnamese company in the development of new generation PVD coating technology, investing in two coating lines with a variety of coatings.

7 Lớp phủ công nghệ PVD
7 Layers of PVD technology coating

Lớp phủ: TiN
Màu sắc: Gold
Độ dày: 2 - 3µm
Ứng dụng:
Phủ mũi khoan,
mũi doa, taro,
dao phay ngón,...

Lớp phủ: TiSiN
Màu sắc: Vàng đồng
Độ dày: 2 - 3µm
Ứng dụng:
Phủ mảnh dao,
mũi khoan,
dao phay ngón,...

Lớp phủ: AlTiN
Màu sắc: Đen sáng
Độ dày: 2 - 2.5µm
Ứng dụng:
Phủ mảnh dao,
mũi khoan, khuôn,
chi tiết máy,...

Lớp phủ: AlTiSiN
Màu sắc: Ánh xanh
Độ dày: 2 - 3µm
Ứng dụng:
Phủ mũi khoan,
mũi doa, taro,
dao phay ngón,...

Lớp phủ: CrN
Màu sắc: Bạc
Độ dày: 1- 4µm
Ứng dụng:
Phủ khuôn ép nhựa

Lớp phủ: AlCrBN
Màu sắc: Light grey
Độ dày: 4 - 5µm
Ứng dụng:
Phủ dao phay răng,
khuôn, chày dập,...

Lớp phủ: ZrN
Màu sắc: Vàng
Độ dày: 1 - 1.5µm
Ứng dụng:
Phủ mũi khoan,
dao phay ngón,
chốt, chày dập,...

Phủ dụng cụ cắt
Tools coating

Phủ khuôn, đồ gá
Molds, jig coating

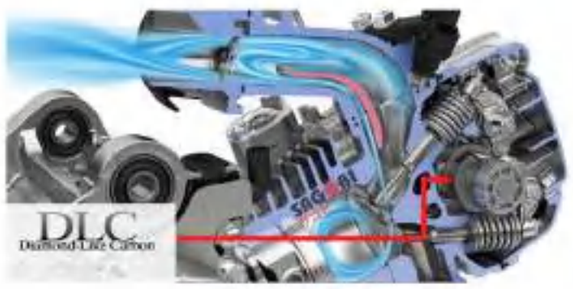
Phủ linh kiện
PVD coating for parts

Phủ DLC / DLC coating

DLC “Diamond like Carbon Coating, nghĩa là lớp phủ Carbon như kim cương và là lớp phủ Nanocomposite có tính chất độc đáo của kim cương tự nhiên như: độ ma sát thấp, độ cứng cao và khả năng chống ăn mòn cao. Lớp phủ DLC thường được ứng dụng phủ trong các lĩnh vực dụng cụ cắt gọt, công nghiệp ô tô, thiết bị điện tử, hàng không vũ trụ,...

DLC "Diamond like Carbon Coating", meaning Carbon coating like diamond and Nanocomposite coating with unique properties of natural diamond such as: low friction, high hardness and high corrosion resistance. DLC coatings are often applied in the fields of cutting tools, automotive industry, electronics, aerospace,...

- Độ cứng & khả năng chống mài mòn cao
  High hardness and wear resistance
- Độ ma sát thấp
  Low friction
- Phù hợp với nhiều loại vật liệu
  Suitable for various materials
- Tương thích ở môi trường ăn mòn cao
  Suitable for high-corrosion environments
- Có khả năng chống bám bẩn
  Stain-resistant
- Có khả năng truyền hồng ngoại
  Infrared transmission capability



Một số ứng dụng công nghệ phủ DLC
Some applications of DLC coating technology

Thấm Nito / Nitrocarburizing
Nhuộm đen / Black oxide coating

- Độ cứng cao / *High Hardness*
- Chống mài mòn / *Wear Resistance*
- Chống ăn mòn / *Corrosion Resistance*
- Hiệu suất tốt / *Good Performance*

Thấm Nito / *Nitrocarburizing*

Nhuộm đen / *Black oxide coating*

MÃ SẢN PHẨM/*PRODUCT CODE*

DK: Mũi khoan
Drill

DV: Dao vát mép
Chamfer endmill

DD: Dao doa
Reamer

DP: Dao phay ngón
End mill

DC: Dao phay cầu
Ball end mill

DR: Dao phay ren
Thread mill

DS: Dao liền khối đặc biệt
Special solid carbide tools

DT: Taro
Threading tap

DB: Dao đánh via
Router burr

DM: Dao mô đun
Modular tools

DH: Dao hàn
Welding tools

DX: Dao xọc
Broaching tools

IK: Khoan lắp mảnh
Indexable drill

ID: Mảnh PCD
PCD inserts

IM: Mảnh MCD/CVD/ND
MCD inserts

IB: Mảnh CBN
CBN inserts

IC: Mảnh Carbide
Carbide inserts

TH: Thân dao phay, tiện
Tool holders & tool shank

KI: Dao cắt công nghiệp
Industrial knife

GC: Phụ kiện máy: Collet, chấu kẹp,...
Machines part: Holder, collet,...

KT: Dưỡng kiểm
Gauges

JF: Đồ gá
Jigs, fixtures

MA: Máy, thiết bị
Machine&Device

MB: Phôi
Blank

GW: Đá mài
Grinding wheels

SG: Dịch vụ mài
Grinding service

SS: Dịch vụ xử lý bề mặt
Surface treament service

SM: Dịch vụ bảo trì, bảo dưỡng
Maintenance services

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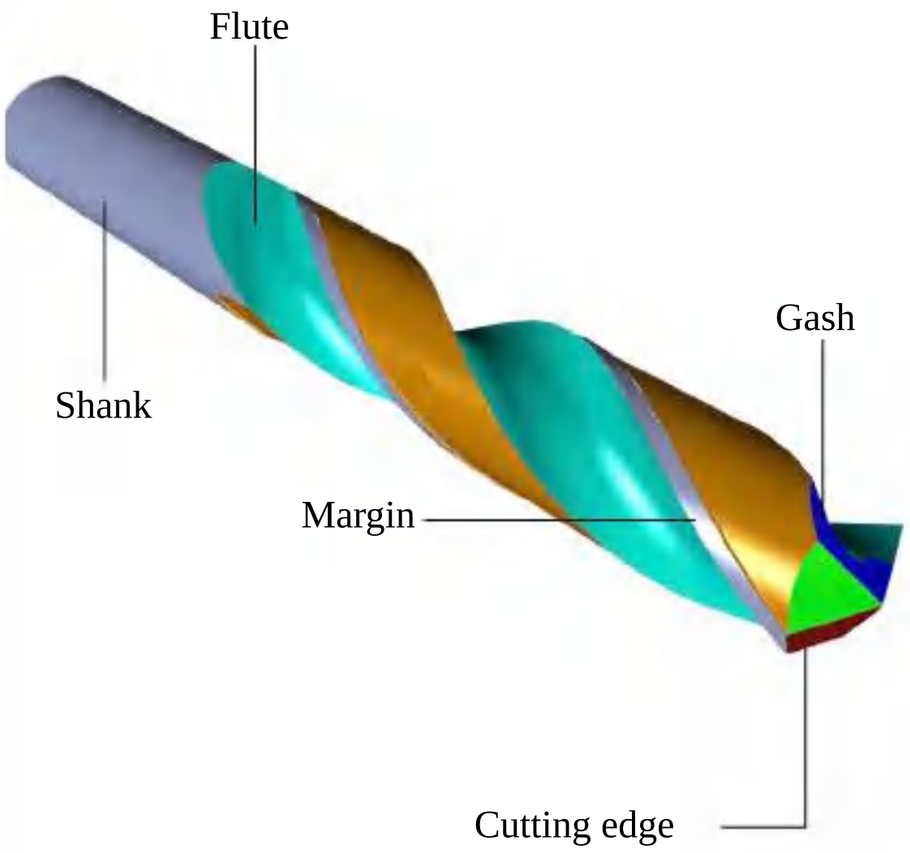
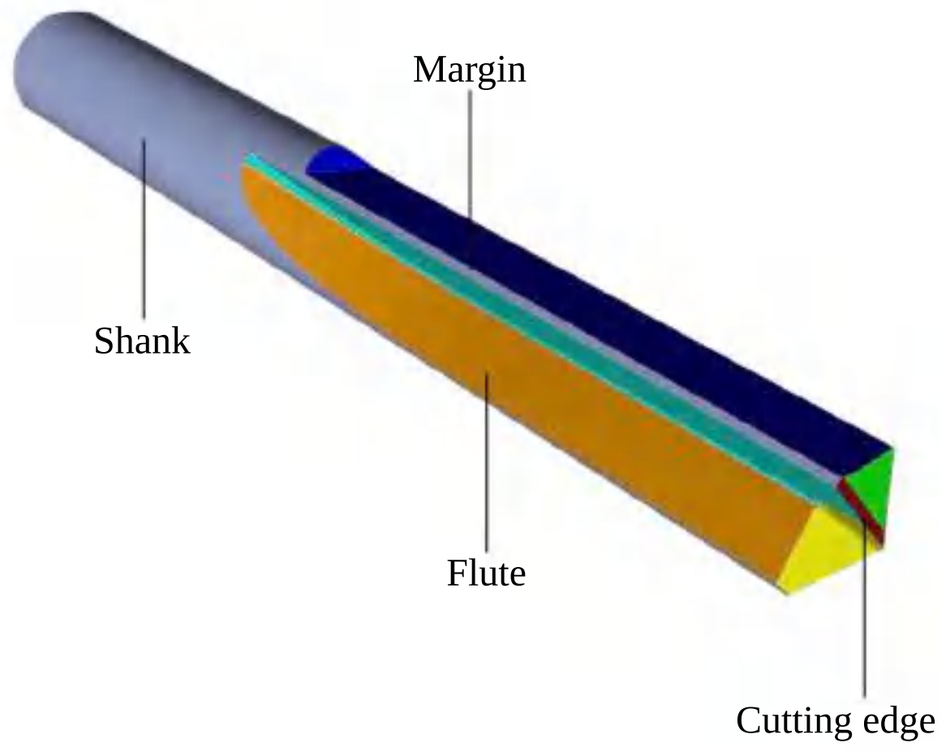
Solid Carbide Tools
DRILLS



Solid Carbide Tools
DRILLS



DK

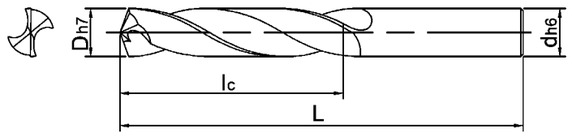
DRILL

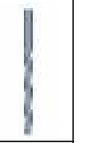
PROPERTIES & APPLICATION

DK001	HM	Z2	Helix 30°	120°	D_{h7}	Shank d_{h6}	2.5XD
DK002	HM	Z2	Helix 30°	120°	D_{h7}	Shank d_{h6}	3XD
DK003	HM	Z2	Helix 30°	120°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



DK001	DK002	DK003
		
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●				
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK001	DK002	DK003
2.0	3.0	38	12	0.014	DK0012.0		
2.5	3.0	43	14	0.014	DK0012.5		
3.0	3.0	46	16	0.020	DK0013.0		
3.0	3.0	62	20	0.018		DK0023.0	
3.0	3.0	61	33	0.016			DK0033.0
3.3	4	49	18	0.022	DK0013.3		
4.0	4.0	55	22	0.025	DK0014.0		
4.0	4.0	66	24	0.023		DK0024.0	
4.0	4.0	75	43	0.020			DK0034.0
4.2	5.0	55	22	0.025	DK0014.2		
5.0	5.0	62	26	0.030	DK0015.0		
5.0	5.0	66	28	0.029		DK0025.0	
5.0	5.0	86	52	0.026			DK0035.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

DK

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK001	DK002	DK003
6.0	6.0	66	28	0.037	DK0016.0		
6.0	6.0	66	28	0.035		DK0026.0	
6.0	6.0	93	57	0.032			DK0036.0
6.8	8.0	74	34	0.040	DK0016.8	DK0026.8	
8.0	8.0	79	37	0.050	DK0018.0		
8.0	8.0	89	40	0.048		DK0028.0	
8.0	8.0	117	75	0.046			DK0038.0
8.5	10.0	79	37	0.060	DK0018.5		
10.0	10.0	85	43	0.080	DK00110.0		
10.0	10.0	102	55	0.076		DK00210.0	
10.0	10.0	133	87	0.075			DK00310.0
10.2	12.0	89	43	0.080	DK00110.2		
12.0	12.0	102	51	0.100	DK00112.0		
12.0	12.0	107	60	0.095		DK00212.0	
12.0	12.0	151	101	0.090			DK00312.0
13.0	13.0	102	51	0.110	DK00113.0		
13.0	13.0	107	60	0.107		DK00213.0	
13.0	13.0	151	101	0.103			DK00313.0
14.0	14.0	107	54	0.120	DK00114.0		
14.0	14.0	107	60	0.118		DK00214.0	
14.0	14.0	160	108	0.113			DK00314.0
15.0	16.0	111	56	0.123	DK00115.0		
15.0	16.0	115	65	0.120		DK00215.0	
15.0	16.0	169	114	0.118			DK00315.0
16.0	16.0	115	58	0.130	DK00116.0		
16.0	16.0	115	65	0.126		DK00216.0	
16.0	16.0	178	120	0.122			DK00316.0
18.0	18.0	123	62	0.140	DK00118.0		
18.0	18.0	123	73	0.137		DK00118.0	
18.0	18.0	191	130	0.133			DK00318.0
20.0	20.0	131	66	0.150	DK00120.0		
20.0	20.0	131	79	0.147		DK00220.0	
20.0	20.0	205	140	0.115			DK00320.0

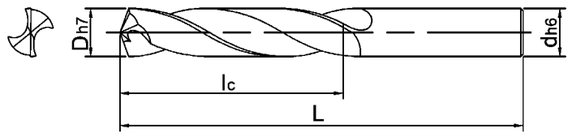
DRILL

PROPERTIES & APPLICATION

DK004	HM	Z2	Helix 30°	140°	D_{h7}	Shank d_{h6}	2.5XD
DK005	HM	Z2	Helix 30°	140°	D_{h7}	Shank d_{h6}	3XD
DK006	HM	Z2	Helix 30°	140°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



DK004	DK005	DK006
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability			○	○	●	●	●	●				
V_c (m / min)	100 ~ 120	100 ~ 120	25 ~ 35	25 ~ 35	50 ~ 70	50 ~ 70	80 ~ 100	80 ~ 100		15 ~ 20	15 ~ 20	15 ~ 20

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK004	DK005	DK006
2.0	3.0	38	12	0.028	DK0042.0		
2.5	3.0	43	14	0.030	DK0042.5		
3.0	3.0	46	16	0.040	DK0043.0		
3.0	3.0	62	20	0.038		DK0053.0	
3.0	3.0	61	33	0.033			DK0063.0
3.3	4	49	18	0.045	DK0043.3		
4.0	4.0	55	22	0.05	DK0044.0		
4.0	4.0	66	24	0.045		DK0054.0	
4.0	4.0	75	43	0.043			DK0064.0
4.2	5.0	55	22	0.053	DK0044.2		
5.0	5.0	62	26	0.060	DK0045.0		
5.0	5.0	66	28	0.057		DK0055.0	
5.0	5.0	86	52	0.050			DK0065.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK004	DK005	DK006
6.0	6.0	66	28	0.070	DK0046.0		
6.0	6.0	66	28	0.063		DK0056.0	
6.0	6.0	93	57	0.060			DK0066.0
6.8	8.0	74	34	0.075	DK0046.8		
8.0	8.0	79	37	0.090	DK0048.0		
8.0	8.0	89	40	0.086		DK0058.0	
8.0	8.0	117	75	0.084			DK0068.0
8.5	10.0	79	37	0.095	DK0048.5		
10.0	10.0	85	43	0.110	DK00410.0		
10.0	10.0	102	55	0.107		DK00510.0	
10.0	10.0	133	87	0.102			DK00610.0
10.2	12.0	89	43	0.113	DK00410.2		
12.0	12.0	102	51	0.130	DK00412.2		
12.0	12.0	107	60	0.126		DK00512.0	
12.0	12.0	151	101	0.122			DK00612.0
13.0	13.0	102	51	0.140	DK00413.0		
13.0	13.0	107	60	0.138		DK00513.0	
13.0	13.0	151	101	0.135			DK00613.0
14.0	14.0	107	54	0.150	DK00414.0		
14.0	14.0	107	60	0.146		DK00514.0	
14.0	14.0	160	108	0.142			DK00614.0
15.0	16.0	111	56	0.160	DK00415.0		
15.0	16.0	115	65	0.157		DK00515.0	
15.0	16.0	169	114	0.150			DK00615.0
16.0	16.0	115	58	0.170	DK00416.0		
16.0	16.0	115	65	0.168		DK00516.0	
16.0	16.0	178	120	0.163			DK00616.0
18.0	18.0	123	62	0.180	DK00418.0		
18.0	18.0	123	73	0.175		DK00518.0	
18.0	18.0	191	130	0.172			DK00618.0
20.0	20.0	131	66	0.190	DK00420.0		
20.0	20.0	131	79	0.184		DK00520.0	
20.0	20.0	205	140	0.181			DK00620.0

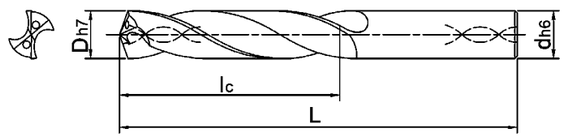
DRILL

PROPERTIES & APPLICATION

DK007	HM	Z2	Helix 30°	120°	D_{h7}	Shank d_{h6}	2.5XD	
DK008	HM	Z2	Helix 30°	120°	D_{h7}	Shank d_{h6}	3XD	
DK009	HM	Z2	Helix 30°	120°	D_{h7}	Shank d_{h6}	4XD	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK007	DK008	DK009
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●				
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK007	DK008	DK009
2.0	3.0	38	12	0.014	DK0072.0		
2.5	3.0	43	14	0.014	DK0072.5		
3.0	3.0	46	16	0.020	DK0073.0		
3.0	3.0	62	20	0.018		DK0083.0	
3.0	3.0	61	33	0.016			DK0093.0
3.3	4	49	18	0.022	DK0073.3		
4.0	4.0	55	22	0.025	DK0074.0		
4.0	4.0	66	24	0.023		DK0084.0	
4.0	4.0	75	43	0.020			DK0094.0
4.2	5.0	55	22	0.025	DK0074.2		
5.0	5.0	62	26	0.030	DK0075.0		
5.0	5.0	66	28	0.029		DK0085.0	
5.0	5.0	86	52	0.026			DK0095.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK007	DK008	DK009
6.0	6.0	66	28	0.037	DK0076.0		
6.0	6.0	66	28	0.035		DK0086.0	
6.0	6.0	93	57	0.032			DK0096.0
6.8	8.0	74	34	0.040	DK0076.8		
8.0	8.0	79	37	0.050	DK0078.0		
8.0	8.0	89	40	0.048		DK0088.0	
8.0	8.0	117	75	0.046			DK0098.0
8.5	10.0	79	37	0.060	DK0078.5		
10.0	10.0	85	43	0.080	DK00710.0		
10.0	10.0	102	55	0.076		DK00810.0	
10.0	10.0	133	87	0.075			DK00910.0
10.2	12.0	89	43	0.080	DK00710.2		
12.0	12.0	102	51	0.100	DK00712.0		
12.0	12.0	107	60	0.095		DK00812.0	
12.0	12.0	151	101	0.090			DK00912.0
13.0	13.0	102	51	0.110	DK00713.0		
13.0	13.0	107	60	0.107		DK00813.0	
13.0	13.0	151	101	0.103			DK00913.0
14.0	14.0	107	54	0.120	DK00714.0		
14.0	14.0	107	60	0.118		DK00814.0	
14.0	14.0	160	108	0.113			DK00914.0
15.0	16.0	111	56	0.123	DK00716.0		
15.0	16.0	115	65	0.120		DK00815.0	
15.0	16.0	169	114	0.118			DK00915.0
16.0	16.0	115	58	0.130	DK00716.0		
16.0	16.0	115	65	0.126		DK00816.0	
16.0	16.0	178	120	0.122			DK00916.0
18.0	18.0	123	62	0.140	DK00718.0		
18.0	18.0	123	73	0.137		DK00810.0	
18.0	18.0	191	130	0.133			DK00910.2
20.0	20.0	131	66	0.150	DK00720.0		
20.0	20.0	131	79	0.147		DK00820.2	
20.0	20.0	205	140	0.115			DK00920.0

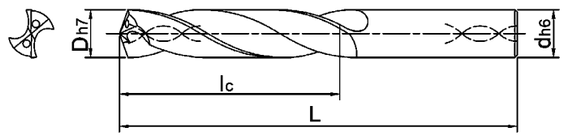
DRILL

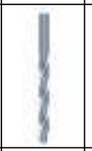
PROPERTIES & APPLICATION

DK010	HM	Z2	Helix 30°	120°	D_{h7}	Shank d_{h6}		5XD	
DK011	HM	Z2	Helix 30°	120°	D_{h7}	Shank d_{h6}		8XD	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK010	DK011	
		
3.00-16.00	3.00-16.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK010	DK011	
3.0	3.0	66	28	0.015	DK0103.0		
3.0	3.0	79	37	0.013		DK0113.0	
3.5	4.0	66	28	0.017	DK0103.5		
3.5	4.0	79	37	0.020		DK0113.5	
4.0	4.0	74	36	0.023	DK0104.0		
4.0	4.0	90	48	0.021		DK0114.0	
4.5	5.0	74	36	0.025	DK0104.5		
4.5	5.0	90	48	0.023		DK0114.5	
5.0	5.0	82	44	0.028	DK0105.0		
5.0	5.0	104	62	0.026		DK0115.0	
5.5	6.0	82	44	0.030	DK0095.0		
5.5	6.0	104	62	0.029		DK0115.0	
6.0	6.0	82	44	0.036	DK0095.0		
6.0	6.0	104	62	0.033		DK0116.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK010	DK011	
6.5	8.0	91	53	0.035	DK0106.5		
6.5	8.0	126	84	0.033		DK0116.5	
7.0	8.0	91	53	0.040	DK0107.0		
7.0	8.0	126	84	0.038		DK0117.0	
7.5	8.0	91	53	0.045	DK0107.5		
7.5	8.0	126	84	0.042		DK0117.5	
8.0	8.0	103	61	0.048	DK0108.0		
8.0	8.0	126	84	0.046		DK0118.0	
8.5	10.0	103	61	0.050	DK0108.5		
8.5	10.0	152	106	0.048		DK0118.5	
9.0	10.0	103	61	0.060	DK0109.0		
9.0	10.0	152	106	0.057		DK0119.0	
9.5	10.0	103	61	0.063	DK0109.5		
9.5	10.0	152	106	0.061		DK0119.5	
10.0	10.0	118	70	0.077	DK01010.0		
10.0	10.0	152	106	0.075		DK01110.0	
10.5	12.0	118	70	0.080	DK01010.5		
10.5	12.0	180	128	0.078		DK01110.5	
11.0	12.0	118	70	0.082	DK01011.0		
11.0	12.0	180	128	0.080		DK01111.0	
11.5	12.0	118	70	0.085	DK01011.5		
11.5	12.0	180	128	0.083		DK01111.5	
12.0	12.0	124	76	0.095	DK01012.0		
12.0	12.0	180	128	0.093		DK01112.0	
12.5	13.0	124	76	0.097	DK01012.5		
12.5	13.0	202	151	0.095		DK01112.5	
13.0	13.0	124	76	0.110	DK01013.0		
13.0	13.0	202	151	0.107		DK01113.0	
14.0	14.0	124	76	0.115	DK01014.0		
14.0	14.0	202	151	0.111		DK01114.0	
15.0	16.0	133	82	0.120	DK01015.0		
15.0	16.0	227	172	0.117		DK01115.0	
16.0	16.0	133	82	0.127	DK01016.0		
16.0	16.0	227	172	0.125		DK01016.0	

DRILL

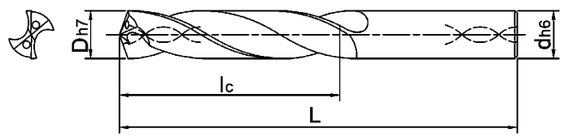
PROPERTIES & APPLICATION

DK012	HM	Z2	Helix 30°	140°	D_{h7}	Shank d_{h6}	2.5XD	
DK013	HM	Z2	Helix 30°	140°	D_{h7}	Shank d_{h6}	3XD	
DK014	HM	Z2	Helix 30°	140°	D_{h7}	Shank d_{h6}	4XD	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

DK012	DK013	DK014
2.00-20.00	2.00-20.00	2.00-20.00

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability			○	○	●	●	●	●				
V_c (m / min)	100 ~ 120	100 ~ 120	25 ~ 35	25 ~ 35	50 ~ 70	50 ~ 70	80 ~ 100	80 ~ 100		15 ~ 20	15 ~ 20	15 ~ 20

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK012	DK013	DK014
2.0	3.0	38	12	0.028	DK0122.0		
2.5	3.0	43	14	0.030	DK0122.5		
3.0	3.0	46	16	0.040	DK0123.0		
3.0	3.0	62	20	0.038		DK0133.0	
3.0	3.0	61	33	0.033			DK0143.0
3.3	4	49	18	0.045	DK0123.3		
4.0	4.0	55	22	0.05	DK0124.0		
4.0	4.0	66	24	0.045		DK0134.0	
4.0	4.0	75	43	0.043			DK0144.0
4.2	5.0	55	22	0.053	DK0124.2		
5.0	5.0	62	26	0.060	DK0125.0		
5.0	5.0	66	28	0.057		DK0134.0	
5.0	5.0	86	52	0.050			DK0145.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

DK

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK012	DK013	DK014
6.0	6.0	66	28	0.070	DK0126.0		
6.0	6.0	66	28	0.063		DK0136.0	
6.0	6.0	93	57	0.060			DK0146.0
6.8	8.0	74	34	0.075	DK0126.0		
8.0	8.0	79	37	0.090	DK0128.0		
8.0	8.0	89	40	0.086		DK0138.0	
8.0	8.0	117	75	0.084			DK0148.0
8.5	10.0	79	37	0.095	DK0128.5		
10.0	10.0	85	43	0.110	DK01210.0		
10.0	10.0	102	55	0.107		DK01310.0	
10.0	10.0	133	87	0.102			DK01410.0
10.2	12.0	89	43	0.113	DK01210.2		
12.0	12.0	102	51	0.130	DK01212.0		
12.0	12.0	107	60	0.126		DK01312.0	
12.0	12.0	151	101	0.122			DK01412.0
13.0	13.0	102	51	0.140	DK01213.0		
13.0	13.0	107	60	0.138		DK01313.0	
13.0	13.0	151	101	0.135			DK01413.0
14.0	14.0	107	54	0.150	DK01214.0		
14.0	14.0	107	60	0.146		DK01314.0	
14.0	14.0	160	108	0.142			DK01414.0
15.0	16.0	111	56	0.160	DK01215.0		
15.0	16.0	115	65	0.157		DK01315.0	
15.0	16.0	169	114	0.150			DK01415.0
16.0	16.0	115	58	0.170	DK01216.0		
16.0	16.0	115	65	0.168		DK01316.0	
16.0	16.0	178	120	0.163			DK01416.0
18.0	18.0	123	62	0.180	DK01218.0		
18.0	18.0	123	73	0.175		DK01318.0	
18.0	18.0	191	130	0.172			DK01418.0
20.0	20.0	131	66	0.190	DK01220.0		
20.0	20.0	131	79	0.184		DK01320.0	
20.0	20.0	205	140	0.181			DK01320.0

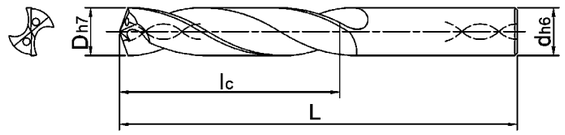
DRILL

PROPERTIES & APPLICATION

DK015	HM	Z2	Helix 30°	140°	D_{h7}	Shank d_{h6}		5XD
DK016	HM	Z2	Helix 30°	140°	D_{h7}	Shank d_{h6}		8XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK015	DK016	
3.00-16.00	3.00-16.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	●	●	●	●				
V_c (m / min)	100 ~ 120	100 ~ 120	25 ~ 35	25 ~ 35	50 ~ 70	50 ~ 70	80 ~ 100	80 ~ 100		15 ~ 20	15 ~ 20	15 ~ 20

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK015	DK016	
3.0	3.0	66	28	0.038	DK0153.0		
3.0	3.0	79	37	0.035		DK0163.0	
3.5	4.0	66	28	0.041	DK0153.5		
3.5	4.0	79	37	0.039		DK0163.5	
4.0	4.0	74	36	0.049	DK0154.0		
4.0	4.0	90	48	0.047		DK0164.0	
4.5	5.0	74	36	0.052	DK0154.5		
4.5	5.0	90	48	0.050		DK0164.5	
5.0	5.0	82	44	0.060	DK0155.0		
5.0	5.0	104	62	0.057		DK0165.0	
5.5	6.0	82	44	0.063	DK0155.5		
5.5	6.0	104	62	0.060		DK0165.5	
6.0	6.0	82	44	0.066	DK0156.0		
6.0	6.0	104	62	0.061		DK0166.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

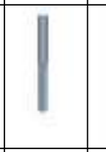
D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK015	DK016	
6.5	8.0	91	53	0.066	DK0156.5		
6.5	8.0	126	84	0.064		DK0166.5	
7.0	8.0	91	53	0.080	DK0157.0		
7.0	8.0	126	84	0.075		DK0167.0	
7.5	8.0	91	53	0.085	DK0157.5		
7.5	8.0	126	84	0.080		DK0167.5	
8.0	8.0	103	61	0.088	DK0158.0		
8.0	8.0	126	84	0.080		DK0168.0	
8.5	10.0	103	61	0.091	DK0158.5		
8.5	10.0	152	106	0.083		DK0168.5	
9.0	10.0	103	61	0.095	DK0159.0		
9.0	10.0	152	106	0.090		DK0169.0	
9.5	10.0	103	61	0.099	DK0159.5		
9.5	10.0	152	106	0.091		DK0169.5	
10.0	10.0	118	70	0.110	DK01510.0		
10.0	10.0	152	106	0.101		DK01610.0	
10.5	12.0	118	70	0.115	DK01510.5		
10.5	12.0	180	128	0.108		DK01610.5	
11.0	12.0	118	70	0.120	DK01511.0		
11.0	12.0	180	128	0.113		DK01611.0	
11.5	12.0	118	70	0.125	DK01511.5		
11.5	12.0	180	128	0.120		DK01611.5	
12.0	12.0	124	76	0.130	DK01512.0		
12.0	12.0	180	128	0.126		DK01612.0	
12.5	13.0	124	76	0.133	DK015125		
12.5	13.0	202	151	0.130		DK01612.5	
13.0	13.0	124	76	0.142	DK01513.0		
13.0	13.0	202	151	0.140		DK01613.0	
14.0	14.0	124	76	0.142	DK01514.0		
14.0	14.0	202	151	0.140		DK01614.0	
15.0	16.0	133	82	0.150	DK01515.0		
15.0	16.0	227	172	0.144		DK01615.0	
16.0	16.0	133	82	0.165	DK01516.0		
16.0	16.0	227	172	0.161		DK01616.0	

DRILL

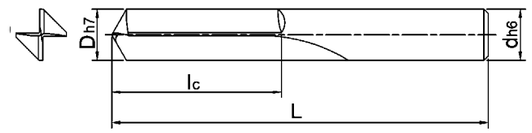
PROPERTIES & APPLICATION

DK017	HM	Z2	Helix 0°	120°	D_{h7}	Shank d_{h6}		2.5XD
DK018	HM	Z2	Helix 0°	120°	D_{h7}	Shank d_{h6}		3XD
DK019	HM	Z2	Helix 0°	120°	D_{h7}	Shank d_{h6}		4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

DK017	DK018	DK019
		
2.00-20.00	2.00-20.00	2.00-20.00

Engineering Data
- Double margin
- Non internal coolant
- Me trụ kép
- Không có lỗ tưới nguội
- ダブルマージン
- 非内部給油
- 이중 마진
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code					K	K	N	N				
Suitability					○	○	●	●				
V_c (m / min)					60 ~ 80	60 ~ 80	300 ~ 350	300 ~ 350				

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK017	DK018	DK019
2.0	3.0	38	12	0.063	DK0172.0		
2.5	3.0	43	14	0.080	DK0172.5		
3.0	3.0	46	16	0.100	DK0173.0		
3.0	3.0	62	20	0.090		DK0183.0	
3.0	3.0	61	33	0.085			DK0193.0
3.3	4	49	18	0.135	DK0173.3		
4.0	4.0	55	22	0.125	DK0174.0		
4.0	4.0	66	24	0.120		DK0184.0	
4.0	4.0	75	43	0.110			DK0194.0
4.2	5.0	55	22	0.128	DK0174.2		
5.0	5.0	62	26	0.130	DK0175.0		
5.0	5.0	66	28	0.127		DK0185.0	
5.0	5.0	86	52	0.120			DK0195.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

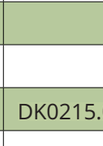
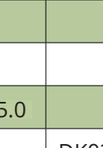
D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK017	DK018	DK019
6.0	6.0	66	28	0.160	DK0176.0		
6.0	6.0	66	28	0.150		DK0186.0	
6.0	6.0	93	57	0.155			DK0196.0
6.8	8.0	74	34	0.173	DK0176.8		
8.0	8.0	79	37	0.200	DK0178.0		
8.0	8.0	89	40	0.182		DK0188.0	
8.0	8.0	117	75	0.175			DK0198.0
8.5	10.0	79	37	0.23	DK0178.5		
10.0	10.0	85	43	0.250	DK01710.0		
10.0	10.0	102	55	0.241		DK01810.0	
10.0	10.0	133	87	0.238			DK01910.0
10.2	12.0	89	43	0.252	DK01710.2		
12.0	12.0	102	51	0.260	DK01712.0		
12.0	12.0	107	60	0.253		DK01812.0	
12.0	12.0	151	101	0.243			DK01912.0
13.0	13.0	102	51	0.265	DK01713.0		
13.0	13.0	107	60	0.260		DK01813.0	
13.0	13.0	151	101	0.253			DK01913.0
14.0	14.0	107	54	0.270	DK01714.0		
14.0	14.0	107	60	0.264		DK01814.0	
14.0	14.0	160	108	0.258			DK01914.0
15.0	16.0	111	56	0.285	DK01715.0		
15.0	16.0	115	65	0.280		DK01815.0	
15.0	16.0	169	114	0.273			DK01915.0
16.0	16.0	115	58	0.315	DK01716.0		
16.0	16.0	115	65	0.302		DK01816.0	
16.0	16.0	178	120	0.296			DK01916.0
18.0	18.0	123	62	0.330	DK01718.0		
18.0	18.0	123	73	0.320		DK01818.0	
18.0	18.0	191	130	0.315			DK01918.0
20.0	20.0	131	66	0.400	DK01720.0		
20.0	20.0	131	79	0.378		DK01820.0	
20.0	20.0	205	140	0.363			DK01920.0

DRILL

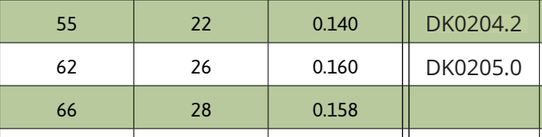
PROPERTIES & APPLICATION

DK020	HM	Z2	Helix 0°	140°	D_{h7}	Shank d_{h6}	2.5XD
DK021	HM	Z2	Helix 0°	140°	D_{h7}	Shank d_{h6}	3XD
DK022	HM	Z2	Helix 0°	140°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

DK020	DK021	DK022
		
2.00-20.00	2.00-20.00	2.00-20.00

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability					○	○	●	●				
V_c (m / min)	100 ~ 120	100 ~ 120			60 ~ 80	60 ~ 80	300 ~ 350	300 ~ 350				

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK020	DK021	DK022
2.0	3.0	38	12	0.080	DK0202.0		
2.5	3.0	43	14	0.090	DK0202.5		
3.0	3.0	46	16	0.125	DK0203.0		
3.0	3.0	62	20	0.120		DK0213.0	
3.0	3.0	61	33	0.110			DK0223.0
3.3	4	49	18	0.130	DK0203.3		
4.0	4.0	55	22	0.160	DK0204.0		
4.0	4.0	66	24	0.155		DK0214.0	
4.0	4.0	75	43	0.150			DK0224.0
4.2	5.0	55	22	0.140	DK0204.2		
5.0	5.0	62	26	0.160	DK0205.0		
5.0	5.0	66	28	0.158		DK0215.0	
5.0	5.0	86	52	0.152			DK0225.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK020	DK021	DK022
6.0	6.0	66	28	0.200	DK0206.0		
6.0	6.0	66	28	0.180		DK0216.0	
6.0	6.0	93	57	0.175			DK0226.0
6.8	8.0	74	34	0.220	DK0206.8		
8.0	8.0	79	37	0.250	DK0208.0		
8.0	8.0	89	40	0.243		DK0218.0	
8.0	8.0	117	75	0.240			DK0228.0
8.5	10.0	79	37	0.275	DK0208.5		
10.0	10.0	85	43	0.315	DK02010.0		
10.0	10.0	102	55	0.308		DK02110.0	
10.0	10.0	133	87	0.300			DK02210.0
10.2	12.0	89	43	0.330	DK02010.2		
12.0	12.0	102	51	0.315	DK02012.0		
12.0	12.0	107	60	0.310		DK02112.0	
12.0	12.0	151	101	0.305			DK02212.0
13.0	13.0	102	51	0.350	DK02013.0		
13.0	13.0	107	60	0.330		DK02113.0	
13.0	13.0	151	101	0.317			DK02213.0
14.0	14.0	107	54	0.350	DK02014.0		
14.0	14.0	107	60	0.335		DK02114.0	
14.0	14.0	160	108	0.322			DK02214.0
15.0	16.0	111	56	0.350	DK02015.0		
15.0	16.0	115	65	0.342		DK02115.0	
15.0	16.0	169	114	0.331			DK02215.0
16.0	16.0	115	58	0.400	DK02016.0		
16.0	16.0	115	65	0.393		DK02116.0	
16.0	16.0	178	120	0.381			DK02216.0
18.0	18.0	123	62	0.450	DK02018.0		
18.0	18.0	123	73	0.425		DK02118.0	
18.0	18.0	191	130	0.410			DK02218.0
20.0	20.0	131	66	0.500	DK02020.0		
20.0	20.0	131	79	0.481		DK02120.0	
20.0	20.0	205	140	0.470			DK02220.0

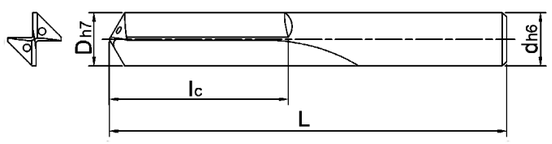
DRILL

PROPERTIES & APPLICATION

DK026	HM	Z2	Helix 0°	120°	D_{h7}	Shank d_{h6}	2.5XD	
DK027	HM	Z2	Helix 0°	120°	D_{h7}	Shank d_{h6}	3XD	
DK028	HM	Z2	Helix 0°	120°	D_{h7}	Shank d_{h6}	4XD	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Double margin
- Straight coolant hole
- Me trụ kép
- Lỗ tưới nguội thẳng
- ダブルマージン
- 直線冷却穴
- 이중 마진
- 직선 냉각 구멍



DK026	DK027	DK028
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability					○	○	●	●				
V_c (m / min)					60 ~ 80	60 ~ 80	300 ~ 350	300 ~ 350				

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK026	DK027	DK028
2.0	3.0	38	12	0.063	DK0262.0		
2.5	3.0	43	14	0.080	DK0262.5		
3.0	3.0	46	16	0.100	DK0263.0		
3.0	3.0	62	20	0.090		DK0273.0	
3.0	3.0	61	33	0.085			DK0283.0
3.3	4	49	18	0.135	DK0263.3		
4.0	4.0	55	22	0.125	DK0264.0		
4.0	4.0	66	24	0.120		DK0274.0	
4.0	4.0	75	43	0.110			DK0284.0
4.2	5.0	55	22	0.128	DK0264.2		
5.0	5.0	62	26	0.130	DK0265.0		
5.0	5.0	66	28	0.127		DK0275.0	
5.0	5.0	86	52	0.120			DK0285.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK026	DK027	DK028
6.0	6.0	66	28	0.160	DK0266.0		
6.0	6.0	66	28	0.150		DK0276.0	
6.0	6.0	93	57	0.155			DK0286.0
6.8	8.0	74	34	0.173	DK0266.8		
8.0	8.0	79	37	0.200	DK0268.0		
8.0	8.0	89	40	0.182		DK0278.0	
8.0	8.0	117	75	0.175			DK0288.0
8.5	10.0	79	37	0.23	DK0268.5		
10.0	10.0	85	43	0.250	DK02610.0		
10.0	10.0	102	55	0.241		DK02710.0	
10.0	10.0	133	87	0.238			DK02810.0
10.2	12.0	89	43	0.252	DK02610.2		
12.0	12.0	102	51	0.260	DK02612.0		
12.0	12.0	107	60	0.253		DK02712.0	
12.0	12.0	151	101	0.243			DK02812.0
13.0	13.0	102	51	0.265	DK02613.0		
13.0	13.0	107	60	0.260		DK02713.0	
13.0	13.0	151	101	0.253			DK02813.0
14.0	14.0	107	54	0.270	DK02614.0		
14.0	14.0	107	60	0.264		DK02714.0	
14.0	14.0	160	108	0.258			DK02814.0
15.0	16.0	111	56	0.285	DK02615.0		
15.0	16.0	115	65	0.280		DK02715.0	
15.0	16.0	169	114	0.273			DK02815.0
16.0	16.0	115	58	0.315	DK02616.0		
16.0	16.0	115	65	0.302		DK02716.0	
16.0	16.0	178	120	0.296			DK02816.0
18.0	18.0	123	62	0.330	DK02618.0		
18.0	18.0	123	73	0.320		DK02718.0	
18.0	18.0	191	130	0.315			DK02818.0
20.0	20.0	131	66	0.400	DK02620.0		
20.0	20.0	131	79	0.378		DK02720.0	
20.0	20.0	205	140	0.363			DK02820.0

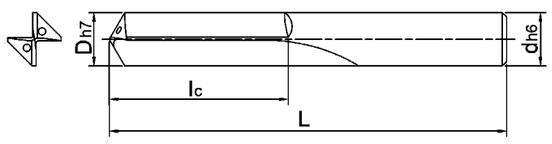
DRILL

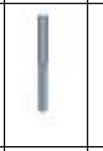
PROPERTIES & APPLICATION

DK029	HM	Z2	Helix 0°	140°	D_{h7}	Shank d_{h6}	2.5XD	
DK030	HM	Z2	Helix 0°	140°	D_{h7}	Shank d_{h6}	3XD	
DK031	HM	Z2	Helix 0°	140°	D_{h7}	Shank d_{h6}	4XD	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Double margin
- Straight coolant hole
- Me trụ kép
- Lỗ tưới nguội thẳng
- ダブルマージン
- 直線冷却穴
- 이중 마진
- 직선 냉각 구멍



DK029	DK030	DK031
		
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability					○	○	●	●				
V_c (m / min)					60 ~ 80	60 ~ 80	300 ~ 350	300 ~ 350				

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK029	DK030	DK031
2.0	3.0	38	12	0.080	DK0292.0		
2.5	3.0	43	14	0.090	DK0292.5		
3.0	3.0	46	16	0.125	DK0293.0		
3.0	3.0	62	20	0.120		DK0303.0	
3.0	3.0	61	33	0.110			DK0313.0
3.3	4	49	18	0.130	DK0293.3		
4.0	4.0	55	22	0.160	DK0294.0		
4.0	4.0	66	24	0.155		DK0304.0	
4.0	4.0	75	43	0.150			DK0314.0
4.2	5.0	55	22	0.140	DK0294.2		
5.0	5.0	62	26	0.160	DK0295.0		
5.0	5.0	66	28	0.158		DK0305.0	
5.0	5.0	86	52	0.152			DK0315.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

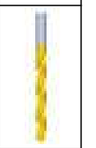
D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK029	DK030	DK031
6.0	6.0	66	28	0.200	DK0296.0		
6.0	6.0	66	28	0.180		DK0306.0	
6.0	6.0	93	57	0.175			DK0316.0
6.8	8.0	74	34	0.220	DK0296.8		
8.0	8.0	79	37	0.250	DK0298.0		
8.0	8.0	89	40	0.243		DK0308.0	
8.0	8.0	117	75	0.240			DK0318.0
8.5	10.0	79	37	0.275	DK0298.5		
10.0	10.0	85	43	0.315	DK02910.0		
10.0	10.0	102	55	0.308		DK03010.0	
10.0	10.0	133	87	0.300			DK03110.0
10.2	12.0	89	43	0.330	DK02910.2		
12.0	12.0	102	51	0.315	DK02912.0		
12.0	12.0	107	60	0.310		DK03012.0	
12.0	12.0	151	101	0.305			DK03112.0
13.0	13.0	102	51	0.350	DK02913.0		
13.0	13.0	107	60	0.330		DK03013.0	
13.0	13.0	151	101	0.317			DK03113.0
14.0	14.0	107	54	0.350	DK02914.0		
14.0	14.0	107	60	0.335		DK03014.0	
14.0	14.0	160	108	0.322			DK03114.0
15.0	16.0	111	56	0.350	DK02915.0		
15.0	16.0	115	65	0.342		DK03015.0	
15.0	16.0	169	114	0.331			DK03115.0
16.0	16.0	115	58	0.400	DK02916.0		
16.0	16.0	115	65	0.393		DK03016.0	
16.0	16.0	178	120	0.381			DK03116.0
18.0	18.0	123	62	0.450	DK02918.0		
18.0	18.0	123	73	0.425		DK03018.0	
18.0	18.0	191	130	0.410			DK03118.0
20.0	20.0	131	66	0.500	DK02920.0		
20.0	20.0	131	79	0.481		DK03020.0	
20.0	20.0	205	140	0.470			DK03120.0

DRILL

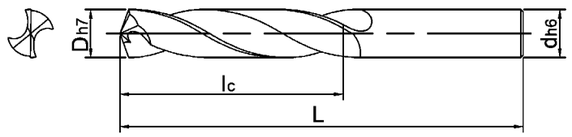
PROPERTIES & APPLICATION

DK032	HM	Z2	TiN	Helix 30°	120°	D_{h7}	Shank d_{h6}	2.5XD
DK033	HM	Z2	TiN	Helix 30°	120°	D_{h7}	Shank d_{h6}	3XD
DK034	HM	Z2	TiN	Helix 30°	120°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

DK032	DK033	DK034
		
2.00-20.00	2.00-20.00	2.00-20.00

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●						
V_c (m / min)	85 ~ 100	85 ~ 100			60 ~ 80	60 ~ 80	150 ~ 200	150 ~ 200		30 ~ 45	30 ~ 45	30 ~ 45

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK032	DK033	DK034
2.0	3.0	38	12	0.032	DK0322.0		
2.5	3.0	43	14	0.040	DK0322.5		
3.0	3.0	46	16	0.050	DK0323.0		
3.0	3.0	62	20	0.048		DK0333.0	
3.0	3.0	61	33	0.040			DK0343.0
3.3	4	49	18	0.053	DK0323.3		
4.0	4.0	55	22	0.063	DK0324.0		
4.0	4.0	66	24	0.060		DK0334.0	
4.0	4.0	75	43	0.052			DK0344.0
4.2	5.0	55	22	0.063	DK0324.2		
5.0	5.0	62	26	0.063	DK0325.0		
5.0	5.0	66	28	0.060		DK0335.0	
5.0	5.0	86	52	0.055			DK0345.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK032	DK033	DK034
6.0	6.0	66	28	0.080	DK0326.0		
6.0	6.0	66	28	0.077		DK0336.0	
6.0	6.0	93	57	0.072			DK0346.0
6.8	8.0	74	34	0.089	DK0326.8		
8.0	8.0	79	37	0.100	DK0328.0		
8.0	8.0	89	40	0.091		DK0338.0	
8.0	8.0	117	75	0.086			DK0348.0
8.5	10.0	79	37	0.110	DK0328.5		
10.0	10.0	85	43	0.125	DK03210.0		
10.0	10.0	102	55	0.120		DK03310.0	
10.0	10.0	133	87	0.114			DK03410.0
10.2	12.0	89	43	0.125	DK03210.2		
12.0	12.0	102	51	0.130	DK03212.2		
12.0	12.0	107	60	0.125		DK03312.0	
12.0	12.0	151	101	0.122			DK03412.0
13.0	13.0	102	51	0.135	DK03213.0		
13.0	13.0	107	60	0.130		DK03313.0	
13.0	13.0	151	101	0.126			DK03413.0
14.0	14.0	107	54	0.143	DK03214.0		
14.0	14.0	107	60	0.141		DK03314.0	
14.0	14.0	160	108	0.136			DK03414.0
15.0	16.0	111	56	0.150	DK03215.0		
15.0	16.0	115	65	0.147		DK03315.0	
15.0	16.0	169	114	0.143			DK03415.0
16.0	16.0	115	58	0.160	DK03216.0		
16.0	16.0	115	65	0.156		DK03316.0	
16.0	16.0	178	120	0.153			DK03416.0
18.0	18.0	123	62	0.183	DK03218.0		
18.0	18.0	123	73	0.172		DK03318.0	
18.0	18.0	191	130	0.170			DK03418.0
20.0	20.0	131	66	0.200	DK02020.0		
20.0	20.0	131	79	0.190		DK03320.0	
20.0	20.0	205	140	0.185			DK03420.0

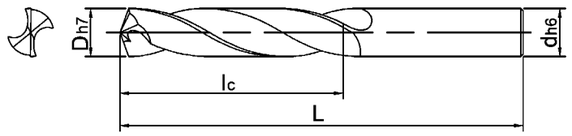
DRILL

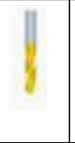
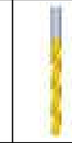
PROPERTIES & APPLICATION

DK035	HM	Z2	TiN	Helix 30°	140°	D_{h7}	Shank d_{h6}	2.5XD
DK036	HM	Z2	TiN	Helix 30°	140°	D_{h7}	Shank d_{h6}	3XD
DK037	HM	Z2	TiN	Helix 30°	140°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



DK035	DK036	DK037
		
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			●	●				○	○	○
V_c (m / min)	85 ~ 100	85 ~ 100			60 ~ 80	60 ~ 80				30 ~ 45	30 ~ 45	30 ~ 45

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK035	DK036	DK037
2.0	3.0	38	12	0.040	DK0352.0		
2.5	3.0	43	14	0.050	DK0352.5		
3.0	3.0	46	16	0.063	DK0353.0		
3.0	3.0	62	20	0.060		DK0363.0	
3.0	3.0	61	33	0.057			DK0373.0
3.3	4	49	18	0.065	DK0353.3		
4.0	4.0	55	22	0.080	DK0354.0		
4.0	4.0	66	24	0.078		DK0364.0	
4.0	4.0	75	43	0.072			DK0374.0
4.2	5.0	55	22	0.083	DK0354.2		
5.0	5.0	62	26	0.085	DK0355.0		
5.0	5.0	66	28	0.082		DK0365.0	
5.0	5.0	86	52	0.080			DK0375.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK035	DK036	DK037
6.0	6.0	66	28	0.110	DK0356.0		
6.0	6.0	66	28	0.108		DK0366.0	
6.0	6.0	93	57	0.103			DK0376.0
6.8	8.0	74	34	0.118	DK0356.8		
8.0	8.0	79	37	0.125	DK0358.0		
8.0	8.0	89	40	0.121		DK0368.0	
8.0	8.0	117	75	0.117			DK0378.0
8.5	10.0	79	37	0.135	DK0358.5		
10.0	10.0	85	43	0.160	DK03510.0		
10.0	10.0	102	55	0.155		DK03610.0	
10.0	10.0	133	87	0.153			DK03710.0
10.2	12.0	89	43	0.163	DK03510.2		
12.0	12.0	102	51	0.165	DK03512.0		
12.0	12.0	107	60	0.161		DK03612.0	
12.0	12.0	151	101	0.157			DK03712.0
13.0	13.0	102	51	0.175	DK03513.0		
13.0	13.0	107	60	0.173		DK03613.0	
13.0	13.0	151	101	0.170			DK03713.0
14.0	14.0	107	54	0.180	DK03514.0		
14.0	14.0	107	60	0.176		DK03614.0	
14.0	14.0	160	108	0.173			DK03714.0
15.0	16.0	111	56	0.186	DK03515.0		
15.0	16.0	115	65	0.184		DK03615.0	
15.0	16.0	169	114	0.180			DK03715.0
16.0	16.0	115	58	0.200	DK03516.0		
16.0	16.0	115	65	0.116		DK03616.0	
16.0	16.0	178	120	0.112			DK03716.0
18.0	18.0	123	62	0.230	DK03518.0		
18.0	18.0	123	73	0.225		DK03618.0	
18.0	18.0	191	130	0.221			DK03718.0
20.0	20.0	131	66	0.250	DK03520.0		
20.0	20.0	131	79	0.243		DK03620.0	
20.0	20.0	205	140	0.240			DK03720.0

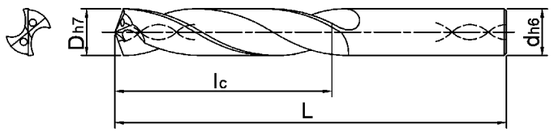
DRILL

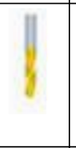
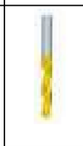
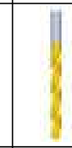
PROPERTIES & APPLICATION

DK038	HM	Z2	TiN	Helix 30°	120°	D_{h7}	Shank d_{h6}		2.5XD
DK039	HM	Z2	TiN	Helix 30°	120°	D_{h7}	Shank d_{h6}		3XD
DK040	HM	Z2	TiN	Helix 30°	120°	D_{h7}	Shank d_{h6}		4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK038	DK039	DK040
		
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Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK038	DK039	DK040
2.0	3.0	38	12	0.032	DK0382.0		
2.5	3.0	43	14	0.040	DK0382.5		
3.0	3.0	46	16	0.050	DK0383.0		
3.0	3.0	62	20	0.048		DK0393.0	
3.0	3.0	61	33	0.040			DK0403.0
3.3	4	49	18	0.053	DK0383.3		
4.0	4.0	55	22	0.063	DK0384.0		
4.0	4.0	66	24	0.060		DK0394.0	
4.0	4.0	75	43	0.052			DK0404.0
4.2	5.0	55	22	0.063	DK0384.2		
5.0	5.0	62	26	0.063	DK0385.0		
5.0	5.0	66	28	0.060		DK0395.0	
5.0	5.0	86	52	0.055			DK0405.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK038	DK039	DK040
6.0	6.0	66	28	0.080	DK0386.0		
6.0	6.0	66	28	0.077		DK0396.0	
6.0	6.0	93	57	0.072			DK0406.0
6.8	8.0	74	34	0.089	DK0386.8		
8.0	8.0	79	37	0.100	DK0388.0		
8.0	8.0	89	40	0.091		DK0398.0	
8.0	8.0	117	75	0.086			DK0408.0
8.5	10.0	79	37	0.110	DK0388.5		
10.0	10.0	85	43	0.125	DK03810.0		
10.0	10.0	102	55	0.120		DK03910.0	
10.0	10.0	133	87	0.114			DK04010.0
10.2	12.0	89	43	0.125	DK03810.2		
12.0	12.0	102	51	0.130	DK03812.0		
12.0	12.0	107	60	0.125		DK03912.0	
12.0	12.0	151	101	0.122			DK04012.0
13.0	13.0	102	51	0.135	DK03813.0		
13.0	13.0	107	60	0.130		DK039130	
13.0	13.0	151	101	0.126			DK04013.0
14.0	14.0	107	54	0.143	DK03814.0		
14.0	14.0	107	60	0.141		DK03914.0	
14.0	14.0	160	108	0.136			DK04014.0
15.0	16.0	111	56	0.150	DK03815.0		
15.0	16.0	115	65	0.147		DK03915.0	
15.0	16.0	169	114	0.143			DK04015.0
16.0	16.0	115	58	0.160	DK03816.0		
16.0	16.0	115	65	0.156		DK03916.0	
16.0	16.0	178	120	0.153			DK04016.0
18.0	18.0	123	62	0.183	DK03818.0		
18.0	18.0	123	73	0.172		DK03918.0	
18.0	18.0	191	130	0.170			DK04018.0
20.0	20.0	131	66	0.200	DK03820.0		
20.0	20.0	131	79	0.190		DK03920.0	
20.0	20.0	205	140	0.185			DK04020.0

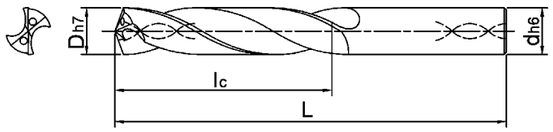
DRILL

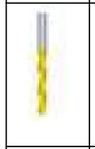
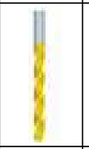
PROPERTIES & APPLICATION

DK041	HM	Z2	TiN	Helix 30°	120°	D_{h7}	Shank d_{h6}		5XD	
DK042	HM	Z2	TiN	Helix 30°	120°	D_{h7}	Shank d_{h6}		8XD	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK041	DK042	
		
3.00-16.00	3.00-16.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○			●	○	○	○
V_c (m / min)	80 ~ 90	70 ~ 80			70 ~ 80	70 ~ 80						

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK041	DK042	
3.0	3.0	66	28	0.045	DK0413.0		
3.0	3.0	79	37	0.043		DK0423.0	
3.5	4.0	66	28	0.050	DK0413.5		
3.5	4.0	79	37	0.046		DK0423.5	
4.0	4.0	74	36	0.060	DK0414.0		
4.0	4.0	90	48	0.058		DK0424.0	
4.5	5.0	74	36	0.062	DK0414.5		
4.5	5.0	90	48	0.060		DK0424.5	
5.0	5.0	82	44	0.063	DK0415.0		
5.0	5.0	104	62	0.061		DK0425.0	
5.5	6.0	82	44	0.069	DK0415.5		
5.5	6.0	104	62	0.063		DK0425.5	
6.0	6.0	82	44	0.080	DK0416.0		
6.0	6.0	104	62	0.078		DK0426.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK041	DK042	
6.5	8.0	91	53	0.083	DK0416.5		
6.5	8.0	126	84	0.081		DK0426.5	
7.0	8.0	91	53	0.085	DK0417.0		
7.0	8.0	126	84	0.083		DK0427.0	
7.5	8.0	91	53	0.088	DK0417.5		
7.5	8.0	126	84	0.085		DK0427.5	
8.0	8.0	103	61	0.095	DK0418.0		
8.0	8.0	126	84	0.091		DK0428.0	
8.5	10.0	103	61	0.100	DK0418.5		
8.5	10.0	152	106	0.096		DK0428.5	
9.0	10.0	103	61	0.110	DK0419.0		
9.0	10.0	152	106	0.107		DK0429.0	
9.5	10.0	103	61	0.115	DK0419.5		
9.5	10.0	152	106	0.110		DK0429.5	
10.0	10.0	118	70	0.120	DK04110.0		
10.0	10.0	152	106	0.117		DK04210.0	
10.5	12.0	118	70	0.120	DK04110.5		
10.5	12.0	180	128	0.115		DK04210.5	
11.0	12.0	118	70	0.122	DK04111.0		
11.0	12.0	180	128	0.120		DK04211.0	
11.5	12.0	118	70	0.128	DK04111.5		
11.5	12.0	180	128	0.125		DK04211.5	
12.0	12.0	124	76	0.130	DK04112.0		
12.0	12.0	180	128	0.122		DK04212.0	
12.5	13.0	124	76	0.132	DK04112.5		
12.5	13.0	202	151	0.130		DK04212.5	
13.0	13.0	124	76	0.140	DK04113.0		
13.0	13.0	202	151	0.137		DK04213.0	
14.0	14.0	124	76	0.145	DK04114.0		
14.0	14.0	202	151	0.140		DK04214.0	
15.0	16.0	133	82	0.153	DK04115.0		
15.0	16.0	227	172	0.145		DK04215.0	
16.0	16.0	133	82	0.160	DK04116.0		
16.0	16.0	227	172	0.150		DK04216.0	

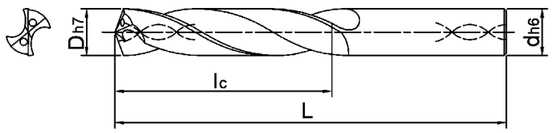
DRILL

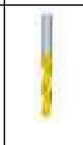
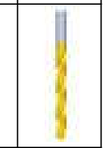
PROPERTIES & APPLICATION

DK043	HM	Z2	TiN	Helix 30°	140°	D_{h7}	Shank d_{h6}		2.5XD
DK044	HM	Z2	TiN	Helix 30°	140°	D_{h7}	Shank d_{h6}		3XD
DK045	HM	Z2	TiN	Helix 30°	140°	D_{h7}	Shank d_{h6}		4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK043	DK044	DK045
		
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK043	DK044	DK045
2.0	3.0	38	12	0.040	DK0432.0		
2.5	3.0	43	14	0.050	DK0432.5		
3.0	3.0	46	16	0.063	DK0433.0		
3.0	3.0	62	20	0.060		DK0443.0	
3.0	3.0	61	33	0.057			DK0453.0
3.3	4	49	18	0.065	DK0433.3		
4.0	4.0	55	22	0.080	DK0434.0		
4.0	4.0	66	24	0.078		DK0444.0	
4.0	4.0	75	43	0.072			DK0444.0
4.2	5.0	55	22	0.083	DK0434.2		
5.0	5.0	62	26	0.085	DK0435.0		
5.0	5.0	66	28	0.082		DK0445.0	
5.0	5.0	86	52	0.080			DK0455.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

DK

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK043	DK044	DK045
6.0	6.0	66	28	0.110	DK0436.0		
6.0	6.0	66	28	0.108		DK0446.0	
6.0	6.0	93	57	0.103			DK0456.0
6.8	8.0	74	34	0.118	DK0436.8		
8.0	8.0	79	37	0.125	DK0438.0		
8.0	8.0	89	40	0.121		DK0448.0	
8.0	8.0	117	75	0.117			DK0458.0
8.5	10.0	79	37	0.135	DK0438.5		
10.0	10.0	85	43	0.160	DK04310.0		
10.0	10.0	102	55	0.155		DK04410.0	
10.0	10.0	133	87	0.153			DK04510.0
10.2	12.0	89	43	0.163	DK04310.2		
12.0	12.0	102	51	0.165	DK04312.0		
12.0	12.0	107	60	0.161		DK04412.0	
12.0	12.0	151	101	0.157			DK04512.0
13.0	13.0	102	51	0.175	DK04313.0		
13.0	13.0	107	60	0.173		DK04413.0	
13.0	13.0	151	101	0.170			DK04513.0
14.0	14.0	107	54	0.180	DK04314.0		
14.0	14.0	107	60	0.176		DK04414.0	
14.0	14.0	160	108	0.173			DK04514.0
15.0	16.0	111	56	0.186	DK04315.0		
15.0	16.0	115	65	0.184		DK04415.0	
15.0	16.0	169	114	0.180			DK04515.0
16.0	16.0	115	58	0.200	DK04316.0		
16.0	16.0	115	65	0.116		DK04416.0	
16.0	16.0	178	120	0.112			DK04516.0
18.0	18.0	123	62	0.230	DK04318.0		
18.0	18.0	123	73	0.225		DK04418.0	
18.0	18.0	191	130	0.221			DK04518.0
20.0	20.0	131	66	0.250	DK04420.0		
20.0	20.0	131	79	0.243		DK04420.0	
20.0	20.0	205	140	0.240			DK04520.0

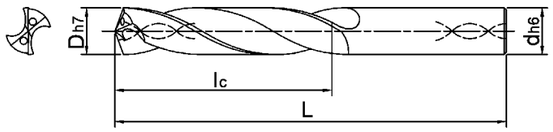
DRILL

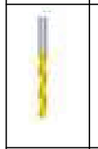
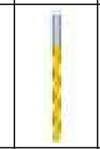
PROPERTIES & APPLICATION

DK046	HM	Z2	TiN	Helix 30°	140°	D_{h7}	Shank d_{h6}		5XD
DK047	HM	Z2	TiN	Helix 30°	140°	D_{h7}	Shank d_{h6}		8XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK046	DK047	
		
3.00-16.00	3.00-16.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○	○	○	●	○	○	○
V_c (m / min)	80 ~ 90	70 ~ 80			70 ~ 80	70 ~ 80	180 ~ 200					

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK046	DK047	
3.0	3.0	66	28	0.060	DK0463.0		
3.0	3.0	79	37	0.058		DK0473.0	
3.5	4.0	66	28	0.065	DK0463.5		
3.5	4.0	79	37	0.060		DK0473.5	
4.0	4.0	74	36	0.077	DK0464.0		
4.0	4.0	90	48	0.072		DK0474.0	
4.5	5.0	74	36	0.080	DK0464.5		
4.5	5.0	90	48	0.078		DK0474.5	
5.0	5.0	82	44	0.082	DK0465.0		
5.0	5.0	104	62	0.080		DK0475.0	
5.5	6.0	82	44	0.086	DK0465.5		
5.5	6.0	104	62	0.082		DK0475.5	
6.0	6.0	82	44	0.108	DK0466.0		
6.0	6.0	104	62	0.105		DK0476.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

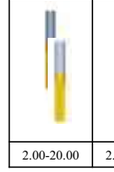
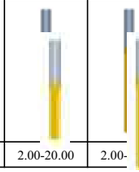
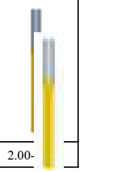
D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK046	DK047	
6.5	8.0	91	53	0.112	DK0466.5		
6.5	8.0	126	84	0.110		DK0476.5	
7.0	8.0	91	53	0.115	DK0467.0		
7.0	8.0	126	84	0.110		DK0477.0	
7.5	8.0	91	53	0.120	DK0467.5		
7.5	8.0	126	84	0.117		DK0477.5	
8.0	8.0	103	61	0.125	DK0468.0		
8.0	8.0	126	84	0.123		DK0478.0	
8.5	10.0	103	61	0.129	DK0468.5		
8.5	10.0	152	106	0.127		DK0478.5	
9.0	10.0	103	61	0.140	DK0469.0		
9.0	10.0	152	106	0.137		DK0479.0	
9.5	10.0	103	61	0.148	DK0469.5		
9.5	10.0	152	106	0.145		DK0479.5	
10.0	10.0	118	70	0.155	DK04610.0		
10.0	10.0	152	106	0.153		DK04710.0	
10.5	12.0	118	70	0.159	DK04610.5		
10.5	12.0	180	128	0.153		DK04710.5	
11.0	12.0	118	70	0.155	DK04611.0		
11.0	12.0	180	128	0.150		DK04711.0	
11.5	12.0	118	70	0.160	DK04611.5		
11.5	12.0	180	128	0.158		DK04711.5	
12.0	12.0	124	76	0.161	DK04612.0		
12.0	12.0	180	128	0.160		DK04712.0	
12.5	13.0	124	76	0.165	DK04612.5		
12.5	13.0	202	151	0.162		DK04712.5	
13.0	13.0	124	76	0.175	DK04613.0		
13.0	13.0	202	151	0.171		DK04713.0	
14.0	14.0	124	76	0.180	DK04614.0		
14.0	14.0	202	151	0.176		DK04714.0	
15.0	16.0	133	82	0.185	DK04615.0		
15.0	16.0	227	172	0.180		DK04715.0	
16.0	16.0	133	82	0.200	DK04616.0		
16.0	16.0	227	172	0.190		DK04716.0	

DRILL

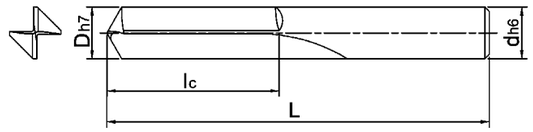
PROPERTIES & APPLICATION

DK048	HM	Z2	TiN	Helix 0°	120°	D_{h7}	Shank d_{h6}	2.5XD
DK049	HM	Z2	TiN	Helix 0°	120°	D_{h7}	Shank d_{h6}	3XD
DK050	HM	Z2	TiN	Helix 0°	120°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

DK048	DK049	DK050
		
2.00-20.00	2.00-20.00	2.00-

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability			○	○	●	●	○	○	○			
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK048	DK049	DK050
2.0	3.0	38	12	0.060	DK0482.0		
2.5	3.0	43	14		DK0482.5		
3.0	3.0	46	16		DK0483.0		
3.0	3.0	62	20	0.060		DK0493.0	
3.0	3.0	61	33	0.080			DK0503.0
3.3	4	49	18		DK0483.3		
4.0	4.0	55	22		DK0484.0		
4.0	4.0	66	24	0.080		DK0494.0	
4.0	4.0	75	43	0.100			DK0504.0
4.2	5.0	55	22		DK0484.2		
5.0	5.0	62	26		DK0485.0		
5.0	5.0	66	28	0.100		DK0495.0	
5.0	5.0	86	52	0.120			DK0505.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

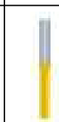
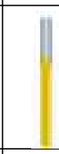
D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK048	DK049	DK050
6.0	6.0	66	28	0.120	DK0486.0		
6.0	6.0	66	28			DK0496.0	
6.0	6.0	93	57				DK0506.0
6.8	8.0	74	34	0.120	DK0486.0		
8.0	8.0	79	37	0.150	DK0488.0		
8.0	8.0	89	40			DK0498.0	
8.0	8.0	117	75				DK0508.0
8.5	10.0	79	37	0.150	DK0488.5		
10.0	10.0	85	43	0.165	DK04810.0		
10.0	10.0	102	55			DK04910.0	
10.0	10.0	133	87				DK05010.0
10.2	12.0	89	43	0.165	DK04810.2		
12.0	12.0	102	51	0.180	DK04812.0		
12.0	12.0	107	60			DK04912.0	
12.0	12.0	151	101				DK05012.0
13.0	13.0	102	51	0.180	DK04813.0		
13.0	13.0	107	60			DK04913.0	
13.0	13.0	151	101				DK05013.0
14.0	14.0	107	54	0.200	DK04814.0		
14.0	14.0	107	60			DK04914.0	
14.0	14.0	160	108				DK05014.0
15.0	16.0	111	56	0.200	DK04815.0		
15.0	16.0	115	65			DK04915.0	
15.0	16.0	169	114				DK05015.0
16.0	16.0	115	58	0.250	DK04816.0		
16.0	16.0	115	65			DK04916.0	
16.0	16.0	178	120				DK05016.0
18.0	18.0	123	62	0.250	DK04818.0		
18.0	18.0	123	73			DK04918.0	
18.0	18.0	191	130				DK05018.0
20.0	20.0	131	66		DK04820.0		
20.0	20.0	131	79			DK04920.0	
20.0	20.0	205	140				DK05020.0

DRILL

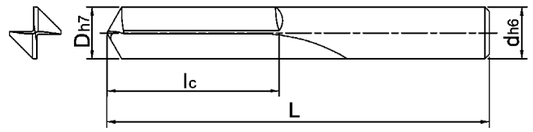
PROPERTIES & APPLICATION

DK051	HM	Z2	TiN	Helix 0°	140°	D_{h7}	Shank d_{h6}	2.5XD
DK052	HM	Z2	TiN	Helix 0°	140°	D_{h7}	Shank d_{h6}	3XD
DK053	HM	Z2	TiN	Helix 0°	140°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

DK051	DK052	DK053
		
2.00-20.00	2.00-20.00	2.00-20.00

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability			○	○	●	●	○	○	○			
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK051	DK052	DK053
2.0	3.0	38	12	0.025	DK0512.0		
2.5	3.0	43	14		DK0512.5		
3.0	3.0	46	16		DK0513.0		
3.0	3.0	62	20	0.025		DK0523.5	
3.0	3.0	61	33	0.030			DK0533.0
3.3	4	49	18		DK0513.3		
4.0	4.0	55	22		DK0514.0		
4.0	4.0	66	24	0.030		DK0524.0	
4.0	4.0	75	43	0.040			DK0534.0
4.2	5.0	55	22		DK0514.2		
5.0	5.0	62	26		DK0512.0		
5.0	5.0	66	28	0.040		DK0525.0	
5.0	5.0	86	52	0.050			DK0535.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK051	DK052	DK053
6.0	6.0	66	28	0.060	DK0516.0		
6.0	6.0	66	28			DK0526.0	
6.0	6.0	93	57				DK0536.0
6.8	8.0	74	34	0.060	DK0516.8		
8.0	8.0	79	37	0.080	DK0518.0		
8.0	8.0	89	40			DK0528.0	
8.0	8.0	117	75				DK0538.0
8.5	10.0	79	37	0.080	DK0518.5		
10.0	10.0	85	43	0.100	DK05110.0		
10.0	10.0	102	55			DK05210.0	
10.0	10.0	133	87				DK05310.0
10.2	12.0	89	43	0.100	DK05110.2		
12.0	12.0	102	51	0.120	DK05112.0		
12.0	12.0	107	60			DK05212.0	
12.0	12.0	151	101				DK05312.0
13.0	13.0	102	51	0.120	DK05113.0		
13.0	13.0	107	60			DK05213.0	
13.0	13.0	151	101				DK05313.0
14.0	14.0	107	54	0.150	DK05114.0		
14.0	14.0	107	60			DK05214.0	
14.0	14.0	160	108				DK05314.0
15.0	16.0	111	56	0.150	DK05115.0		
15.0	16.0	115	65			DK05215.0	
15.0	16.0	169	114				DK05315.0
16.0	16.0	115	58	0.200	DK05116.0		
16.0	16.0	115	65			DK05216.0	
16.0	16.0	178	120				DK05316.0
18.0	18.0	123	62	0.200	DK05118.0		
18.0	18.0	123	73			DK05218.0	
18.0	18.0	191	130				DK05318.0
20.0	20.0	131	66		DK05120.0		
20.0	20.0	131	79			DK05220.0	
20.0	20.0	205	140				DK05320.0

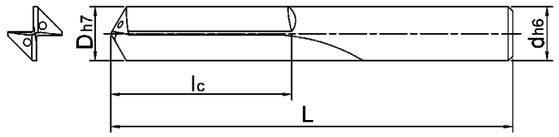
DRILL

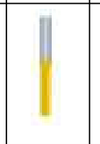
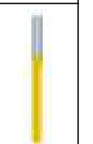
PROPERTIES & APPLICATION

DK054	HM	Z2	TiN	Helix 0°	120°	D_{h7}	Shank d_{h6}		2.5XD
DK055	HM	Z2	TiN	Helix 0°	120°	D_{h7}	Shank d_{h6}		3XD
DK056	HM	Z2	TiN	Helix 0°	120°	D_{h7}	Shank d_{h6}		4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Double margin
- Straight coolant hole
- Me trụ kép
- Lỗ tưới nguội thẳng
- ダブルマージン
- 直線冷却穴
- 이중 마진
- 직선 냉각 구멍



DK054	DK055	DK056
		
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability					●	●	○	○	○			
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK054	DK055	DK056
2.0	3.0	38	12	0.060	DK0542.0		
2.5	3.0	43	14		DK0542.5		
3.0	3.0	46	16		DK0543.0		
3.0	3.0	62	20	0.060		DK0553.0	
3.0	3.0	61	33	0.080			DK0563.0
3.3	4	49	18		DK0543.3		
4.0	4.0	55	22		DK0544.0		
4.0	4.0	66	24	0.080		DK0554.0	
4.0	4.0	75	43	0.100			DK0564.0
4.2	5.0	55	22		DK0544.2		
5.0	5.0	62	26		DK0545.0		
5.0	5.0	66	28	0.100		DK0555.0	
5.0	5.0	86	52	0.120			DK0565.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK054	DK055	DK056
6.0	6.0	66	28	0.120	DK0546.0		
6.0	6.0	66	28			DK0556.0	
6.0	6.0	93	57				DK0566.0
6.8	8.0	74	34	0.120	DK0546.8		
8.0	8.0	79	37	0.150	DK0548.0		
8.0	8.0	89	40			DK0558.0	
8.0	8.0	117	75				DK0568.0
8.5	10.0	79	37	0.150	DK0548.5		
10.0	10.0	85	43	0.165	DK05410.0		
10.0	10.0	102	55			DK05510.0	
10.0	10.0	133	87				DK05610.0
10.2	12.0	89	43	0.165	DK05410.2		
12.0	12.0	102	51	0.180	DK05410.2		
12.0	12.0	107	60			DK05512.0	
12.0	12.0	151	101				DK05512.0
13.0	13.0	102	51	0.180	DK05413.0		
13.0	13.0	107	60			DK05513.0	
13.0	13.0	151	101				DK05613.0
14.0	14.0	107	54	0.200	DK05414.0		
14.0	14.0	107	60			DK05514.0	
14.0	14.0	160	108				DK05614.0
15.0	16.0	111	56	0.200	DK05415.0		
15.0	16.0	115	65			DK05515.0	
15.0	16.0	169	114				DK05615.0
16.0	16.0	115	58	0.250	DK05416.0		
16.0	16.0	115	65			DK05516.0	
16.0	16.0	178	120				DK05616.0
18.0	18.0	123	62	0.250	DK05418.0		
18.0	18.0	123	73			DK05518.0	
18.0	18.0	191	130				DK05618.0
20.0	20.0	131	66		DK05420.0		
20.0	20.0	131	79			DK05520.0	
20.0	20.0	205	140				DK05620.0

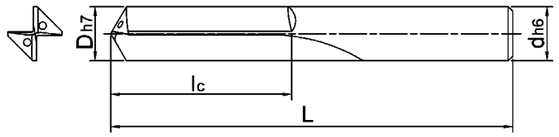
DRILL

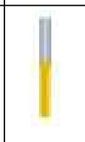
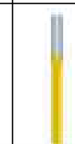
PROPERTIES & APPLICATION

DK057	HM	Z2	TiN	Helix 0°	140°	D_{h7}	Shank d_{h6}		2.5XD
DK058	HM	Z2	TiN	Helix 0°	140°	D_{h7}	Shank d_{h6}		3XD
DK059	HM	Z2	TiN	Helix 0°	140°	D_{h7}	Shank d_{h6}		4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Double margin
- Straight coolant hole
- Me trụ kép
- Lỗ tưới nguội thẳng
- ダブルマージン
- 直線冷却穴
- 이중 마진
- 직선 냉각 구멍



DK057	DK058	DK059
		
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability					●	●	○	○	○			
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK057	DK058	DK059
2.0	3.0	38	12	0.025	DK0572.0		
2.5	3.0	43	14		DK0572.5		
3.0	3.0	46	16		DK0573.0		
3.0	3.0	62	20	0.025		DK0583.0	
3.0	3.0	61	33	0.030			DK0593.0
3.3	4	49	18		DK0573.3		
4.0	4.0	55	22		DK0574.0		
4.0	4.0	66	24	0.030		DK0584.0	
4.0	4.0	75	43	0.040			DK0594.0
4.2	5.0	55	22		DK0574.2		
5.0	5.0	62	26		DK0575.0		
5.0	5.0	66	28	0.040		DK0585.0	
5.0	5.0	86	52	0.050			DK0595.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK057	DK058	DK059
6.0	6.0	66	28	0.060	DK0576.0		
6.0	6.0	66	28			DK0586.0	
6.0	6.0	93	57				DK0596.0
6.8	8.0	74	34	0.060	DK0576.8		
8.0	8.0	79	37	0.080	DK0578.0		
8.0	8.0	89	40			DK0588.0	
8.0	8.0	117	75				DK0598.0
8.5	10.0	79	37	0.080	DK0578.5		
10.0	10.0	85	43	0.100	DK05710.0		
10.0	10.0	102	55			DK05810.0	
10.0	10.0	133	87				DK05910.0
10.2	12.0	89	43	0.100	DK05710.2		
12.0	12.0	102	51	0.120	DK05712.0		
12.0	12.0	107	60			DK05812.0	
12.0	12.0	151	101				DK05912.0
13.0	13.0	102	51	0.120	DK05713.0		
13.0	13.0	107	60			DK05813.0	
13.0	13.0	151	101				DK05913.0
14.0	14.0	107	54	0.150	DK05714.0		
14.0	14.0	107	60			DK05814.0	
14.0	14.0	160	108				DK05914.0
15.0	16.0	111	56	0.150	DK05715.0		
15.0	16.0	115	65			DK05815.0	
15.0	16.0	169	114				DK05915.0
16.0	16.0	115	58	0.200	DK05716.0		
16.0	16.0	115	65			DK05816.0	
16.0	16.0	178	120				DK05916.0
18.0	18.0	123	62	0.200	DK05718.0		
18.0	18.0	123	73			DK05818.0	
18.0	18.0	191	130				DK05918.0
20.0	20.0	131	66		DK05720.0		
20.0	20.0	131	79			DK05820.0	
20.0	20.0	205	140				DK05920.0

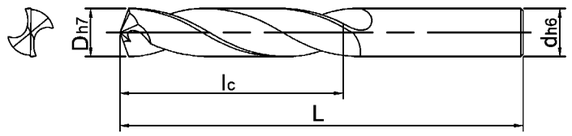
DRILL

PROPERTIES & APPLICATION

DK060	HM	Z2	AlTiCrn	Helix 30°	120°	D_{h7}	Shank d_{h6}	2.5XD
DK061	HM	Z2	AlTiCrn	Helix 30°	120°	D_{h7}	Shank d_{h6}	3XD
DK062	HM	Z2	AlTiCrn	Helix 30°	120°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



DK060	DK061	DK062
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●			○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK060	DK061	DK062
2.0	3.0	38	12	0.100	DK0602.0		
2.5	3.0	43	14		DK0602.5		
3.0	3.0	46	16		DK0603.0		
3.0	3.0	62	20	0.100		DK0613.0	
3.0	3.0	61	33	0.150			DK0623.0
3.3	4	49	18		DK0603.0		
4.0	4.0	55	22		DK0604.0		
4.0	4.0	66	24	0.150		DK0614.0	
4.0	4.0	75	43	0.180			DK0624.0
4.2	5.0	55	22		DK0604.2		
5.0	5.0	62	26		DK0605.0		
5.0	5.0	66	28	0.180		DK0615.0	
5.0	5.0	86	52	0.200			DK0625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK060	DK061	DK062
6.0	6.0	66	28	0.250	DK0606.0		
6.0	6.0	66	28			DK0616.0	
6.0	6.0	93	57				DK0626.0
6.8	8.0	74	34	0.250	DK0606.8		
8.0	8.0	79	37	0.300	DK0608.0		
8.0	8.0	89	40			DK0618.0	
8.0	8.0	117	75				DK0628.0
8.5	10.0	79	37	0.300	DK0608.5		
10.0	10.0	85	43	0.400	DK06010.0		
10.0	10.0	102	55			DK06110.0	
10.0	10.0	133	87				DK06210.0
10.2	12.0	89	43	0.400	DK06010.2		
12.0	12.0	102	51	0.450	DK06012.0		
12.0	12.0	107	60			DK06112.0	
12.0	12.0	151	101				DK06212.0
13.0	13.0	102	51	0.500	DK06013.0		
13.0	13.0	107	60			DK06113.0	
13.0	13.0	151	101				DK06213.0
14.0	14.0	107	54	0.500	DK06014.0		
14.0	14.0	107	60			DK06114.0	
14.0	14.0	160	108				DK06214.0
15.0	16.0	111	56	0.550	DK06015.0		
15.0	16.0	115	65			DK06115.0	
15.0	16.0	169	114				DK06215.0
16.0	16.0	115	58	0.550	DK06016.0		
16.0	16.0	115	65			DK06116.0	
16.0	16.0	178	120				DK06216.0
18.0	18.0	123	62	0.600	DK06018.0		
18.0	18.0	123	73			DK06118.0	
18.0	18.0	191	130				DK06218.0
20.0	20.0	131	66		DK06020.0		
20.0	20.0	131	79			DK06120.0	
20.0	20.0	205	140				DK06220.0

DRILL

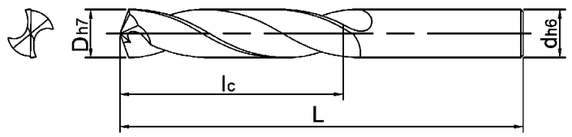
PROPERTIES & APPLICATION

DK063	HM	Z2	AlTiCrn	Helix 30°	140°	D_{h7}	Shank d_{h6}	2.5XD
DK064	HM	Z2	AlTiCrn	Helix 30°	140°	D_{h7}	Shank d_{h6}	3XD
DK065	HM	Z2	AlTiCrn	Helix 30°	140°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

DK063	DK064	DK065
2.00-20.00	2.00-20.00	2.00-20.00

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●			○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK063	DK064	DK065
2.0	3.0	38	12		DK0632.0		
2.5	3.0	43	14		DK0632.5		
3.0	3.0	46	16		DK0633.0		
3.0	3.0	62	20			DK0643.0	
3.0	3.0	61	33				DK0653.0
3.3	4	49	18		DK0633.0		
4.0	4.0	55	22		DK0634.0		
4.0	4.0	66	24			DK0644.0	
4.0	4.0	75	43				DK0654.0
4.2	5.0	55	22		DK0634.2		
5.0	5.0	62	26		DK0635.0		
5.0	5.0	66	28			DK0645.0	
5.0	5.0	86	52				DK0655.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK063	DK064	DK065
6.0	6.0	66	28		DK0636.0		
6.0	6.0	66	28			DK0646.0	
6.0	6.0	93	57				DK0656.0
6.8	8.0	74	34		DK0636.8		
8.0	8.0	79	37		DK0638.0		
8.0	8.0	89	40			DK0648.0	
8.0	8.0	117	75				DK0658.0
8.5	10.0	79	37		DK0638.5		
10.0	10.0	85	43		DK06310.0		
10.0	10.0	102	55			DK06410.0	
10.0	10.0	133	87				DK06510.0
10.2	12.0	89	43		DK06310.2		
12.0	12.0	102	51		DK06312.0		
12.0	12.0	107	60			DK06412.0	
12.0	12.0	151	101				DK06512.0
13.0	13.0	102	51		DK06313.0		
13.0	13.0	107	60			DK06413.0	
13.0	13.0	151	101				DK06513.0
14.0	14.0	107	54		DK06314.0		
14.0	14.0	107	60			DK06414.0	
14.0	14.0	160	108				DK06514.0
15.0	16.0	111	56		DK06315.0		
15.0	16.0	115	65			DK06415.0	
15.0	16.0	169	114				DK06515.0
16.0	16.0	115	58		DK06316.0		
16.0	16.0	115	65			DK06516.0	
16.0	16.0	178	120				DK06516.0
18.0	18.0	123	62		DK06318.0		
18.0	18.0	123	73			DK06418.0	
18.0	18.0	191	130				DK06518.0
20.0	20.0	131	66		DK06318.0		
20.0	20.0	131	79			DK06420.0	
20.0	20.0	205	140				DK06518.0

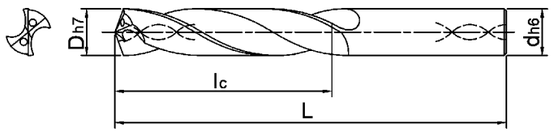
DRILL

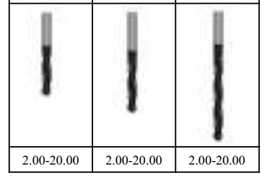
PROPERTIES & APPLICATION

DK066	HM	Z2	AlTiCrn	Helix 30°	120°	D_{h7}	Shank d_{h6}		2.5XD
DK067	HM	Z2	AlTiCrn	Helix 30°	120°	D_{h7}	Shank d_{h6}		3XD
DK068	HM	Z2	AlTiCrn	Helix 30°	120°	D_{h7}	Shank d_{h6}		4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK066	DK067	DK068
		
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●			○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK066	DK067	DK068
2.0	3.0	38	12	0.014	DK0662.0		
2.5	3.0	43	14	0.014	DK0662.5		
3.0	3.0	46	16	0.020	DK0663.0		
3.0	3.0	62	20	0.018		DK0673.0	
3.0	3.0	61	33	0.016			DK0683.0
3.3	4	49	18	0.022	DK0663.3		
4.0	4.0	55	22	0.025	DK0664.0		
4.0	4.0	66	24	0.023		DK0674.0	
4.0	4.0	75	43	0.020			DK0684.0
4.2	5.0	55	22	0.025	DK0664.2		
5.0	5.0	62	26	0.030	DK0665.0		
5.0	5.0	66	28	0.029		DK0674.0	
5.0	5.0	86	52	0.026			DK0684.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK066	DK067	DK068
6.0	6.0	66	28	0.037	DK0666.0		
6.0	6.0	66	28	0.035		DK0676.0	
6.0	6.0	93	57	0.032			DK0686.0
6.8	8.0	74	34	0.040	DK0666.8		
8.0	8.0	79	37	0.050	DK06680		
8.0	8.0	89	40	0.048		DK0678.0	
8.0	8.0	117	75	0.046			DK0688.0
8.5	10.0	79	37	0.060	DK0668.5		
10.0	10.0	85	43	0.080	DK06610.0		
10.0	10.0	102	55	0.076		DK06710.0	
10.0	10.0	133	87	0.075			DK06810.0
10.2	12.0	89	43	0.080	AA09110.2		
12.0	12.0	102	51	0.100	DK06612.0		
12.0	12.0	107	60	0.095		DK06712.0	
12.0	12.0	151	101	0.090			DK06812.0
13.0	13.0	102	51	0.110	DK06613.0		
13.0	13.0	107	60	0.107		DK01713.0	
13.0	13.0	151	101	0.103			DK01713.0
14.0	14.0	107	54	0.120	DK06614.0		
14.0	14.0	107	60	0.118		DK06714.0	
14.0	14.0	160	108	0.113			DK06814.0
15.0	16.0	111	56	0.123	DK06614.0		
15.0	16.0	115	65	0.120		DK06714.0	
15.0	16.0	169	114	0.118			DK06814.0
16.0	16.0	115	58	0.130	DK06615.0		
16.0	16.0	115	65	0.126		DK06615.0	
16.0	16.0	178	120	0.122			DK06815.0
18.0	18.0	123	62	0.140	DK06618.0		
18.0	18.0	123	73	0.137		DK06718.0	
18.0	18.0	191	130	0.133			DK06818.0
20.0	20.0	131	66	0.150	DK06620.0		
20.0	20.0	131	79	0.147		DK06720.0	
20.0	20.0	205	140	0.115			DK06820.0

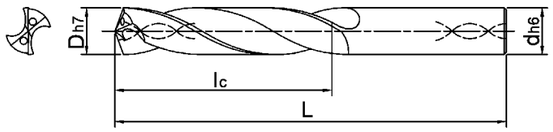
DRILL

PROPERTIES & APPLICATION

DK069	HM	Z2	AlTiCrn	Helix 30°	120°	D_{h7}	Shank d_{h6}		5XD	
DK070	HM	Z2	AlTiCrn	Helix 30°	120°	D_{h7}	Shank d_{h6}		8XD	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK069	DK070	
3.00-16.00	3.00-16.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	○	○				○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75				30 ~ 45	30 ~ 45	30 ~ 45

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK069	DK070	
3.0	3.0	66	28		DK0693.0		
3.0	3.0	79	37			DK0703.0	
3.5	4.0	66	28		DK0693.5		
3.5	4.0	79	37			DK0703.5	
4.0	4.0	74	36		DK0694.0		
4.0	4.0	90	48			DK0704.0	
4.5	5.0	74	36		DK0694.5		
4.5	5.0	90	48			DK0704.5	
5.0	5.0	82	44		DK0695.0		
5.0	5.0	104	62			DK0705.0	
5.5	6.0	82	44		DK0695.5		
5.5	6.0	104	62			DK0705.5	
6.0	6.0	82	44		DK0696.0		
6.0	6.0	104	62			DK0706.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK069	DK070	
6.5	8.0	91	53		DK0696.5		
6.5	8.0	126	84			DK0706.5	
7.0	8.0	91	53		DK0697.0		
7.0	8.0	126	84			DK0707.0	
7.5	8.0	91	53		DK0697.5		
7.5	8.0	126	84			DK0707.5	
8.0	8.0	103	61		DK0698.0		
8.0	8.0	126	84			DK0708.0	
8.5	10.0	103	61		DK0698.5		
8.5	10.0	152	106			DK0708.5	
9.0	10.0	103	61		DK0699.0		
9.0	10.0	152	106			DK0709.0	
9.5	10.0	103	61		DK0699.5		
9.5	10.0	152	106			DK0709.5	
10.0	10.0	118	70		DK06910.0		
10.0	10.0	152	106			DK07010.0	
10.5	12.0	118	70		DK06910.5		
10.5	12.0	180	128			DK07010.5	
11.0	12.0	118	70		DK06911.0		
11.0	12.0	180	128			DK07011.0	
11.5	12.0	118	70		DK06911.5		
11.5	12.0	180	128			DK07011.5	
12.0	12.0	124	76		DK06912.0		
12.0	12.0	180	128			DK07012.0	
12.5	13.0	124	76		DK06912.5		
12.5	13.0	202	151			DK07012.5	
13.0	13.0	124	76		DK06913.0		
13.0	13.0	202	151			DK07013.0	
14.0	14.0	124	76		DK06914.0		
14.0	14.0	202	151			DK07014.0	
15.0	16.0	133	82		DK06915.0		
15.0	16.0	227	172			DK07015.0	
16.0	16.0	133	82		DK06916.0		
16.0	16.0	227	172			DK07016.0	

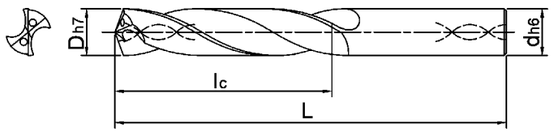
DRILL

PROPERTIES & APPLICATION

DK071	HM	Z2	AlTiCrn	Helix 30°	140°	D_{h7}	Shank d_{h6}		2.5XD
DK072	HM	Z2	AlTiCrn	Helix 30°	140°	D_{h7}	Shank d_{h6}		3XD
DK073	HM	Z2	AlTiCrn	Helix 30°	140°	D_{h7}	Shank d_{h6}		4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK071	DK072	DK073
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●			○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK071	DK072	DK073
2.0	3.0	38	12		DK0712.0		
2.5	3.0	43	14		DK0712.5		
3.0	3.0	46	16		DK0713.0		
3.0	3.0	62	20			DK0723.0	
3.0	3.0	61	33				DK0733.0
3.3	4	49	18		DK0713.3		
4.0	4.0	55	22		DK0714.0		
4.0	4.0	66	24			DK0724.0	
4.0	4.0	75	43				DK0134.0
4.2	5.0	55	22		DK0714.2		
5.0	5.0	62	26		DK0715.0		
5.0	5.0	66	28			DK0725.0	
5.0	5.0	86	52				DK0735.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK071	DK072	DK073
6.0	6.0	66	28		DK0716.0		
6.0	6.0	66	28			DK0726.0	
6.0	6.0	93	57				DK0736.0
6.8	8.0	74	34		DK0716.8		
8.0	8.0	79	37		DK0718.0		
8.0	8.0	89	40			DK0728.0	
8.0	8.0	117	75				DK0738.0
8.5	10.0	79	37		DK0718.5		
10.0	10.0	85	43		DK07110.0		
10.0	10.0	102	55			DK07210.0	
10.0	10.0	133	87				DK07310.0
10.2	12.0	89	43		DK07110.2		
12.0	12.0	102	51		DK07112.0		
12.0	12.0	107	60			DK07212.0	
12.0	12.0	151	101				DK07312.0
13.0	13.0	102	51		DK07113.0		
13.0	13.0	107	60			DK07213.0	
13.0	13.0	151	101				DK07313.0
14.0	14.0	107	54		DK07114.0		
14.0	14.0	107	60			DK07214.0	
14.0	14.0	160	108				DK07314.0
15.0	16.0	111	56		DK07115.0		
15.0	16.0	115	65			DK07215.0	
15.0	16.0	169	114				DK07315.0
16.0	16.0	115	58		DK07116.0		
16.0	16.0	115	65			DK07216.0	
16.0	16.0	178	120				DK07316.0
18.0	18.0	123	62		DK07118.0		
18.0	18.0	123	73			DK07218.0	
18.0	18.0	191	130				DK07318.0
20.0	20.0	131	66		DK07220.0		
20.0	20.0	131	79			DK07220.0	
20.0	20.0	205	140				DK07320.0

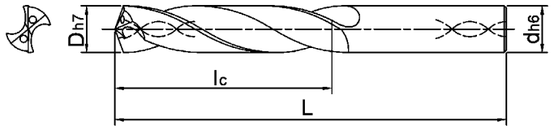
DRILL

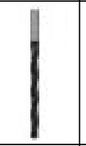
PROPERTIES & APPLICATION

DK074	HM	Z2	AlTiCrn	Helix 30°	140°	D_{h7}	Shank d_{h6}		5XD
DK075	HM	Z2	AlTiCrn	Helix 30°	140°	D_{h7}	Shank d_{h6}		8XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Spiral coolant hole
- Me trụ đơn
- Lỗ tưới nguội xoắn
- シングルマージン
- スパイラルクーラントホール
- 단일 여백
- 나선형 절삭유 구멍



DK074	DK075	
		
3.00-16.00	3.00-16.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	○	○			●	○	○	○
V_c (m / min)	80 ~ 90	70 ~ 80			80 ~ 90	80 ~ 90	180 ~ 200					

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK074	DK075	
3.0	3.0	66	28	0.014	DK0743.0		
3.0	3.0	79	37	0.014		DK0753.0	
3.5	4.0	66	28	0.020	DK0743.5		
3.5	4.0	79	37	0.018		DK0753.5	
4.0	4.0	74	36	0.016	DK0744.0		
4.0	4.0	90	48	0.022		DK0754.0	
4.5	5.0	74	36	0.025	DK0744.5		
4.5	5.0	90	48	0.023		DK0754.5	
5.0	5.0	82	44	0.020	DK0745.0		
5.0	5.0	104	62	0.025		DK0755.0	
5.5	6.0	82	44	0.030	DK0745.5		
5.5	6.0	104	62	0.026		DK0755.5	
6.0	6.0	82	44	0.029	DK0746.0		
6.0	6.0	104	62	0.037		DK0756.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK074	DK075	
6.5	8.0	91	53		DK0746.5		
6.5	8.0	126	84			DK0756.5	
7.0	8.0	91	53		DK0747.0		
7.0	8.0	126	84			DK0756.5	
7.5	8.0	91	53		DK0747.5		
7.5	8.0	126	84			DK0757.5	
8.0	8.0	103	61		DK0748.0		
8.0	8.0	126	84			DK0758.0	
8.5	10.0	103	61		DK0748.5		
8.5	10.0	152	106			DK0758.5	
9.0	10.0	103	61		DK0749.0		
9.0	10.0	152	106			DK0759.0	
9.5	10.0	103	61		DK0749.5		
9.5	10.0	152	106			DK0759.5	
10.0	10.0	118	70		DK07410.0		
10.0	10.0	152	106			DK07510.0	
10.5	12.0	118	70		DK07410.5		
10.5	12.0	180	128			DK07510.5	
11.0	12.0	118	70		DK07411.0		
11.0	12.0	180	128			DK07511.0	
11.5	12.0	118	70		DK07411.5		
11.5	12.0	180	128			DK07511.5	
12.0	12.0	124	76		DK07412.0		
12.0	12.0	180	128			DK07512.0	
12.5	13.0	124	76		DK07412.5		
12.5	13.0	202	151			DK07512.5	
13.0	13.0	124	76		DK07413.0		
13.0	13.0	202	151			DK07513.0	
14.0	14.0	124	76		DK07414.0		
14.0	14.0	202	151			DK07514.0	
15.0	16.0	133	82		DK07415.0		
15.0	16.0	227	172			DK07515.0	
16.0	16.0	133	82		DK07416.0		
16.0	16.0	227	172			DK07516.0	

DRILL

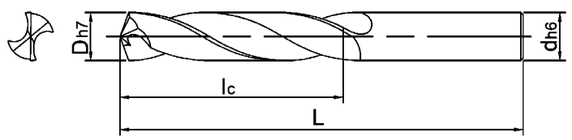
PROPERTIES & APPLICATION

DK076	HM	Z2	AlTiCrn	Helix 0°	120°	D_{h7}	Shank d_{h6}	2.5XD
DK077	HM	Z2	AlTiCrn	Helix 0°	120°	D_{h7}	Shank d_{h6}	3XD
DK078	HM	Z2	AlTiCrn	Helix 0°	120°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

DK076	DK077	DK078
2.00-20.00	2.00-20.00	2.00-20.00

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK076	DK077	DK078
2.0	3.0	38	12		DK0762.0		
2.5	3.0	43	14		DK0762.5		
3.0	3.0	46	16		DK0763.0		
3.0	3.0	62	20			DK0773.0	
3.0	3.0	61	33				DK0783.0
3.3	4	49	18		DK0763.3		
4.0	4.0	55	22		DK0764.0		
4.0	4.0	66	24			DK0774.0	
4.0	4.0	75	43				DK0784.0
4.2	5.0	55	22		DK0764.2		
5.0	5.0	62	26		DK0765.0		
5.0	5.0	66	28			DK0775.0	
5.0	5.0	86	52				DK0785.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK076	DK077	DK078
6.0	6.0	66	28		DK0766.0		
6.0	6.0	66	28			DK0776.0	
6.0	6.0	93	57				DK0786.0
6.8	8.0	74	34		DK0766.8		
8.0	8.0	79	37		DK0768.0		
8.0	8.0	89	40			DK0778.0	
8.0	8.0	117	75				DK0786.0
8.5	10.0	79	37		DK0768.5		
10.0	10.0	85	43		DK0766.0		
10.0	10.0	102	55			DK07710.0	
10.0	10.0	133	87				DK07810.0
10.2	12.0	89	43		DK07610.2		
12.0	12.0	102	51		DK07612.0		
12.0	12.0	107	60			DK07712.0	
12.0	12.0	151	101				DK07812.0
13.0	13.0	102	51		DK07613.0		
13.0	13.0	107	60			DK07713.0	
13.0	13.0	151	101				DK07813.0
14.0	14.0	107	54		DK07614.0		
14.0	14.0	107	60			DK07714.0	
14.0	14.0	160	108				DK07814.0
15.0	16.0	111	56		DK07615.0		
15.0	16.0	115	65			DK07715.0	
15.0	16.0	169	114				DK07815.0
16.0	16.0	115	58		DK07616.0		
16.0	16.0	115	65			DK07716.0	
16.0	16.0	178	120				DK07816.0
18.0	18.0	123	62		DK07618.0		
18.0	18.0	123	73			DK07718.0	
18.0	18.0	191	130				DK07818.0
20.0	20.0	131	66		DK07620.0		
20.0	20.0	131	79			DK07720.0	
20.0	20.0	205	140				DK07820.0

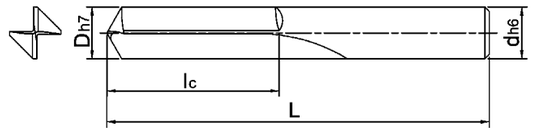
DRILL

PROPERTIES & APPLICATION

DK079	HM	Z2	AlTiCrn	Helix 0°	140°	D_{h7}	Shank d_{h6}	2.5XD
DK080	HM	Z2	AlTiCrn	Helix 0°	140°	D_{h7}	Shank d_{h6}	3XD
DK081	HM	Z2	AlTiCrn	Helix 0°	140°	D_{h7}	Shank d_{h6}	4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Single margin
- Non internal coolant
- Me trụ đơn
- Không có lỗ tưới nguội
- シングルマージン
- 非内部給油
- 단일 여백
- 비내부 절삭유



DK079	DK080	DK081
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK079	DK080	DK081
2.0	3.0	38	12		DK0792.0		
2.5	3.0	43	14		DK0792.5		
3.0	3.0	46	16		DK0793.0		
3.0	3.0	62	20			DK0803.0	
3.0	3.0	61	33				DK0813.0
3.3	4	49	18		DK0793.3		
4.0	4.0	55	22		DK0794.0		
4.0	4.0	66	24			DK0804.0	
4.0	4.0	75	43				DK0814.0
4.2	5.0	55	22		DK0794.2		
5.0	5.0	62	26		DK0795.0		
5.0	5.0	66	28			DK0805.0	
5.0	5.0	86	52				DK0815.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

DK

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK079	DK080	DK081
6.0	6.0	66	28		DK0796.0		
6.0	6.0	66	28			DK0806.0	
6.0	6.0	93	57				DK0816.0
6.8	8.0	74	34		DK0796.8		
8.0	8.0	79	37		DK0798.0		
8.0	8.0	89	40			DK0808.0	
8.0	8.0	117	75				DK0818.0
8.5	10.0	79	37		DK0798.5		
10.0	10.0	85	43		DK07910.0		
10.0	10.0	102	55			DK08010.0	
10.0	10.0	133	87				DK08110.0
10.2	12.0	89	43		DK07910.2		
12.0	12.0	102	51		DK07912.0		
12.0	12.0	107	60			DK08012.0	
12.0	12.0	151	101				DK08112.0
13.0	13.0	102	51		DK07913.0		
13.0	13.0	107	60			DK08013.0	
13.0	13.0	151	101				DK08112.0
14.0	14.0	107	54		DK07914.0		
14.0	14.0	107	60			DK08014.0	
14.0	14.0	160	108				DK08114.0
15.0	16.0	111	56		DK07915.0		
15.0	16.0	115	65			DK08015.0	
15.0	16.0	169	114				DK08115.0
16.0	16.0	115	58		DK07916.0		
16.0	16.0	115	65			DK08016.0	
16.0	16.0	178	120				DK08116.0
18.0	18.0	123	62		DK07918.0		
18.0	18.0	123	73			DK08018.0	
18.0	18.0	191	130				DK08118.0
20.0	20.0	131	66		DK07920.0		
20.0	20.0	131	79			DK08020.0	
20.0	20.0	205	140				DK08120.0

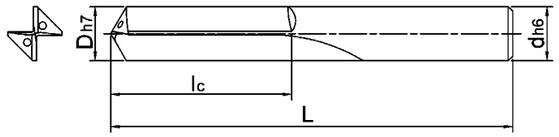
DRILL

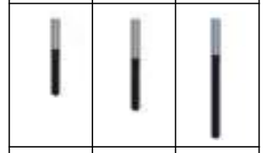
PROPERTIES & APPLICATION

DK082	HM	Z2	AlTiCrn	Helix 0°	120°	D_{h7}	Shank d_{h6}		2.5XD
DK083	HM	Z2	AlTiCrn	Helix 0°	120°	D_{h7}	Shank d_{h6}		3XD
DK084	HM	Z2	AlTiCrn	Helix 0°	120°	D_{h7}	Shank d_{h6}		4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Double margin
- Straight coolant hole
- Me trụ kép
- Lỗ tưới nguội thẳng
- ダブルマージン
- 直線冷却穴
- 이중 마진
- 직선 냉각 구멍



DK082	DK083	DK084
		
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK082	DK083	DK084
2.0	3.0	38	12		DK0822.0		
2.5	3.0	43	14		DK0822.5		
3.0	3.0	46	16		DK0823.0		
3.0	3.0	62	20			DK0833.0	
3.0	3.0	61	33				DK0843.0
3.3	4	49	18		DK0823.3		
4.0	4.0	55	22		DK0824.0		
4.0	4.0	66	24			DK0834.0	
4.0	4.0	75	43				DK0844.0
4.2	5.0	55	22		DK0824.2		
5.0	5.0	62	26		DK0825.0		
5.0	5.0	66	28			DK0835.0	
5.0	5.0	86	52				DK0845.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

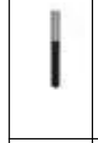
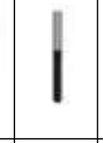
D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK082	DK083	DK084
6.0	6.0	66	28		DK0826.0		
6.0	6.0	66	28			DK0836.0	
6.0	6.0	93	57				DK0846.0
6.8	8.0	74	34		DK0826.8		
8.0	8.0	79	37		DK0828.0		
8.0	8.0	89	40			DK0838.0	
8.0	8.0	117	75				DK0848.0
8.5	10.0	79	37		DK0828.5		
10.0	10.0	85	43		DK08210.0		
10.0	10.0	102	55			DK08310.0	
10.0	10.0	133	87				DK08410.0
10.2	12.0	89	43		DK08210.2		
12.0	12.0	102	51		DK08212.0		
12.0	12.0	107	60			DK08312.0	
12.0	12.0	151	101				DK08412.0
13.0	13.0	102	51		DK08213.0		
13.0	13.0	107	60			DK08313.0	
13.0	13.0	151	101				DK08413.0
14.0	14.0	107	54		DK08214.0		
14.0	14.0	107	60			DK08314.0	
14.0	14.0	160	108				DK08414.0
15.0	16.0	111	56		DK08215.0		
15.0	16.0	115	65			DK08315.0	
15.0	16.0	169	114				DK08415.0
16.0	16.0	115	58		DK08216.0		
16.0	16.0	115	65			DK08316.0	
16.0	16.0	178	120				DK08416.0
18.0	18.0	123	62		DK08218.0		
18.0	18.0	123	73			DK08318.0	
18.0	18.0	191	130				DK08418.0
20.0	20.0	131	66		DK08220.0		
20.0	20.0	131	79			DK08320.0	
20.0	20.0	205	140				DK08420.0

DRILL

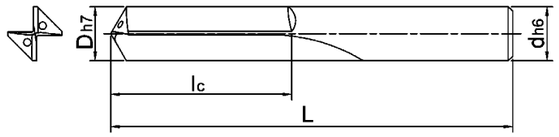
PROPERTIES & APPLICATION

DK085	HM	Z2	AlTiCrn	Helix 0°	140°	D_{h7}	Shank d_{h6}		2.5XD
DK086	HM	Z2	AlTiCrn	Helix 0°	140°	D_{h7}	Shank d_{h6}		3XD
DK087	HM	Z2	AlTiCrn	Helix 0°	140°	D_{h7}	Shank d_{h6}		4XD

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	DK001	-0.018
18 < D ≤ 30	0	-0.021

DK085	DK086	DK087
		
2.00-20.00	2.00-20.00	2.00-20.00

Engineering Data
- Double margin
- Straight coolant hole
- Me trụ kép
- Lỗ tưới nguội thẳng
- ダブルマージン
- 直線冷却穴
- 이중 마진
- 직선 냉각 구멍



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK085	DK086	DK087
2.0	3.0	38	12		DK0852.0		
2.5	3.0	43	14		DK0852.5		
3.0	3.0	46	16		DK0853.0		
3.0	3.0	62	20			DK0863.0	
3.0	3.0	61	33				DK0873.0
3.3	4	49	18		DK0853.3		
4.0	4.0	55	22		DK0854.0		
4.0	4.0	66	24			DK0864.0	
4.0	4.0	75	43				DK0874.0
4.2	5.0	55	22		DK0854.2		
5.0	5.0	62	26		DK0855.0		
5.0	5.0	66	28			DK0865.0	
5.0	5.0	86	52				DK0875.0

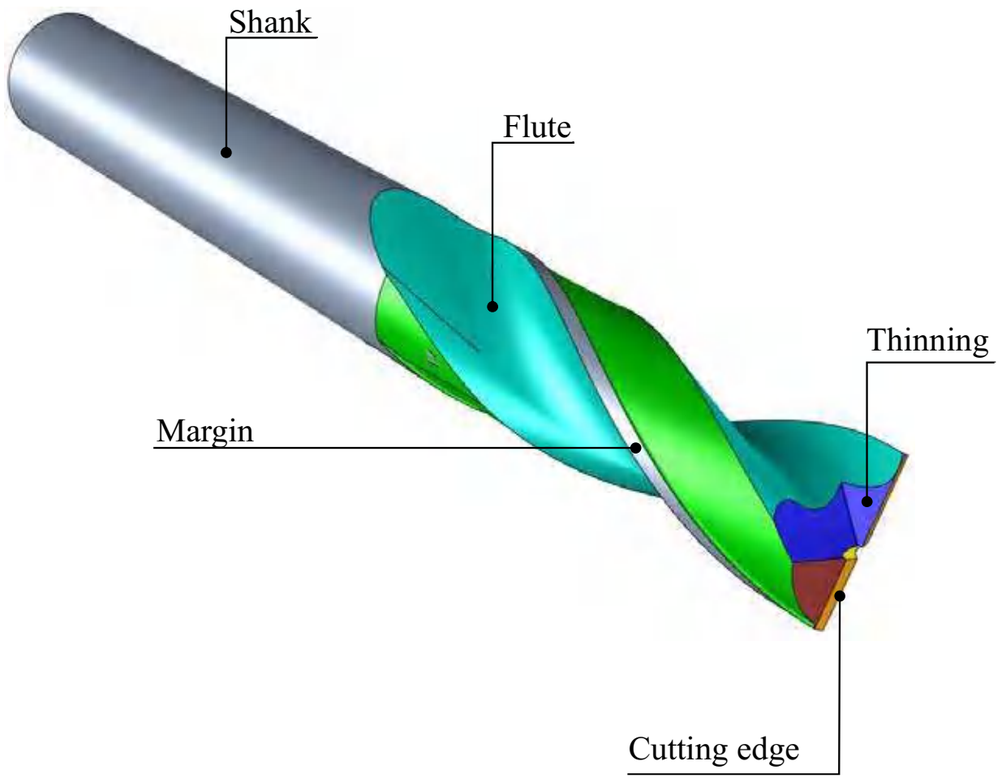
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK085	DK086	DK087
6.0	6.0	66	28		DK0856.0		
6.0	6.0	66	28			DK0866.0	
6.0	6.0	93	57				DK0876.0
6.8	8.0	74	34		DK0856.8		
8.0	8.0	79	37		DK0858.0		
8.0	8.0	89	40			DK0868.0	
8.0	8.0	117	75				DK0878.0
8.5	10.0	79	37		DK0858.5		
10.0	10.0	85	43		DK08510.0		
10.0	10.0	102	55			DK08610.0	
10.0	10.0	133	87				DK08710.0
10.2	12.0	89	43		DK08510.2		
12.0	12.0	102	51		DK08512.0		
12.0	12.0	107	60			DK08612.0	
12.0	12.0	151	101				DK08712.0
13.0	13.0	102	51		DK08513.0		
13.0	13.0	107	60			DK08613.0	
13.0	13.0	151	101				DK08713.0
14.0	14.0	107	54		DK08514.0		
14.0	14.0	107	60			DK08614.0	
14.0	14.0	160	108				DK08714.0
15.0	16.0	111	56		DK08515.0		
15.0	16.0	115	65			DK08615.0	
15.0	16.0	169	114				DK08715.0
16.0	16.0	115	58		DK08516.0		
16.0	16.0	115	65			DK08616.0	
16.0	16.0	178	120				DK08715.0
18.0	18.0	123	62		DK08518.0		
18.0	18.0	123	73			DK08618.0	
18.0	18.0	191	130				DK08718.0
20.0	20.0	131	66		DK08720.0		
20.0	20.0	131	79			DK08620.0	
20.0	20.0	205	140				DK08720.0

DK

Solid Carbide Tools

FLAT DRILLS



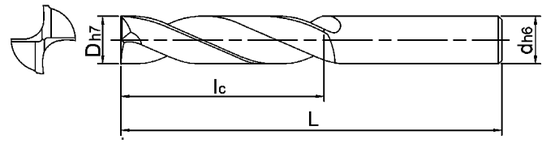
FLAT DRILLS

PROPERTIES & APPLICATION

DK088	HM	Z2	Helix 30°	180°	D_{h7}	Shank d_{h6}	
DK089	HM	Z2	Helix 30°	180°	D_{h7}	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DK088	DK089	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK088	DK089	
2.0	3.0	50	6		DK0882.0	DK0892.0	
3.0	3.0	50	10		DK0883.0	DK0893.0	
4.0	4.0	50	10		DK0884.0	DK0894.0	
5.0	5.0	50	13		DK0885.0	DK0895.0	
6.0	6.0	50	15		DK0886.0	DK0896.0	
8.0	8.0	64	20		DK0888.0	DK0898.0	
10.0	10.0	73	25		DK08810.0	DK08910.0	
12.0	12.0	74	30		DK08812.0	DK08912.0	
14.0	14.0	80	30		DK08814.0	DK08914.0	
16.0	16.0	93	40		DK08816.0	DK08916.0	
18.0	18.0	100	45		DK08818.0	DK08918.0	
20.0	20.0	100	45		DK08820.0	DK08920.0	
25.0	25.0	100	45		DK08825.0	DK08925.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

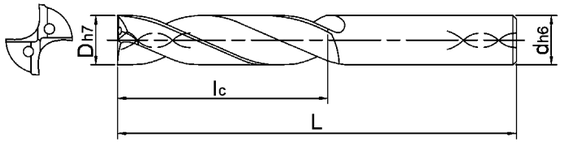
FLAT DRILLS

PROPERTIES & APPLICATION

DK090	HM	Z2	Helix 30°	180°	D_{h7}	Shank d_{h6}	
DK091	HM	Z2	Helix 30°	180°	D_{h7}	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Center cutting
- Spiral coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội xoắn
- センターカット
- スパイラルクーラントホール
- 센터 커팅
- 나선형 절삭유 구멍



DK090	DK091	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK090	DK091	
2.0	3.0	50	6		DK0902.0	DK0912.0	
3.0	3.0	50	10		DK0903.0	DK0913.0	
4.0	4.0	50	10		DK0904.0	DK0914.0	
5.0	5.0	50	13		DK0905.0	DK0915.0	
6.0	6.0	50	15		DK0906.0	DK0916.0	
8.0	8.0	50	20		DK0908.0	DK0918.0	
10.0	10.0	75	25		DK09010.0	DK09110.0	
12.0	12.0	75	30		DK09012.0	DK09112.0	
14.0	14.0	80	30		DK09014.0	DK09114.0	
16.0	16.0	100	40		DK09016.0	DK09116.0	
18.0	18.0	100	45		DK09018.0	DK09118.0	
20.0	20.0	100	45		DK09020.0	DK09120.0	
25.0	25.0	100	45		DK08620.0	DK09120.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

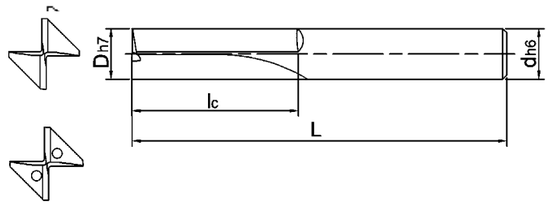
FLAT DRILLS

PROPERTIES & APPLICATION

DK092	HM	Z2	Helix 0°	180°	D_{h7}	Shank d_{h6}	
DK093	HM	Z2	Helix 0°	180°	D_{h7}	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Center cutting
- Double margin
- Lưỡi cắt qua tâm
- Me trụ kép
- センターカット
- ダブルマージン
- 센터 커팅
- 이중 마진



DK092	DK093	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK092	DK093	
2.0	3.0	50	6		DK0922.0	DK0933.0	
3.0	3.0	50	10		DK0923.0	DK0933.0	
4.0	4.0	50	10		DK0924.0	DK0934.0	
5.0	5.0	50	13		DK0925.0	DK0935.0	
6.0	6.0	50	15		DK0926.0	DK0935.0	
8.0	8.0	50	20		DK0928.0	DK0938.0	
10.0	10.0	75	25		DK09210.0	DK09310.0	
12.0	12.0	75	30		DK09212.0	DK09310.0	
14.0	14.0	80	30		DK09214.0	DK09314.0	
16.0	16.0	100	40		DK09216.0	DK09316.0	
18.0	18.0	100	45		DK09216.0	DK09316.0	
20.0	20.0	100	45		DK09220.0	DK09320.0	
25.0	25.0	100	45		DK09225.0	DK09325.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

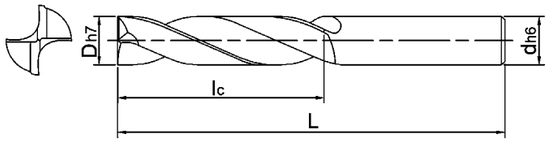
FLAT DRILLS

PROPERTIES & APPLICATION

DK094	HM	Z2	TiN	Helix 30°	180°	D_{h7}	Shank d_{h6}	
DK095	HM	Z2	TiN	Helix 30°	180°	D_{h7}	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DK094	DK095	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK094	DK095	
2.0	3.0	50	6		DK0942.0	DK0952.0	
3.0	3.0	50	10		DK0943.0	DK0952.0	
4.0	4.0	50	10		DK0944.0	DK0954.0	
5.0	5.0	50	13		DK0945.0	DK0955.0	
6.0	6.0	50	15		DK0946.0	DK0956.0	
8.0	8.0	50	20		DK0948.0	DK0956.0	
10.0	10.0	75	25		DK09410.0	DK09510.0	
12.0	12.0	75	30		DK09412.0	DK09512.0	
14.0	14.0	80	30		DK09414.0	DK09514.0	
16.0	16.0	100	40		DK09416.0	DK09516.0	
18.0	18.0	100	45		DK09418.0	DK09518.0	
20.0	20.0	100	45		DK09420.0	DK09520.0	
25.0	25.0	100	45		DK09425.0	DK09525.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

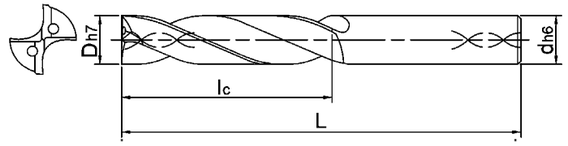
FLAT DRILLS

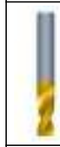
PROPERTIES & APPLICATION

DK096	HM	Z2	TiN	Helix 30°	180°	D_{h7}	Shank d_{h6}	
DK097	HM	Z2	TiN	Helix 30°	180°	D_{h7}	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Center cutting
- Spiral coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội xoắn
- センターカット
- スパイラルクーラントホール
- 센터 커팅
- 나선형 절삭유 구멍



DK096	DK097	
		
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK096	DK097	
2.0	3.0	50	6		DK0962.0	DK0972.0	
3.0	3.0	50	10		DK0963.0	DK0973.0	
4.0	4.0	50	10		DK0964.0	DK0974.0	
5.0	5.0	50	13		DK0965.0	DK0975.0	
6.0	6.0	50	15		DK0966.0	DK0976.0	
8.0	8.0	50	20		DK0968.0	DK0978.0	
10.0	10.0	75	25		DK09610.0	DK09710.0	
12.0	12.0	75	30		DK09612.0	DK09712.0	
14.0	14.0	80	30		DK09614.0	DK09714.0	
16.0	16.0	100	40		DK09616.0	DK09716.0	
18.0	18.0	100	45		DK09618.0	DK09718.0	
20.0	20.0	100	45		DK09620.0	DK09720.0	
25.0	25.0	100	45		DK09625.0	DK09725.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

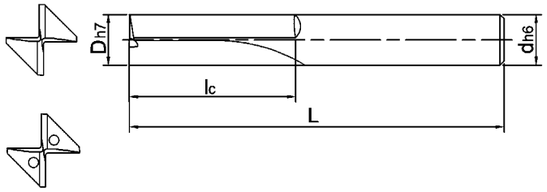
FLAT DRILLS

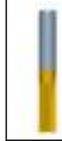
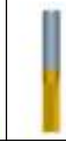
PROPERTIES & APPLICATION

DK098	HM	Z2	TiN	Helix 0°	180°	D_{h7}	Shank d_{h6}	
DK099	HM	Z2	TiN	Helix 0°	180°	D_{h7}	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Center cutting
- Double margin
- Lưỡi cắt qua tâm
- Me trụ kép
- センターカット
- ダブルマージン
- 센터 커팅
- 이중 마진



DK098	DK099	
		
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK098	DK099	
2.0	3.0	50	6		DK0982.0	DK0992.0	
3.0	3.0	50	10		DK0983.0	DK0993.0	
4.0	4.0	50	10		DK0984.0	DK0994.0	
5.0	5.0	50	13		DK0985.0	DK0995.0	
6.0	6.0	50	15		DK0986.0	DK0996.0	
8.0	8.0	50	20		DK0988.0	DK0998.0	
10.0	10.0	75	25		DK09810.0	DK09910.0	
12.0	12.0	75	30		DK09812.0	DK09912.0	
14.0	14.0	80	30		DK09814.0	DK09914.0	
16.0	16.0	100	40		DK09816.0	DK09916.0	
18.0	18.0	100	45		DK09818.0	DK09918.0	
20.0	20.0	100	45		DK09820.0	DK09920.0	
25.0	25.0	100	45		DK09825.0	DK09925.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

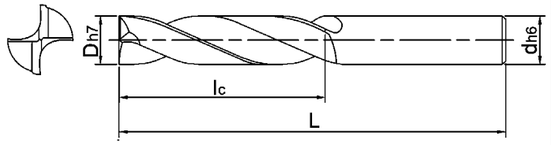
FLAT DRILLS

PROPERTIES & APPLICATION

DK100	HM	Z2	AlTiCrn	Helix 30°	180°	D_{h7}	Shank d_{h6}	
DK101	HM	Z3	AlTiCrn	Helix 30°	180°	D_{h7}	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DK100	DK101	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK100	DK101	
2.0	3.0	50	6		DK1002.0	DK1012.0	
3.0	3.0	50	10		DK1003.0	DK1013.0	
4.0	4.0	50	10		DK1004.0	DK1014.0	
5.0	5.0	50	13		DK1005.0	DK1015.0	
6.0	6.0	50	15		DK1006.0	DK1016.0	
8.0	8.0	50	20		DK1008.0	DK1018.0	
10.0	10.0	75	25		DK10010.0	DK10110.0	
12.0	12.0	75	30		DK10012.0	DK10112.0	
14.0	14.0	80	30		DK10014.0	DK10114.0	
16.0	16.0	100	40		DK10016.0	DK10116.0	
18.0	18.0	100	45		DK10018.0	DK10118.0	
20.0	20.0	100	45		DK10020.0	DK10120.0	
25.0	25.0	100	45		DK10025.0	DK10125.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

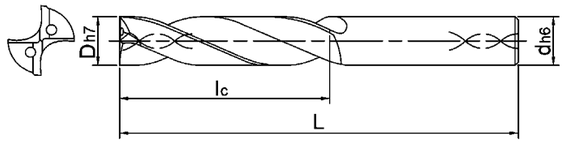
FLAT DRILLS

PROPERTIES & APPLICATION

DK102	HM	Z2	AlTiCrn	Helix 30°	180°	D_{h7}	Shank d_{h6}	
DK103	HM	Z3	AlTiCrn	Helix 30°	180°	D_{h7}	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Center cutting
- Spiral coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội xoắn
- センターカット
- スパイラルクーラントホール
- 센터 커팅
- 나선형 절삭유 구멍



DK102	DK103	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK102	DK103	
2.0	3.0	50	6		DK1022.0	DK1032.0	
3.0	3.0	50	10		DK1023.0	DK1033.0	
4.0	4.0	50	10		DK1024.0	DK1034.0	
5.0	5.0	50	13		DK1025.0	DK1035.0	
6.0	6.0	50	15		DK1026.0	DK1036.0	
8.0	8.0	50	20		DK1028.0	DK1038.0	
10.0	10.0	75	25		DK10210.0	DK10310.0	
12.0	12.0	75	30		DK10212.0	DK10312.0	
14.0	14.0	80	30		DK10214.0	DK10314.0	
16.0	16.0	100	40		DK10216.0	DK10316.0	
18.0	18.0	100	45		DK10218.0	DK10318.0	
20.0	20.0	100	45		DK10220.0	DK10320.0	
25.0	25.0	100	45		DK10225.0	DK10325.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

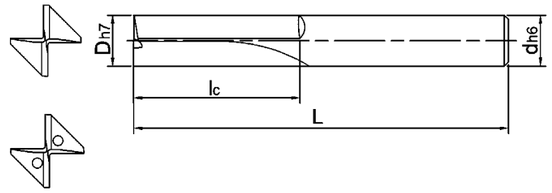
FLAT DRILLS

PROPERTIES & APPLICATION

DK104	HM	Z2	AlTiCrn	Helix 0°	180°	D_{h7}	Shank d_{h6}	
DK105	HM	Z2	AlTiCrn	Helix 0°	180°	D_{h7}	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Center cutting
- Double margin
- Lưỡi cắt qua tâm
- Me trụ kép
- センターカット
- ダブルマージン
- 센터 커팅
- 이중 마진



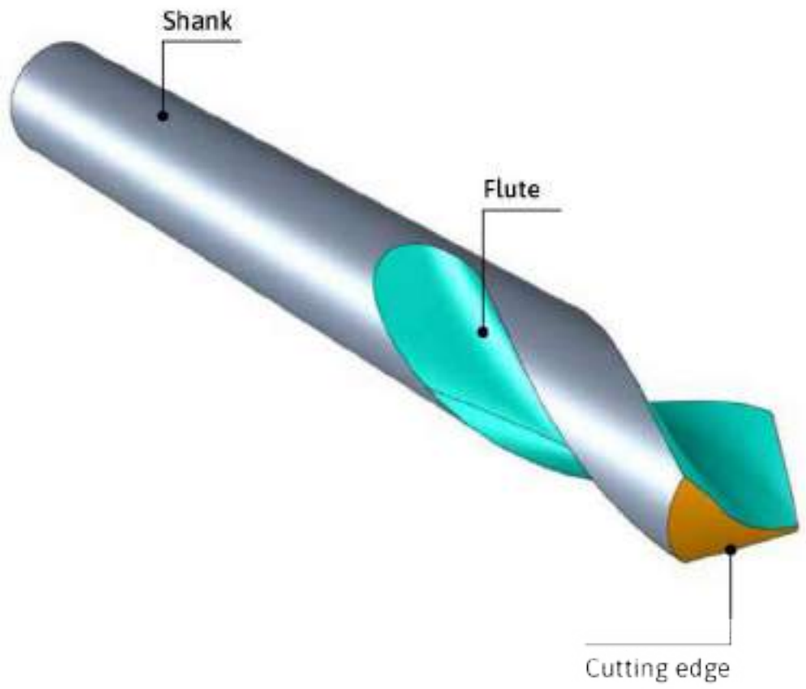
DK104	DK105	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h7} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK104	DK105	
2.0	3.0	50	6		DK1042.0	DK1052.0	
3.0	3.0	50	10		DK1043.0	DK1053.0	
4.0	4.0	50	10		DK1044.0	DK1054.0	
5.0	5.0	50	13		DK1045.0	DK1055.0	
6.0	6.0	50	15		DK1046.0	DK1056.0	
8.0	8.0	50	20		DK1048.0	DK1058.0	
10.0	10.0	75	25		DK10410.0	DK10510.0	
12.0	12.0	75	30		DK10412.0	DK10512.0	
14.0	14.0	80	30		DK10414.0	DK10514.0	
16.0	16.0	100	40		DK10416.0	DK10516.0	
18.0	18.0	100	45		DK10418.0	DK10518.0	
20.0	20.0	100	45		DK10420.0	DK10520.0	
25.0	25.0	100	45		DK10425.0	DK10525.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
SPOT DRILL



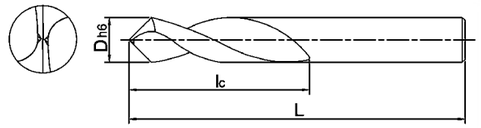
SPOT DRILLS

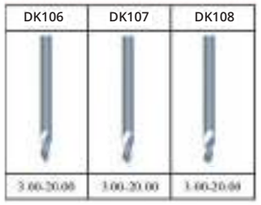
PROPERTIES & APPLICATION

DK106	HM	Z2	Helix 30°	60°	D_{h6}	
DK107	HM	Z2	Helix 30°	90°	D_{h6}	
DK108	HM	Z2	Helix 30°	120°	D_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Conical surface
- No edge on diameter
- Bề mặt hình nón
- Không có lưỡi cắt trên phần đường kính
- 円錐面
- 直径にエッジなし
- 원뿔 표면
- 직경에 모서리 없음





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK106	DK107	DK108
3.0	50	10		DK1063.0	DK1073.0	DK1083.0
4.0	50	10		DK1064.0	DK1074.0	DK1084.0
5.0	50	13		DK1065.0	DK1075.0	DK1085.0
6.0	50	15		DK1066.0	DK1076.0	DK1086.0
8.0	64	20		DK1068.0	DK1078.0	DK1088.0
10.0	73	25		DK10610.0	DK10710.0	DK10810.0
12.0	74	30		DK10612.0	DK10712.0	DK10812.0
14.0	80	35		DK10614.0	DK10714.0	DK10814.0
16.0	92	40		DK10616.0	DK10716.0	DK10816.0
18.0	100	45		DK10618.0	DK10718.0	DK10818.0
20.0	100	45		DK10620.0	DK10720.0	DK10820.0

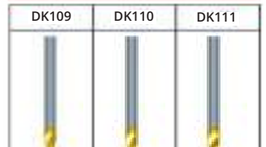
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

SPOT DRILLS

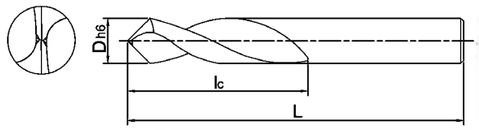
PROPERTIES & APPLICATION

DK109	HM	Z2	TiN	Helix 30°	60°	D_{h6}	
DK110	HM	Z2	TiN	Helix 30°	90°	D_{h6}	
DK111	HM	Z2	TiN	Helix 30°	120°	D_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021



Engineering Data
- Conical surface
- No edge on diameter
- Bề mặt hình nón
- Không có lưỡi cắt trên phần đường kính
- 円錐面
- 直径にエッジなし
- 원뿔 표면
- 직경에 모서리 없음



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK109	DK110	DK111
3.0	50	10		DK1093.0	DK1103.0	DK1113.0
4.0	**50**	**10**		DK1094.0	DK1104.0	DK1114.0
5.0	50	13		DK1095.0	DK1105.0	DK1115.0
6.0	**50**	**15**		DK1096.0	DK1106.0	DK1116.0
8.0	64	20		DK1098.0	DK1108.0	DK1118.0
10.0	**73**	**25**		DK10910.0	DK11010.0	DK11110.0
12.0	74	30		DK10912.0	DK11012.0	DK11112.0
14.0	**80**	**35**		DK10914.0	DK11014.0	DK11114.0
16.0	92	40		DK10916.0	DK11016.0	DK11116.0
18.0	**100**	**45**		DK10918.0	DK11018.0	DK11118.0
20.0	100	45		DK10920.0	DK11020.0	DK11120.0

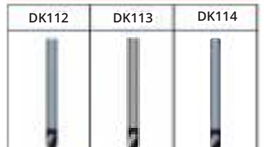
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

SPOT DRILLS

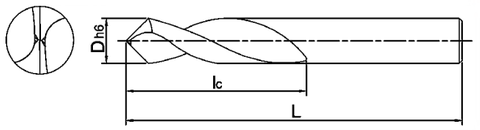
PROPERTIES & APPLICATION

DK112	HM	Z2	AlTiCrn	Helix 30°	60°	D_{h6}	
DK113	HM	Z2	AlTiCrn	Helix 30°	90°	D_{h6}	
DK114	HM	Z2	AlTiCrn	Helix 30°	120°	D_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021



Engineering Data
- Conical surface
- No edge on diameter
- Bề mặt hình nón
- Không có lưỡi cắt trên phần đường kính
- 円錐面
- 直径にエッジなし
- 원뿔 표면
- 직경에 모서리 없음



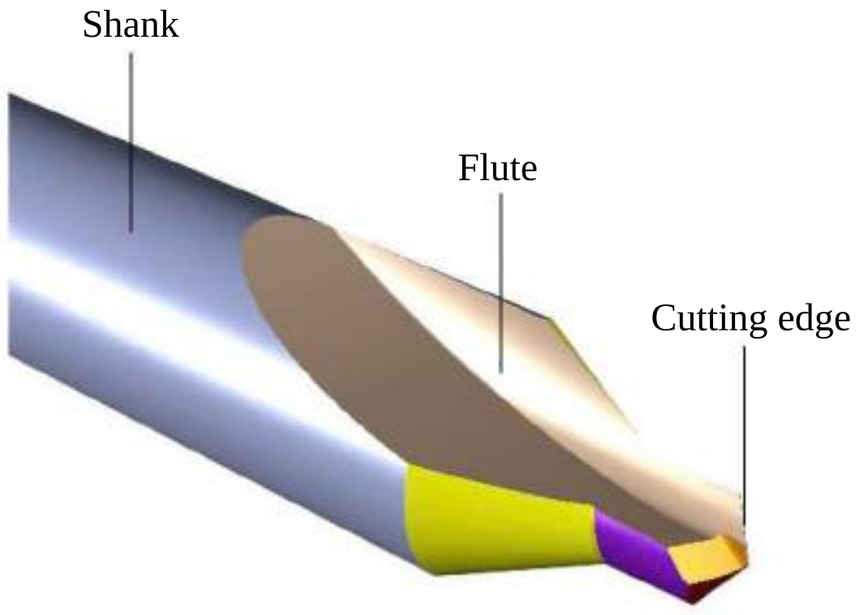
Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK112	DK113	DK114
3.0	50	10		DK1123.0	DK1133.0	DK1143.0
4.0	**50**	**10**		DK1124.0	DK1134.0	DK1144.0
5.0	50	13		DK1125.0	DK1135.0	DK1145.0
6.0	**50**	**15**		DK1126.0	DK1136.0	DK1146.0
8.0	64	20		DK1128.0	DK1138.0	DK1148.0
10.0	**73**	**25**		DK11210.0	DK11310.0	DK11410.0
12.0	74	30		DK11212.0	DK11312.0	DK11412.0
14.0	**80**	**35**		DK11214.0	DK11314.0	DK11414.0
16.0	92	40		DK11216.0	DK11316.0	DK11416.0
18.0	**100**	**45**		DK11218.0	DK11318.0	DK11418.0
20.0	100	45		DK11220.0	DK11420.0	DK11420.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
CENTER DRILL

DK

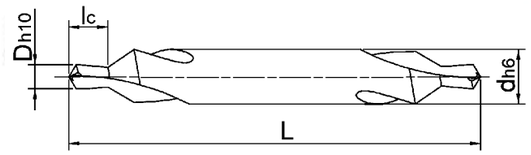


PROPERTIES & APPLICATION

DK115	HM	Z2	Helix 10°	60°	60°	Shank d_{h6}	
DK116	HM	Z2	Helix 10°	90°	60°	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Conical surface
- Non margin
- Bề mặt hình nón
- Không có mẹ trụ
- 円錐面
- マージンなし
- 원뿔 표면
- 무마진



DK115	DK116	
2.00-6.00	2.00-6.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h10} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK115	Code order DK116	
2.0	6.0	50	3.5		DK1152.0	DK1162.0	
3.0	8.0	64	4.5		DK1153.0	DK1163.0	
4.0	10.0	73	5.5		DK1154.0	DK1164.0	
5.0	12.0	74	6.5		DK1155.0	DK1165.0	
6.0	16.0	93	8.5		DK1156.0	DK1166.0	
8.0	16.0	93	10.5		DK1158.0	DK1168.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

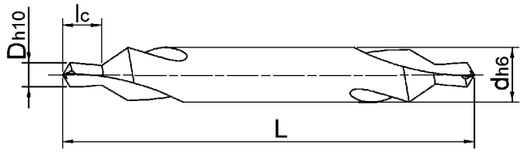
CENTER DRILL

PROPERTIES & APPLICATION

DK117	HM	Z2	Helix 0°	60°	60°	Shank d_{h6}	
DK118	HM	Z2	Helix 0°	90°	60°	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Conical surface
- Non margin
- Bề mặt hình nón
- Không có me trụ
- 円錐面
- マージンなし
- 원뿔 표면
- 무마진



DK117	DK118	
2.00-8.00	2.00-8.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h10} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK117	DK118	
2.0	6.0	50	3.5		DK1172.0	DK1182.0	
3.0	8.0	64	4.5		DK1173.0	DK1183.0	
4.0	10.0	73	5.5		DK1174.0	DK1184.0	
5.0	12.0	74	6.5		DK1175.0	DK1185.0	
6.0	16.0	93	8.5		DK1176.0	DK1186.0	
8.0	16.0	93	10.5		DK1178.0	DK1188.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

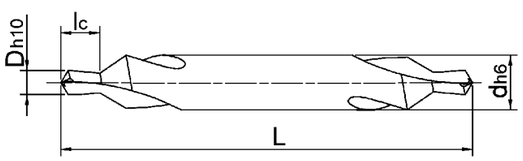
CENTER DRILL

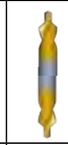
PROPERTIES & APPLICATION

DK119	HM	Z2	TiN	Helix 10°	60°	60°	Shank d_{h6}	
DK120	HM	Z2	TiN	Helix 10°	90°	60°	Shank d_{h6}	

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Conical surface
- Non margin
- Bề mặt hình nón
- Không có me trụ
- 円錐面
- マージンなし
- 원뿔 표면
- 무마진



DK119	DK120	
		
2.00-8.00	2.00-8.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h10} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK119	DK120	
2.0	6.0	50	3.5		DK1192.0	DK1202.0	
3.0	8.0	64	4.5		DK1193.0	DK1203.0	
4.0	10.0	73	5.5		DK1194.0	DK1204.0	
5.0	12.0	74	6.5		DK1195.0	DK1205.0	
6.0	16.0	93	8.5		DK1196.0	DK1206.0	
8.0	16.0	93	10.5		DK1198.0	DK1208.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

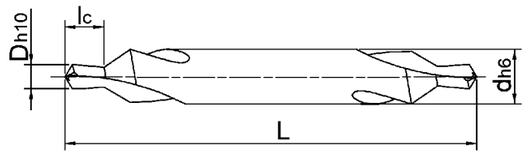
CENTER DRILL

PROPERTIES & APPLICATION

DK121	HM	Z2	TiN	Helix 0°	60°	60°	Shank d_{h6}
DK122	HM	Z2	TiN	Helix 0°	90°	60°	Shank d_{h6}

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Conical surface
- Non margin
- Bề mặt hình nón
- Không có me trụ
- 円錐面
- マージンなし
- 원뿔 표면
- 무마진



DK121	DK122	
2.00-8.00	2.00-8.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h10} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK121	DK122	
2.0	6.0	50	3.5		DK1212.0	DK1222.0	
3.0	8.0	64	4.5		DK1213.0	DK1223.0	
4.0	10.0	73	5.5		DK1214.0	DK1224.0	
5.0	12.0	74	6.5		DK1215.0	DK1225.0	
6.0	16.0	93	8.5		DK1216.0	DK1226.0	
8.0	16.0	93	10.5		DK1218.0	DK1228.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

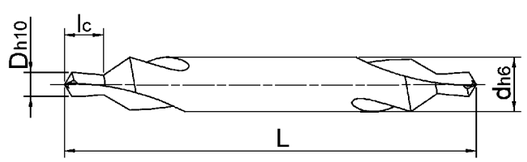
CENTER DRILL

PROPERTIES & APPLICATION

DK123	HM	Z2	AlTiCrn	Helix 10°	60°	60°	Shank d_{h6}
DK124	HM	Z2	AlTiCrn	Helix 10°	90°	60°	Shank d_{h6}

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Conical surface
- Non margin
- Bề mặt hình nón
- Không có me trụ
- 円錐面
- マージンなし
- 원뿔 표면
- 무마진



DK123	DK124	
2.00-8.00	2.00-8.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h10} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK123	DK124	
2.0	6.0	50	3.5		DK1232.0	DK1242.0	
3.0	8.0	64	4.5		DK1233.0	DK1243.0	
4.0	10.0	73	5.5		DK1234.0	DK1244.0	
5.0	12.0	74	6.5		DK1235.0	DK1245.0	
6.0	16.0	93	8.5		DK1236.0	DK1246.0	
8.0	16.0	93	10.5		DK1238.0	DK1248.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

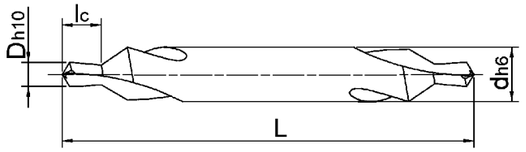
CENTER DRILL

PROPERTIES & APPLICATION

DK125	HM	Z2	AlTiCrn	Helix 0°	60°	60°	Shank d_{h6}
DK126	HM	Z2	AlTiCrn	Helix 0°	90°	60°	Shank d_{h6}

D_{h7}	Tolerance	
1 < D ≤ 3	0	-0.01
3 < D ≤ 6	0	-0.012
6 < D ≤ 10	0	-0.015
10 < D ≤ 18	0	-0.018
18 < D ≤ 30	0	-0.021

Engineering Data
- Conical surface
- Non margin
- Bề mặt hình nón
- Không có me trụ
- 円錐面
- マージンなし
- 원뿔 표면
- 무마진



DK125	DK126	
2.00-8.00	2.00-8.00	

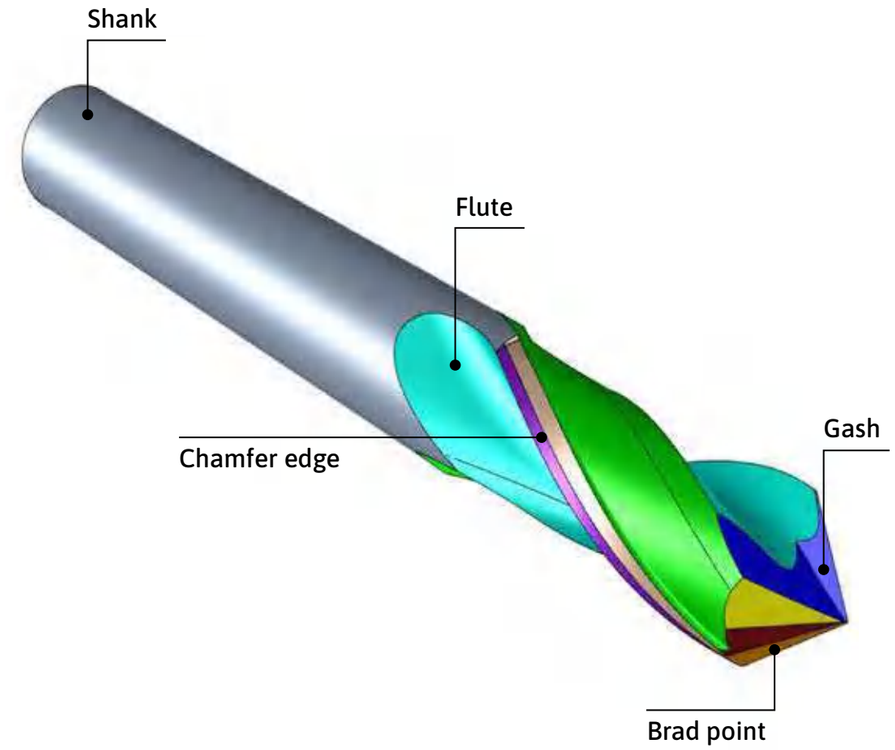
Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h10} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DK125	Code order DK126	
2.0	6.0	50	3.5		DK1252.0	DK1262.0	
3.0	8.0	64	4.5		DK1253.0	DK1263.0	
4.0	10.0	73	5.5		DK1254.0	DK1264.0	
5.0	12.0	74	6.5		DK1255.0	DK1265.0	
6.0	16.0	93	8.5		DK1256.0	DK1266.0	
8.0	16.0	93	10.5		DK1258.0	DK1268.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DK

Solid Carbide Tools
CHAMFER ENDMILL



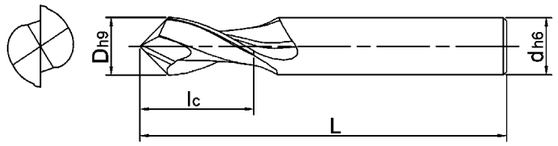
DV

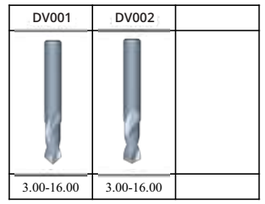
CHAMFER ENDMILL

PROPERTIES & APPLICATION

DV001	HM	Z2	Helix 30°	90°	D_{h9}	Shank d_{h6}			
DV002	HM	Z2	Helix 30°	120°	D_{h9}	Shank d_{h6}			

Engineering Data
- No endface cutting
- No ouside diameter cutting
- Không có lưỡi cắt mặt đầu
- Không có lưỡi cắt đường kính
- 底刃なし
- 外径カットなし
- 바닥 날 없음
- 외경 컷 없음





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DV001	DV002	
3.0	3.0	50	10		DV0013.0	DV0023.0	
4.0	4.0	50	10		DV0014.0	DV0024.0	
5.0	5.0	50	13		DV0015.0	DV0025.0	
6.0	6.0	50	15		DV0016.0	DV0026.0	
8.0	8.0	64	20		DV0018.0	DV0028.0	
10.0	10.0	73	25		DK00110.0	DK00210.0	
12.0	12.0	74	30		DK00112.0	DK00212.0	
14.0	14.0	80	30		DK00114.0	DK00214.0	
16.0	16.0	93	40		DK00116.0	DK00214.0	

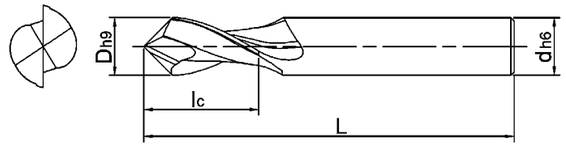
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

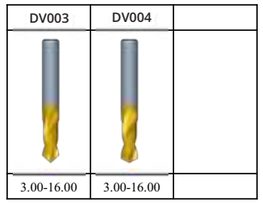
CHAMFER ENDMILL

PROPERTIES & APPLICATION

DV003	HM	Z2	TiN	Helix 30°	90°	D_{h9}	Shank d_{h6}			
DV004	HM	Z2	TiN	Helix 30°	120°	D_{h9}	Shank d_{h6}			

Engineering Data
- No endface cutting
- No ouside diameter cutting
- Không có lưỡi cắt mặt đầu
- Không có lưỡi cắt đường kính
- 底刃なし
- 外径カットなし
- 바닥 날 없음
- 외경 컷 없음





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DV003	DV004	
2	3	50	6		DV0032.0	DV0042.0	
3	3	50	10		DV0033.0	DV0043.0	
4	4	50	10		DV0034.0	DV0044.0	
5	5	50	13		DV0035.0	DV0045.0	
6	6	50	15		DV0036.0	DV0046.0	
8	8	50	20		DV0038.0	DV0048.0	
10	10	75	25		DV00310.0	DV00410.0	
12	12	75	30		DV00312.0	DV00412.0	
13	13	75	30		DV00313.0	DV00413.0	
14	14	80	30		DV00314.0	DV00414.0	
16	16	100	40		DV00316.0	DV00416.0	
18	18	100	45		DV00318.0	DV00418.0	
20	20	100	45		DV00320.0	DV00420.0	

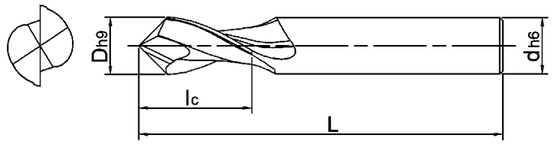
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

CHAMFER ENDMILL

PROPERTIES & APPLICATION

DV005	HM	Z2	AlTiCrn	Helix 30°	90°	D_{h9}	Shank d_{h6}		
DV006	HM	Z2	AlTiCrn	Helix 30°	120°	D_{h9}	Shank d_{h6}		

Engineering Data
- No endface cutting
- No ouside diameter cutting
- Không có lưỡi cắt mặt đầu
- Không có lưỡi cắt đường kính
- 底刃なし
- 外径カットなし
- 바닥 날 없음
- 외경 컷 없음

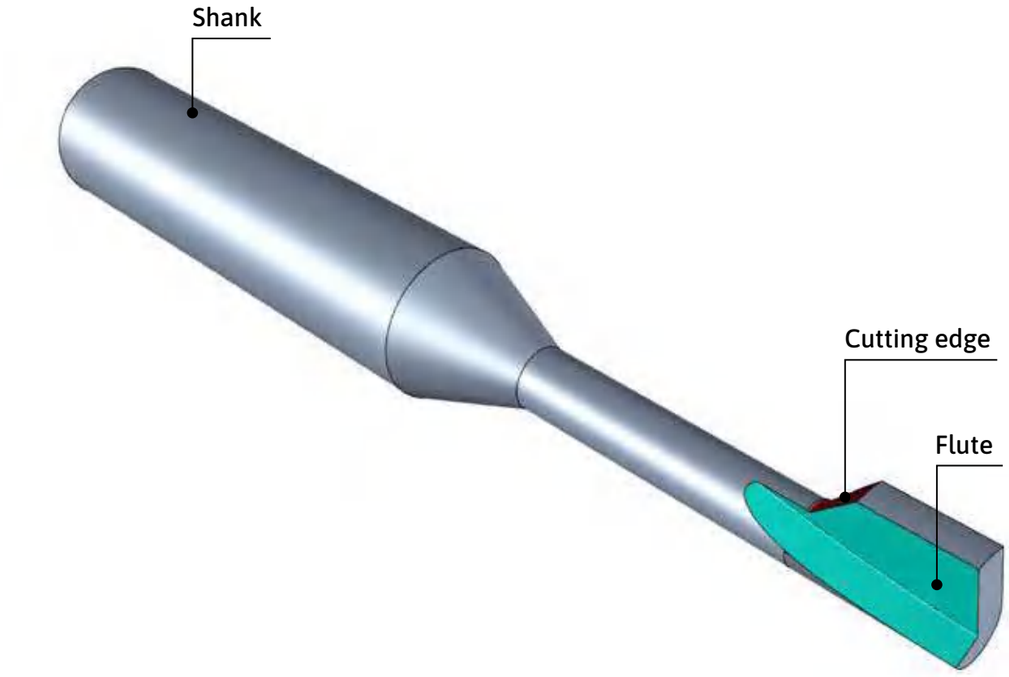


Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / z)	Code order DV005	DV006	
3.0	3.0	50	10		DV0053.0	DV0063.0	
4.0	4.0	50	10		DV0054.0	DV0064.0	
5.0	5.0	50	13		DV0055.0	DV0065.0	
6.0	6.0	50	15		DV0056.0	DV0066.0	
8.0	8.0	64	20		DV0058.0	DV0068.0	
10.0	10.0	73	25		DV00510.0	DV00610.0	
12.0	12.0	74	30		DV00512.0	DV00612.0	
14.0	14.0	80	30		DV00514.0	DV00614.0	
16.0	16.0	93	40		DV00516.0	DV00616.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
BACK CHAMFER

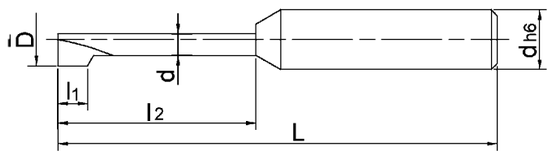


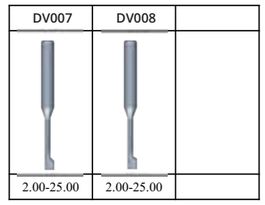
BACK CHAMFER

PROPERTIES & APPLICATION

DV007	HM	Z1	Helix 0°	90°	Shank d_{h6}	
DV008	HM	Z1	Helix 0°	120°	Shank d_{h6}	

Engineering Data
- No endface cutting
- No ouside diameter cutting
- Không có lưỡi cắt mặt đầu
- Không có lưỡi cắt đường kính
- 底刃なし
- 外径カットなし
- 바닥 날 없음
- 외경 컷 없음





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV007	DV008	
2.0	3.0	50	6			DV0072.0	DV0082.0	
3.0	3.0	50	10			DV0073.0	DV0083.0	
4.0	4.0	50	10			DV0074.0	DV0084.0	
5.0	5.0	50	13			DV0075.0	DV0085.0	
6.0	6.0	50	15			DV0076.0	DV0085.0	
8.0	8.0	50	20			DV0078.0	DV0088.0	
10.0	10.0	75	25			DV00710.0	DV00810.0	
12.0	12.0	75	30			DV00712.0	DV00812.0	
14.0	14.0	80	30			DV00714.0	DV00814.0	
16.0	16.0	100	40			DV00716.0	DV00816.0	
18.0	18.0	100	45			DV00718.0	DV00818.0	
20.0	20.0	100	45			DV00720.0	DV00820.0	
25.0	25.0	100	45			DV00725.0	DV00825.0	

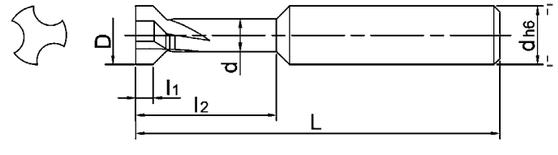
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

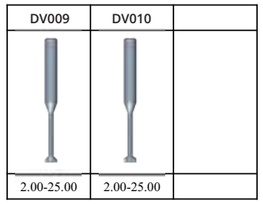
BACK CHAMFER

PROPERTIES & APPLICATION

DV009	HM	Z3	Helix 10°	90°	Shank d_{h6}	
DV010	HM	Z3	Helix 10°	120°	Shank d_{h6}	

Engineering Data
- No endface cutting
- No ouside diameter cutting
- Không có lưỡi cắt mặt đầu
- Không có lưỡi cắt đường kính
- 底刃なし
- 外径カットなし
- 바닥 날 없음
- 외경 컷 없음





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV009	DV010	
2.0	3.0	50	6			DV0092.0	DV0102.0	
3.0	3.0	50	10			DV0093.0	DV0103.0	
4.0	4.0	50	10			DV0094.0	DV0105.0	
5.0	5.0	50	13			DV0095.0	DV0105.0	
6.0	6.0	50	15			DV0096.0	DV0106.0	
8.0	8.0	50	20			DV0098.0	DV0108.0	
10.0	10.0	75	25			DV00910.0	DV01010.0	
12.0	12.0	75	30			DV00912.0	DV01012.0	
14.0	14.0	80	30			DV00914.0	DV01014.0	
16.0	16.0	100	40			DV00916.0	DV01016.0	
18.0	18.0	100	45			DV00918.0	DV01018.0	
20.0	20.0	100	45			DV00920.0	DV01020.0	
25.0	25.0	100	45			DV00925.0	DV01025.0	

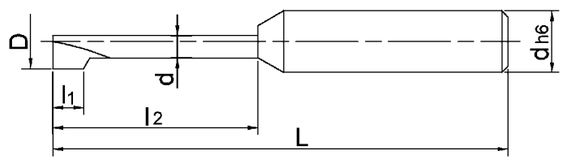
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

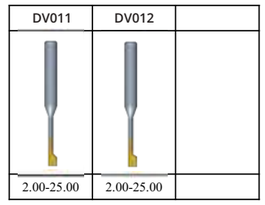
CHAMFER ENDMILL

PROPERTIES & APPLICATION

DV011	HM	Z1	TiN	Helix 0°	90°	Shank d_{h6}	
DV012	HM	Z1	TiN	Helix 0°	120°	Shank d_{h6}	

Engineering Data
- No endface cutting
- No ouside diameter cutting
- Không có lưỡi cắt mặt đầu
- Không có lưỡi cắt đường kính
- 底刃なし
- 外径カットなし
- 바닥 날 없음
- 외경 컷 없음





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV011	DV012	
2.0	3.0	50	6			DV0852.0	DV0852.0	
3.0	3.0	50	10			DV0852.0	DV0852.0	
4.0	4.0	50	10			DV0852.0	DV0852.0	
5.0	5.0	50	13			DV0852.0	DV0852.0	
6.0	6.0	50	15			DV0852.0	DV0852.0	
8.0	8.0	50	20			DV0852.0	DV0852.0	
10.0	10.0	75	25			DV08720.0	DV08720.0	
12.0	12.0	75	30			DV08720.0	DV08720.0	
14.0	14.0	80	30			DV08720.0	DV08720.0	
16.0	16.0	100	40			DV08720.0	DV08720.0	
18.0	18.0	100	45			DV08720.0	DV08720.0	
20.0	20.0	100	45			DV08720.0	DV08720.0	
25.0	25.0	100	45			DV08720.0	DV08720.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

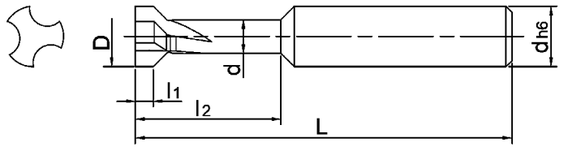
SYNCHRONOUS SOLUTION

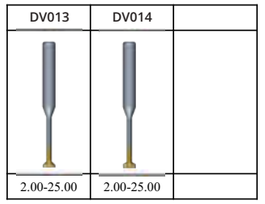
CHAMFER ENDMILL

PROPERTIES & APPLICATION

DV013	HM	Z3	TiN	Helix 10°	90°	Shank d_{h6}	
DV014	HM	Z3	TiN	Helix 10°	120°	Shank d_{h6}	

Engineering Data
- No endface cutting
- No ouside diameter cutting
- Không có lưỡi cắt mặt đầu
- Không có lưỡi cắt đường kính
- 底刃なし
- 外径カットなし
- 바닥 날 없음
- 외경 컷 없음





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV013	DV014	
2.0	3.0	50	6			DV0132.0	DV0142.0	
3.0	3.0	50	10			DV0133.0	DV0143.0	
4.0	4.0	50	10			DV0134.0	DV0144.0	
5.0	5.0	50	13			DV0135.0	DV0145.0	
6.0	6.0	50	15			DV0136.0	DV0146.0	
8.0	8.0	50	20			DV0138.0	DV0148.0	
10.0	10.0	75	25			DV01310.0	DV01410.0	
12.0	12.0	75	30			DV01312.0	DV01412.0	
14.0	14.0	80	30			DV01314.0	DV01414.0	
16.0	16.0	100	40			DV01316.0	DV01416.0	
18.0	18.0	100	45			DV01318.0	DV01418.0	
20.0	20.0	100	45			DV01320.0	DV01420.0	
25.0	25.0	100	45			DV01325.0	DV01425.0	

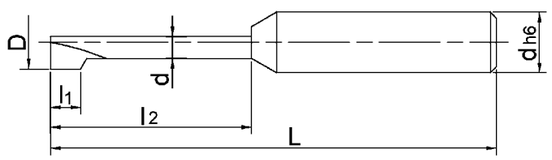
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

CHAMFER ENDMILL

PROPERTIES & APPLICATION

DV015	HM	Z1	AlTiCrn	Helix 0°	90°	Shank d_{h6}	
DV016	HM	Z1	AlTiCrn	Helix 0°	120°	Shank d_{h6}	

Engineering Data
- No endface cutting
- No ouside diameter cutting
- Không có lưỡi cắt mặt đầu
- Không có lưỡi cắt đường kính
- 底刃なし
- 外径カットなし
- 바닥 날 없음
- 외경 컷 없음



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV015	DV016	
2.0	3.0	50	6			DV0152.0	DV0162.0	
3.0	3.0	50	10			DV0153.0	DV0163.0	
4.0	4.0	50	10			DV0154.0	DV0164.0	
5.0	5.0	50	13			DV0155.0	DV0165.0	
6.0	6.0	50	15			DV0156.0	DV0166.0	
8.0	8.0	50	20			DV0158.0	DV0168.0	
10.0	10.0	75	25			DV01510.0	DV01610.0	
12.0	12.0	75	30			DV01512.0	DV01612.0	
14.0	14.0	80	30			DV01514.0	DV01614.0	
16.0	16.0	100	40			DV01516.0	DV01615.0	
18.0	18.0	100	45			DV01518.0	DV01618.0	
20.0	20.0	100	45			DV01520.0	DV01620.0	
25.0	25.0	100	45			DV01525.0	DV01520.0	

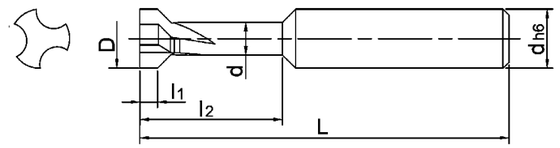
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

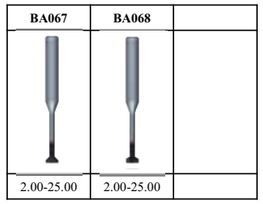
CHAMFER ENDMILL

PROPERTIES & APPLICATION

DV017	HM	Z2	AlTiCrn	Helix 10°	90°	Shank d_{h6}	
DV018	HM	Z2	AlTiCrn	Helix 10°	120°	Shank d_{h6}	

Engineering Data
- No endface cutting
- No ouside diameter cutting
- Không có lưỡi cắt mặt đầu
- Không có lưỡi cắt đường kính
- 底刃なし
- 外径カットなし
- 바닥 날 없음
- 외경 컷 없음



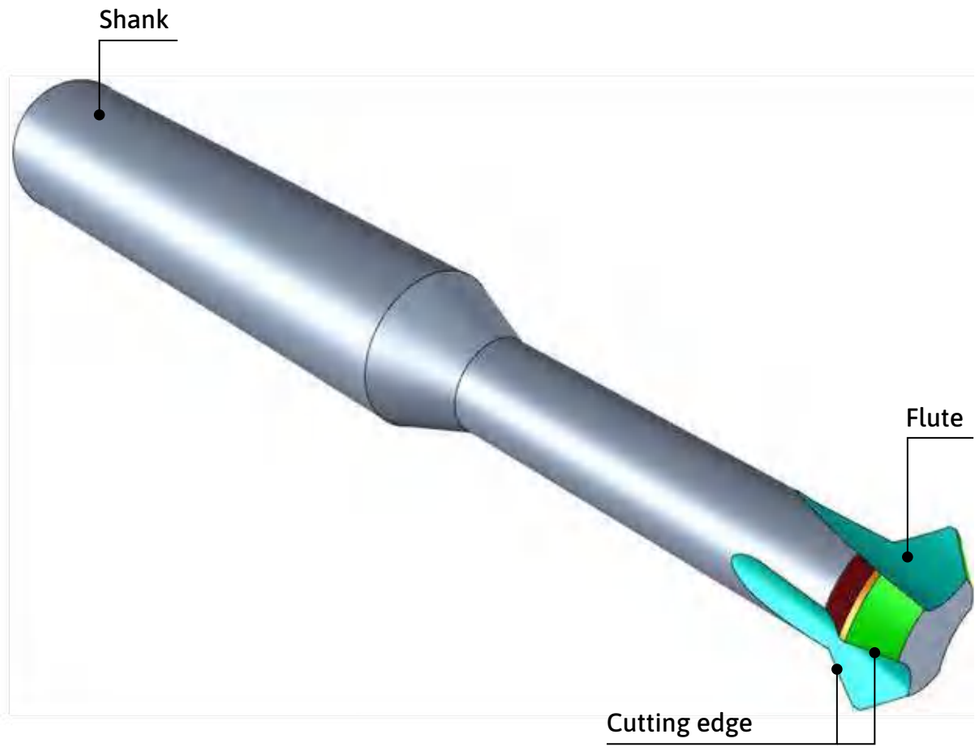


Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV017	DV018	
2.0	3.0	50	6			DV0172.0	DV0182.0	
3.0	3.0	50	10			DV0173.0	DV0183.0	
4.0	4.0	50	10			DV0174.0	DV0184.0	
5.0	5.0	50	13			DV0175.0	DV0185.0	
6.0	6.0	50	15			DV0176.0	DV0186.0	
8.0	8.0	50	20			DV0178.0	DV0188.0	
10.0	10.0	75	25			DV01710.0	DV01810.0	
12.0	12.0	75	30			DV01712.0	DV01812.0	
14.0	14.0	80	30			DV01714.0	DV01814.0	
16.0	16.0	100	40			DV01716.0	DV01816.0	
18.0	18.0	100	45			DV01718.0	DV01818.0	
20.0	20.0	100	45			DV01720.0	DV01820.0	
25.0	25.0	100	45			DV01725.0	DV01825.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

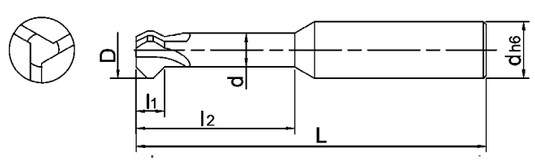
Solid Carbide Tools
DOUBLE SIDE CHAMFER

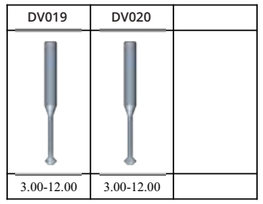


PROPERTIES & APPLICATION

DV019	HM	Z3	Helix 0°	90°	Shank d_{h6}		
DV020	HM	Z4	Helix 0°	90°	Shank d_{h6}		

Engineering Data
- Conical surface
- Right hand cutter
- Bề mặt hình nón
- Lưỡi cắt phải
- 円錐面
- 右手カッター
- 원뿔 표면
- 오른손 절단기





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV019	DV020	
3.0	3.0	50	10	10			DV0193.0	DV0203.0	
4.0	4.0	50	10	10			DV0194.0	DV0204.0	
5.0	5.0	50	13	13			DV0195.0	DV0205.0	
6.0	6.0	50	15	15			DV0196.0	DV0206.0	
8.0	8.0	64	20	20			DV0198.0	DV0208.0	
10.0	10.0	75	25	25			DV01910.0	DV02010.0	
12.0	12.0	75	30	30			DV01912.0	DV02012.0	

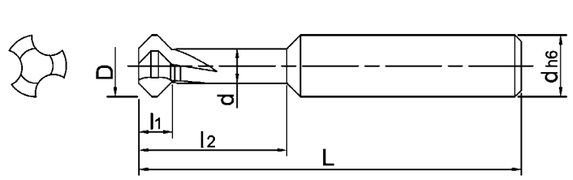
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

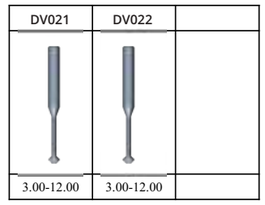
DOUBLE SIDE CHAMFER

PROPERTIES & APPLICATION

DV021	HM	Z3	Helix 10°	90°	Shank d_{h6}		
DV022	HM	Z4	Helix 10°	90°	Shank d_{h6}		

Engineering Data
- Conical surface
- Right hand cutter
- Bề mặt hình nón
- Lưỡi cắt phải
- 円錐面
- 右手カッター
- 원뿔 표면
- 오른손 절단기





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV021	DV022	
3.0	3.0	50	10			DV0213.0	DV0223.0	
4.0	4.0	50	10			DV0214.0	DV0224.0	
5.0	5.0	50	13			DV0215.0	DV0225.0	
6.0	6.0	50	15			DV0216.0	DV0226.0	
8.0	8.0	64	20			DV0218.0	DV0218.0	
10.0	10.0	75	25			DV02110.0	DV02210.0	
12.0	12.0	75	30			DV02112.0	DV02212.0	

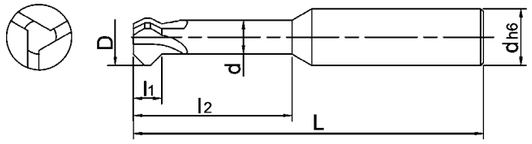
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

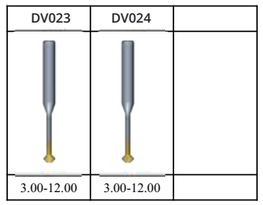
DOUBLE SIDE CHAMFER

PROPERTIES & APPLICATION

DV023	HM	Z3	TiN	Helix 0°	90°	Shank d_{h6}	
DV024	HM	Z4	TiN	Helix 0°	90°	Shank d_{h6}	

Engineering Data
- Conical surface
- Right hand cutter
- Bề mặt hình nón
- Lưỡi cắt phải
- 円錐面
- 右手カッター
- 원뿔 표면
- 오른손 절단기





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV023	DV024	
3.0	3.0	50	10			DV0852.0	DV0852.0	
4.0	4.0	50	10			DV0852.0	DV0852.0	
5.0	5.0	50	13			DV0852.0	DV0852.0	
6.0	6.0	50	15			DV0852.0	DV0852.0	
8.0	8.0	64	20			DV0852.0	DV0852.0	
10.0	10.0	75	25			DV08720.0	DV08720.0	
12.0	12.0	75	30			DV08720.0	DV08720.0	

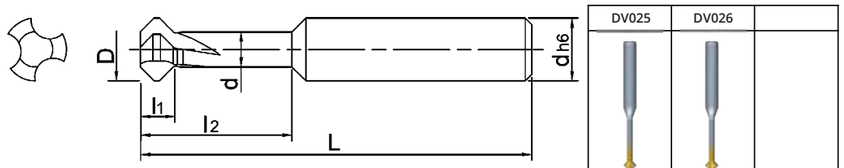
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

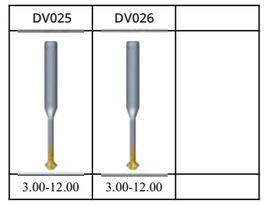
DOUBLE SIDE CHAMFER

PROPERTIES & APPLICATION

DV025	HM	Z3	TiN	Helix 10°	90°	Shank d_{h6}	
DV026	HM	Z4	TiN	Helix 10°	90°	Shank d_{h6}	

Engineering Data
- Conical surface
- Right hand cutter
- Bề mặt hình nón
- Lưỡi cắt phải
- 円錐面
- 右手カッター
- 원뿔 표면
- 오른손 절단기





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV025	DV026	
3.0	3.0	50	10			DV0253.0	DV0263.0	
4.0	4.0	50	10			DV0254.0	DV0264.0	
5.0	5.0	50	13			DV0255.0	DV0265.0	
6.0	6.0	50	15			DV0256.0	DV0266.0	
8.0	8.0	64	20			DV0258.0	DV0268.0	
10.0	10.0	75	25			DV02510.0	DV02610.0	
12.0	12.0	75	30			DV02512.0	DV02612.0	

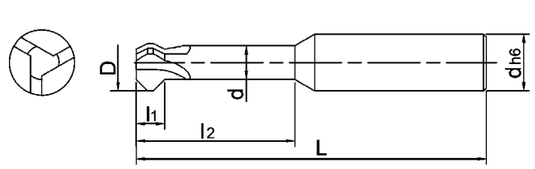
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

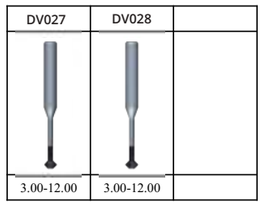
DOUBLE SIDE CHAMFER

PROPERTIES & APPLICATION

DV027	HM	Z3	AlTiCrn	Helix 0°	90°	Shank d_{h6}	
DV028	HM	Z4	AlTiCrn	Helix 0°	90°	Shank d_{h6}	

Engineering Data
- Conical surface
- Right hand cutter
- Bề mặt hình nón
- Lưỡi cắt phải
- 円錐面
- 右手カッター
- 원뿔 표면
- 오른손 절단기





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV027	DV028	
3.0	3.0	50	10			DV0273.0	DV0283.0	
4.0	4.0	50	10			DV0274.0	DV0284.0	
5.0	5.0	50	13			DV0275.0	DV0285.0	
6.0	6.0	50	15			DV0276.0	DV0286.0	
8.0	8.0	64	20			DV0278.0	DV0288.0	
10.0	10.0	75	25			DV02710.0	DV02810.0	
12.0	12.0	75	30			DV02712.0	DV02812.0	

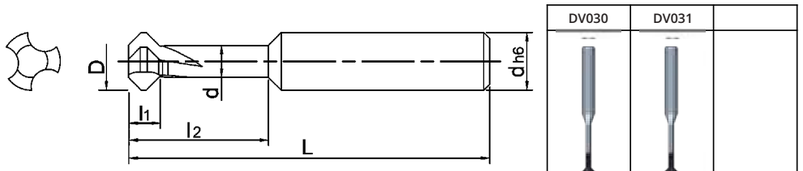
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

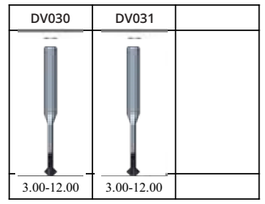
DOUBLE SIDE CHAMFER

PROPERTIES & APPLICATION

DV030	HM	Z3	AlTiCrn	Helix 10°	90°	Shank d_{h6}		
DV031	HM	Z4	AlTiCrn	Helix 10°	90°	Shank d_{h6}		

Engineering Data
- Conical surface
- Right hand cutter
- Bề mặt hình nón
- Lưỡi cắt phải
- 円錐面
- 右手カッター
- 원뿔 표면
- 오른손 절단기



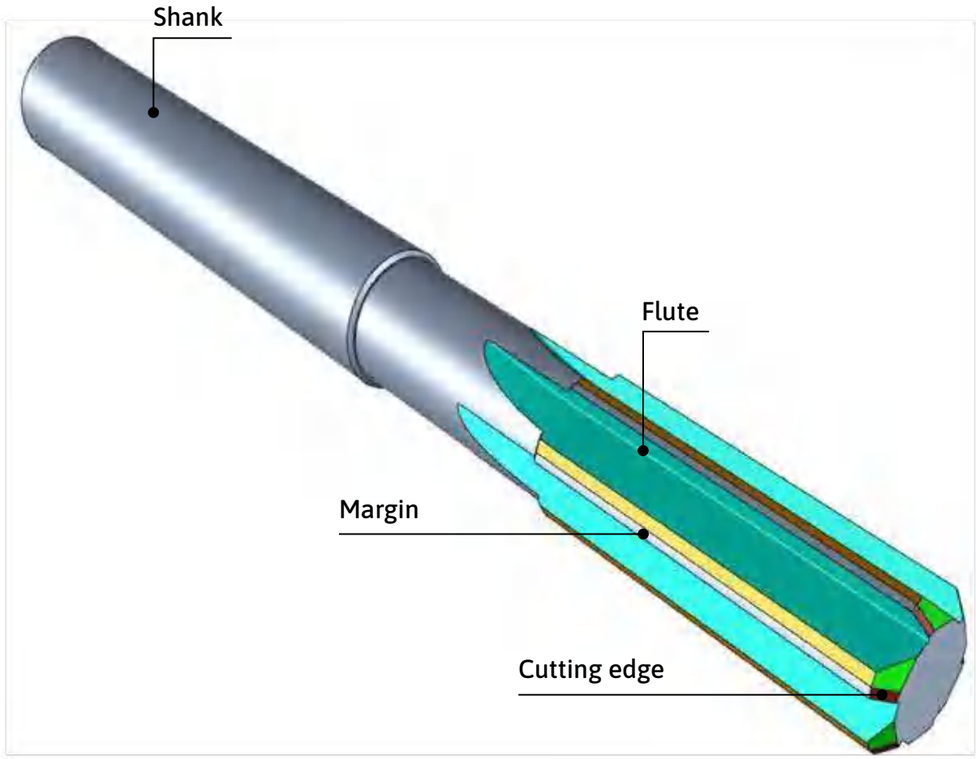


Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DV030	DV031	
3.0	3.0	50	10			DV0303.0	DV0313.0	
4.0	4.0	50	10			DV0304.0	DV0314.0	
5.0	5.0	50	13			DV0305.0	DV0315.0	
6.0	6.0	50	15			DV0306.0	DV0316.0	
8.0	8.0	64	20			DV0308.0	DV0318.0	
10.0	10.0	75	25			DV03010.0	DV03110.0	
12.0	12.0	75	30			DV03012.0	DV03112.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
STRAIGHT REAMER



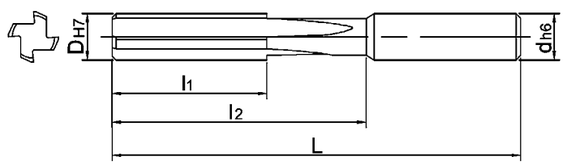
STRAIGHT REAMER

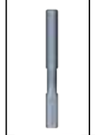
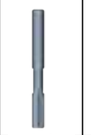
PROPERTIES & APPLICATION

DD001	HM	Z4	Helix 0°	45°	D_{H7}	Shank d_{h6}	
DD002	HM	Z6	Helix 0°	45°	D_{H7}	Shank d_{h6}	

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Non internal coolant
- Không có lưỡi cắt mặt đầu
- Không có lỗ tưới nguội
- 底刃なし
- 非内部給油
- 바닥 날 없음
- 비내부 절삭유



DD001	DD002	
		
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)												

D_{H7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD001	DD002	
2.0	3.0	50	6			DD0012.0	DD0022.0	
3.0	3.0	50	10			DD0013.0	DD0023.0	
4.0	4.0	50	10			DD0014.0	DD0024.0	
5.0	5.0	50	13			DD0015.0	DD0025.0	
6.0	6.0	50	15			DD0016.0	DD0026.0	
8.0	8.0	50	20			DD0018.0	DD0028.0	
10.0	10.0	75	25			DV00110.0	DV00210.0	
12.0	12.0	75	30			DV00112.0	DV00212.0	
14.0	14.0	80	30			DV00114.0	DV00214.0	
16.0	16.0	100	40			DV00116.0	DV00216.0	
18.0	18.0	100	45			DV00118.0	DV00218.0	
20.0	20.0	100	45			DV00120.0	DV00220.0	
25.0	25.0	100	45			DV00125.0	DV00225.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

STRAIGHT REAMER

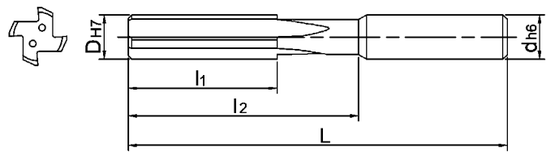
ANMI SYNCHRONOUS SOLUTION

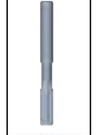
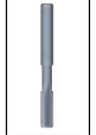
PROPERTIES & APPLICATION

DD003	HM	Z4	Helix 0°	45°	D_{H7}	Shank d_{h6}	
DD004	HM	Z6	Helix 0°	45°	D_{H7}	Shank d_{h6}	

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Non internal coolant
- Không có lưỡi cắt mặt đầu
- Lỗ tưới nguội thẳng
- 底刃なし
- 非内部給油
- 바닥 날 없음
- 직선 냉각 구멍



DD003	DD004	
		
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD003	DD004	
2.0	3.0	50	6			DD0032.0	DD0042.0	
3.0	3.0	50	10			DD0033.0	DD0043.0	
4.0	4.0	50	10			DD0034.0	DD0044.0	
5.0	5.0	50	13			DD0035.0	DD0045.0	
6.0	6.0	50	15			DD0036.0	DD0046.0	
8.0	8.0	50	20			DD0038.0	DD0048.0	
10.0	10.0	75	25			DV00310.0	DV00410.0	
12.0	12.0	75	30			DV00312.0	DV00412.0	
14.0	14.0	80	30			DV00314.0	DV00414.0	
16.0	16.0	100	40			DV00316.0	DV00416.0	
18.0	18.0	100	45			DV00318.0	DV00418.0	
20.0	20.0	100	45			DV00320.0	DV00420.0	
25.0	25.0	100	45			DV00325.0	DV00425.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

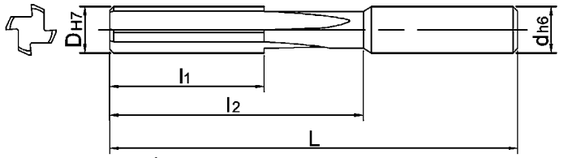
STRAIGHT REAMER

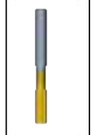
PROPERTIES & APPLICATION

DD005	HM	Z4	TiN	Helix 0°	45°	D_{H7}	Shank d_{h6}
DD006	HM	Z6	TiN	Helix 0°	45°	D_{H7}	Shank d_{h6}

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Non internal coolant
- Không có lưỡi cắt mặt đầu
- Không có lỗ tưới nguội
- 底刃なし
- 非内部給油
- 바닥 날 없음
- 비내부 절삭유



DD005	DD006	
		
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD005	DD006	
2.0	3.0	50	6			DD0052.0	DD0062.0	
3.0	3.0	50	10			DD0053.0	DD0063.0	
4.0	4.0	50	10			DD0054.0	DD0064.0	
5.0	5.0	50	13			DD0055.0	DD0065.0	
6.0	6.0	50	15			DD0056.0	DD0066.0	
8.0	8.0	50	20			DD0058.0	DD0068.0	
10.0	10.0	75	25			DD00510.0	DD00610.0	
12.0	12.0	75	30			DD00512.0	DD00612.0	
14.0	14.0	80	30			DD00514.0	DD00614.0	
16.0	16.0	100	40			DD00516.0	DD00616.0	
18.0	18.0	100	45			DD00518.0	DD00618.0	
20.0	20.0	100	45			DD00520.0	DD00620.0	
25.0	25.0	100	45			DD00525.0	DD00625.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

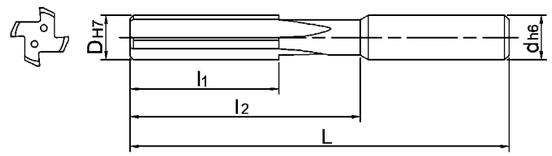
STRAIGHT REAMER

PROPERTIES & APPLICATION

DD007	HM	Z4	TiN	Helix 0°	45°	D_{H7}	Shank d_{h6}
DD008	HM	Z6	TiN	Helix 0°	45°	D_{H7}	Shank d_{h6}

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Non internal coolant
- Không có lưỡi cắt mặt đầu
- Lỗ tưới nguội thẳng
- 底刃なし
- 非内部給油
- 바닥 날 없음
- 직선 냉각 구멍



DD007	DD008	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD007	DD008	
2.0	3.0	50	6			DD0072.0	DD0082.0	
3.0	3.0	50	10			DD0073.0	DD0083.0	
4.0	4.0	50	10			DD0074.0	DD0084.0	
5.0	5.0	50	13			DD0075.0	DD0085.0	
6.0	6.0	50	15			DD0076.0	DD0086.0	
8.0	8.0	50	20			DD0078.0	DD0088.0	
10.0	10.0	75	25			DD00710.0	DD00810.0	
12.0	12.0	75	30			DD00712.0	DD00812.0	
14.0	14.0	80	30			DD00714.0	DD00814.0	
16.0	16.0	100	40			DD00716.0	DD00816.0	
18.0	18.0	100	45			DD00718.0	DD00818.0	
20.0	20.0	100	45			DD00720.0	DD00820.0	
25.0	25.0	100	45			DD00725.0	DD00825.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

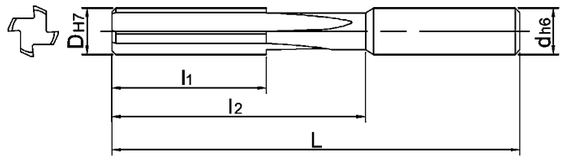
STRAIGHT REAMER

PROPERTIES & APPLICATION

DD009	HM	Z4	ALTiN	Helix 0°	45°	D_{H7}	Shank d_{h6}
DD010	HM	Z6	ALTiN	Helix 0°	45°	D_{H7}	Shank d_{h6}

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Non internal coolant
- Không có lưỡi cắt mặt đầu
- Không có lỗ tưới nguội
- 底刃なし
- 非内部給油
- 바닥 날 없음
- 비내부 절삭유



DD009	DD010	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD009	DD010	
2.0	3.0	50	6			DD0092.0	DD0102.0	
3.0	3.0	50	10			DD0093.0	DD0103.0	
4.0	4.0	50	10			DD0094.0	DD0104.0	
5.0	5.0	50	13			DD0095.0	DD0105.0	
6.0	6.0	50	15			DD0096.0	DD0106.0	
8.0	8.0	50	20			DD0098.0	DD0108.0	
10.0	10.0	75	25			DD00910.0	DD01010.0	
12.0	12.0	75	30			DD00912.0	DD01012.0	
14.0	14.0	80	30			DD00914.0	DD01014.0	
16.0	16.0	100	40			DD00916.0	DD01016.0	
18.0	18.0	100	45			DD00918.0	DD01018.0	
20.0	20.0	100	45			DD00920.0	DD01020.0	
25.0	25.0	100	45			DD00925.0	DD01025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

STRAIGHT REAMER

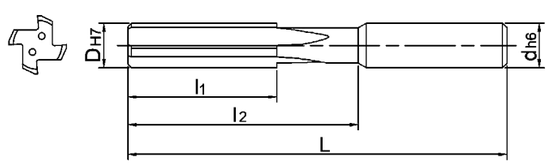
ANMI SYNCHRONOUS SOLUTION

PROPERTIES & APPLICATION

DD011	HM	Z4	ALTiN	Helix 0°	45°	D_{H7}	Shank d_{h6}
DD012	HM	Z6	ALTiN	Helix 0°	45°	D_{H7}	Shank d_{h6}

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Non internal coolant
- Không có lưỡi cắt mặt đầu
- Lỗ tưới nguội thẳng
- 底刃なし
- 非内部給油
- 바닥 날 없음
- 직선 냉각 구멍



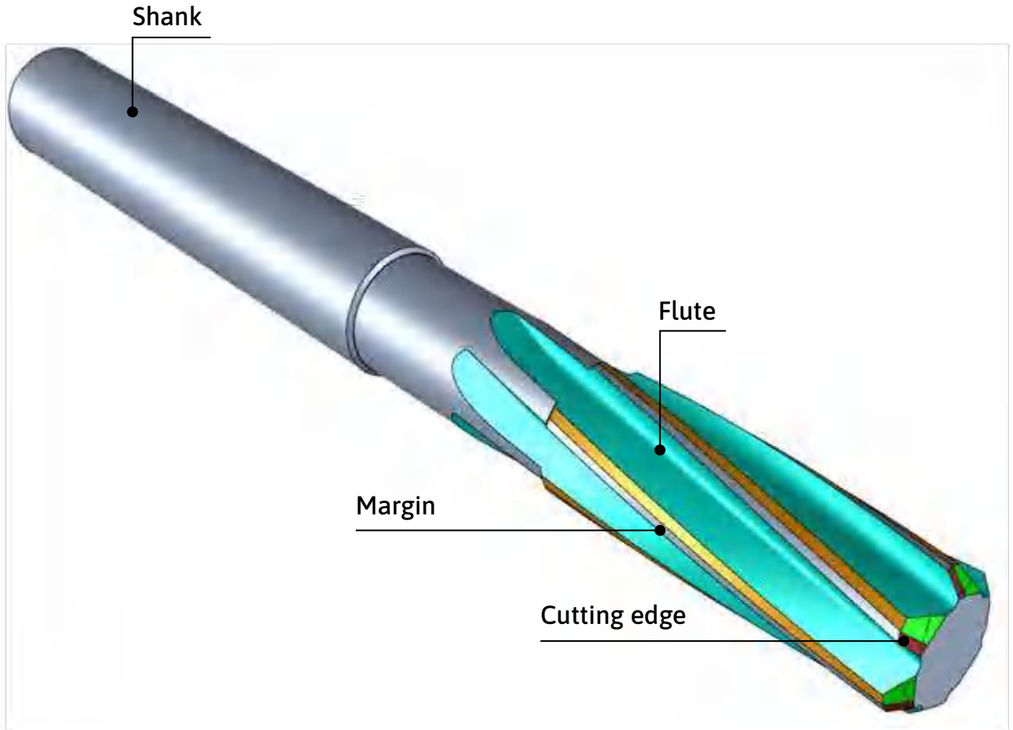
DD011	DD012	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD011	DD012	
2.0	3.0	50	6			DD0112.0	DD0122.0	
3.0	3.0	50	10			DD0113.0	DD0123.0	
4.0	4.0	50	10			DD0114.0	DD0124.0	
5.0	5.0	50	13			DD0115.0	DD0125.0	
6.0	6.0	50	15			DD0116.0	DD0126.0	
8.0	8.0	50	20			DD0118.0	DD0128.0	
10.0	10.0	75	25			DD01110.0	DD01210.0	
12.0	12.0	75	30			DD01112.0	DD01212.0	
14.0	14.0	80	30			DD01114.0	DD01214.0	
16.0	16.0	100	40			DD01116.0	DD01216.0	
18.0	18.0	100	45			DD01118.0	DD01218.0	
20.0	20.0	100	45			DD01120.0	DD01220.0	
25.0	25.0	100	45			DD01125.0	DD01220.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
HELIX REAMER



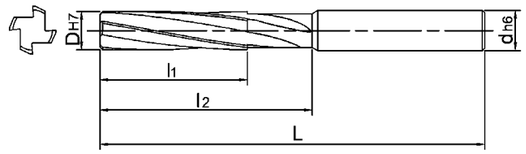
HELIX REAMER

PROPERTIES & APPLICATION

DD013	HM	Z4	Helix (R)	45°	D_{H7}	Shank d_{h6}	
DD014	HM	Z6	Helix (R)	45°	D_{H7}	Shank d_{h6}	

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Non internal coolant
- Không có lưỡi cắt mặt đầu
- Không có lỗ tưới nguội
- 底刃なし
- 非内部給油
- 바닥 날 없음
- 비내부 절삭유



DD013	DD014	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD013	DD014	
2.0	3.0	50	6			DD0132.0	DD0142.0	
3.0	3.0	50	10			DD0133.0	DD0143.0	
4.0	4.0	50	10			DD0134.0	DD0144.0	
5.0	5.0	50	13			DD0135.0	DD0145.0	
6.0	6.0	50	15			DD0136.0	DD0146.0	
8.0	8.0	50	20			DD0138.0	DD0148.0	
10.0	10.0	75	25			DD01310.0	DD01410.0	
12.0	12.0	75	30			DD01312.0	DD01412.0	
14.0	14.0	80	30			DD01314.0	DD01414.0	
16.0	16.0	100	40			DD01316.0	DD01416.0	
18.0	18.0	100	45			DD01318.0	DD01418.0	
20.0	20.0	100	45			DD01320.0	DD01420.0	
25.0	25.0	100	45			DD01325.0	DD01425.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

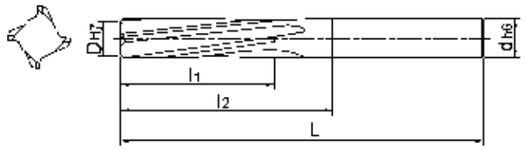
HELIX REAMER

PROPERTIES & APPLICATION

DD015	HM	Z4	Helix (L)	45°	D_{H7}	Shank d_{h6}	
DD016	HM	Z6	Helix (L)	45°	D_{H7}	Shank d_{h6}	

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Left helix
- Không có lưỡi cắt mặt đầu
- Xoắn trái
- 底刃なし
- 左ヘリックス
- 바닥 날 없음
- 왼쪽 나선



DD015	DD016	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○		○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD015	DD016	
2.0	3.0	50	6			DD0152.0	DD0162.0	
3.0	3.0	50	10			DD0153.0	DD0163.0	
4.0	4.0	50	10			DD0154.0	DD0164.0	
5.0	5.0	50	13			DD0155.0	DD0165.0	
6.0	6.0	50	15			DD0156.0	DD0166.0	
8.0	8.0	50	20			DD0158.0	DD0168.0	
10.0	10.0	75	25			DD01510.0	DD01610.0	
12.0	12.0	75	30			DD01512.0	DD01612.0	
14.0	14.0	80	30			DD01514.0	DD01614.0	
16.0	16.0	100	40			DD01516.0	DD01616.0	
18.0	18.0	100	45			DD01518.0	DD01618.0	
20.0	20.0	100	45			DD01520.0	DD01620.0	
25.0	25.0	100	45			DD01525.0	DD01625.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

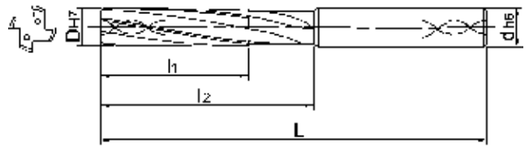
HELIX REAMER

PROPERTIES & APPLICATION

DD017	HM	Z4	Helix (R)	45°	D_{H7}	Shank d_{h6}	
DD018	HM	Z6	Helix (R)	45°	D_{H7}	Shank d_{h6}	

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Straight coolant hole
- Không có lưỡi cắt mặt đầu
- Lỗ tưới nguội thẳng
- 底刃なし
- 直線冷却穴
- 바닥 날 없음
- 직선 냉각 구멍



DD017	DD018	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD017	DD018	
2.0	3.0	50	6			DD0172.0	DD0182.0	
3.0	3.0	50	10			DD0173.0	DD0183.0	
4.0	4.0	50	10			DD0174.0	DD0184.0	
5.0	5.0	50	13			DD0175.0	DD0185.0	
6.0	6.0	50	15			DD0176.0	DD0186.0	
8.0	8.0	50	20			DD0178.0	DD0188.0	
10.0	10.0	75	25			DD01710.0	DD01810.0	
12.0	12.0	75	30			DD01712.0	DD01812.0	
14.0	14.0	80	30			DD01714.0	DD01814.0	
16.0	16.0	100	40			DD01716.0	DD01816.0	
18.0	18.0	100	45			DD01718.0	DD01818.0	
20.0	20.0	100	45			DD01720.0	DD01820.0	
25.0	25.0	100	45			DD01725.0	DD01825.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

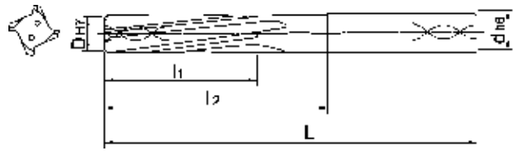
HELIX REAMER

PROPERTIES & APPLICATION

DD019	HM	Z4	Helix (L)	45°	D_{H7}	Shank d_{h6}		
DD020	HM	Z6	Helix (L)	45°	D_{H7}	Shank d_{h6}		

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Straight coolant hole
- Không có lưỡi cắt mặt đầu
- Lỗ tưới nguội thẳng
- 底刃なし
- 直線冷却穴
- 바닥 날 없음
- 직선 냉각 구멍



DD019	DD020	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○		○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD019	DD020	
2.0	3.0	50	6			DD0192.0	DD0202.0	
3.0	3.0	50	10			DD0193.0	DD0203.0	
4.0	4.0	50	10			DD0194.0	DD0204.0	
5.0	5.0	50	13			DD0195.0	DD0205.0	
6.0	6.0	50	15			DD0196.0	DD0206.0	
8.0	8.0	50	20			DD0198.0	DD0208.0	
10.0	10.0	75	25			DD01910.0	DD02010.0	
12.0	12.0	75	30			DD01912.0	DD02012.0	
14.0	14.0	80	30			DD01914.0	DD02014.0	
16.0	16.0	100	40			DD01916.0	DD02016.0	
18.0	18.0	100	45			DD01918.0	DD02018.0	
20.0	20.0	100	45			DD01920.0	DD02019.0	
25.0	25.0	100	45			DD01925.0	DD02025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

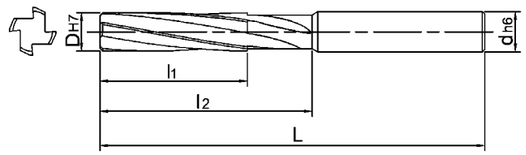
HELIX REAMER

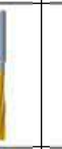
PROPERTIES & APPLICATION

DD021	HM	Z4	Helix (R)	TiN	45°	D_{H7}	Shank d_{h6}	
DD022	HM	Z6	Helix (R)	TiN	45°	D_{H7}	Shank d_{h6}	

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Non internal coolant
- Không có lưỡi cắt mặt đầu
- Không có lỗ tưới nguội
- 底刃なし
- 非内部給油
- 바닥 날 없음
- 비내부 절삭유



DD021	DD022	
		
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD021	DD022	
2.0	3.0	50	6			DD0212.0	DD0222.0	
3.0	3.0	50	10			DD0213.0	DD0223.0	
4.0	4.0	50	10			DD0214.0	DD0224.0	
5.0	5.0	50	13			DD0215.0	DD0225.0	
6.0	6.0	50	15			DD0216.0	DD0226.0	
8.0	8.0	50	20			DD0218.0	DD0228.0	
10.0	10.0	75	25			DD02110.0	DD02210.0	
12.0	12.0	75	30			DD02112.0	DD02212.0	
14.0	14.0	80	30			DD02114.0	DD02214.0	
16.0	16.0	100	40			DD02116.0	DD02216.0	
18.0	18.0	100	45			DD02118.0	DD02218.0	
20.0	20.0	100	45			DD02120.0	DD02220.0	
25.0	25.0	100	45			DD02125.0	DD02225.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

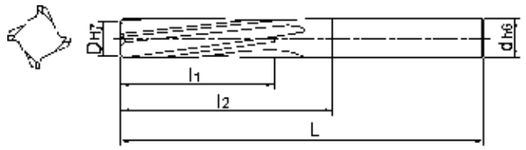
HELIX REAMER

PROPERTIES & APPLICATION

DD023	HM	Z4	TiN	Helix (L)	45°	D_{H7}	Shank d_{h6}	
DD024	HM	Z6	TiN	Helix (L)	45°	D_{H7}	Shank d_{h6}	

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Left helix
- Không có lưỡi cắt mặt đầu
- Xoắn trái
- 底刃なし
- 左ヘリックス
- 바닥 날 없음
- 왼쪽 나선



DD023	DD024	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○		○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD023	DD024	
2.0	3.0	50	6			DD0232.0	DD0242.0	
3.0	3.0	50	10			DD0233.0	DD0243.0	
4.0	4.0	50	10			DD0234.0	DD0244.0	
5.0	5.0	50	13			DD0235.0	DD0245.0	
6.0	6.0	50	15			DD0236.0	DD0246.0	
8.0	8.0	50	20			DD0238.0	DD0248.0	
10.0	10.0	75	25			DD02310.0	DD02410.0	
12.0	12.0	75	30			DD02312.0	DD02412.0	
14.0	14.0	80	30			DD02314.0	DD02414.0	
16.0	16.0	100	40			DD02316.0	DD02416.0	
18.0	18.0	100	45			DD02318.0	DD02418.0	
20.0	20.0	100	45			DD02320.0	DD02420.0	
25.0	25.0	100	45			DD02325.0	DD02425.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

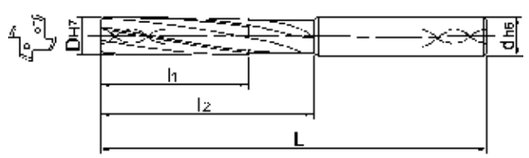
HELIX REAMER

PROPERTIES & APPLICATION

DD025	HM	Z4	TiN	Helix (R)	45°	D_{H7}	Shank d_{h6}	
DD026	HM	Z6	TiN	Helix (R)	45°	D_{H7}	Shank d_{h6}	

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Straight coolant hole
- Không có lưỡi cắt mặt đầu
- Lỗ tưới nguội thẳng
- 底刃なし
- 直線冷却穴
- 바닥 날 없음
- 직선 냉각 구멍



DD025	DD026	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD025	DD026	
2.0	3.0	50	6			DD0252.0	DD0262.0	
3.0	3.0	50	10			DD0253.0	DD0263.0	
4.0	4.0	50	10			DD0254.0	DD0264.0	
5.0	5.0	50	13			DD0255.0	DD0265.0	
6.0	6.0	50	15			DD0256.0	DD0266.0	
8.0	8.0	50	20			DD0258.0	DD0268.0	
10.0	10.0	75	25			DD02510.0	DD02610.0	
12.0	12.0	75	30			DD02512.0	DD02612.0	
14.0	14.0	80	30			DD02514.0	DD02614.0	
16.0	16.0	100	40			DD02516.0	DD02616.0	
18.0	18.0	100	45			DD02518.0	DD02618.0	
20.0	20.0	100	45			DD02520.0	DD02620.0	
25.0	25.0	100	45			DD02525.0	DD02625.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

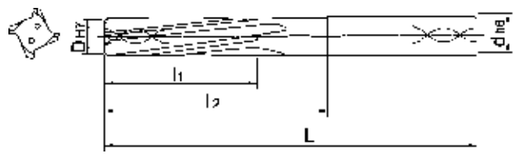
HELIX REAMER

PROPERTIES & APPLICATION

DD027	HM	Z4	TiN	Helix (L)	45°	D_{H7}	Shank d_{h6}	
DD028	HM	Z6	TiN	Helix (L)	45°	D_{H7}	Shank d_{h6}	

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Left helix
- Không có lưỡi cắt mặt đầu
- Xoắn trái
- 底刃なし
- 左ヘリックス
- 바닥 날 없음
- 왼쪽 나선



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○		○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD027	DD028	
2.0	3.0	50	6			DD0272.0	DD0282.0	
3.0	3.0	50	10			DD0273.0	DD0283.0	
4.0	4.0	50	10			DD0274.0	DD0284.0	
5.0	5.0	50	13			DD0275.0	DD0285.0	
6.0	6.0	50	15			DD0276.0	DD0286.0	
8.0	8.0	50	20			DD0278.0	DD0288.0	
10.0	10.0	75	25			DD02710.0	DD02810.0	
12.0	12.0	75	30			DD02712.0	DD02812.0	
14.0	14.0	80	30			DD02714.0	DD02814.0	
16.0	16.0	100	40			DD02716.0	DD02816.0	
18.0	18.0	100	45			DD02718.0	DD02818.0	
20.0	20.0	100	45			DD02720.0	DD02820.0	
25.0	25.0	100	45			DD02725.0	DD02825.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

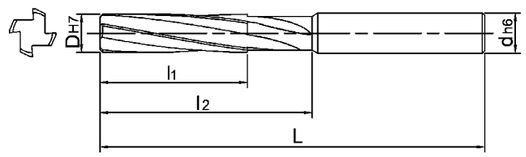
HELIX REAMER

PROPERTIES & APPLICATION

DD029	HM	Z4	AlTiCrn	Helix (R)	45°	D_{H7}	Shank d_{h6}	
DD030	HM	Z6	AlTiCrn	Helix (R)	45°	D_{H7}	Shank d_{h6}	

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Non internal coolant
- Không có lưỡi cắt mặt đầu
- Không có lỗ tưới nguội
- 底刃なし
- 非内部給油
- 바닥 날 없음
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD029	DD030	
2.0	3.0	50	6			DD0292.0	DD0302.0	
3.0	3.0	50	10			DD0293.0	DD0303.0	
4.0	4.0	50	10			DD0294.0	DD0304.0	
5.0	5.0	50	13			DD0295.0	DD0305.0	
6.0	6.0	50	15			DD0296.0	DD0306.0	
8.0	8.0	50	20			DD0298.0	DD0308.0	
10.0	10.0	75	25			DD02910.0	DD03012.0	
12.0	12.0	75	30			DD02912.0	DD03012.0	
14.0	14.0	80	30			DD02914.0	DD03014.0	
16.0	16.0	100	40			DD02916.0	DD03016.0	
18.0	18.0	100	45			DD02918.0	DD03018.0	
20.0	20.0	100	45			DD02920.0	DD03020.0	
25.0	25.0	100	45			DD02925.0	DD03025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

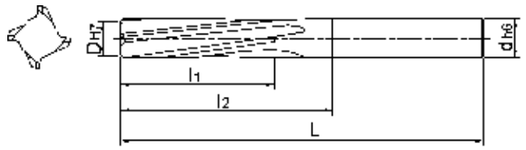
HELIX REAMER

PROPERTIES & APPLICATION

DD031	HM	Z4	AlTiCrn	Helix (L)	45°	D_{H7}	Shank d_{h6}
DD032	HM	Z6	AlTiCrn	Helix (L)	45°	D_{H7}	Shank d_{h6}

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Left helix
- Không có lưỡi cắt mặt đầu
- Xoắn trái
- 底刃なし
- 左ヘリックス
- 바닥 날 없음
- 왼쪽 나선



DD031	DD032	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○		○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD031	DD032	
2.0	3.0	50	6			DD0312.0	DD0322.0	
3.0	3.0	50	10			DD0313.0	DD0323.0	
4.0	4.0	50	10			DD0314.0	DD0324.0	
5.0	5.0	50	13			DD0315.0	DD0325.0	
6.0	6.0	50	15			DD0316.0	DD0326.0	
8.0	8.0	50	20			DD0318.0	DD0318.0	
10.0	10.0	75	25			DD03110.0	DD03210.0	
12.0	12.0	75	30			DD03112.0	DD03212.0	
14.0	14.0	80	30			DD03114.0	DD03214.0	
16.0	16.0	100	40			DD03116.0	DD03216.0	
18.0	18.0	100	45			DD03118.0	DD03218.0	
20.0	20.0	100	45			DD03120.0	DD03220.0	
25.0	25.0	100	45			DD03125.0	DD03125.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

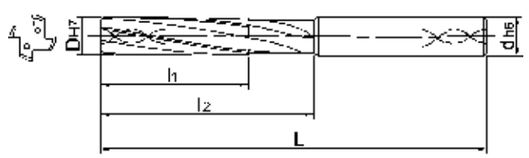
HELIX REAMER

PROPERTIES & APPLICATION

DD033	HM	Z4	AlTiCrn	Helix (R)	45°	D_{H7}	Shank d_{h6}
DD034	HM	Z6	AlTiCrn	Helix (R)	45°	D_{H7}	Shank d_{h6}

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Straight coolant hole
- Không có lưỡi cắt mặt đầu
- Lỗ tưới nguội thẳng
- 底刃なし
- 直線冷却穴
- 바닥 날 없음
- 직선 냉각 구멍



DD033	DD034	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD033	DD034	
2.0	3.0	50	6			DD0332.0	DD0342.0	
3.0	3.0	50	10			DD0333.0	DD0343.0	
4.0	4.0	50	10			DD0334.0	DD0344.0	
5.0	5.0	50	13			DD0335.0	DD0345.0	
6.0	6.0	50	15			DD0336.0	DD0346.0	
8.0	8.0	50	20			DD0338.0	DD0348.0	
10.0	10.0	75	25			DD03310.0	DD03410.0	
12.0	12.0	75	30			DD03312.0	DD03412.0	
14.0	14.0	80	30			DD03314.0	DD03414.0	
16.0	16.0	100	40			DD03316.0	DD03416.0	
18.0	18.0	100	45			DD03318.0	DD03418.0	
20.0	20.0	100	45			DD03320.0	DD03420.0	
25.0	25.0	100	45			DD03325.0	DD03425.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

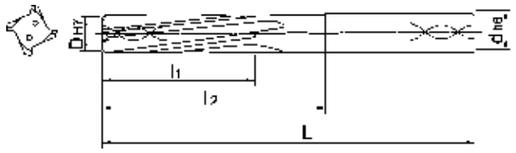
HELIX REAMER

PROPERTIES & APPLICATION

DD035	HM	Z4	AlTiCrn	Helix (L)	45°	D_{H7}	Shank d_{h6}		
DD036	HM	Z6	AlTiCrn	Helix (L)	45°	D_{H7}	Shank d_{h6}		

D_{H7}	Tolerance	
1 < D ≤ 3	0.01	0
3 < D ≤ 6	0.012	0
6 < D ≤ 10	0.015	0
10 < D ≤ 18	0.018	0
18 < D ≤ 30	0.021	0

Engineering Data
- No endface cutting
- Straight coolant hole
- Không có lưỡi cắt mặt đầu
- Lỗ tưới nguội thẳng
- 底刃なし
- 直線冷却穴
- 바닥 날 없음
- 직선 냉각 구멍



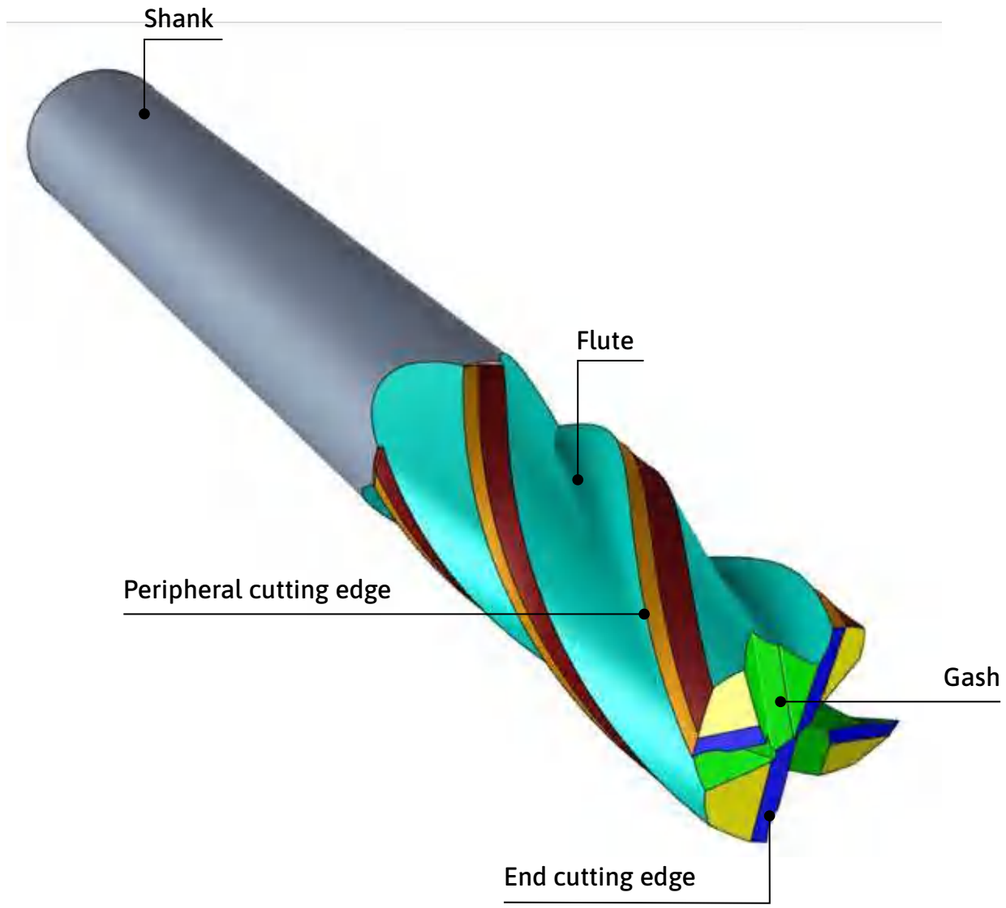
DD035	DD036	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○		○	○	○
V_c (m / min)												

D (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / z)	Code order DD035	DD036	
2.0	3.0	50	6			DD0352.0	DD0362.0	
3.0	3.0	50	10			DD0353.0	DD0363.0	
4.0	4.0	50	10			DD0354.0	DD0364.0	
5.0	5.0	50	13			DD0355.0	DD0365.0	
6.0	6.0	50	15			DD0356.0	DD0366.0	
8.0	8.0	50	20			DD0358.0	DD0368.0	
10.0	10.0	75	25			DD03510.0	DD03610.0	
12.0	12.0	75	30			DD03512.0	DD03612.0	
14.0	14.0	80	30			DD03514.0	DD03614.0	
16.0	16.0	100	40			DD03516.0	DD03616.0	
18.0	18.0	100	45			DD03518.0	DD03618.0	
20.0	20.0	100	45			DD03520.0	DD03620.0	
25.0	25.0	100	45			DD03525.0	DD03625.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
FLAT ENDMILL



FLAT ENDMILL

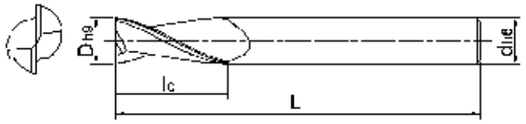
PROPERTIES & APPLICATION

DP001	HM	Z2	Helix 30°	D_{h9}	Shank d_{h6}			
DP002	HM	Z3	Helix 30°	D_{h9}	Shank d_{h6}			
DP003	HM	Z4	Helix 30°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP001	DP002	DP003
2.00-25.00	2.00-25.00	2.00-25.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					○	○	○			
V_c (m / min)	20 ~ 25	20 ~ 25					50 ~ 60	50 ~ 60	40 ~ 50			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP001	DP002	DP003
2	3	50	6	0.008	DP0012.0	DP0022.0	DP0032.0
3	3	50	10	0.012	DP0013.0	DP0023.0	DP0033.0
4	4	50	10	0.016	DP0014.0	DP0024.0	DP0034.0
5	5	50	13	0.019	DP0015.0	DP0025.0	DP0035.0
6	6	50	15	0.023	DP0016.0	DP0026.0	DP0036.0
8	8	50	20	0.028	DP0018.0	DP0028.0	DP0038.0
10	10	75	25	0.033	DP00110.0	DP00210.0	DP00310.0
12	12	75	30	0.037	DP00112.0	DP00212.0	DP00312.0
13	13	75	30	0.040	DP00113.0	DP00213.0	DP00313.0
14	14	80	30	0.042	DP00114.0	DP00214.0	DP00314.0
16	16	100	40	0.047	DP00116.0	DP00216.0	DP00316.0
18	18	100	45	0.052	DP00118.0	DP00218.0	DP00318.0
20	20	100	45	0.057	DP00120.0	DP00220.0	DP00320.0
25	25	100	45	0.067	DP00125.0	DP00225.0	DP00325.0

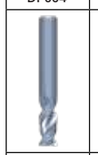
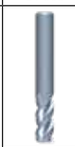
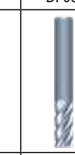
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

FLAT ENDMILL

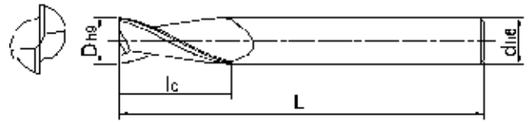
PROPERTIES & APPLICATION

DP004	HM	Z2	Helix 30°	D_{h9}	Shank d_{h6}			
DP005	HM	Z3	Helix 30°	D_{h9}	Shank d_{h6}			
DP006	HM	Z4	Helix 30°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP004	DP005	DP006
		
2.00-25.00	2.00-25.00	2.00-25.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	20 ~ 25	20 ~ 25					100 ~ 120	100 ~ 120	80 ~ 90			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP004	DP005	DP006
2	3	50	6	0.008	DP0042.0	DP0052.0	DP0062.0
3	3	50	10	0.012	DP0043.0	DP0053.0	DP0063.0
4	4	50	10	0.016	DP0044.0	DP0054.0	DP0064.0
5	5	50	13	0.019	DP0045.0	DP0055.0	DP0065.0
6	6	50	15	0.023	DP0046.0	DP0056.0	DP0065.0
8	8	50	20	0.028	DP0048.0	DP0058.0	DP0068.0
10	10	75	25	0.033	DP00410.0	DP00510.0	DP00610.0
12	12	75	30	0.037	DP00412.0	DP00512.0	DP00612.0
13	13	75	30	0.040	DP00413.0	DP00513.0	DP00613.0
14	14	80	30	0.042	DP00414.0	DP00514.0	DP00614.0
16	16	100	40	0.047	DP00416.0	DP00514.0	DP00616.0
18	18	100	45	0.052	DP00418.0	DP00518.0	DP00618.0
20	20	100	45	0.057	DP00420.0	DP00520.0	DP00620.0
25	25	100	45	0.067	DP00425.0	DP00625.0	DP00625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

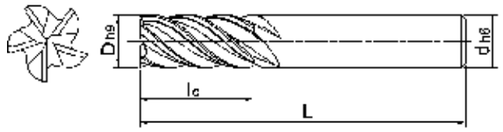
FLAT ENDMILL

PROPERTIES & APPLICATION

DP007	HM	Z5	Helix 50⁰	D_{h9}	Shank d_{h6}			
DP008	HM	Z6	Helix 50⁰	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP007	DP008	
10.00-32.00	10.00-32.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O						
V_c (m / min)	30 ~ 40	30 ~ 40	30 ~ 35	30 ~ 35	25 ~ 30	25 ~ 30						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP007	DP008	
10	10	75	25	0.124	DP00710.0	DP00810.0	
12	12	75	30	0.143	DP00712.0	DP00812.0	
13	13	75	30	0.151	DP00713.0	DP00813.0	
14	14	80	30	0.162	DP00714.0	DP00814.0	
16	16	100	40	0.179	DP00716.0	DP00816.0	
18	18	100	45	0.190	DP00718.0	DP00818.0	
20	20	100	45	0.216	DP00720.0	DP00820.0	
25	25	100	45	0.250	DP00725.0	DP00825.0	
32	32	100	45	0.283	DP00732.0	DP00832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

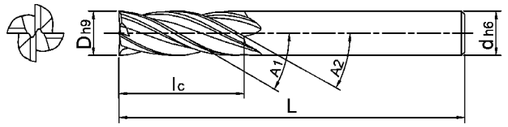
FLAT ENDMILL

PROPERTIES & APPLICATION

DP009	HM	Z3	35° /38°	D_{h9}	Shank d_{h6}			
DP010	HM	Z4	35° /38°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP009	DP010	
2.00-25.00	2.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O						
V_c (m / min)	30 ~ 40	30 ~ 40	30 ~ 35	30 ~ 35	25 ~ 30	25 ~ 30						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP009	DP010	
4	4	50	10	0.072	DP0094.0	DP0104.0	
5	5	50	13	0.088	DP0095.0	DP0105.0	
6	6	50	15	0.103	DP0096.0	DP0106.0	
8	8	50	20	0.127	DP0098.0	DP0108.0	
10	10	75	25	0.148	DP00910.0	DP01010.0	
12	12	75	30	0.170	DP00912.0	DP01012.0	
13	13	75	30	0.180	DP00913.0	DP00913.0	
14	14	80	30	0.193	DP00914.0	DP01014.0	
16	16	100	40	0.213	DP00916.0	DP01016.0	
18	18	100	45	0.236	DP00918.0	DP01018.0	
20	20	100	45	0.191	DP00920.0	DP00920.0	
25	25	100	45	0.205	DP00925.0	DP01020.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

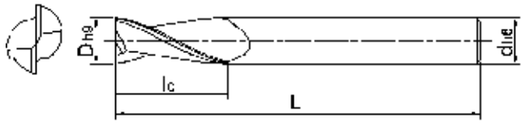
FLAT ENDMILL

PROPERTIES & APPLICATION

DP011	HM	Z2	Helix 30°	2°	D_{h9}	Shank d_{h6}
DP012	HM	Z3	Helix 30°	2°	D_{h9}	Shank d_{h6}
DP013	HM	Z4	Helix 30°	2°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP011	DP012	DP013
2.00-25.00	2.00-25.00	2.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminij Alu Plastics	Aluminij Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					○	○	○			
V_c (m / min)	20 ~ 25	20 ~ 25					50 ~ 60	50 ~ 60	40 ~ 50			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP011	DP012	DP013
2	3	50	6	0.008	DP0112.0	DP0122.0	DP0132.0
3	3	50	10	0.012	DP0113.0	DP0123.0	DP0133.0
4	4	50	10	0.016	DP0114.0	DP0124.0	DP0134.0
5	5	50	13	0.019	DP0115.0	DP0125.0	DP0135.0
6	6	50	15	0.023	DP0116.0	DP0126.0	DP0136.0
8	8	50	20	0.028	DP0118.0	DP0128.0	DP0138.0
10	10	75	25	0.033	DP01110.0	DP01210.0	DP01310.0
12	12	75	30	0.037	DP01112.0	DP01212.0	DP01312.0
13	13	75	30	0.040	DP01113.0	DP01213.0	DP01313.0
14	14	80	30	0.042	DP01114.0	DP01214.0	DP01314.0
16	16	100	40	0.047	DP01116.0	DP01216.0	DP01316.0
18	18	100	45	0.052	DP01118.0	DP01218.0	DP01318.0
20	20	100	45	0.057	DP01120.0	DP01220.0	DP01320.0
25	25	100	45	0.067	DP01125.0	DP01225.0	DP01325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

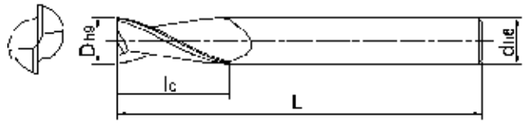
FLAT ENDMILL

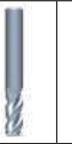
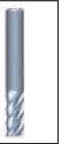
PROPERTIES & APPLICATION

DP014	HM	Z2	Helix 45°	2°	D_{h9}	Shank d_{h6}
DP015	HM	Z3	Helix 45°	2°	D_{h9}	Shank d_{h6}
DP016	HM	Z4	Helix 45°	2°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP014	DP015	DP016
		
2.00-25.00	2.00-25.00	2.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminij Alu Plastics	Aluminij Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	20 ~ 25	20 ~ 25					100 ~ 120	100 ~ 120	80 ~ 90			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP014	DP015	DP016
2	3	50	6	0.007	DP0142.0	DP0152.0	DP0162.0
3	3	50	10	0.010	DP0143.0	DP0153.0	DP0163.0
4	4	50	10	0.013	DP0144.0	DP0154.0	DP0164.0
5	5	50	13	0.015	DP0145.0	DP0155.0	DP0165.0
6	6	50	15	0.018	DP0146.0	DP0156.0	DP0166.0
8	8	50	20	0.022	DP0148.0	DP0158.0	DP0168.0
10	10	75	25	0.026	DP01410.0	DP01510.0	DP01610.0
12	12	75	30	0.030	DP01412.0	DP01512.0	DP01612.0
13	13	75	30	0.032	DP01413.0	DP01513.0	DP01613.0
14	14	80	30	0.034	DP01414.0	DP01514.0	DP01614.0
16	16	100	40	0.037	DP01416.0	DP01516.0	DP01616.0
18	18	100	45	0.041	DP01418.0	DP01518.0	DP01618.0
20	20	100	45	0.045	DP01420.0	DP01520.0	DP01620.0
25	25	100	45	0.050	DP01425.0	DP01525.0	DP01625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

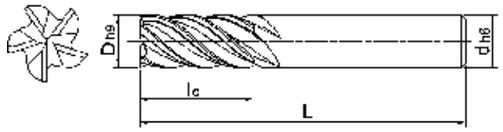
FLAT ENDMILL

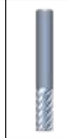
PROPERTIES & APPLICATION

DP017	HM	Z5	Helix 50°	2°	D_{h9}	Shank d_{h6}			
DP018	HM	Z6	Helix 50°	2°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP017	DP018	
		
10.00-32.00	10.00-32.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O						
V_c (m / min)	30 ~ 40	30 ~ 40	30 ~ 35	30 ~ 35	20 ~ 25	20 ~ 25						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP017	DP018	
10	10	75	25	0.124	DP01710.0	DP01810.0	
12	12	75	30	0.143	DP01712.0	DP01812.0	
13	13	75	30	0.151	DP01713.0	DP01813.0	
14	14	80	30	0.162	DP01714.0	DP01814.0	
16	16	100	40	0.179	DP01716.0	DP01816.0	
18	18	100	45	0.190	DP01718.0	DP01718.0	
20	20	100	45	0.216	DP01720.0	DP01820.0	
25	25	100	45	0.250	DP01725.0	DP01825.0	
32	32	100	45	0.283	DP01732.0	DP01832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

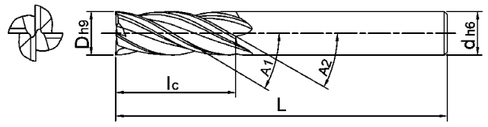
FLAT ENDMILL

PROPERTIES & APPLICATION

DP019	HM	Z3	35° /38°	2°	D_{h9}	Shank d_{h6}			
DP020	HM	Z4	35° /38°	2°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP019	DP020	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O						
V_c (m / min)	30 ~ 40	30 ~ 40	30 ~ 35	30 ~ 35	25 ~ 30	25 ~ 30						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP019	DP020	
4	4	50	10	0.072	DP0194.0	DP0204.0	
5	5	50	13	0.088	DP0195.0	DP0205.0	
6	6	50	15	0.103	DP0196.0	DP0206.0	
8	8	50	20	0.127	DP0198.0	DP0208.0	
10	10	75	25	0.148	DP01910.0	DP02010.0	
12	12	75	30	0.170	DP01912.0	DP02012.0	
13	13	75	30	0.180	DP01913.0	DP02013.0	
14	14	80	30	0.193	DP01914.0	DP02014.0	
16	16	100	40	0.213	DP01916.0	DP02016.0	
18	18	100	45	0.236	DP01918.0	DP02018.0	
20	20	100	45	0.191	DP01920.0	DP02020.0	
25	25	100	45	0.205	DP01925.0	DP02025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

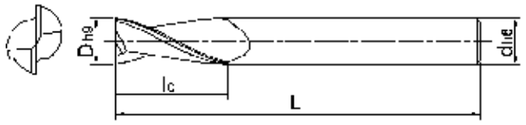
FLAT ENDMILL

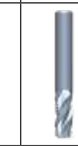
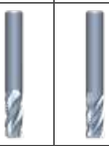
PROPERTIES & APPLICATION

DP021	HM	Z2	Helix 30°	D_{h9}	Shank d_{h6}				
DP022	HM	Z3	Helix 30°	D_{h9}	Shank d_{h6}				
DP023	HM	Z4	Helix 30°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP021	DP022	DP023
		
2.00-25.00	2.00-25.00	2.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					○	○	○			
V_c (m / min)	30 ~ 40	30 ~ 40					60 ~ 80	60 ~ 80	50 ~ 60			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP021	DP022	DP023
2	3	50	6	0.008	DP0212.0	DP0222.0	DP0232.0
3	3	50	10	0.012	DP0213.0	DP0223.0	DP0233.0
4	4	50	10	0.016	DP0214.0	DP0224.0	DP0234.0
5	5	50	13	0.019	DP0215.0	DP0225.0	DP0235.0
6	6	50	15	0.023	DP0216.0	DP0226.0	DP0236.0
8	8	50	20	0.028	DP0218.0	DP0228.0	DP0238.0
10	10	75	25	0.033	DP02110.0	DP02210.0	DP02310.0
12	12	75	30	0.037	DP02112.0	DP02212.0	DP02312.0
13	13	75	30	0.040	DP02113.0	DP02213.0	DP02313.0
14	14	80	30	0.042	DP02114.0	DP02214.0	DP02314.0
16	16	100	40	0.047	DP02116.0	DP02216.0	DP02315.0
18	18	100	45	0.052	DP02118.0	DP02218.0	DP02318.0
20	20	100	45	0.057	DP02120.0	DP02220.0	DP02320.0
25	25	100	45	0.067	DP02125.0	DP02225.0	DP02325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

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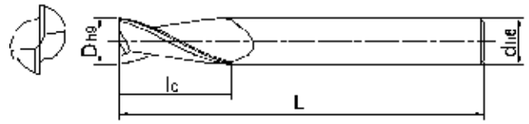
FLAT ENDMILL

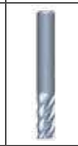
PROPERTIES & APPLICATION

DP024	HM	Z2	Helix 45°	D_{h9}	Shank d_{h6}				
DP025	HM	Z3	Helix 45°	D_{h9}	Shank d_{h6}				
DP026	HM	Z4	Helix 45°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP024	DP025	DP026
		
2.00-25.00	2.00-25.00	2.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	30 ~ 40	30 ~ 40					120 ~ 150	120 ~ 150	90 ~ 100			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP024	DP025	DP026
2	3	50	6	0.008	DP0242.0	DP0352.0	DP0352.0
3	3	50	10	0.012	DP0243.0	DP0352.0	DP0352.0
4	4	50	10	0.016	DP0244.0	DP0352.0	DP0352.0
5	5	50	13	0.019	DP0245.0	DP0352.0	DP0352.0
6	6	50	15	0.023	DP0246.0	DP0352.0	DP0352.0
8	8	50	20	0.028	DP0248.0	DP0352.0	DP0352.0
10	10	75	25	0.033	DP02410.0	DP02510.0	DP02610.0
12	12	75	30	0.037	DP02412.0	DP02512.0	DP02612.0
13	13	75	30	0.040	DP02413.0	DP02513.0	DP02613.0
14	14	80	30	0.042	DP02414.0	DP02514.0	DP02614.0
16	16	100	40	0.047	DP02416.0	DP02516.0	DP02616.0
18	18	100	45	0.052	DP02418.0	DP02518.0	DP02618.0
20	20	100	45	0.057	DP02420.0	DP02520.0	DP02620.0
25	25	100	45	0.067	DP02425.0	DP02525.0	DP02625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

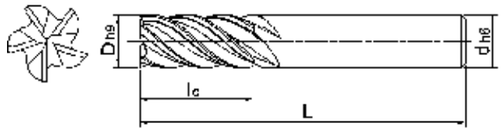
FLAT ENDMILL

PROPERTIES & APPLICATION

DP027	HM	Z5	Helix 50°	D_{h9}	Shank d_{h6}		
DP028	HM	Z6	Helix 50°	D_{h9}	Shank d_{h6}		

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP027	DP028	
10.00-32.00	10.00-32.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP027	DP028	
10	10	75	25	0.124	DP02710.0	DP02810.0	
12	12	75	30	0.143	DP02712.0	DP02812.0	
13	13	75	30	0.151	DP02713.0	DP02813.0	
14	14	80	30	0.162	DP02714.0	DP02814.0	
16	16	100	40	0.179	DP02716.0	DP02816.0	
18	18	100	45	0.190	DP02718.0	DP02818.0	
20	20	100	45	0.216	DP02720.0	DP02820.0	
25	25	100	45	0.250	DP02725.0	DP02825.0	
32	32	100	45	0.283	DP02732.0	DP02832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

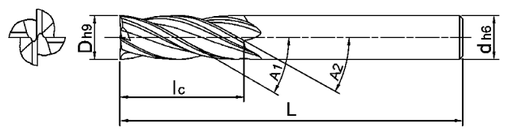
FLAT ENDMILL

PROPERTIES & APPLICATION

DP029	HM	Z3	35° /38°	D_{h9}	Shank d_{h6}		
DP030	HM	Z4	35° /38°	D_{h9}	Shank d_{h6}		

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP029	DP030	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP029	DP030	
4	4	50	10	0.072	DP0294.0	DP0304.0	
5	5	50	13	0.088	DP0295.0	DP0305.0	
6	6	50	15	0.103	DP0296.0	DP0306.0	
8	8	50	20	0.127	DP0298.0	DP0308.0	
10	10	75	25	0.148	DP02910.0	DP03010.0	
12	12	75	30	0.170	DP02912.0	DP03012.0	
13	13	75	30	0.180	DP02913.0	DP03013.0	
14	14	80	30	0.193	DP02914.0	DP03014.0	
16	16	100	40	0.213	DP02916.0	DP03016.0	
18	18	100	45	0.236	DP02918.0	DP03018.0	
20	20	100	45	0.191	DP02920.0	DP03020.0	
25	25	100	45	0.205	DP02925.0	DP03025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

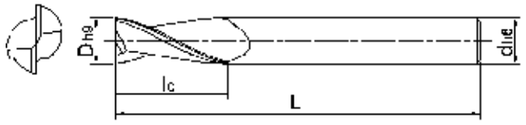
FLAT ENDMILL

PROPERTIES & APPLICATION

DP031	HM	Z2	Helix 30°	2°	D_{h9}	Shank d_{h6}
DP032	HM	Z3	Helix 30°	2°	D_{h9}	Shank d_{h6}
DP033	HM	Z4	Helix 30°	2°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP031	DP032	DP033
2.00-25.00	2.00-25.00	2.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					○	○	○			
V_c (m / min)	30 ~ 40	30 ~ 40					60 ~ 80	60 ~ 80	50 ~ 60			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP031	DP032	DP033
4	4	50	10	0.016	DP0314.0	DP0324.0	DP0334.0
5	5	50	13	0.019	DP0315.0	DP0325.0	DP0335.0
6	6	50	15	0.023	DP0316.0	DP0326.0	DP0336.0
8	8	50	20	0.028	DP0318.0	DP0328.0	DP0338.0
10	10	75	25	0.033	DP03110.0	DP03210.0	DP03310.0
12	12	75	30	0.037	DP03112.0	DP03212.0	DP03312.0
13	13	75	30	0.040	DP03113.0	DP03213.0	DP03313.0
14	14	80	30	0.042	DP03114.0	DP03214.0	DP03314.0
16	16	100	40	0.047	DP03116.0	DP03216.0	DP03316.0
18	18	100	45	0.052	DP03118.0	DP03218.0	DP03318.0
20	20	100	45	0.057	DP03120.0	DP03220.0	DP03320.0
25	25	100	45	0.067	DP03125.0	DP03225.0	DP03325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

SYNCHRONOUS SOLUTION

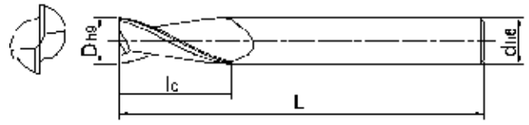
FLAT ENDMILL

PROPERTIES & APPLICATION

DP034	HM	Z2	Helix 45°	2°	D_{h9}	Shank d_{h6}
DP035	HM	Z3	Helix 45°	2°	D_{h9}	Shank d_{h6}
DP036	HM	Z4	Helix 45°	2°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP034	DP035	DP036
2.00-25.00	2.00-25.00	2.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	30 ~ 40	30 ~ 40					120 ~ 150	120 ~ 150	90 ~ 100			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP034	DP035	DP036
4	4	50	10	0.013	DP0344.0	DP0354.0	DP0364.0
5	5	50	13	0.015	DP0345.0	DP0355.0	DP0365.0
6	6	50	15	0.018	DP0346.0	DP0356.0	DP0366.0
8	8	50	20	0.022	DP0348.0	DP0358.0	DP0368.0
10	10	75	25	0.026	DP03410.0	DP03510.0	DP03610.0
12	12	75	30	0.030	DP03412.0	DP03512.0	DP03612.0
13	13	75	30	0.032	DP03413.0	DP03513.0	DP03613.0
14	14	80	30	0.034	DP03414.0	DP03514.0	DP03614.0
16	16	100	40	0.037	DP03416.0	DP03516.0	DP03616.0
18	18	100	45	0.041	DP03418.0	DP03518.0	DP03618.0
20	20	100	45	0.045	DP03420.0	DP03520.0	DP03620.0
25	25	100	45	0.050	DP03425.0	DP03525.0	DP03625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

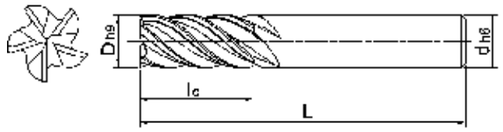
FLAT ENDMILL

PROPERTIES & APPLICATION

DP037	HM	Z5	Helix 50°	2°	D_{h9}	Shank d_{h6}				
DP038	HM	Z6	Helix 50°	2°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP037	DP038	
10.00-32.00	10.00-32.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP037	DP038	
10	10	75	25	0.124	DP03710.0	DP03810.0	
12	12	75	30	0.143	DP03712.0	DP03812.0	
13	13	75	30	0.151	DP03713.0	DP03813.0	
14	14	80	30	0.162	DP03714.0	DP03814.0	
16	16	100	40	0.179	DP03716.0	DP03816.0	
18	18	100	45	0.190	DP03718.0	DP03818.0	
20	20	100	45	0.216	DP03720.0	DP03820.0	
25	25	100	45	0.250	DP03725.0	DP03825.0	
32	32	100	45	0.283	DP03732.0	DP03832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

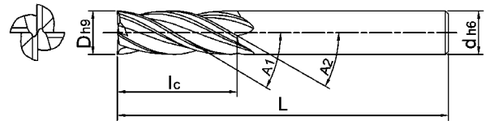
FLAT ENDMILL

PROPERTIES & APPLICATION

DP039	HM	Z5	35° /38°	2°	D_{h9}	Shank d_{h6}				
DP040	HM	Z6	35° /38°	2°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP039	DP040	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP039	DP040	
4	4	50	10	0.072	DP0394.0	DP0404.0	
5	5	50	13	0.088	DP0395.0	DP0405.0	
6	6	50	15	0.103	DP0396.0	DP0406.0	
8	8	50	20	0.127	DP0398.0	DP0408.0	
10	10	75	25	0.148	DP03910.0	DP04010.0	
12	12	75	30	0.170	DP03912.0	DP04012.0	
13	13	75	30	0.180	DP03913.0	DP04013.0	
14	14	80	30	0.193	DP03914.0	DP04014.0	
16	16	100	40	0.213	DP03916.0	DP04016.0	
18	18	100	45	0.236	DP03918.0	DP04018.0	
20	20	100	45	0.191	DP03920.0	DP04020.0	
25	25	100	45	0.205	DP03925.0	DP04025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *With special sizes, made to request (order code duplicates ID Code)*
- *Tolerances of feed ± 15%*

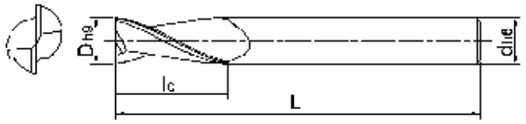
FLAT ENDMILL

PROPERTIES & APPLICATION

DP041	HM	Z2	AlTiN	Helix 35°	D_{h9}	Shank d_{h6}			
DP042	HM	Z3	AlTiN	Helix 35°	D_{h9}	Shank d_{h6}			
DP043	HM	Z4	AlTiN	Helix 35°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP041	DP042	DP043
2.00-25.00	2.00-25.00	2.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	○	○				○	○	○
V_c (m / min)	40 ~ 50	40 ~ 50	30 ~ 35	30 ~ 35	25 ~ 30	25 ~ 30				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP041	DP042	DP043
2	3	50	6	0.008	DP0412.0	DP0422.0	DP0432.0
3	3	50	10	0.012	DP0413.0	DP0423.0	DP0433.0
4	4	50	10	0.016	DP0414.0	DP0424.0	DP0434.0
5	5	50	13	0.019	DP0415.0	DP0425.0	DP0438.0
6	6	50	15	0.023	DP0416.0	DP0426.0	DP0436.0
8	8	50	20	0.028	DP0418.0	DP0428.0	DP0438.0
10	10	75	25	0.033	DP04110.0	DP04210.0	DP04310.0
12	12	75	30	0.037	DP04112.0	DP04212.0	DP04312.0
13	13	75	30	0.040	DP04113.0	DP04213.0	DP04313.0
14	14	80	30	0.042	DP04114.0	DP04214.0	DP04314.0
16	16	100	40	0.047	DP04116.0	DP04216.0	DP04316.0
18	18	100	45	0.052	DP04118.0	DP04218.0	DP04318.0
20	20	100	45	0.057	DP04120.0	DP04220.0	DP04320.0
25	25	100	45	0.067	DP04125.0	DP04225.0	DP04325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

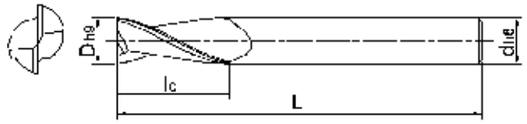
FLAT ENDMILL

PROPERTIES & APPLICATION

DP044	HM	Z2	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}			
DP045	HM	Z3	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}			
DP046	HM	Z4	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP044	DP045	DP046
2.00-25.00	2.00-25.00	2.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○				○	○	○
V_c (m / min)	30 ~ 40	30 ~ 40	20 ~ 25	20 ~ 25	15 ~ 25	15 ~ 25				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP044	DP045	DP046
2	3	50	6	0.019	DP0442.0	DP0452.0	DP0462.0
3	3	50	10	0.027	DP0443.0	DP0453.0	DP0463.0
4	4	50	10	0.036	DP0444.0	DP0454.0	DP0464.0
5	5	50	13	0.043	DP0445.0	DP0455.0	DP0465.0
6	6	50	15	0.051	DP0446.0	DP0456.0	DP0466.0
8	8	50	20	0.063	DP0448.0	DP0458.0	DP0468.0
10	10	75	25	0.073	DP04410.0	DP0450.0	DP04610.0
12	12	75	30	0.084	DP04412.0	DP04512.0	DP04612.0
13	13	75	30	0.090	DP04413.0	DP04513.0	DP04613.0
14	14	80	30	0.095	DP04414.0	DP04514.0	DP04614.0
16	16	100	40	0.105	DP04416.0	DP04516.0	DP04616.0
18	18	100	45	0.116	DP04418.0	DP04518.0	DP46318.0
20	20	100	45	0.127	DP04420.0	DP04520.0	DP04620.0
25	25	100	45	0.167	DP04425.0	DP04525.0	DP04625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DP

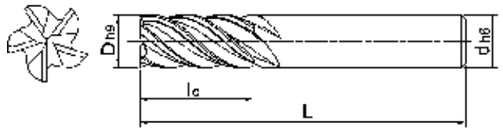
FLAT ENDMILL

PROPERTIES & APPLICATION

DP047	HM	Z5	ALTiN	Helix 50°	D_{h9}	Shank d_{h6}			
DP048	HM	Z6	ALTiN	Helix 50°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP047	DP048	
10.00-32.00	10.00-32.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	45 ~ 50	45 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP047	DP048	
10	10	75	25	0.099	DP04710.0	DP04810.0	
12	12	75	30	0.114	DP04712.0	DP04812.0	
13	13	75	30	0.122	DP04713.0	DP04813.0	
14	14	80	30	0.128	DP04714.0	DP04814.0	
16	16	100	40	0.142	DP04716.0	DP04816.0	
18	18	100	45	0.157	DP04718.0	DP04818.0	
20	20	100	45	0.172	DP04720.0	DP04820.0	
25	25	100	45	0.192	DP04725.0	DP04825.0	
32	32	100	45	0.212	DP04732.0	DP04832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

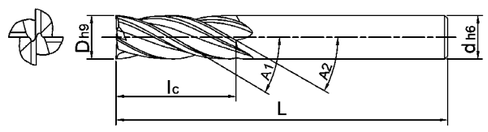
FLAT ENDMILL

PROPERTIES & APPLICATION

DP049	HM	Z3	ALTiN	35° /38°	D_{h9}	Shank d_{h6}			
DP050	HM	Z4	ALTiN	35° /38°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP049	DP050	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40				25 ~ 30	25 ~ 30	25 ~ 30

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP049	DP050	
4	4	50	10	0.072	DP0494.0	DP0504.0	
5	5	50	13	0.088	DP0495.0	DP0505.0	
6	6	50	15	0.103	DP0496.0	DP0506.0	
8	8	50	20	0.127	DP0498.0	DP0508.0	
10	10	75	25	0.148	DP04910.0	DP05010.0	
12	12	75	30	0.170	DP05912.0	DP05012.0	
13	13	75	30	0.185	DP04913.0	DP05013.0	
14	14	80	30	0.193	DP05914.0	DP05014.0	
16	16	100	40	0.213	DP05916.0	DP05016.0	
18	18	100	45	0.236	DP05918.0	DP05018.0	
20	20	100	45	0.258	DP04920.0	DP05020.0	
25	25	100	45	0.280	DP04925.0	DP05025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

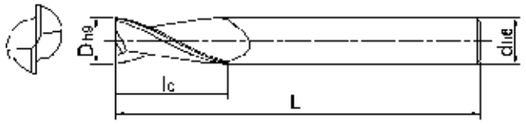
FLAT ENDMILL

PROPERTIES & APPLICATION

DP051	HM	Z2	AlTiN	Helix 35°	2°	D_{h9}	Shank d_{h6}		
DP052	HM	Z3	AlTiN	Helix 35°	2°	D_{h9}	Shank d_{h6}		
DP053	HM	Z4	AlTiN	Helix 35°	2°	D_{h9}	Shank d_{h6}		

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP051	DP052	DP053
2.00-25.00	2.00-25.00	2.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	○	○				○	○	○
V_c (m / min)	40 ~ 50	40 ~ 50	30 ~ 35	30 ~ 35	25 ~ 30	25 ~ 30				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP051	DP052	DP053
2	3	50	6	0.008	DP0512.0	DP0522.0	DP0532.0
3	3	50	10	0.012	DP0513.0	DP0523.0	DP0533.0
4	4	50	10	0.016	DP0514.0	DP0524.0	DP0534.0
5	5	50	13	0.019	DP0515.0	DP0525.0	DP0535.0
6	6	50	15	0.023	DP0516.0	DP0526.0	DP0536.0
8	8	50	20	0.028	DP0518.0	DP0528.0	DP0538.0
10	10	75	25	0.033	DP05110.0	DP05210.0	DP05310.0
12	12	75	30	0.037	DP05112.0	DP05212.0	DP05312.0
13	13	75	30	0.040	DP05113.0	DP05213.0	DP05313.0
14	14	80	30	0.042	DP05114.0	DP05214.0	DP05314.0
16	16	100	40	0.047	DP05116.0	DP05216.0	DP05316.0
18	18	100	45	0.052	DP05118.0	DP05218.0	DP05318.0
20	20	100	45	0.057	DP05120.0	DP05220.0	DP05320.0
25	25	100	45	0.067	DP05125.0	DP05225.0	DP05325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

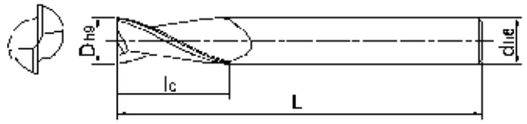
FLAT ENDMILL

PROPERTIES & APPLICATION

DP054	HM	Z2	AlTiN	Helix 45°	2°	D_{h9}	Shank d_{h6}		
DP055	HM	Z3	AlTiN	Helix 45°	2°	D_{h9}	Shank d_{h6}		
DP056	HM	Z4	AlTiN	Helix 45°	2°	D_{h9}	Shank d_{h6}		

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP054	DP055	DP056
2.00-25.00	2.00-25.00	2.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○				○	○	○
V_c (m / min)	30 ~ 40	30 ~ 40	20 ~ 25	20 ~ 25	15 ~ 25	15 ~ 25				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP054	DP055	DP056
2	3	50	6	0.019	DP0544.0	DP0554.0	DP0564.0
3	3	50	10	0.027	DP0545.0	DP0555.0	DP0565.0
4	4	50	10	0.036	DP0544.0	DP0554.0	DP0564.0
5	5	50	13	0.043	DP0545.0	DP0555.0	DP0565.0
6	6	50	15	0.051	DP0546.0	DP0556.0	DP0566.0
8	8	50	20	0.063	DP0548.0	DP0558.0	DP0568.0
10	10	75	25	0.073	DP05410.0	DP05510.0	DP05610.0
12	12	75	30	0.084	DP05412.0	DP05512.0	DP05612.0
13	13	75	30	0.090	DP05413.0	DP05513.0	DP05613.0
14	14	80	30	0.095	DP05414.0	DP05514.0	DP05614.0
16	16	100	40	0.105	DP05416.0	DP05516.0	DP05616.0
18	18	100	45	0.116	DP05418.0	DP05518.0	DP05618.0
20	20	100	45	0.127	DP05420.0	DP05520.0	DP05620.0
25	25	100	45	0.167	DP05425.0	DP05525.0	DP05625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

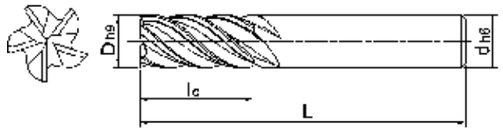
FLAT ENDMILL

PROPERTIES & APPLICATION

DP057	HM	Z5	AlTiN	Helix 50°	2°	D_{h9}	Shank d_{h6}			
DP058	HM	Z6	AlTiN	Helix 50°	2°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP057	DP058	
10.00-32.00	10.00-32.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	45 ~ 50	45 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP057	DP058	
10	10	75	25	0.099	DP05710.0	DP05810.0	
12	12	75	30	0.114	DP05712.0	DP05812.0	
13	13	75	30	0.122	DP05713.0	DP05813.0	
14	14	80	30	0.128	DP05714.0	DP05814.0	
16	16	100	40	0.142	DP05716.0	DP05816.0	
18	18	100	45	0.157	DP05718.0	DP05818.0	
20	20	100	45	0.172	DP05720.0	DP05820.0	
25	25	100	45	0.192	DP0725.0	DP05825.0	
32	32	100	45	0.212	DP05732.0	DP05832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

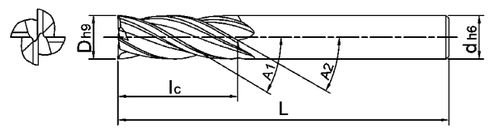
FLAT ENDMILL

PROPERTIES & APPLICATION

DP059	HM	Z3	AlTiN	35° /38°	2°	D_{h9}	Shank d_{h6}			
DP060	HM	Z4	AlTiN	35° /38°	2°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP059	DP060	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40				25 ~ 30	25 ~ 30	25 ~ 30

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP059	DP060	
4	4	50	10	0.072	DP0594.0	DP0604.0	
5	5	50	13	0.088	DP0595.0	DP0605.0	
6	6	50	15	0.103	DP0596.0	DP0606.0	
8	8	50	20	0.127	DP0598.0	DP0608.0	
10	10	75	25	0.148	DP05910.0	DP06010.0	
12	12	75	30	0.170	DP05912.0	DP06012.0	
13	13	75	30	0.185	DP05913.0	DP06013.0	
14	14	80	30	0.193	DP05914.0	DP06014.0	
16	16	100	40	0.213	DP05916.0	DP06016.0	
18	18	100	45	0.236	DP05918.0	DP06018.0	
20	20	100	45	0.258	DP05920.0	DP06020.0	
25	25	100	45	0.280	DP05925.0	DP06025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

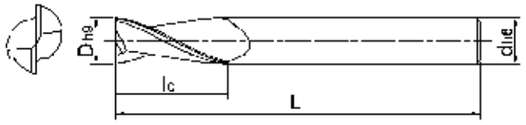
FLAT ENDMILL

PROPERTIES & APPLICATION

DP061	HM	Z2	AlTiN	Helix 35°	D_{h9}	Shank d_{h6}				
DP062	HM	Z3	AlTiN	Helix 35°	D_{h9}	Shank d_{h6}				
DP063	HM	Z4	AlTiN	Helix 35°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP061	DP062	DP063
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	○	○						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP061	DP062	DP063
4	4	50	10	0.016	DP0614.0	DP0624.0	DP0634.0
5	5	50	13	0.019	DP0615.0	DP0625.0	DP0635.0
6	6	50	15	0.023	DP0616.0	DP0626.0	DP0636.0
8	8	50	20	0.028	DP0618.0	DP0628.0	DP0638.0
10	10	75	25	0.033	DP06110.0	DP06210.0	DP06310.0
12	12	75	30	0.037	DP06112.0	DP06212.0	DP06312.0
13	13	75	30	0.040	DP06113.0	DP06213.0	DP06313.0
14	14	80	30	0.042	DP06114.0	DP06214.0	DP06314.0
16	16	100	40	0.047	DP06116.0	DP06216.0	DP06316.0
18	18	100	45	0.052	DP06118.0	DP06218.0	DP06318.0
20	20	100	45	0.057	DP06120.0	DP06220.0	DP06320.0
25	25	100	45	0.062	DP06125.0	DP06225.0	DP06325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

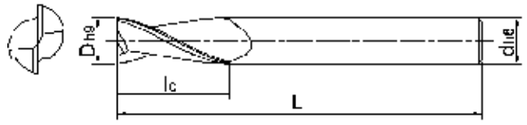
FLAT ENDMILL

PROPERTIES & APPLICATION

DP064	HM	Z2	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}				
DP065	HM	Z3	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}				
DP066	HM	Z4	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP064	DP065	DP066
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○				○	○	○
V_c (m / min)	30 ~ 40	30 ~ 40	20 ~ 25	20 ~ 25	15 ~ 25	15 ~ 25				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP064	DP065	DP066
4	4	50	10	0.036	DP0644.0	DP0654.0	DP0664.0
5	5	50	13	0.043	DP0645.0	DP0655.0	DP0665.0
6	6	50	15	0.051	DP0646.0	DP0656.0	DP0666.0
8	8	50	20	0.063	DP0648.0	DP0658.0	DP0668.0
10	10	75	25	0.073	DP06410.0	DP0650.0	DP06610.0
12	12	75	30	0.084	DP06412.0	DP06512.0	DP06612.0
13	13	75	30	0.090	DP06413.0	DP06513.0	DP06613.0
14	14	80	30	0.095	DP06414.0	DP06514.0	DP06614.0
16	16	100	40	0.105	DP06416.0	DP06516.0	DP06616.0
18	18	100	45	0.116	DP06418.0	DP06518.0	DP06618.0
20	20	100	45	0.127	DP06420.0	DP06520.0	DP06620.0
25	25	100	45	0.167	DP06425.0	DP06525.0	DP06625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

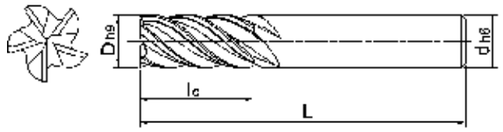
FLAT ENDMILL

PROPERTIES & APPLICATION

DP067	HM	Z5	AlTiN	Helix 50°	D_{h9}	Shank d_{h6}				
DP068	HM	Z6	AlTiN	Helix 50°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP067	DP068	
10.00-32.00	10.00-32.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				25 ~ 30	25 ~ 30	25 ~ 30

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP067	DP068	
10	10	75	25	0.099	DP06710.0	DP06810.0	
12	12	75	30	0.114	DP06712.0	DP06812.0	
13	13	75	30	0.122	DP06713.0	DP06813.0	
14	14	80	30	0.128	DP06714.0	DP06814.0	
16	16	100	40	0.142	DP06716.0	DP06816.0	
18	18	100	45	0.157	DP06718.0	DP06818.0	
20	20	100	45	0.172	DP06720.0	DP06820.0	
25	25	100	45	0.192	DP06725.0	DP06825.0	
32	32	100	45	0.212	DP06732.0	DP06832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

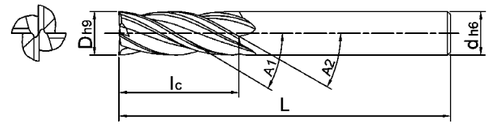
FLAT ENDMILL

PROPERTIES & APPLICATION

DP069	HM	Z3	AlTiN	35° /38°	D_{h9}	Shank d_{h6}				
DP070	HM	Z4	AlTiN	35° /38°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP069	DP070	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				25 ~ 30	25 ~ 30	25 ~ 30

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP069	DP070	
4	4	50	10	0.072	DP0694.0	DP0704.0	
5	5	50	13	0.088	DP0695.0	DP0705.0	
6	6	50	15	0.103	DP0696.0	DP0706.0	
8	8	50	20	0.127	DP0698.0	DP0708.0	
10	10	75	25	0.148	DP06910.0	DP07010.0	
12	12	75	30	0.170	DP06912.0	DP07012.0	
13	13	75	30	0.185	DP06913.0	DP07013.0	
14	14	80	30	0.193	DP06914.0	DP07014.0	
16	16	100	40	0.213	DP06916.0	DP07016.0	
18	18	100	45	0.236	DP06918.0	DP07018.0	
20	20	100	45	0.258	DP06920.0	DP07020.0	
25	25	100	45	0.280	DP06925.0	DP07025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

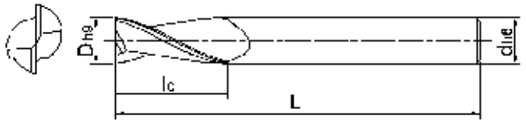
FLAT ENDMILL

PROPERTIES & APPLICATION

DP071	HM	Z2	AlTiN	Helix 35⁰	2⁰	D_{h9}	Shank d_{h6}				
DP072	HM	Z3	AlTiN	Helix 35⁰	2⁰	D_{h9}	Shank d_{h6}				
DP073	HM	Z4	AlTiN	Helix 35⁰	2⁰	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP071	DP072	DP073
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	O	O	O	O						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP071	DP072	DP073
4	4	50	10	0.016	DP0714.0	DP0724.0	DP0734.0
5	5	50	13	0.019	DP0715.0	DP0725.0	DP0735.0
6	6	50	15	0.023	DP0716.0	DP0726.0	DP0736.0
8	8	50	20	0.028	DP0718.0	DP0728.0	DP0738.0
10	10	75	25	0.033	DP07110.0	DP07210.0	DP07310.0
12	12	75	30	0.037	DP07112.0	DP07212.0	DP07312.0
13	13	75	30	0.040	DP07113.0	DP07213.0	DP07313.0
14	14	80	30	0.042	DP07114.0	DP07214.0	DP07314.0
16	16	100	40	0.047	DP07116.0	DP07216.0	DP07316.0
18	18	100	45	0.052	DP07118.0	DP07218.0	DP07318.0
20	20	100	45	0.057	DP03120.0	DP07220.0	DP07320.0
25	25	100	45	0.062	DP07125.0	DP07225.0	DP07325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

SYNCHRONOUS SOLUTION

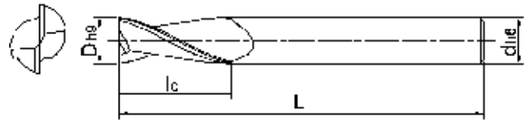
FLAT ENDMILL

PROPERTIES & APPLICATION

DP074	HM	Z2	AlTiN	Helix 45⁰	2⁰	D_{h9}	Shank d_{h6}				
DP075	HM	Z3	AlTiN	Helix 45⁰	2⁰	D_{h9}	Shank d_{h6}				
DP076	HM	Z4	AlTiN	Helix 45⁰	2⁰	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP074	DP075	DP076
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O				O	O	O
V_c (m / min)	30 ~ 40	30 ~ 40	20 ~ 25	20 ~ 25	15 ~ 25	15 ~ 25				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP074	DP075	DP076
4	4	50	10	0.036	DP0744.0	DP0754.0	DP0764.0
5	5	50	13	0.043	DP0745.0	DP0755.0	DP0765.0
6	6	50	15	0.051	DP0746.0	DP0756.0	DP0766.0
8	8	50	20	0.063	DP0748.0	DP0758.0	DP0768.0
10	10	75	25	0.073	DP07410.0	DP07510.0	DP07610.0
12	12	75	30	0.084	DP07412.0	DP07512.0	DP07612.0
13	13	75	30	0.090	DP07413.0	DP07513.0	DP07613.0
14	14	80	30	0.095	DP07414.0	DP07514.0	DP07614.0
16	16	100	40	0.105	DP07416.0	DP07516.0	DP07616.0
18	18	100	45	0.116	DP07418.0	DP07518.0	DP07618.0
20	20	100	45	0.127	DP07420.0	DP07520.0	DP07620.0
25	25	100	45	0.167	DP07425.0	DP0755.0	DP07625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

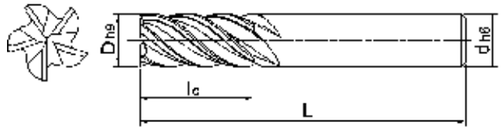
FLAT ENDMILL

PROPERTIES & APPLICATION

DP077	HM	Z5	AlTiN	Helix 50°	2°	D_{h9}	Shank d_{h6}				
DP078	HM	Z6	AlTiN	Helix 50°	2°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP077	DP078	
10.00-32.00	10.00-32.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				25 ~ 30	25 ~ 30	25 ~ 30

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP077	DP078	
10	10	75	25	0.099	DP07710.0	DP07810.0	
12	12	75	30	0.114	DP07712.0	DP07812.0	
13	13	75	30	0.122	DP07713.0	DP07813.0	
14	14	80	30	0.128	DP07714.0	DP07814.0	
16	16	100	40	0.142	DP07716.0	DP07816.0	
18	18	100	45	0.157	DP07718.0	DP07818.0	
20	20	100	45	0.172	DP07720.0	DP07820.0	
25	25	100	45	0.192	DP07725.0	DP07825.0	
32	32	100	45	0.212	DP07732.0	DP07832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

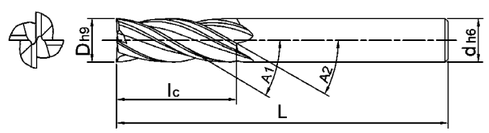
FLAT ENDMILL

PROPERTIES & APPLICATION

DP079	HM	Z3	AlTiN	35° /38°	2°	D_{h9}	Shank d_{h6}				
DP080	HM	Z4	AlTiN	35° /38°	2°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP079	DP080	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				25 ~ 30	25 ~ 30	25 ~ 30

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP079	DP080	
4	4	50	10	0.072	DP0794.0	DP0804.0	
5	5	50	13	0.088	DP0795.0	DP0805.0	
6	6	50	15	0.103	DP0796.0	DP0806.0	
8	8	50	20	0.127	DP0798.0	DP0808.0	
10	10	75	25	0.148	DP07910.0	DP08010.0	
12	12	75	30	0.170	DP07912.0	DP08012.0	
13	13	75	30	0.185	DP07913.0	DP08013.0	
14	14	80	30	0.193	DP07914.0	DP08014.0	
16	16	100	40	0.213	DP07916.0	DP08016.0	
18	18	100	45	0.236	DP07918.0	DP08018.0	
20	20	100	45	0.258	DP07920.0	DP08020.0	
25	25	100	45	0.280	DP07925.0	DP08025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

FLAT ENDMILL

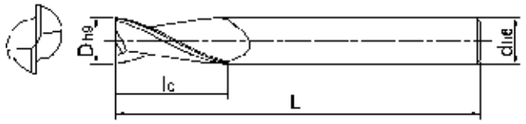
PROPERTIES & APPLICATION

DP081	HM	Z2	AlCr Blue	Helix 35⁰	D_{h9}	Shank d_{h6}			
DP082	HM	Z3	AlCr Blue	Helix 35⁰	D_{h9}	Shank d_{h6}			
DP083	HM	Z3	AlCr Blue	Helix 35⁰	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP081	DP082	DP083
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP081	DP082	DP083
2	3	50	6	0.019	DP0812.0	DP0822.0	DP0832.0
3	3	50	10	0.027	DP0813.0	DP0823.0	DP0833.0
4	4	50	10	0.036	DP0814.0	DP0824.0	DP0834.0
5	5	50	13	0.043	DP0815.0	DP0825.0	DP0835.0
6	6	50	15	0.051	DP0816.0	DP0826.0	DP0836.0
8	8	50	20	0.063	DP0818.0	DP0828.0	DP0838.0
10	10	75	25	0.073	DP08110.0	DP08210.0	DP08310.0
12	12	75	30	0.084	DP08112.0	DP08212.0	DP08312.0
13	13	75	30	0.090	DP08113.0	DP08213.0	DP08313.0
14	14	80	30	0.095	DP08114.0	DP08214.0	DP08314.0
16	16	100	40	0.105	DP08116.0	DP08216.0	DP08316.0
18	18	100	45	0.116	DP08118.0	DP08218.0	DP08318.0
20	20	100	45	0.127	DP08120.0	DP08220.0	DP08320.0
25	25	100	45	0.132	DP08125.0	DP08225.0	DP08325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

FLAT ENDMILL

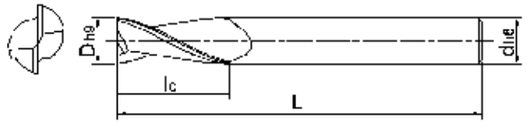
PROPERTIES & APPLICATION

DP084	HM	Z2	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}			
DP085	HM	Z3	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}			
DP086	HM	Z3	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP084	DP085	DP086
2.00-25.00	2.00-25.00	2.00-25.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●	○	○	○	●	●	●
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40	100 ~ 120	100 ~ 120	80 ~ 90	30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP084	DP085	DP086
2	3	50	6	0.023	DP0842.0	DP0852.0	DP0862.0
3	3	50	10	0.034	DP0843.0	DP0853.0	DP0863.0
4	4	50	10	0.045	DP0844.0	DP0854.0	DP0864.0
5	5	50	13	0.054	DP0845.0	DP0855.0	DP0863.0
6	6	50	15	0.064	DP0846.0	DP0856.0	DP0866.0
8	8	50	20	0.078	DP0848.0	DP0858.0	DP0868.0
10	10	75	25	0.091	DP08410.0	DP08510.0	DP08610.0
12	12	75	30	0.105	DP08412.0	DP08512.0	DP08612.0
13	13	75	30	0.110	DP08413.0	DP08513.0	DP08613.0
14	14	80	30	0.119	DP08414.0	DP08514.0	DP08614.0
16	16	100	40	0.132	DP08416.0	DP08516.0	DP08616.0
18	18	100	45	0.146	DP08418.0	DP08518.0	DP08618.0
20	20	100	45	0.159	DP08420.0	DP08520.0	DP08620.0
25	25	100	45	0.164	DP08425.0	DP08525.0	DP08625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

FLAT ENDMILL

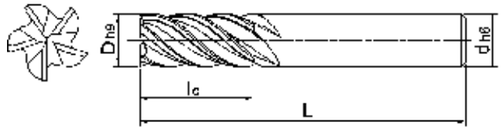
PROPERTIES & APPLICATION

DP087	HM	Z5	AlCr Blue	Helix 50°	D_{h9}	Shank d_{h6}			
DP088	HM	Z6	AlCr Blue	Helix 50°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP087	DP088	
10.00-32.00	10.00-32.00	

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP087	DP088	
10	10	75	25	0.099	DP08710.0	DP08810.0	
12	12	75	30	0.114	DP08712.0	DP08812.0	
13	13	75	30	0.122	DP08713.0	DP08813.0	
14	14	80	30	0.128	DP08714.0	DP08814.0	
16	16	100	40	0.142	DP08716.0	DP08816.0	
18	18	100	45	0.157	DP08718.0	DP08818.0	
20	20	100	45	0.172	DP08720.0	DP08820.0	
25	25	100	45	0.192	DP08725.0	DP08825.0	
32	32	100	45	0.212	DP08732.0	DP08832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DP

FLAT ENDMILL

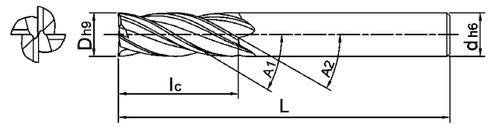
PROPERTIES & APPLICATION

DP089	HM	Z3	AlCr Blue	35° /38°	D_{h9}	Shank d_{h6}			
DP090	HM	Z4	AlCr Blue	35° /38°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP089	DP090	
4.00-25.00	4.00-25.00	

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP089	DP090	
4	4	50	10	0.072	DP0894.0	DP0904.0	
5	5	50	13	0.088	DP0895.0	DP0905.0	
6	6	50	15	0.103	DP0896.0	DP0906.0	
8	8	50	20	0.127	DP0898.0	DP0908.0	
10	10	75	25	0.148	DP08910.0	DP09010.0	
12	12	75	30	0.170	DP08912.0	DP09012.0	
13	13	75	30	0.185	DP08913.0	DP09013.0	
14	14	80	30	0.193	DP08914.0	DP09014.0	
16	16	100	40	0.213	DP08916.0	DP09016.0	
18	18	100	45	0.236	DP08918.0	DP09018.0	
20	20	100	45	0.258	DP08920.0	DP09020.0	
25	25	100	45	0.280	DP08925.0	DP09025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DP

FLAT ENDMILL

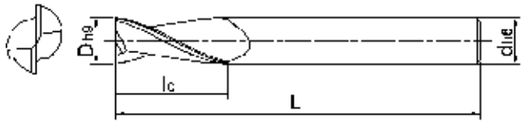
PROPERTIES & APPLICATION

DP091	HM	Z2	AlCr Blue	Helix 35⁰	2⁰	D_{h9}	Shank d_{h6}			
DP092	HM	Z3	AlCr Blue	Helix 35⁰	2⁰	D_{h9}	Shank d_{h6}			
DP093	HM	Z4	AlCr Blue	Helix 35⁰	2⁰	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP091	DP092	DP093
2.00-25.00	2.00-25.00	2.00-25.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order		
					DP091	DP092	DP092
2	3	50	6	0.008	DP0912.0	DP0922.0	DP0932.0
3	3	50	10	0.012	DP0913.0	DP0923.0	DP0933.0
4	4	50	10	0.016	DP0914.0	DP0924.0	DP0934.0
5	5	50	13	0.019	DP0915.0	DP0925.0	DP0935.0
6	6	50	15	0.023	DP0916.0	DP0926.0	DP0936.0
8	8	50	20	0.028	DP0918.0	DP0928.0	DP0938.0
10	10	75	25	0.033	DP09110.0	DP09210.0	DP09310.0
12	12	75	30	0.037	DP09112.0	DP09212.0	DP09312.0
13	13	75	30	0.040	DP09113.0	DP09213.0	DP09313.0
14	14	80	30	0.042	DP09114.0	DP09214.0	DP09314.0
16	16	100	40	0.047	DP09116.0	DP09216.0	DP09316.0
18	18	100	45	0.052	DP09118.0	DP09218.0	DP09318.0
20	20	100	45	0.057	DP09120.0	DP09220.0	DP09320.0
25	25	100	45	0.062	DP09125.0	DP09225.0	DP09325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DP

SYNCHRONOUS SOLUTION

FLAT ENDMILL

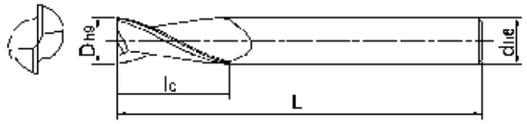
PROPERTIES & APPLICATION

DP094	HM	Z2	AlCr Blue	Helix 45⁰	2⁰	D_{h9}	Shank d_{h6}			
DP095	HM	Z3	AlCr Blue	Helix 45⁰	2⁰	D_{h9}	Shank d_{h6}			
DP096	HM	Z4	AlCr Blue	Helix 45⁰	2⁰	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP094	DP095	DP096
2.00-25.00	2.00-25.00	2.00-25.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●	○	○	○	●	●	●
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40	100 ~ 120	100 ~ 120	80 ~ 90	30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order		
					DP094	DP095	DP096
2	3	50	6	0.019	DP0912.0	DP0952.0	DP0962.0
3	3	50	10	0.027	DP0913.0	DP0953.0	DP0963.0
4	4	50	10	0.036	DP0944.0	DP0954.0	DP0964.0
5	5	50	13	0.043	DP0945.0	DP0955.0	DP0965.0
6	6	50	15	0.051	DP0946.0	DP0956.0	DP0966.0
8	8	50	20	0.063	DP0948.0	DP0958.0	DP0968.0
10	10	75	25	0.073	DP09410.0	DP09510.0	DP09610.0
12	12	75	30	0.084	DP09412.0	DP09512.0	DP09612.0
13	13	75	30	0.090	DP09413.0	DP09513.0	DP09613.0
14	14	80	30	0.095	DP09414.0	DP09514.0	DP09614.0
16	16	100	40	0.105	DP09416.0	DP09516.0	DP09616.0
18	18	100	45	0.116	DP09418.0	DP09518.0	DP09618.0
20	20	100	45	0.127	DP09420.0	DP09520.0	DP09620.0
25	25	100	45	0.167	DP09425.0	DP09525.0	DP09625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DP

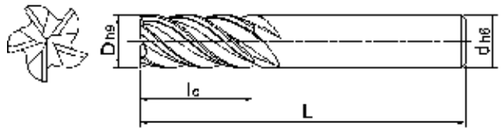
FLAT ENDMILL

PROPERTIES & APPLICATION

DP097	HM	Z5	AlCr Blue	Helix 50°	2°	D_{h9}	Shank d_{h6}			
DP098	HM	Z6	AlCr Blue	Helix 50°	2°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP097	DP098	
10.00-32.00	10.00-32.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP097	DP098	
10	10	75	25	0.099	DP09710.0	DP09810.0	
12	12	75	30	0.114	DP09712.0	DP09812.0	
13	13	75	30	0.122	DP09713.0	DP09813.0	
14	14	80	30	0.128	DP09714.0	DP09814.0	
16	16	100	40	0.142	DP09716.0	DP09816.0	
18	18	100	45	0.157	DP09718.0	DP09818.0	
20	20	100	45	0.172	DP09720.0	DP09820.0	
25	25	100	45	0.192	DP09725.0	DP09825.0	
32	32	100	45	0.212	DP09732.0	DP09832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

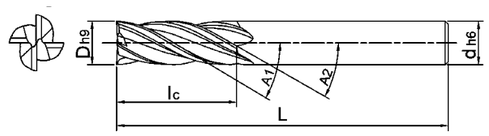
FLAT ENDMILL

PROPERTIES & APPLICATION

DP099	HM	Z3	AlCr Blue	35° /38°	2°	D_{h9}	Shank d_{h6}			
DP100	HM	Z4	AlCr Blue	35° /38°	2°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP099	DP100	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP099	DP100	
4	4	50	10	0.072	DP0994.0	DP1004.0	
5	5	50	13	0.088	DP0995.0	DP1005.0	
6	6	50	15	0.103	DP0996.0	DP1006.0	
8	8	50	20	0.127	DP0998.0	DP1008.0	
10	10	75	25	0.148	DP09910.0	DP10010.0	
12	12	75	30	0.170	DP09912.0	DP10012.0	
13	13	75	30	0.185	DP09913.0	DP10013.0	
14	14	80	30	0.193	DP09914.0	DP10014.0	
16	16	100	40	0.213	DP09916.0	DP10016.0	
18	18	100	45	0.236	DP09918.0	DP10018.0	
20	20	100	45	0.258	DP09920.0	DP10020.0	
25	25	100	45	0.280	DP09925.0	DP10025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

FLAT ENDMILL

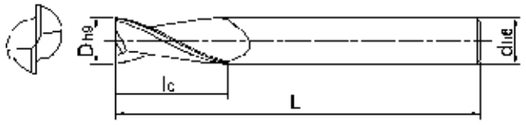
PROPERTIES & APPLICATION

DP101	HM	Z2	AlCr Blue	Helix 35°	D_{h9}	Shank d_{h6}	
DP102	HM	Z3	AlCr Blue	Helix 35°	D_{h9}	Shank d_{h6}	
DP103	HM	Z4	AlCr Blue	Helix 35°	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP101	DP102	DP103
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP101	DP102	DP103
4	4	50	10	0.036	DP1014.0	DP1024.0	DP1034.0
5	5	50	13	0.043	DP1015.0	DP1025.0	DP1035.0
6	6	50	15	0.051	DP1016.0	DP1026.0	DP1036.0
8	8	50	20	0.063	DP1018.0	DP1028.0	DP1038.0
10	10	75	25	0.073	DP10110.0	DP10210.0	DP10310.0
12	12	75	30	0.084	DP10112.0	DP10212.0	DP10312.0
13	13	75	30	0.090	DP10113.0	DP10213.0	DP10313.0
14	14	80	30	0.095	DP10114.0	DP10214.0	DP10314.0
16	16	100	40	0.105	DP10116.0	DP10216.0	DP10316.0
18	18	100	45	0.116	DP10118.0	DP10218.0	DP10318.0
20	20	100	45	0.127	DP10120.0	DP10220.0	DP10320.0
25	25	100	45	0.132	DP10125.0	DP10225.0	DP10325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

SYNCHRONOUS SOLUTION

FLAT ENDMILL

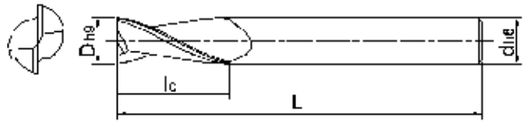
PROPERTIES & APPLICATION

DP104	HM	Z2	AlCr Blue	Helix 35°	D_{h9}	Shank d_{h6}	
DP105	HM	Z3	AlCr Blue	Helix 35°	D_{h9}	Shank d_{h6}	
DP106	HM	Z4	AlCr Blue	Helix 35°	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP104	DP105	DP106
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●	○	○	○	●	●	●
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40	100 ~ 120	100 ~ 120	80 ~ 90	30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP104	DP105	DP106
4	4	50	10	0.045	DP1044.0	DP1054.0	DP1064.0
5	5	50	13	0.054	DP1045.0	DP1055.0	DP1065.0
6	6	50	15	0.064	DP1046.0	DP1056.0	DP1066.0
8	8	50	20	0.078	DP1048.0	DP1058.0	DP1068.0
10	10	75	25	0.091	DP10410.0	DP10510.0	DP10610.0
12	12	75	30	0.105	DP10412.0	DP10512.0	DP10612.0
13	13	75	30	0.110	DP10413.0	DP10513.0	DP10613.0
14	14	80	30	0.119	DP10414.0	DP10514.0	DP10614.0
16	16	100	40	0.132	DP10416.0	DP10516.0	DP10616.0
18	18	100	45	0.146	DP10418.0	DP10518.0	DP10618.0
20	20	100	45	0.159	DP10420.0	DP10520.0	DP10620.0
25	25	100	45	0.164	DP10425.0	DP10525.0	DP10625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

FLAT ENDMILL

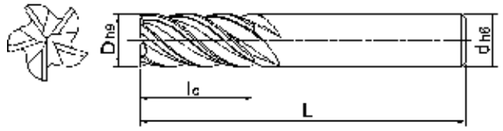
PROPERTIES & APPLICATION

DP107	HM	Z5	AlCr Blue	Helix 50°	D_{h9}	Shank d_{h6}				
DP108	HM	Z6	AlCr Blue	Helix 50°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP107	DP108	
10.00-32.00	10.00-32.00	

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	80 ~ 100	80 ~ 100	60 ~ 80	60 ~ 80	50 ~ 65	50 ~ 65				40 ~ 50	40 ~ 50	40 ~ 50

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP107	DP108	
10	10	75	25	0.099	DP10710.0	DP10810.0	
12	12	75	30	0.114	DP10712.0	DP10812.0	
13	13	75	30	0.122	DP10713.0	DP10813.0	
14	14	80	30	0.128	DP10714.0	DP10814.0	
16	16	100	40	0.142	DP10716.0	DP10816.0	
18	18	100	45	0.157	DP10718.0	DP10818.0	
20	20	100	45	0.172	DP10720.0	DP10820.0	
25	25	100	45	0.192	DP10725.0	DP10825.0	
32	32	100	45	0.212	DP10732.0	DP10832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

FLAT ENDMILL

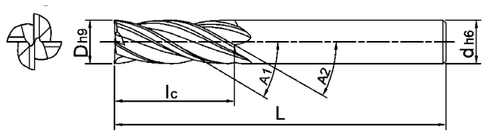
PROPERTIES & APPLICATION

DP109	HM	Z3	AlCr Blue	35° /38°	D_{h9}	Shank d_{h6}				
DP110	HM	Z4	AlCr Blue	35° /38°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP109	DP110	
4.00-25.00	4.00-25.00	

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	80 ~ 100	80 ~ 100	60 ~ 80	60 ~ 80	50 ~ 65	50 ~ 65				40 ~ 50	40 ~ 50	40 ~ 50

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP109	DP110	
4	4	50	10	0.072	DP1094.0	DP1104.0	
5	5	50	13	0.088	DP1095.0	DP1105.0	
6	6	50	15	0.103	DP1096.0	DP1106.0	
8	8	50	20	0.127	DP1098.0	DP1108.0	
10	10	75	25	0.148	DP10910.0	DP11010.0	
12	12	75	30	0.170	DP10912.0	DP11012.0	
13	13	75	30	0.185	DP10913.0	DP11013.0	
14	14	80	30	0.193	DP10914.0	DP11014.0	
16	16	100	40	0.213	DP10916.0	DP11016.0	
18	18	100	45	0.236	DP10918.0	DP11018.0	
20	20	100	45	0.258	DP10920.0	DP11020.0	
25	25	100	45	0.280	DP10925.0	DP11025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

FLAT ENDMILL

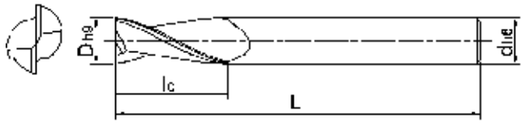
PROPERTIES & APPLICATION

DP111	HM	Z2	AlCr Blue	Helix 35⁰	2⁰	D_{h9}	Shank d_{h6}				
DP112	HM	Z3	AlCr Blue	Helix 35⁰	2⁰	D_{h9}	Shank d_{h6}				
DP113	HM	Z4	AlCr Blue	Helix 35⁰	2⁰	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP111	DP112	DP113
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP111	DP112	DP113
4	4	50	10	0.016	DP1114.0	DP1124.0	DP1134.0
5	5	50	13	0.019	DP1115.0	DP1125.0	DP1135.0
6	6	50	15	0.023	DP1116.0	DP1126.0	DP1136.0
8	8	50	20	0.028	DP1118.0	DP1128.0	DP1138.0
10	10	75	25	0.033	DP11110.0	DP11210.0	DP11310.0
12	12	75	30	0.037	DP11112.0	DP11212.0	DP11312.0
13	13	75	30	0.040	DP11113.0	DP11213.0	DP11313.0
14	14	80	30	0.042	DP11114.0	DP11214.0	DP11314.0
16	16	100	40	0.047	DP11116.0	DP11216.0	DP11316.0
18	18	100	45	0.052	DP11118.0	DP11218.0	DP11318.0
20	20	100	45	0.057	DP11120.0	DP11220.0	DP11320.0
25	25	100	45	0.062	DP11125.0	DP11225.0	DP11325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

FLAT ENDMILL

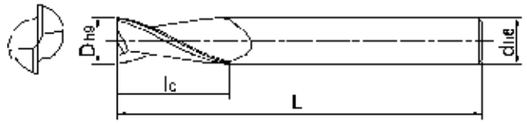
PROPERTIES & APPLICATION

DP114	HM	Z2	AlCr Blue	Helix 45⁰	2⁰	D_{h9}	Shank d_{h6}				
DP115	HM	Z3	AlCr Blue	Helix 45⁰	2⁰	D_{h9}	Shank d_{h6}				
DP116	HM	Z4	AlCr Blue	Helix 45⁰	2⁰	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP114	DP115	DP116
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●	○	○	○	●	●	●
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40	100 ~ 120	100 ~ 120	80 ~ 90	30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP114	DP115	DP116
4	4	50	10	0.036	DP1144.0	DP1154.0	DP1164.0
5	5	50	13	0.043	DP1145.0	DP1155.0	DP1165.0
6	6	50	15	0.051	DP1146.0	DP1156.0	DP1166.0
8	8	50	20	0.063	DP1148.0	DP1158.0	DP1168.0
10	10	75	25	0.073	DP11410.0	DP11510.0	DP11610.0
12	12	75	30	0.084	DP11412.0	DP11512.0	DP11612.0
13	13	75	30	0.090	DP11413.0	DP11513.0	DP11613.0
14	14	80	30	0.095	DP11414.0	DP11514.0	DP11614.0
16	16	100	40	0.105	DP11416.0	DP11516.0	DP11616.0
18	18	100	45	0.116	DP11418.0	DP11518.0	DP11618.0
20	20	100	45	0.127	DP11420.0	DP11520.0	DP11620.0
25	25	100	45	0.167	DP11425.0	DP11525.0	DP11625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DP

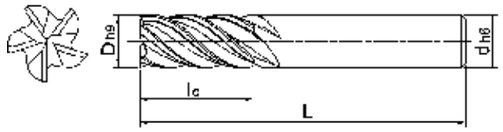
FLAT ENDMILL

PROPERTIES & APPLICATION

DP117	HM	Z5	AlCr Blue	Helix 50°	2°	D_{h9}	Shank d_{h6}				
DP118	HM	Z6	AlCr Blue	Helix 50°	2°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP117	DP118	
10.00-32.00	10.00-32.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	80 ~ 100	80 ~ 100	60 ~ 80	60 ~ 80	50 ~ 65	50 ~ 65				40 ~ 50	40 ~ 50	40 ~ 50

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP117	DP118	
10	10	75	25	0.099	DP11710.0	DP11810.0	
12	12	75	30	0.114	DP11712.0	DP11812.0	
13	13	75	30	0.122	DP11713.0	DP11813.0	
14	14	80	30	0.128	DP11714.0	DP11814.0	
16	16	100	40	0.142	DP11716.0	DP11816.0	
18	18	100	45	0.157	DP11718.0	DP11818.0	
20	20	100	45	0.172	DP11720.0	DP11820.0	
25	25	100	45	0.192	DP11725.0	DP11825.0	
32	32	100	45	0.212	DP11732.0	DP11832.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

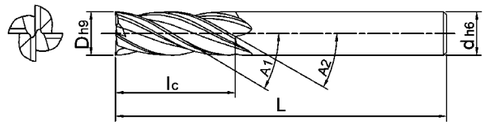
FLAT ENDMILL

PROPERTIES & APPLICATION

DP119	HM	Z3	AlCr Blue	35° /38°	2°	D_{h9}	Shank d_{h6}				
DP120	HM	Z4	AlCr Blue	35° /38°	2°	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



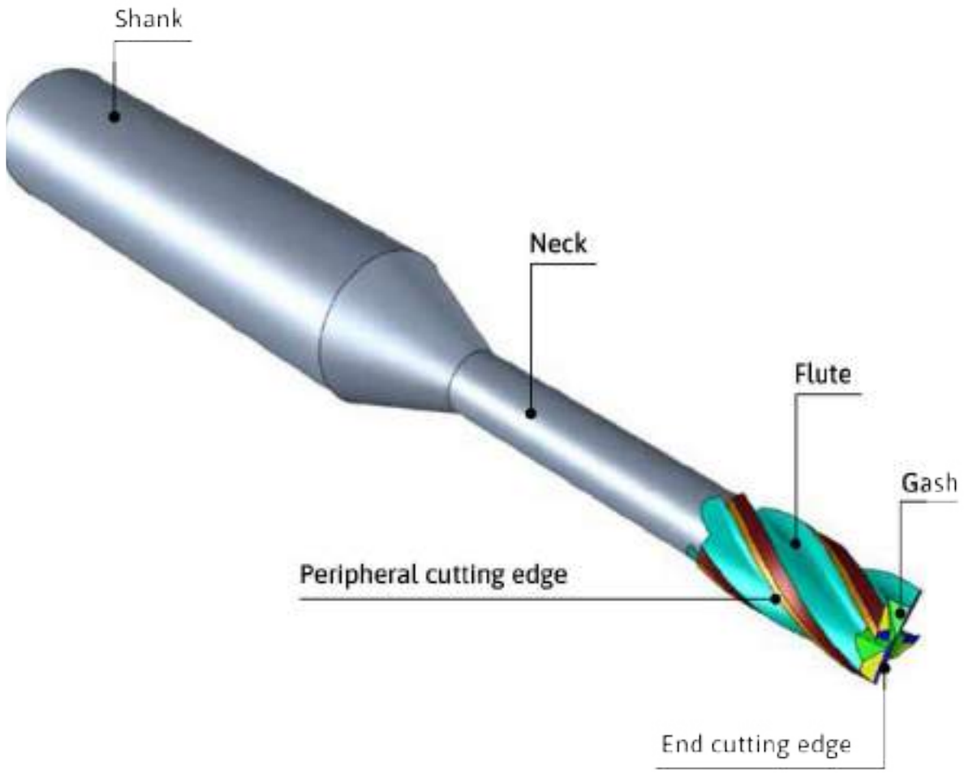
DP119	DP120	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	80 ~ 100	80 ~ 100	60 ~ 80	60 ~ 80	50 ~ 65	50 ~ 65				40 ~ 50	40 ~ 50	40 ~ 50

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP119	DP120	
4	4	50	10	0.072	DP1194.0	DP1204.0	
5	5	50	13	0.088	DP1195.0	DP1205.0	
6	6	50	15	0.103	DP1196.0	DP1206.0	
8	8	50	20	0.127	DP1198.0	DP1208.0	
10	10	75	25	0.148	DP11910.0	DP12010.0	
12	12	75	30	0.170	DP11912.0	DP12012.0	
13	13	75	30	0.185	DP11913.0	DP12013.0	
14	14	80	30	0.193	DP11914.0	DP12014.0	
16	16	100	40	0.213	DP11916.0	DP12016.0	
18	18	100	45	0.236	DP11918.0	DP12018.0	
20	20	100	45	0.258	DP11920.0	DP12020.0	
25	25	100	45	0.280	DP11925.0	DP12025.0	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
LONG NECK ENDMILL



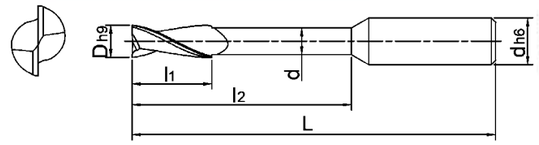
LONG NECK ENDMILL

PROPERTIES & APPLICATION

DP121	HM	Z2	Helix 30°	D_{h9}	Shank d_{h6}			
DP122	HM	Z3	Helix 30°	D_{h9}	Shank d_{h6}			
DP123	HM	Z4	Helix 30°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部冷却
- 센터 커팅
- 비내부 절삭유



DP121	DP122	DP123
1.00-4.00	1.00-4.00	1.00-4.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / rev)	Code order DP121	DP122	DP123
1.0	4.0	50	1.5	4		DP1211.0x4	DP1221.0x4	DP1231.0x4
1.0	4.0	50	1.5	6		DP1211.0x6	DP1221.0x6	DP1231.0x6
1.0	4.0	50	1.5	8		DP1211.0x8	DP1221.0x8	DP1231.0x8
1.5	4.0	50	1.8	4		DP1211.5x4	DP1221.5x4	DP1231.5x4
1.5	4.0	50	1.8	6		DP1211.5x6	DP1221.5x6	DP1231.5x6
1.5	4.0	50	1.8	8		DP1211.5x8	DP1221.5x8	DP1231.5x8
2.0	4.0	50	2.2	8		DP1212.0x8	DP1222.0x8	DP1232.0x8
2.0	4.0	50	2.2	10		DP1212.0x10	DP1222.0x10	DP1232.0x10
2.0	4.0	50	2.2	12		DP1212.0x12	DP1222.0x12	DP1232.0x12
3.0	6.0	74	3.5	10		DP1213.0x10	DP1223.0x10	DP1233.0x10
3.0	6.0	74	3.5	12		DP1213.0x12	DP1223.0x12	DP1233.0x12
3.0	6.0	74	3.5	20		DP1213.0x20	DP1223.0x20	DP1233.0x20
4.0	6.0	74	4.5	12		DP1214.0x12	DP1224.0x12	DP1234.0x12
4.0	6.0	74	4.5	16		DP1214.0x16	DP1224.0x16	DP1234.0x16
4.0	6.0	74	4.5	20		DP1214.0x20	DP1224.0x20	DP1234.0x20

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

LONG NECK ENDMILL

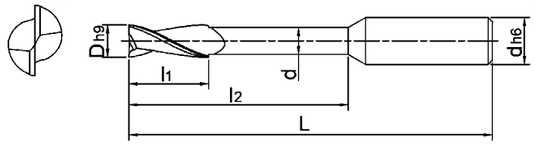
PROPERTIES & APPLICATION

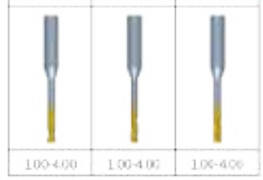
DP124	HM	Z2	TiN	Helix 30°	D_{h9}	Shank d_{h6}
DP125	HM	Z3	TiN	Helix 30°	D_{h9}	Shank d_{h6}
DP126	HM	Z4	TiN	Helix 30°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data

- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / rev)	Code order DP124	DP125	DP126
1.0	4.0	50	1.5	4		DP1241.0x4	DP1251.0x4	DP1261.0x4
1.0	4.0	50	1.5	6		DP1241.0x6	DP1251.0x6	DP1261.0x6
1.0	4.0	50	1.5	8		DP1241.0x8	DP1251.0x8	DP1261.0x8
1.5	4.0	50	1.8	4		DP1241.5x4	DP1251.5x4	DP1261.5x4
1.5	4.0	50	1.8	6		DP1241.5x6	DP1251.5x6	DP1261.5x6
1.5	4.0	50	1.8	8		DP1241.5x8	DP1251.5x8	DP1261.5x8
2.0	4.0	50	2.2	8		DP1242.0x8	DP1252.0x8	DP1262.0x8
2.0	4.0	50	2.2	10		DP1242.0x10	DP1252.0x10	DP1262.0x10
2.0	4.0	50	2.2	12		DP1242.0x12	DP1252.0x12	DP1262.0x12
3.0	6.0	74	3.5	10		DP1243.0x10	DP1253.0x10	DP1263.0x10
3.0	6.0	74	3.5	12		DP1243.0x12	DP1253.0x12	DP1263.0x12
3.0	6.0	74	3.5	20		DP1243.0x20	DP1253.0x20	DP1263.0x20
4.0	6.0	74	4.5	12		DP1244.0x12	DP1254.0x12	DP1264.0x12
4.0	6.0	74	4.5	16		DP1244.0x16	DP1254.0x16	DP1264.0x16
4.0	6.0	74	4.5	20		DP1244.0x20	DP1254.0x20	DP1264.0x20

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

LONG NECK ENDMILL

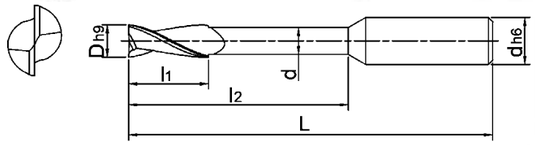
PROPERTIES & APPLICATION

DP127	HM	Z2	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}
DP128	HM	Z3	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}
DP129	HM	Z4	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data

- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유

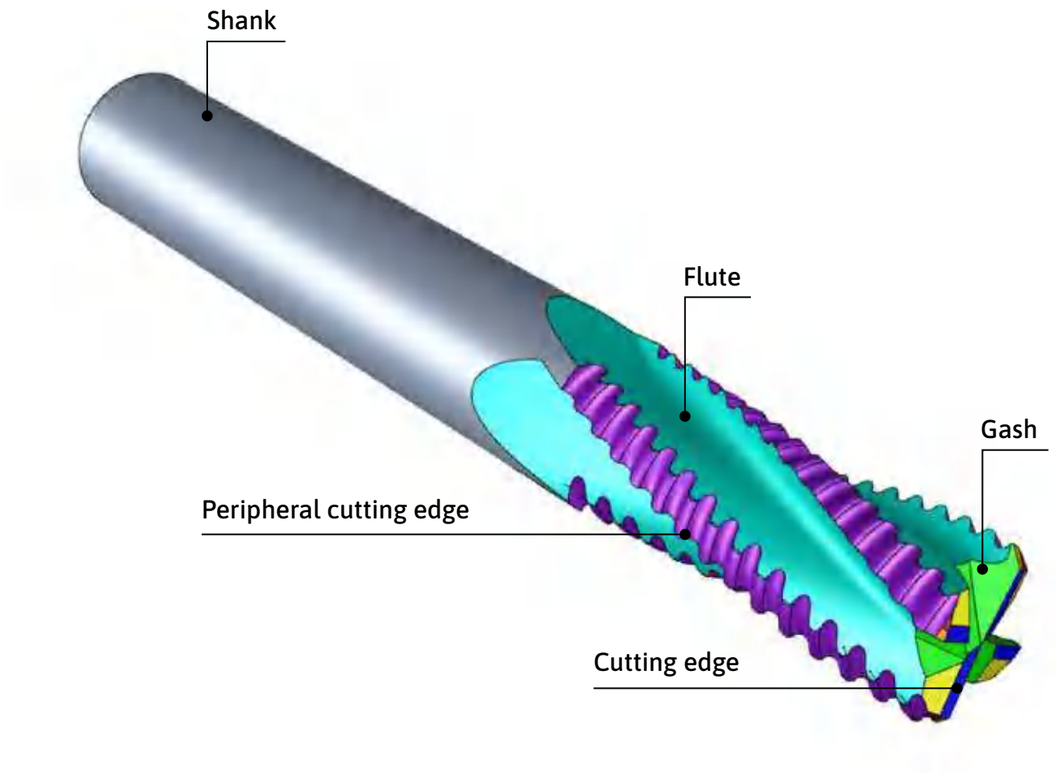


Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	Feed (mm / rev)	Code order DP127	DP128	DP129
1.0	4.0	50	1.5	4		DP1271.0x4	DP1281.0x4	DP1291.0x4
1.0	4.0	50	1.5	6		DP1271.0x6	DP1281.0x6	DP1291.0x6
1.0	4.0	50	1.5	8		DP1271.0x8	DP1281.0x8	DP1291.0x8
1.5	4.0	50	1.8	4		DP1271.5x4	DP1281.5x4	DP1291.5x4
1.5	4.0	50	1.8	6		DP1271.5x6	DP1281.5x6	DP1291.5x6
1.5	4.0	50	1.8	8		DP1271.5x8	DP1281.5x8	DP1291.5x8
2.0	4.0	50	2.2	8		DP1272.0x8	DP1282.0x8	DP1292.0x8
2.0	4.0	50	2.2	10		DP1272.0x10	DP1282.0x10	DP1292.0x10
2.0	4.0	50	2.2	12		DP1242.0x12	DP1282.0x12	DP1292.0x12
3.0	6.0	74	3.5	10		DP1273.0x10	DP1283.0x10	DP1293.0x10
3.0	6.0	74	3.5	12		DP1273.0x12	DP1283.0x12	DP1293.0x12
3.0	6.0	74	3.5	20		DP1273.0x20	DP1283.0x20	DP1293.0x20
4.0	6.0	74	4.5	12		DP1274.0x12	DP1284.0x12	DP1294.0x12
4.0	6.0	74	4.5	16		DP1274.0x16	DP1284.0x16	DP1294.0x16
4.0	6.0	74	4.5	20		DP1274.0x20	DP1284.0x20	DP1294.0x20

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
ROUGH ENDMILL



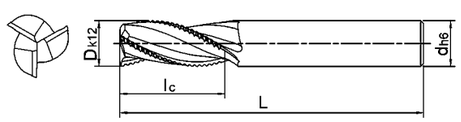
ROUGH ENDMILL

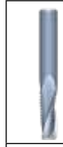
PROPERTIES & APPLICATION

DP130	HM	Z3	Helix 25°	D_{k12}	Shank d_{h6}			
DP131	HM	Z4	Helix 25°	D_{k12}	Shank d_{h6}			
DP132	HM	Z6	Helix 25°	D_{k12}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



DP130	DP131	DP132
		
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O					O	O	O			
V_c (m / min)	25 ~ 30	25 ~ 30					60 ~ 80	60 ~ 80	50 ~ 60			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP130	DP131	DP132
4	4	50	10	0.020	DP1304.0	DP1314.0	
5	5	50	13	0.025	DP1305.0	DP1315.0	
6	6	50	15	0.030	DP1306.0	DP1316.0	
8	8	50	20	0.040	DP1308.0	DP1318.0	
10	10	75	25	0.050	DP13010.0	DP13110.0	DP13210.0
12	12	75	30	0.060	DP13012.0	DP13112.0	DP13212.0
16	16	100	40	0.080	DP13016.0	DP13116.0	DP13216.0
20	20	100	45	0.080	DP13020.0	DP13120.0	DP13220.0
25	25	100	45	0.100	DP13025.0	DP13125.0	DP13225.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

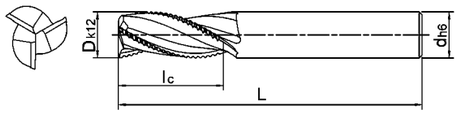
ROUGH ENDMILL

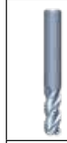
PROPERTIES & APPLICATION

DP133	HM	Z3	Helix 45°	D_{k12}	Shank d_{h6}	
DP134	HM	Z4	Helix 45°	D_{k12}	Shank d_{h6}	
DP135	HM	Z6	Helix 45°	D_{k12}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



DP133	DP134	DP135
		
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	25 ~ 30	25 ~ 30					120 ~ 150	120 ~ 150	100 ~ 120			

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP133	DP134	DP135
4	4	50	10	0.020	DP1334.0	DP1344.0	
5	5	50	13	0.025	DP1335.0	DP1345.0	
6	6	50	15	0.030	DP1336.0	DP1346.0	
8	8	50	20	0.040	DP1338.0	DP1348.0	
10	10	75	25	0.050	DP13310.0	DP13410.0	DP13510.0
12	12	75	30	0.060	DP13312.0	DP13412.0	DP13512.0
16	16	100	40	0.080	DP13316.0	DP13416.0	DP13516.0
20	20	100	45	0.080	DP13320.0	DP13420.0	DP13520.0
25	25	100	45	0.100	DP13325.0	DP13425.0	DP13525.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DP

ANMI SYNCHRONOUS SOLUTION

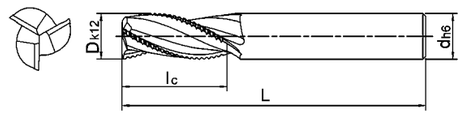
ROUGH ENDMILL

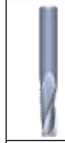
PROPERTIES & APPLICATION

DP136	HM	Z3	Helix 25°	D_{k12}	Shank d_{h6}	
DP137	HM	Z4	Helix 25°	D_{k12}	Shank d_{h6}	
DP138	HM	Z6	Helix 25°	D_{k12}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



DP136	DP137	DP138
		
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					○	○	○			
V_c (m / min)	25 ~ 30	25 ~ 30					60 ~ 80	60 ~ 80	50 ~ 60			

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP136	DP137	DP138
4	4	50	10	0.020	DP1364.0	DP1374.0	
5	5	50	13	0.025	DP1365.0	DP1375.0	
6	6	50	15	0.030	DP1366.0	DP1376.0	
8	8	50	20	0.040	DP1368.0	DP1378.0	
10	10	75	25	0.050	DP13610.0	DP13710.0	DP13810.0
12	12	75	30	0.060	DP13612.0	DP13712.0	DP13812.0
16	16	100	40	0.080	DP13616.0	DP13716.0	DP13816.0
20	20	100	45	0.080	DP13620.0	DP13720.0	DP13820.0
25	25	100	45	0.100	DP13625.0	DP13725.0	DP13825.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DP

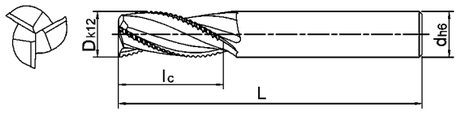
ROUGH ENDMILL

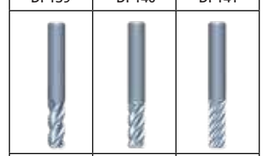
PROPERTIES & APPLICATION

DP139	HM	Z3	Helix 45⁰	D_{k12}	Shank d_{h6}				
DP140	HM	Z4	Helix 45⁰	D_{k12}	Shank d_{h6}				
DP141	HM	Z6	Helix 45⁰	D_{k12}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)





Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	25 ~ 30	25 ~ 30					120 ~ 150	120 ~ 150	100 ~ 120			

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP139	DP140	DP141
4	4	50	10	0.020	DP1394.0	DP1404.0	
5	5	50	13	0.025	DP1395.0	DP1405.0	
6	6	50	15	0.030	DP1396.0	DP1406.0	
8	8	50	20	0.040	DP1398.0	DP1408.0	
10	10	75	25	0.050	DP13910.0	DP14010.0	DP14110.0
12	12	75	30	0.060	DP13912.0	DP14012.0	DP14112.0
16	16	100	40	0.080	DP13916.0	DP14016.0	DP14116.0
20	20	100	45	0.080	DP13920.0	DP14020.0	DP14120.0
25	25	100	45	0.100	DP13925.0	DP14025.0	DP14125.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

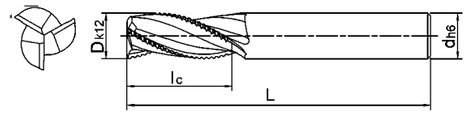
ANMI SYNCHRONOUS SOLUTION
ROUGH ENDMILL

PROPERTIES & APPLICATION

DP142	HM	Z3	AlTiCrn	Helix 25⁰	D_{k12}	Shank d_{h6}			
DP143	HM	Z4	AlTiCrn	Helix 25⁰	D_{k12}	Shank d_{h6}			
DP144	HM	Z6	AlTiCrn	Helix 25⁰	D_{k12}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	○	○				○	○	○
V_c (m / min)	50 ~ 60	50 ~ 60	45 ~ 55	45 ~ 55	30 ~ 40	30 ~ 40				20 ~ 30	20 ~ 30	20 ~ 30

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP142	DP143	DP144
4	4	50	10	0.020	DP1424.0	DP1434.0	
5	5	50	13	0.025	DP1425.0	DP1435.0	
6	6	50	15	0.030	DP1426.0	DP1436.0	
8	8	50	20	0.040	DP1428.0	DP1438.0	
10	10	75	25	0.050	DP14210.0	DP14310.0	DP14410.0
12	12	75	30	0.060	DP14212.0	DP14312.0	DP14412.0
16	16	100	40	0.080	DP14216.0	DP14316.0	DP14416.0
20	20	100	45	0.080	DP14320.0	DP14320.0	DP14420.0
25	25	100	45	0.100	DP14425.0	DP14325.0	DP14425.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

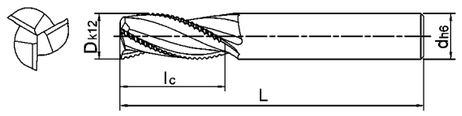
ROUGH ENDMILL

PROPERTIES & APPLICATION

DP145	HM	Z3	AlTiN	Helix 45°	D_{k12}	Shank d_{h6}			
DP146	HM	Z4	AlTiN	Helix 45°	D_{k12}	Shank d_{h6}			
DP147	HM	Z6	AlTiN	Helix 45°	D_{k12}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



DP145	DP146	DP147
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O				O	O	O
V_c (m / min)	30 ~ 50	30 ~ 50	25 ~ 40	25 ~ 40	20 ~ 40	20 ~ 40				20 ~ 30	20 ~ 30	20 ~ 30

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP145	DP146	DP147
4	4	50	10	0.020	DP1454.0	DP1464.0	
5	5	50	13	0.025	DP1455.0	DP1465.0	
6	6	50	15	0.030	DP1456.0	DP1466.0	
8	8	50	20	0.040	DP1458.0	DP1468.0	
10	10	75	25	0.050	DP14510.0	DP14610.0	DP14710.0
12	12	75	30	0.060	DP14512.0	DP14612.0	DP14712.0
16	16	100	40	0.080	DP14516.0	DP14616.0	DP14716.0
20	20	100	45	0.080	DP14520.0	DP14620.0	DP14720.0
25	25	100	45	0.100	DP14525.0	DP14625.0	DP14725.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

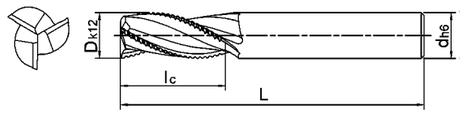
ROUGH ENDMILL

PROPERTIES & APPLICATION

DP148	HM	Z3	AlTiN	Helix 25°	D_{k12}	Shank d_{h6}			
DP149	HM	Z4	AlTiN	Helix 25°	D_{k12}	Shank d_{h6}			
DP150	HM	Z6	AlTiN	Helix 25°	D_{k12}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



DP148	DP149	DP150
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O				O	O	O
V_c (m / min)	50 ~ 60	50 ~ 60	45 ~ 55	45 ~ 55	30 ~ 40	30 ~ 40				20 ~ 30	20 ~ 30	20 ~ 30

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP148	DP149	DP150
4	4	50	10	0.020	DP1484.0	DP1494.0	
5	5	50	13	0.025	DP1485.0	DP1495.0	
6	6	50	15	0.030	DP1486.0	DP1496.0	
8	8	50	20	0.040	DP1488.0	DP1498.0	
10	10	75	25	0.050	DP14810.0	DP14910.0	DP15010.0
12	12	75	30	0.060	DP14812.0	DP14912.0	DP15012.0
16	16	100	40	0.080	DP14816.0	DP14916.0	DP15016.0
20	20	100	45	0.080	DP14820.0	DP14920.0	DP15020.0
25	25	100	45	0.100	DP14825.0	DP14925.0	DP15025.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

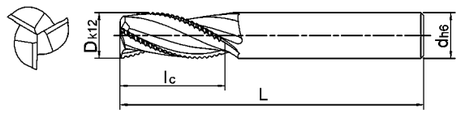
ROUGH ENDMILL

PROPERTIES & APPLICATION

DP151	HM	Z3	AlTiN	Helix 45⁰	D_{k12}	Shank d_{h6}				
DP152	HM	Z4	AlTiN	Helix 45⁰	D_{k12}	Shank d_{h6}				
DP153	HM	Z6	AlTiN	Helix 45⁰	D_{k12}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



DP151	DP152	DP153
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○				○	○	○
V_c (m / min)	30 ~ 50	30 ~ 50	25 ~ 40	25 ~ 40	20 ~ 40	20 ~ 40				20 ~ 30	20 ~ 30	20 ~ 30

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP151	DP152	DP153
4	4	50	10	0.020	DP1514.0	DP1524.0	
5	5	50	13	0.025	DP1515.0	DP1525.0	
6	6	50	15	0.030	DP1516.0	DP1526.0	
8	8	50	20	0.040	DP1518.0	DP1528.0	
10	10	75	25	0.050	DP15110.0	DP15210.0	DP15310.0
12	12	75	30	0.060	DP15112.0	DP15212.0	DP15312.0
16	16	100	40	0.080	DP15116.0	DP15216.0	DP15316.0
20	20	100	45	0.080	DP15120.0	DP15220.0	DP15320.0
25	25	100	45	0.100	DP15125.0	DP15225.0	DP15325.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

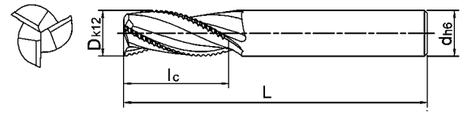
ROUGH ENDMILL

PROPERTIES & APPLICATION

DP154	HM	Z3	AlCr Blue	Helix 25⁰	D_{k12}	Shank d_{h6}				
DP155	HM	Z4	AlCr Blue	Helix 25⁰	D_{k12}	Shank d_{h6}				
DP156	HM	Z6	AlCr Blue	Helix 25⁰	D_{k12}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



DP154	DP155	DP156
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●					○	○				
V_c (m / min)	55~80	55~80					250~400	250~400				

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order DP154	DP155	DP156
4	4	50	10	0.020	DP1544.0	DP1554.0	
5	5	50	13	0.025	DP1545.0	DP1555.0	
6	6	50	15	0.030	DP1546.0	DP1556.0	
8	8	50	20	0.040	DP1548.0	DP1558.0	
10	10	75	25	0.050	DP15410.0	DP15510.0	DP15610.0
12	12	75	30	0.060	DP15412.0	DP15512.0	DP15612.0
16	16	100	40	0.080	DP1616.0	DP15516.0	DP15616.0
20	20	100	45	0.080	DP15420.0	DP15520.0	DP15620.0
25	25	100	45	0.100	DP15425.0	DP15525.0	DP15625.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DP

ROUGH ENDMILL

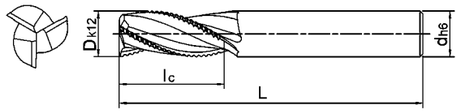
PROPERTIES & APPLICATION

DP157	HM	Z3	AlCr Blue	Helix 45⁰	D_{k12}	Shank d_{h6}			
DP158	HM	Z4	AlCr Blue	Helix 45⁰	D_{k12}	Shank d_{h6}			
DP159	HM	Z6	AlCr Blue	Helix 45⁰	D_{k12}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

DP157	DP158	DP159
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●					○	○				
V_c (m / min)	55~80	55~80					250~400	250~400				

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order		
					DP157	DP158	DP159
4	4	50	10	0.020	DP1574.0	DP1584.0	
5	5	50	13	0.025	DP1575.0	DP1585.0	
6	6	50	15	0.030	DP1576.0	DP1586.0	
8	8	50	20	0.040	DP1578.0	DP1588.0	
10	10	75	25	0.050	DP15710.0	DP15810.0	DP15910.0
12	12	75	30	0.060	DP15712.0	DP15812.0	DP15912.0
16	16	100	40	0.080	DP15716.0	DP15816.0	DP15916.0
20	20	100	45	0.080	DP15720.0	DP15820.0	DP15920.0
25	25	100	45	0.100	DP15725.0	DP15825.0	DP15925.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ROUGH ENDMILL

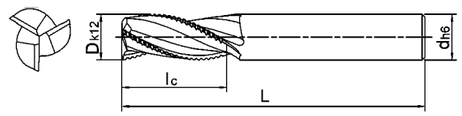
PROPERTIES & APPLICATION

DP160	HM	Z3	AlCr Blue	Helix 25⁰	D_{k12}	Shank d_{h6}			
DP161	HM	Z4	AlCr Blue	Helix 25⁰	D_{k12}	Shank d_{h6}			
DP162	HM	Z6	AlCr Blue	Helix 25⁰	D_{k12}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

DP160	DP161	DP162
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●					○	○				
V_c (m / min)	55~80	55~80					250~400	250~400				

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order		
					DP160	DP161	DP162
4	4	50	10	0.020	DP1604.0	DP1614.0	
5	5	50	13	0.025	DP1605.0	DP1615.0	
6	6	50	15	0.030	DP1606.0	DP1616.0	
8	8	50	20	0.040	DP1608.0	DP1618.0	
10	10	75	25	0.050	DP16010.0	DP16110.0	DP16210.0
12	12	75	30	0.060	DP16012.0	DP16112.0	DP16212.0
16	16	100	40	0.080	DP13016.0	DP16116.0	DP16216.0
20	20	100	45	0.080	DP13020.0	DP16120.0	DP16220.0
25	25	100	45	0.100	DP13025.0	DP16125.0	DP16225.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ROUGH ENDMILL

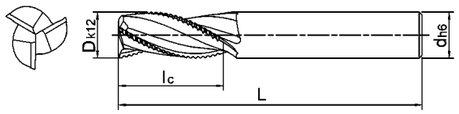
PROPERTIES & APPLICATION

DP163	HM	Z3	AlCr Blue	Helix 45°	D_{k12}	Shank d_{h6}				
DP164	HM	Z4	AlCr Blue	Helix 45°	D_{k12}	Shank d_{h6}				
DP165	HM	Z6	AlCr Blue	Helix 45°	D_{k12}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0.1	0
3 < D ≤ 6	0.12	0
6 < D ≤ 10	0.15	0
10 < D ≤ 18	0.18	0
18 < D ≤ 30	0.21	0

DP163	DP164	DP165
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Fine pitch chip breaker (HR)
- Lưỡi cắt qua tâm
- Biên dạng bẻ phoi bước mịn (HR)
- センターカット
- ファインピッチブレーカ（HR）
- 센터 커팅
- 미세 피치 칩 브레이커(HR)



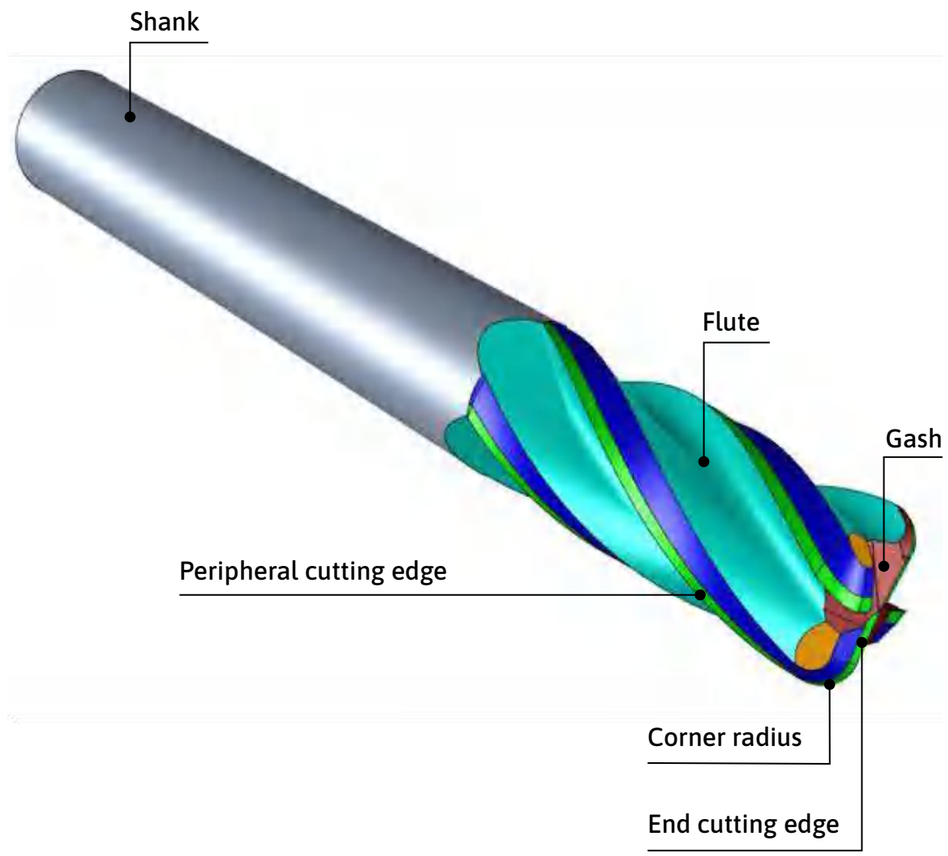
Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●					○	○				
V_c (m / min)	55~80	55~80					250~400	250~400				

D_{k12} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order		
					DP163	DP164	DP165
4	4	50	10	0.020	DP1634.0	DP1644.0	
5	5	50	13	0.025	DP1635.0	DP1645.0	
6	6	50	15	0.030	DP1636.0	DP1646.0	
8	8	50	20	0.040	DP1638.0	DP1648.0	
10	10	75	25	0.050	DP16310.0	DP16410.0	DP16510.0
12	12	75	30	0.060	DP16312.0	DP16412.0	DP16512.0
16	16	100	40	0.080	DP16316.0	DP16416.0	DP16516.0
20	20	100	45	0.080	DP16320.0	DP16420.0	DP16520.0
25	25	100	45	0.100	DP16325.0	DP16425.0	DP16525.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

Solid Carbide Tools
CORNER RADIUS ENDMILL



DP

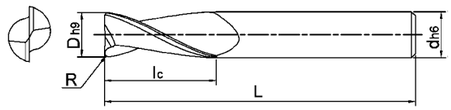
CORNER RADIUS ENDMILL

PROPERTIES & APPLICATION

DP166	HM	Z2	Helix 30°	D_{h9}	Shank d_{h6}			
DP167	HM	Z3	Helix 30°	D_{h9}	Shank d_{h6}			
DP168	HM	Z4	Helix 30°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP166	DP167	DP168
2.00-12.00	2.00-12.00	2.00-12.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					○	○	○			
V_c (m / min)	20 ~ 25	20 ~ 25					50 ~ 60	50 ~ 60	40 ~ 50			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP166	DP167	DP168
2.0	3.0	50	4	0.5	0.008	DP1662.0xR2.0	DP1673.0xR0.5	DP1682.0xR0.5
3.0	3.0	50	5	0.5	0.012	DP1663.0xR0.5	DP1673.0xR0.5	DP1683.0xR0.5
4.0	4.0	50	8	0.5	0.016	DP1664.0xR0.5	DP1674.0xR0.5	DP1684.0xR0.5
4.0	4.0	50	8	1.0	0.016	DP1664.0xR1.0	DP1674.0xR1.0	DP1684.0xR1.0
6.0	6.0	50	12	0.5	0.023	DP1666.0xR0.5	DP1676.0xR0.5	DP1686.0xR0.5
6.0	6.0	50	12	1.0	0.023	DP1666.0xR1.0	DP1676.0xR1.0	DP1686.0xR1.0
8.0	8.0	64	16	0.5	0.028	DP1668.0xR0.5	DP1678.0xR0.5	DP1688.0xR0.5
8.0	8.0	64	16	1.0	0.028	DP1668.0xR1.0	DP1678.0xR1.0	DP1688.0xR1.0
8.0	8.0	64	16	1.5	0.028	DP1668.0xR1.5	DP1678.0xR1.5	DP1688.0xR1.5
10.0	10.0	73	20	0.5	0.033	DP16610.0xR0.5	DP16710.0xR0.5	DP16810.0xR0.5
10.0	10.0	73	20	1.0	0.033	DP16610.0xR1.0	DP16710.0xR1.0	DP16810.0xR1.0
10.0	10.0	73	20	1.5	0.033	DP16610.0xR1.5	DP16710.0xR1.5	DP16810.0xR1.5
12.0	12.0	74	24	0.5	0.040	DP16612.0xR0.5	DP16712.0xR0.5	DP16812.0xR0.5
12.0	12.0	74	24	1.0	0.040	DP16612.0xR1.0	DP16712.0xR1.0	DP16812.0xR1.0
12.0	12.0	74	24	1.5	0.040	DP16612.0xR1.5	DP16712.0xR1.5	DP16812.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

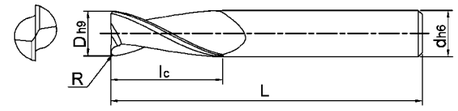
CORNER RADIUS ENDMILL

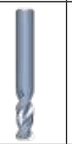
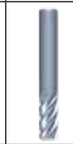
PROPERTIES & APPLICATION

DP169	HM	Z2	Helix 45°	D_{h9}	Shank d_{h6}			
DP170	HM	Z3	Helix 45°	D_{h9}	Shank d_{h6}			
DP171	HM	Z4	Helix 45°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP169	DP170	DP171
		
2.00-12.00	2.00-12.00	2.00-12.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	20 ~ 25	20 ~ 25					100 ~ 120	100 ~ 120	80 ~ 90			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP169	DP170	DP171
2.0	3.0	50	4	0.5	0.007	DP1692.0xR0.5	DP1702.0xR0.5	DP1712.0xR0.5
3.0	3.0	50	5	0.5	0.010	DP1693.0xR0.5	DP1703.0xR0.5	DP1713.0xR0.5
4.0	4.0	50	8	0.5	0.013	DP1694.0xR0.5	DP1704.0xR0.5	DP1714.0xR0.5
4.0	4.0	50	8	1.0	0.013	DP1694.0xR1.0	DP1704.0xR1.0	DP1714.0xR1.0
6.0	6.0	50	12	0.5	0.018	DP1696.0xR0.5	DP1706.0xR0.5	DP1716.0xR0.5
6.0	6.0	50	12	1.0	0.018	DP1696.0xR1.0	DP1706.0xR1.0	DP1716.0xR1.0
8.0	8.0	64	16	0.5	0.022	DP1698.0xR0.5	DP1708.0xR0.5	DP1718.0xR0.5
8.0	8.0	64	16	1.0	0.022	DP1698.0xR1.0	DP1708.0xR1.0	DP1718.0xR1.0
8.0	8.0	64	16	1.5	0.022	DP1698.0xR1.5	DP1708.0xR1.5	DP1718.0xR1.5
10.0	10.0	73	20	0.5	0.026	DP16910.0xR0.5	DP17010.0xR0.5	DP17110.0xR0.5
10.0	10.0	73	20	1.0	0.026	DP16910.0xR1.0	DP17010.0xR1.0	DP17110.0xR1.0
10.0	10.0	73	20	1.5	0.026	DP16910.0xR1.5	DP17010.0xR1.5	DP17110.0xR1.5
12.0	12.0	74	24	0.5	0.030	DP16912.0xR0.5	DP17012.0xR0.5	DP17112.0xR0.5
12.0	12.0	74	24	1.0	0.030	DP16912.0xR1.0	DP17012.0xR1.0	DP17112.0xR1.0
12.0	12.0	74	24	1.5	0.030	DP16912.0xR1.5	DP17012.0xR1.5	DP17112.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

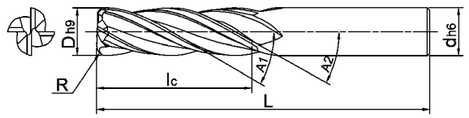
CORNER RADIUS ENDMILL

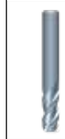
PROPERTIES & APPLICATION

DP172	HM	Z3	A1≠A2	D_{h9}	Shank d_{h6}			
DP173	HM	Z4	A1≠A2	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP172	DP173	
		
4.00-12.00	4.00-12.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O						
V_c (m / min)	30 ~ 40	30 ~ 40	30 ~ 35	30 ~ 35	25 ~ 30	25 ~ 30						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP172	DP173	
4.0	4.0	50	8	0.5	0.070	DP1724.0xR0.5	DP1734.0xR0.5	
4.0	4.0	50	8	1.0	0.070	DP1724.0xR1.0	DP1734.0xR1.0	
6.0	6.0	50	12	0.5	0.100	DP1726.0xR0.5	DP1736.0xR0.5	
6.0	6.0	50	12	1.0	0.100	DP1726.0xR1.0	DP1736.0xR1.0	
8.0	8.0	64	16	0.5	0.120	DP1728.0xR0.5	DP1738.0xR0.5	
8.0	8.0	64	16	1.0	0.120	DP1728.0xR1.0	DP1738.0xR1.0	
8.0	8.0	64	16	1.5	0.120	DP1728.0xR1.5	DP1738.0xR1.5	
10.0	10.0	73	20	0.5	0.150	DP17210.0xR0.5	DP17310.0xR0.5	
10.0	10.0	73	20	1.0	0.150	DP17210.0xR1.0	DP17310.0xR1.0	
10.0	10.0	73	20	1.5	0.150	DP17210.0xR1.5	DP17310.0xR1.5	
12.0	12.0	74	24	0.5	0.180	DP17212.0xR0.5	DP17312.0xR0.5	
12.0	12.0	74	24	1.0	0.180	DP17212.0xR1.0	DP17312.0xR1.0	
12.0	12.0	74	24	1.5	0.180	DP17212.0xR1.5	DP17312.0xR1.5	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

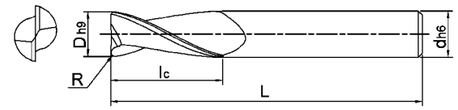
CORNER RADIUS ENDMILL

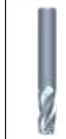
PROPERTIES & APPLICATION

DP174	HM	Z2	Helix 30°	D_{h9}	Shank d_{h6}			
DP175	HM	Z3	Helix 30°	D_{h9}	Shank d_{h6}			
DP176	HM	Z4	Helix 30°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP174	DP175	DP176
		
4.00-12.00	4.00-12.00	4.00-12.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O					O	O	O			
V_c (m / min)	30 ~ 40	30 ~ 40					60 ~ 80	60 ~ 80	50 ~ 60			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP174	DP175	DP176
4.0	4.0	50	8	0.5	0.016	DP1744.0xR0.5	DP1754.0xR0.5	DP1764.0xR0.5
4.0	4.0	50	8	1.0	0.016	DP1744.0xR1.0	DP1754.0xR1.0	DP1764.0xR1.0
6.0	6.0	50	12	0.5	0.023	DP1746.0xR0.5	DP1756.0xR0.5	DP1766.0xR0.5
6.0	6.0	50	12	1.0	0.023	DP1746.0xR1.0	DP1756.0xR1.0	DP1766.0xR1.0
8.0	8.0	64	16	0.5	0.028	DP1748.0xR0.5	DP1758.0xR0.5	DP1768.0xR0.5
8.0	8.0	64	16	1.0	0.028	DP1748.0xR1.0	DP1758.0xR1.0	DP1768.0xR1.0
8.0	8.0	64	16	1.5	0.028	DP1748.0xR1.5	DP1758.0xR1.5	DP1768.0xR1.5
10.0	10.0	73	20	0.5	0.033	DP17410.0xR0.5	DP17510.0xR0.5	DP17610.0xR0.5
10.0	10.0	73	20	1.0	0.033	DP17410.0xR1.0	DP17510.0xR1.0	DP17610.0xR1.0
10.0	10.0	73	20	1.5	0.033	DP17410.0xR1.5	DP17510.0xR1.5	DP17610.0xR1.5
12.0	12.0	74	24	0.5	0.040	DP17412.0xR0.5	DP17512.0xR0.5	DP17612.0xR0.5
12.0	12.0	74	24	1.0	0.040	DP17412.0xR1.0	DP17512.0xR1.0	DP17612.0xR1.0
12.0	12.0	74	24	1.5	0.040	DP17412.0xR1.5	DP17512.0xR1.5	DP17612.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

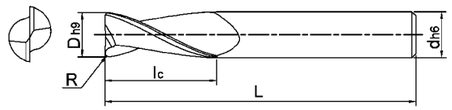
CORNER RADIUS ENDMILL

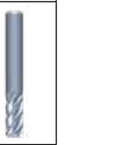
PROPERTIES & APPLICATION

DP177	HM	Z2	Helix 45°	D_{h9}	Shank d_{h6}	
DP178	HM	Z3	Helix 45°	D_{h9}	Shank d_{h6}	
DP179	HM	Z4	Helix 45°	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP177	DP178	DP179
		
4.00-12.00	4.00-12.00	4.00-12.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	30 ~ 40	30 ~ 40					120 ~ 150	120 ~ 150	90 ~ 100			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP177	DP178	DP179
4.0	4.0	50	8	0.5	0.013	DP1774.0xR0.5	DP1784.0xR0.5	DP1794.0xR0.5
4.0	4.0	50	8	1.0	0.013	DP1774.0xR1.0	DP1784.0xR1.0	DP1794.0xR1.0
6.0	6.0	50	12	0.5	0.018	DP1776.0xR0.5	DP1786.0xR0.5	DP1796.0xR0.5
6.0	6.0	50	12	1.0	0.018	DP1776.0xR1.0	DP1786.0xR1.0	DP1796.0xR1.0
8.0	8.0	64	16	0.5	0.022	DP1778.0xR0.5	DP1788.0xR0.5	DP1798.0xR0.5
8.0	8.0	64	16	1.0	0.022	DP1778.0xR1.0	DP1788.0xR1.0	DP1798.0xR1.0
8.0	8.0	64	16	1.5	0.022	DP1778.0xR1.5	DP1788.0xR1.5	DP1798.0xR1.5
10.0	10.0	73	20	0.5	0.026	DP17710.0xR0.5	DP17810.0xR0.5	DP17910.0xR0.5
10.0	10.0	73	20	1.0	0.026	DP17710.0xR1.0	DP17810.0xR1.0	DP17910.0xR1.0
10.0	10.0	73	20	1.5	0.026	DP17710.0xR1.5	DP17810.0xR1.5	DP17910.0xR1.5
12.0	12.0	74	24	0.5	0.030	DP17712.0xR0.5	DP17812.0xR0.5	DP17912.0xR0.5
12.0	12.0	74	24	1.0	0.030	DP17712.0xR1.0	DP17812.0xR1.0	DP17912.0xR1.0
12.0	12.0	74	24	1.5	0.030	DP17712.0xR1.5	DP17812.0xR1.5	DP17912.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

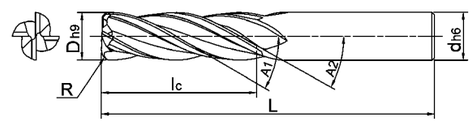
ANMI SYNCHRONOUS SOLUTION
CORNER RADIUS ENDMILL

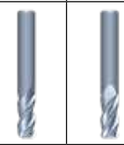
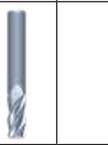
PROPERTIES & APPLICATION

DP180	HM	Z3	A1≠A2	D_{h9}	Shank d_{h6}	
DP181	HM	Z4	A1≠A2	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP180	DP181	
		
4.00-12.00	4.00-12.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP180	DP181	
4.0	4.0	50	8	0.5	0.070	DP1804.0xR0.5	DP1814.0xR0.5	
4.0	4.0	50	8	1.0	0.070	DP1804.0xR1.0	DP1814.0xR1.0	
6.0	6.0	50	12	0.5	0.100	DP1806.0xR0.5	DP1816.0xR0.5	
6.0	6.0	50	12	1.0	0.100	DP1806.0xR1.0	DP1816.0xR1.0	
8.0	8.0	64	16	0.5	0.120	DP1808.0xR0.5	DP1818.0xR0.5	
8.0	8.0	64	16	1.0	0.120	DP1808.0xR1.0	DP1818.0xR1.0	
8.0	8.0	64	16	1.5	0.120	DP1808.0xR1.5	DP1818.0xR1.5	
10.0	10.0	73	20	0.5	0.150	DP18010.0xR0.5	DP18110.0xR0.5	
10.0	10.0	73	20	1.0	0.150	DP18010.0xR1.0	DP18110.0xR1.0	
10.0	10.0	73	20	1.5	0.150	DP18010.0xR1.5	DP18110.0xR1.5	
12.0	12.0	74	24	0.5	0.180	DP18012.0xR0.5	DP18112.0xR0.5	
12.0	12.0	74	24	1.0	0.180	DP18012.0xR1.0	DP18112.0xR1.0	
12.0	12.0	74	24	1.5	0.180	DP18012.0xR1.5	DP18112.0xR1.5	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

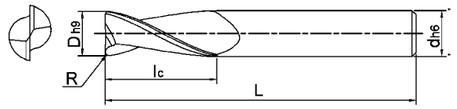
CORNER RADIUS ENDMILL

PROPERTIES & APPLICATION

DP182	HM	Z2	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}			
DP183	HM	Z3	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}			
DP184	HM	Z4	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP182	DP183	DP184
2.00-12.00	2.00-12.00	2.00-12.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	○	○				○	○	○
V_c (m / min)	40 ~ 50	40 ~ 50	30 ~ 35	30 ~ 35	25 ~ 30	25 ~ 30				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP182	DP183	DP184
2.0	3.0	50	4	0.5	0.019	DP1822.0xR0.5	DP1832.0xR0.5	DP1842.0xR0.5
3.0	3.0	50	5	0.5	0.027	DP1823.0xR0.5	DP1833.0xR0.5	DP1843.0xR0.5
4.0	4.0	50	8	0.5	0.036	DP1824.0xR0.5	DP1834.0xR0.5	DP1844.0xR0.5
4.0	4.0	50	8	1.0	0.036	DP1824.0xR1.0	DP1834.0xR1.0	DP1844.0xR1.0
6.0	6.0	50	12	0.5	0.051	DP1826.0xR0.5	DP1836.0xR0.5	DP1846.0xR0.5
6.0	6.0	50	12	1.0	0.051	DP1826.0xR1.0	DP1836.0xR1.0	DP1846.0xR1.0
8.0	8.0	64	16	0.5	0.063	DP1828.0xR0.5	DP1838.0xR0.5	DP1848.0xR0.5
8.0	8.0	64	16	1.0	0.063	DP1828.0xR1.0	DP1838.0xR1.0	DP1848.0xR1.0
8.0	8.0	64	16	1.5	0.063	DP1828.0xR1.5	DP1838.0xR1.5	DP1848.0xR1.5
10.0	10.0	73	20	0.5	0.073	DP18210.0xR0.5	DP18310.0xR0.5	DP18410.0xR0.5
10.0	10.0	73	20	1.0	0.073	DP18210.0xR1.0	DP18310.0xR1.0	DP18410.0xR1.0
10.0	10.0	73	20	1.5	0.073	DP18210.0xR1.5	DP18310.0xR1.5	DP18410.0xR1.5
12.0	12.0	74	24	0.5	0.080	DP18212.0xR0.5	DP18312.0xR0.5	DP18412.0xR0.5
12.0	12.0	74	24	1.0	0.080	DP18212.0xR1.0	DP18312.0xR1.0	DP18412.0xR1.0
12.0	12.0	74	24	1.5	0.080	DP18212.0xR1.5	DP18312.0xR1.5	DP18412.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

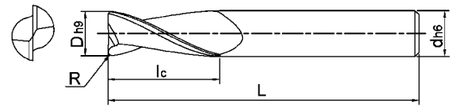
CORNER RADIUS ENDMILL

PROPERTIES & APPLICATION

DP185	HM	Z2	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}			
DP186	HM	Z3	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}			
DP187	HM	Z4	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP185	DP186	DP187
2.00-12.00	2.00-12.00	2.00-12.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○				○	○	○
V_c (m / min)	30 ~ 40	30 ~ 40	20 ~ 25	20 ~ 25	15 ~ 25	15 ~ 25				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP185	DP186	DP187
2.0	3.0	50	4	0.5	0.014	DP1852.0xR0.5	DP1862.0xR0.5	DP1872.0xR0.5
3.0	3.0	50	5	0.5	0.021	DP1853.0xR0.5	DP1863.0xR0.5	DP1873.0xR0.5
4.0	4.0	50	8	0.5	0.027	DP1854.0xR0.5	DP1864.0xR0.5	DP1874.0xR0.5
4.0	4.0	50	8	1.0	0.027	DP1854.0xR1.0	DP1864.0xR1.0	DP1874.0xR1.0
6.0	6.0	50	12	0.5	0.038	DP1856.0xR0.5	DP1866.0xR0.5	DP1876.0xR0.5
6.0	6.0	50	12	1.0	0.038	DP1856.0xR1.0	DP1866.0xR1.0	DP1876.0xR1.0
8.0	8.0	64	16	0.5	0.047	DP1858.0xR0.5	DP1868.0xR0.5	DP1878.0xR0.5
8.0	8.0	64	16	1.0	0.047	DP1858.0xR1.0	DP1868.0xR1.0	DP1878.0xR1.0
8.0	8.0	64	16	1.5	0.047	DP1858.0xR1.5	DP1868.0xR1.5	DP1878.0xR1.5
10.0	10.0	73	20	0.5	0.055	DP18510.0xR0.5	DP18610.0xR0.5	DP18710.0xR0.5
10.0	10.0	73	20	1.0	0.055	DP18510.0xR1.0	DP18610.0xR1.0	DP18710.0xR1.0
10.0	10.0	73	20	1.5	0.055	DP18510.0xR1.5	DP18610.0xR1.5	DP18710.0xR1.5
12.0	12.0	74	24	0.5	0.063	DP18512.0xR0.5	DP18612.0xR0.5	DP18712.0xR0.5
12.0	12.0	74	24	1.0	0.063	DP18512.0xR1.0	DP18612.0xR1.0	DP18712.0xR1.0
12.0	12.0	74	24	1.5	0.063	DP18512.0xR1.5	DP18612.0xR1.5	DP18712.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

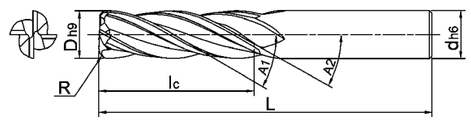
CORNER RADIUS ENDMILL

PROPERTIES & APPLICATION

DP188	HM	Z3	AlTiN	A1≠A2	D_{h9}	Shank d_{h6}			
DP189	HM	Z4	AlTiN	A1≠A2	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP188	DP189	
4.00-12.00	4.00-12.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40				25 ~ 30	25 ~ 30	25 ~ 30

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP188	DP189	
4.0	4.0	50	8	0.5	0.053	DP1884.0xR0.5	DP1894.0xR0.5	
4.0	4.0	50	8	1.0	0.053	DP1884.0xR1.0	DP1894.0xR1.0	
6.0	6.0	50	12	0.5	0.076	DP1886.0xR0.5	DP1896.0xR0.5	
6.0	6.0	50	12	1.0	0.076	DP1886.0xR1.0	DP1896.0xR1.0	
8.0	8.0	64	16	0.5	0.094	DP1888.0xR0.5	DP1898.0xR0.5	
8.0	8.0	64	16	1.0	0.094	DP1888.0xR1.0	DP1898.0xR1.0	
8.0	8.0	64	16	1.5	0.094	DP1888.0xR1.5	DP1898.0xR1.5	
10.0	10.0	73	20	0.5	0.110	DP18810.0xR0.5	DP18910.0xR0.5	
10.0	10.0	73	20	1.0	0.110	DP18810.0xR1.0	DP18910.0xR1.0	
10.0	10.0	73	20	1.5	0.110	DP18810.0xR1.5	DP18910.0xR1.5	
12.0	12.0	74	24	0.5	0.126	DP18812.0xR0.5	DP18912.0xR0.5	
12.0	12.0	74	24	1.0	0.126	DP18812.0xR1.0	DP18912.0xR1.0	
12.0	12.0	74	24	1.5	0.126	DP18812.0xR1.5	DP18912.0xR1.5	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

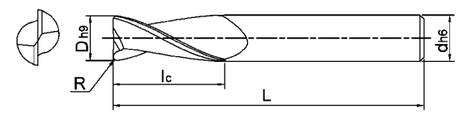
CORNER RADIUS ENDMILL

PROPERTIES & APPLICATION

DP190	HM	Z2	AlTiN	Helix 30⁰	D_{h9}	Shank d_{h6}			
DP191	HM	Z3	AlTiN	Helix 30⁰	D_{h9}	Shank d_{h6}			
DP192	HM	Z4	AlTiN	Helix 30⁰	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP190	DP191	DP192
4.00-12.00	4.00-12.00	4.00-12.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP190	DP191	DP192
4.0	4.0	50	8	0.5	0.036	DP1904.0xR0.5	DP1914.0xR0.5	DP1924.0xR0.5
4.0	4.0	50	8	1.0	0.036	DP1904.0xR1.0	DP1914.0xR1.0	DP1924.0xR1.0
6.0	6.0	50	12	0.5	0.051	DP1906.0xR0.5	DP1916.0xR0.5	DP1926.0xR0.5
6.0	6.0	50	12	1.0	0.051	DP1906.0xR1.0	DP1916.0xR1.0	DP1926.0xR1.0
8.0	8.0	64	16	0.5	0.063	DP1908.0xR0.5	DP1918.0xR0.5	DP1928.0xR0.5
8.0	8.0	64	16	1.0	0.063	DP1908.0xR1.0	DP1918.0xR1.0	DP1928.0xR1.0
8.0	8.0	64	16	1.5	0.063	DP1908.0xR1.5	DP1918.0xR1.5	DP1928.0xR1.5
10.0	10.0	73	20	0.5	0.073	DP19010.0xR0.5	DP19110.0xR0.5	DP19210.0xR0.5
10.0	10.0	73	20	1.0	0.073	DP19010.0xR1.0	DP19110.0xR1.0	DP19210.0xR1.0
10.0	10.0	73	20	1.5	0.073	DP19010.0xR1.5	DP19110.0xR1.5	DP19210.0xR1.5
12.0	12.0	74	24	0.5	0.080	DP19012.0xR0.5	DP19112.0xR0.5	DP19212.0xR0.5
12.0	12.0	74	24	1.0	0.080	DP19012.0xR1.0	DP19112.0xR1.0	DP19212.0xR1.0
12.0	12.0	74	24	1.5	0.080	DP19012.0xR1.5	DP19112.0xR1.5	DP19212.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

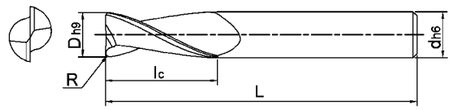
CORNER RADIUS ENDMILL

PROPERTIES & APPLICATION

DP193	HM	Z2	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}
DP194	HM	Z3	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}
DP195	HM	Z4	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP193	DP194	DP195
4.00-12.00	4.00-12.00	4.00-12.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○				○	○	○
V_c (m / min)	30 ~ 40	30 ~ 40	20 ~ 25	20 ~ 25	15 ~ 25	15 ~ 25				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP193	DP194	DP195
4.0	4.0	50	8	0.5	0.027	DP1934.0xR0.5	DP1944.0xR0.5	DP1954.0xR0.5
4.0	4.0	50	8	1.0	0.027	DP1934.0xR1.0	DP1944.0xR1.0	DP1954.0xR1.0
6.0	6.0	50	12	0.5	0.038	DP1936.0xR0.5	DP1946.0xR0.5	DP1956.0xR0.5
6.0	6.0	50	12	1.0	0.038	DP1936.0xR1.0	DP1946.0xR1.0	DP1956.0xR1.0
8.0	8.0	64	16	0.5	0.047	DP1938.0xR0.5	DP1948.0xR0.5	DP1958.0xR0.5
8.0	8.0	64	16	1.0	0.047	DP1938.0xR1.0	DP1948.0xR1.0	DP1958.0xR1.0
8.0	8.0	64	16	1.5	0.047	DP1938.0xR1.5	DP1948.0xR1.5	DP1958.0xR1.5
10.0	10.0	73	20	0.5	0.055	DP19310.0xR0.5	DP19410.0xR0.5	DP19510.0xR0.5
10.0	10.0	73	20	1.0	0.055	DP19310.0xR1.0	DP19410.0xR1.0	DP19510.0xR1.0
10.0	10.0	73	20	1.5	0.055	DP19310.0xR1.5	DP19410.0xR1.5	DP19510.0xR1.5
12.0	12.0	74	24	0.5	0.063	DP19312.0xR0.5	DP19412.0xR0.5	DP19512.0xR0.5
12.0	12.0	74	24	1.0	0.063	DP19312.0xR1.0	DP19412.0xR1.0	DP19512.0xR1.0
12.0	12.0	74	24	1.5	0.063	DP19312.0xR1.5	DP19412.0xR1.5	DP19512.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

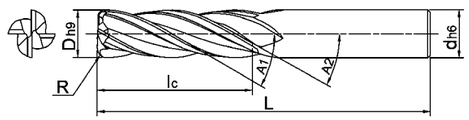
CORNER RADIUS ENDMILL

PROPERTIES & APPLICATION

DP196	HM	Z3	AlTiN	A1≠A2	D_{h9}	Shank d_{h6}
DP197	HM	Z4	AlTiN	A1≠A2	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP196	DP197	
4.00-12.00	4.00-12.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				25 ~ 30	25 ~ 30	25 ~ 30

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP196	DP197	
4.0	4.0	50	8	0.5	0.053	DP1964.0xR0.5	DP1974.0xR0.5	
4.0	4.0	50	8	1.0	0.053	DP1964.0xR1.0	DP1974.0xR1.0	
6.0	6.0	50	12	0.5	0.076	DP1966.0xR0.5	DP1976.0xR0.5	
6.0	6.0	50	12	1.0	0.076	DP1966.0xR1.0	DP1976.0xR1.0	
8.0	8.0	64	16	0.5	0.094	DP1968.0xR0.5	DP1978.0xR0.5	
8.0	8.0	64	16	1.0	0.094	DP1968.0xR1.0	DP1978.0xR1.0	
8.0	8.0	64	16	1.5	0.094	DP1968.0xR1.5	DP1978.0xR1.5	
10.0	10.0	73	20	0.5	0.110	DP19610.0xR0.5	DP19710.0xR0.5	
10.0	10.0	73	20	1.0	0.110	DP19610.0xR1.0	DP19710.0xR1.0	
10.0	10.0	73	20	1.5	0.110	DP19610.0xR1.5	DP19710.0xR1.5	
12.0	12.0	74	24	0.5	0.126	DP19612.0xR0.5	DP19712.0xR0.5	
12.0	12.0	74	24	1.0	0.126	DP19612.0xR1.0	DP19712.0xR1.0	
12.0	12.0	74	24	1.5	0.126	DP19612.0xR1.5	DP19712.0xR1.5	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

CORNER RADIUS ENDMILL

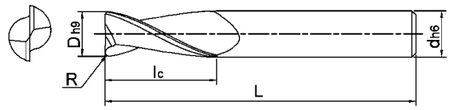
PROPERTIES & APPLICATION

DP198	HM	Z2	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}			
DP199	HM	Z3	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}			
DP200	HM	Z4	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP198	DP199	DP200
2.00-12.00	2.00-12.00	2.00-12.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP198	DP199	DP200
2.0	3.0	50	4	0.5	0.008	DP1982.0xR0.5	DP1992.0xR0.5	DP2002.0xR0.5
3.0	3.0	50	5	0.5	0.012	DP1983.0xR0.5	DP1993.0xR0.5	DP2003.0xR0.5
4.0	4.0	50	8	0.5	0.016	DP1984.0xR0.5	DP1994.0xR0.5	DP2004.0xR0.5
4.0	4.0	50	8	1.0	0.016	DP1984.0xR1.0	DP1994.0xR1.0	DP2004.0xR1.0
6.0	6.0	50	12	0.5	0.023	DP1986.0xR0.5	DP1996.0xR0.5	DP2006.0xR0.5
6.0	6.0	50	12	1.0	0.023	DP1986.0xR1.0	DP1996.0xR1.0	DP2006.0xR1.0
8.0	8.0	64	16	0.5	0.028	DP1988.0xR0.5	DP1998.0xR0.5	DP2008.0xR0.5
8.0	8.0	64	16	1.0	0.028	DP1988.0xR1.0	DP1998.0xR1.0	DP2008.0xR1.0
8.0	8.0	64	16	1.5	0.028	DP1988.0xR1.5	DP1998.0xR1.5	DP2008.0xR1.5
10.0	10.0	73	20	0.5	0.033	DP19810.0xR0.5	DP19910.0xR0.5	DP20010.0xR0.5
10.0	10.0	73	20	1.0	0.033	DP19810.0xR1.0	DP19910.0xR1.0	DP20010.0xR1.0
10.0	10.0	73	20	1.5	0.033	DP19810.0xR1.5	DP19910.0xR1.5	DP20010.0xR1.5
12.0	12.0	74	24	0.5	0.040	DP19812.0xR0.5	DP19912.0xR0.5	DP20012.0xR0.5
12.0	12.0	74	24	1.0	0.040	DP19812.0xR1.0	DP19912.0xR1.0	DP20012.0xR1.0
12.0	12.0	74	24	1.5	0.040	DP19812.0xR1.5	DP19912.0xR1.5	DP20012.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

SYNCHRONOUS SOLUTION

CORNER RADIUS ENDMILL

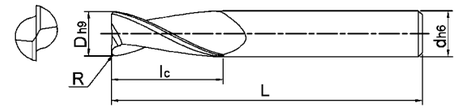
PROPERTIES & APPLICATION

DP201	HM	Z2	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}			
DP202	HM	Z3	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}			
DP203	HM	Z4	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP201	DP202	DP203
2.00-12.00	2.00-12.00	2.00-12.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP201	DP202	DP203
2.0	3.0	50	4	0.5	0.014	DP2012.0xR0.5	DP2022.0xR0.5	DP2032.0xR0.5
3.0	3.0	50	5	0.5	0.021	DP2013.0xR0.5	DP2023.0xR0.5	DP2033.0xR0.5
4.0	4.0	50	8	0.5	0.027	DP2014.0xR0.5	DP2024.0xR0.5	DP2034.0xR0.5
4.0	4.0	50	8	1.0	0.027	DP2014.0xR1.0	DP2024.0xR1.0	DP2034.0xR1.0
6.0	6.0	50	12	0.5	0.038	DP2016.0xR0.5	DP2026.0xR0.5	DP2036.0xR0.5
6.0	6.0	50	12	1.0	0.038	DP2016.0xR1.0	DP2026.0xR1.0	DP2036.0xR1.0
8.0	8.0	64	16	0.5	0.047	DP2018.0xR0.5	DP2028.0xR0.5	DP2038.0xR0.5
8.0	8.0	64	16	1.0	0.047	DP2018.0xR1.0	DP2028.0xR1.0	DP2038.0xR1.0
8.0	8.0	64	16	1.5	0.047	DP2018.0xR1.5	DP2028.0xR1.5	DP2038.0xR1.5
10.0	10.0	73	20	0.5	0.055	DP20110.0xR0.5	DP20210.0xR0.5	DP20310.0xR0.5
10.0	10.0	73	20	1.0	0.055	DP20110.0xR1.0	DP20210.0xR1.0	DP20310.0xR1.0
10.0	10.0	73	20	1.5	0.055	DP20110.0xR1.5	DP20210.0xR1.5	DP20310.0xR1.5
12.0	12.0	74	24	0.5	0.063	DP20112.0xR0.5	DP20212.0xR0.5	DP20312.0xR0.5
12.0	12.0	74	24	1.0	0.063	DP20112.0xR1.0	DP20212.0xR1.0	DP20312.0xR1.0
12.0	12.0	74	24	1.5	0.063	DP20112.0xR1.5	DP20212.0xR1.5	DP20312.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

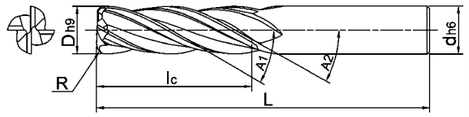
CORNER RADIUS ENDMILL

PROPERTIES & APPLICATION

DP204	HM	Z3	AlCr Blue	A1≠A2	D_{h9}	Shank d_{h6}			
DP205	HM	Z4	AlCr Blue	A1≠A2	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP204	DP205	
2.00-12.00	2.00-12.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP204	DP205	
4.0	4.0	50	8	0.5	0.053	DP2044.0xR0.5	DP2054.0xR0.5	
4.0	4.0	50	8	1.0	0.053	DP2044.0xR1.0	DP2054.0xR1.0	
6.0	6.0	50	12	0.5	0.076	DP2046.0xR0.5	DP2056.0xR0.5	
6.0	6.0	50	12	1.0	0.076	DP2046.0xR1.0	DP2056.0xR1.0	
8.0	8.0	64	16	0.5	0.094	DP2048.0xR0.5	DP2058.0xR0.5	
8.0	8.0	64	16	1.0	0.094	DP2048.0xR1.0	DP2058.0xR1.0	
8.0	8.0	64	16	1.5	0.094	DP2048.0xR1.5	DP2058.0xR1.5	
10.0	10.0	73	20	0.5	0.110	DP20410.0xR0.5	DP20510.0xR0.5	
10.0	10.0	73	20	1.0	0.110	DP20410.0xR1.0	DP20510.0xR1.0	
10.0	10.0	73	20	1.5	0.110	DP20410.0xR1.5	DP20510.0xR1.5	
12.0	12.0	74	24	0.5	0.126	DP20412.0xR0.5	DP20512.0xR0.5	
12.0	12.0	74	24	1.0	0.126	DP20412.0xR1.0	DP20512.0xR1.0	
12.0	12.0	74	24	1.5	0.126	DP20412.0xR1.5	DP20512.0xR1.5	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

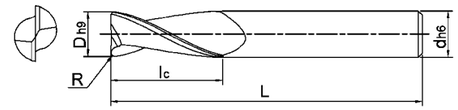
CORNER RADIUS ENDMILL

PROPERTIES & APPLICATION

DP206	HM	Z2	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}			
DP207	HM	Z3	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}			
DP208	HM	Z4	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP206	DP207	DP208
2.00-12.00	2.00-12.00	2.00-12.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP206	DP207	DP208
4.0	4.0	50	8	0.5	0.016	DP2064.0xR0.5	DP2074.0xR0.5	DP2084.0xR0.5
4.0	4.0	50	8	1.0	0.016	DP2064.0xR1.0	DP2074.0xR1.0	DP2084.0xR1.0
6.0	6.0	50	12	0.5	0.023	DP2066.0xR0.5	DP2076.0xR0.5	DP2086.0xR0.5
6.0	6.0	50	12	1.0	0.023	DP2066.0xR1.0	DP2076.0xR1.0	DP2086.0xR1.0
8.0	8.0	64	16	0.5	0.028	DP2068.0xR0.5	DP2078.0xR0.5	DP2088.0xR0.5
8.0	8.0	64	16	1.0	0.028	DP2068.0xR1.0	DP2078.0xR1.0	DP2088.0xR1.0
8.0	8.0	64	16	1.5	0.028	DP2068.0xR1.5	DP2078.0xR1.5	DP2088.0xR1.5
10.0	10.0	73	20	0.5	0.033	DP20610.0xR0.5	DP20710.0xR0.5	DP20810.0xR0.5
10.0	10.0	73	20	1.0	0.033	DP20610.0xR1.0	DP20710.0xR1.0	DP20810.0xR1.0
10.0	10.0	73	20	1.5	0.033	DP20610.0xR1.5	DP20710.0xR1.5	DP20810.0xR1.5
12.0	12.0	74	24	0.5	0.035	DP20612.0xR0.5	DP20712.0xR0.5	DP20812.0xR0.5
12.0	12.0	74	24	1.0	0.035	DP20612.0xR1.0	DP20712.0xR1.0	DP20812.0xR1.0
12.0	12.0	74	24	1.5	0.035	DP20612.0xR1.5	DP20712.0xR1.5	DP20812.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

CORNER RADIUS ENDMILL

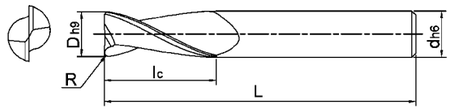
PROPERTIES & APPLICATION

DP209	HM	Z2	AlCr Blue	Helix 45°	D_{h9}	Shank d_{h6}
DP210	HM	Z3	AlCr Blue	Helix 45°	D_{h9}	Shank d_{h6}
DP211	HM	Z4	AlCr Blue	Helix 45°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP209	DP210	DP211
4.00-12.00	4.00-12.00	4.00-12.00

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●	○	○	○	●	●	●
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40	100 ~ 120	100 ~ 120	80 ~ 90	30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP209	DP210	DP211
4.0	4.0	50	8	0.5	0.027	DP2094.0xR0.5	DP2104.0xR0.5	DP2114.0xR0.5
4.0	4.0	50	8	1.0	0.027	DP2094.0xR1.0	DP2104.0xR1.0	DP2114.0xR1.0
6.0	6.0	50	12	0.5	0.038	DP2096.0xR0.5	DP2106.0xR0.5	DP2116.0xR0.5
6.0	6.0	50	12	1.0	0.038	DP2096.0xR1.0	DP2106.0xR1.0	DP2116.0xR1.0
8.0	8.0	64	16	0.5	0.047	DP2098.0xR0.5	DP2108.0xR0.5	DP2118.0xR0.5
8.0	8.0	64	16	1.0	0.047	DP2098.0xR1.0	DP2108.0xR1.0	DP2118.0xR1.0
8.0	8.0	64	16	1.5	0.047	DP2098.0xR1.5	DP2108.0xR1.5	DP2118.0xR1.5
10.0	10.0	73	20	0.5	0.055	DP20910.0xR0.5	DP21010.0xR0.5	DP21110.0xR0.5
10.0	10.0	73	20	1.0	0.055	DP20910.0xR1.0	DP21010.0xR1.0	DP21110.0xR1.0
10.0	10.0	73	20	1.5	0.055	DP20910.0xR1.5	DP21010.0xR1.5	DP21110.0xR1.5
12.0	12.0	74	24	0.5	0.063	DP20912.0xR0.5	DP21012.0xR0.5	DP21112.0xR0.5
12.0	12.0	74	24	1.0	0.063	DP20912.0xR1.0	DP21012.0xR1.0	DP21112.0xR1.0
12.0	12.0	74	24	1.5	0.063	DP20912.0xR1.5	DP21012.0xR1.5	DP21112.0xR1.5

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

CORNER RADIUS ENDMILL

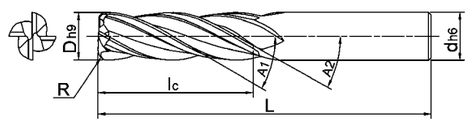
PROPERTIES & APPLICATION

DP212	HM	Z3	AlCr Blue	A1≠A2	D_{h9}	Shank d_{h6}	
DP213	HM	Z4	AlCr Blue	A1≠A2	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP212	DP213	
4.00-12.00	4.00-12.00	

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍

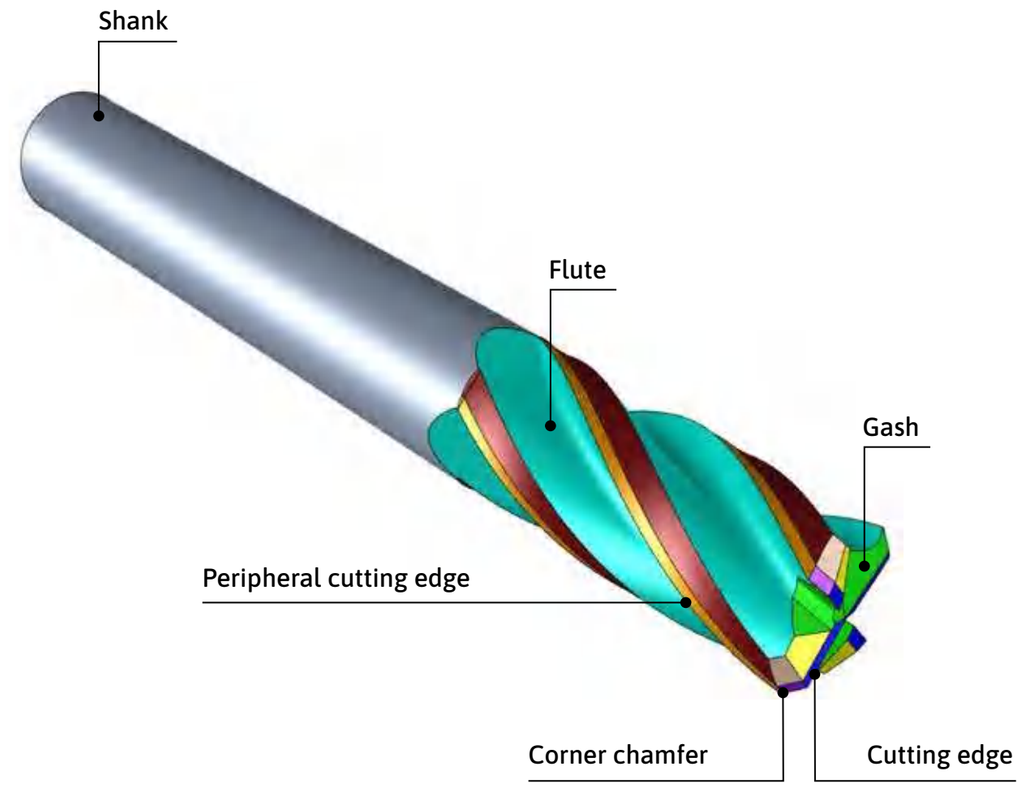


Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				●	●	●
V_c (m / min)	80 ~ 100	80 ~ 100	60 ~ 80	60 ~ 80	50 ~ 65	50 ~ 65				50 ~ 60	50 ~ 60	50 ~ 60

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DP212	DP213	
4.0	4.0	50	8	0.5	0.053	DP2124.0xR0.5	DP2134.0xR0.5	
4.0	4.0	50	8	1.0	0.053	DP2124.0xR1.0	DP2134.0xR1.0	
6.0	6.0	50	12	0.5	0.076	DP2126.0xR0.5	DP2136.0xR0.5	
6.0	6.0	50	12	1.0	0.076	DP2126.0xR1.0	DP2136.0xR1.0	
8.0	8.0	64	16	0.5	0.094	DP2128.0xR0.5	DP2138.0xR0.5	
8.0	8.0	64	16	1.0	0.094	DP2128.0xR1.0	DP2138.0xR1.0	
8.0	8.0	64	16	1.5	0.094	DP2128.0xR1.5	DP2138.0xR1.5	
10.0	10.0	73	20	0.5	0.110	DP21210.0xR0.5	DP21310.0xR0.5	
10.0	10.0	73	20	1.0	0.110	DP21210.0xR1.0	DP21310.0xR1.0	
10.0	10.0	73	20	1.5	0.110	DP21210.0xR1.5	DP21310.0xR1.5	
12.0	12.0	74	24	0.5	0.126	DP21212.0xR0.5	DP21312.0xR0.5	
12.0	12.0	74	24	1.0	0.126	DP21212.0xR1.0	DP21312.0xR1.0	
12.0	12.0	74	24	1.5	0.126	DP21212.0xR1.5	DP21312.0xR1.5	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
CORNER CHAMFER ENDMILL



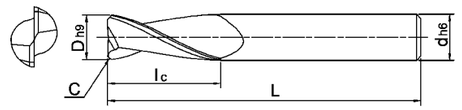
CORNER CHAMFER ENDMILL

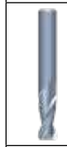
PROPERTIES & APPLICATION

DP214	HM	Z2	Helix 30^0	D_{h9}	Shank d_{h6}			
DP215	HM	Z3	Helix 30^0	D_{h9}	Shank d_{h6}			
DP216	HM	Z4	Helix 30^0	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP214	DP215	DP216
		
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O					O	O	O			
V_c (m / min)	20 ~ 25	20 ~ 25					50 ~ 60	50 ~ 60	40 ~ 50			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP214	DP215	DP216
4.0	4.0	50	8	0.10	0.036	DP2144.0xC0.1	DP2154.0xC0.1	DP2164.0xC0.1
5.0	5.0	50	10	0.10	0.043	DP2145.0xC0.1	DP2155.0xC0.1	DP2165.0xC0.1
6.0	6.0	50	10	0.15	0.051	DP2146.0xC0.15	DP2156.0xC0.15	DP2166.0xC0.15
8.0	8.0	64	16	0.15	0.063	DP2148.0xC0.15	DP2158.0xC0.15	DP2168.0xC0.15
10.0	10.0	73	20	0.20	0.073	DP21410.0xC0.2	DP21510.0xC0.2	DP21610.0xC0.2
12.0	12.0	74	22	0.20	0.084	DP21412.0xC0.2	DP21512.0xC0.2	DP21612.0xC0.2
14.0	14.0	83	22	0.25	0.095	DP21414.0xC0.25	DP21514.0xC0.25	DP21614.0xC0.25
16.0	16.0	92	26	0.35	0.105	DP21416.0xC0.35	DP21516.0xC0.35	DP21616.0xC0.35
18.0	18.0	92	26	0.40	0.116	DP21418.0xC0.4	DP21518.0xC0.4	DP21618.0xC0.4
20.0	20.0	104	32	0.45	0.127	DP21420.0xC0.45	DP21520.0xC0.45	DP21620.0xC0.45
25.0	25.0	121	40	0.60	0.142	DP21425.0xC0.6	DP21525.0xC0.6	DP21625.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

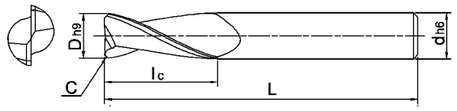
CORNER CHAMFER ENDMILL

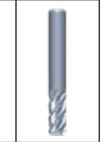
PROPERTIES & APPLICATION

DP217	HM	Z2	Helix 45⁰	D_{h9}	Shank d_{h6}		
DP218	HM	Z3	Helix 45⁰	D_{h9}	Shank d_{h6}		
DP219	HM	Z4	Helix 45⁰	D_{h9}	Shank d_{h6}		

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP217	DP218	DP219
		
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	20 ~ 25	20 ~ 25					100 ~ 120	50 ~ 60	80 ~ 90			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP217	DP218	DP219
4.0	4.0	50	8	0.10	0.012	DP2174.0xC0.1	DP2184.0xC0.1	DP2194.0xC0.1
5.0	5.0	50	10	0.10	0.015	DP2175.0xC0.1	DP2185.0xC0.1	DP2195.0xC0.1
6.0	6.0	50	10	0.15	0.018	DP2176.0xC0.15	DP2186.0xC0.15	DP2196.0xC0.15
8.0	8.0	64	16	0.15	0.022	DP2178.0xC0.15	DP2188.0xC0.15	DP2198.0xC0.15
10.0	10.0	73	20	0.20	0.025	DP21710.0xC0.2	DP21810.0xC0.2	DP21910.0xC0.2
12.0	12.0	74	22	0.20	0.030	DP21712.0xC0.2	DP21812.0xC0.2	DP21912.0xC0.2
14.0	14.0	83	22	0.25	0.032	DP21714.0xC0.25	DP21814.0xC0.25	DP21914.0xC0.25
16.0	16.0	92	26	0.35	0.035	DP21716.0xC0.35	DP21816.0xC0.35	DP21916.0xC0.35
18.0	18.0	92	26	0.40	0.040	DP21718.0xC0.4	DP21818.0xC0.4	DP21918.0xC0.4
20.0	20.0	104	32	0.45	0.045	DP21720.0xC0.45	DP21820.0xC0.45	DP21920.0xC0.45
25.0	25.0	121	40	0.60	0.050	DP21725.0xC0.6	DP21825.0xC0.6	DP21925.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

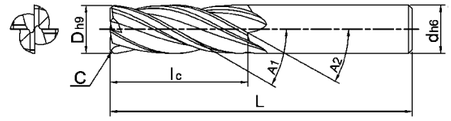
CORNER CHAMFER ENDMILL

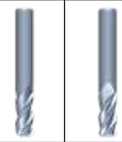
PROPERTIES & APPLICATION

DP220	HM	Z3	A1≠A2	D_{h9}	Shank d_{h6}		
DP221	HM	Z4	A1≠A2	D_{h9}	Shank d_{h6}		

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP220	DP221	
		
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○			○	○	●	●		○	○	○
V_c (m / min)	75 ~ 85	75 ~ 85			55 ~ 75	55 ~ 75	250 ~ 275	250 ~ 275		30 ~ 45	30 ~ 45	30 ~ 45

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP220	DP221	
4.0	4.0	50	8	0.10	0.070	DP2204.0xC0.1	DP2214.0xC0.1	
5.0	5.0	50	10	0.10	0.100	DP2205.0xC0.1	DP2215.0xC0.1	
6.0	6.0	50	10	0.15	0.100	DP2206.0xC0.15	DP2216.0xC0.15	
8.0	8.0	64	16	0.15	0.120	DP2208.0xC0.15	DP2218.0xC0.15	
10.0	10.0	73	20	0.20	0.150	DP22010.0xC0.2	DP22110.0xC0.2	
12.0	12.0	74	22	0.20	0.180	DP22012.0xC0.2	DP22112.0xC0.2	
14.0	14.0	83	22	0.25	0.180	DP22014.0xC0.25	DP22114.0xC0.25	
16.0	16.0	92	26	0.35	0.200	DP22016.0xC0.35	DP22116.0xC0.35	
18.0	18.0	92	26	0.40	0.250	DP22018.0xC0.4	DP22118.0xC0.4	
20.0	20.0	104	32	0.45	0.250	DP22020.0xC0.45	DP22120.0xC0.45	
25.0	25.0	121	40	0.60	0.300	DP22025.0xC0.6	DP22125.0xC0.6	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

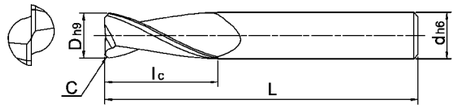
CORNER CHAMFER ENDMILL

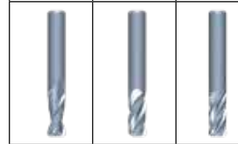
PROPERTIES & APPLICATION

DP222	HM	Z2	Helix 30°	D_{h9}	Shank d_{h6}	
DP223	HM	Z3	Helix 30°	D_{h9}	Shank d_{h6}	
DP224	HM	Z4	Helix 30°	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP222	DP223	DP224
		
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					○	○	○			
V_c (m / min)	30 ~ 40	30 ~ 40					60 ~ 80	60 ~ 80	50 ~ 60			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP222	DP223	DP224
4.0	4.0	50	8	0.10	0.036	DP2224.0xC0.1	DP2234.0xC0.1	DP2244.0xC0.1
5.0	5.0	50	10	0.10	0.043	DP2225.0xC0.1	DP2235.0xC0.1	DP2245.0xC0.1
6.0	6.0	50	10	0.15	0.051	DP2226.0xC0.15	DP2236.0xC0.15	DP2246.0xC0.15
8.0	8.0	64	16	0.15	0.063	DP2228.0xC0.15	DP2238.0xC0.15	DP2248.0xC0.15
10.0	10.0	73	20	0.20	0.073	DP22210.0xC0.2	DP22310.0xC0.2	DP22410.0xC0.2
12.0	12.0	74	22	0.20	0.084	DP22212.0xC0.2	DP22312.0xC0.2	DP22412.0xC0.2
14.0	14.0	83	22	0.25	0.095	DP22214.0xC0.25	DP22314.0xC0.25	DP22414.0xC0.25
16.0	16.0	92	26	0.35	0.105	DP22216.0xC0.35	DP22316.0xC0.35	DP22416.0xC0.35
18.0	18.0	92	26	0.40	0.116	DP22218.0xC0.4	DP22318.0xC0.4	DP22418.0xC0.4
20.0	20.0	104	32	0.45	0.127	DP22220.0xC0.45	DP22320.0xC0.45	DP22420.0xC0.45
25.0	25.0	121	40	0.60	0.142	DP22225.0xC0.6	DP22325.0xC0.6	DP22425.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

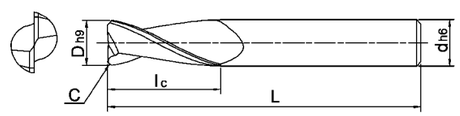
CORNER CHAMFER ENDMILL

PROPERTIES & APPLICATION

DP225	HM	Z2	Helix 45°	D_{h9}	Shank d_{h6}	
DP226	HM	Z3	Helix 45°	D_{h9}	Shank d_{h6}	
DP227	HM	Z4	Helix 45°	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP225	DP226	DP227
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	30 ~ 40	30 ~ 40					120 ~ 150	120 ~ 150	90 ~ 100			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP225	DP226	DP227
4.0	4.0	50	8	0.10	0.012	DP2254.0xC0.1	DP2264.0xC0.1	DP2274.0xC0.1
5.0	5.0	50	10	0.10	0.015	DP2255.0xC0.1	DP2265.0xC0.1	DP2275.0xC0.1
6.0	6.0	50	10	0.15	0.018	DP2256.0xC0.15	DP2266.0xC0.15	DP2276.0xC0.15
8.0	8.0	64	16	0.15	0.022	DP2258.0xC0.15	DP2268.0xC0.15	DP2278.0xC0.15
10.0	10.0	73	20	0.20	0.025	DP22510.0xC0.2	DP22610.0xC0.2	DP22710.0xC0.2
12.0	12.0	74	22	0.20	0.030	DP22512.0xC0.2	DP22612.0xC0.2	DP22712.0xC0.2
14.0	14.0	83	22	0.25	0.032	DP22514.0xC0.25	DP22614.0xC0.25	DP22714.0xC0.25
16.0	16.0	92	26	0.35	0.035	DP22516.0xC0.35	DP22616.0xC0.35	DP22716.0xC0.35
18.0	18.0	92	26	0.40	0.040	DP22518.0xC0.4	DP22618.0xC0.4	DP22718.0xC0.4
20.0	20.0	104	32	0.45	0.045	DP22520.0xC0.45	DP22620.0xC0.45	DP22720.0xC0.45
25.0	25.0	121	40	0.60	0.050	DP22525.0xC0.6	DP22625.0xC0.6	DP22725.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

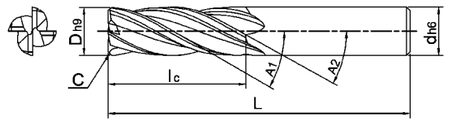
CORNER CHAMFER ENDMILL

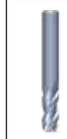
PROPERTIES & APPLICATION

DP228	HM	Z3	A1≠A2	D_{h9}	Shank d_{h6}				
DP229	HM	Z4	A1≠A2	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP228	DP229	
		
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O	O	O	O	O						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP228	DP229	
4.0	4.0	50	8	0.10	0.070	DP2284.0xC0.1	DP2294.0xC0.1	
5.0	5.0	50	10	0.10	0.100	DP2285.0xC0.1	DP2295.0xC0.1	
6.0	6.0	50	10	0.15	0.100	DP2286.0xC0.15	DP2296.0xC0.15	
8.0	8.0	64	16	0.15	0.120	DP2288.0xC0.15	DP2298.0xC0.15	
10.0	10.0	73	20	0.20	0.150	DP22810.0xC0.2	DP22910.0xC0.2	
12.0	12.0	74	22	0.20	0.180	DP22812.0xC0.2	DP22912.0xC0.2	
14.0	14.0	83	22	0.25	0.180	DP22814.0xC0.25	DP22914.0xC0.25	
16.0	16.0	92	26	0.35	0.200	DP22816.0xC0.35	DP22916.0xC0.35	
18.0	18.0	92	26	0.40	0.250	DP22818.0xC0.4	DP22918.0xC0.4	
20.0	20.0	104	32	0.45	0.250	DP22820.0xC0.45	DP22920.0xC0.45	
25.0	25.0	121	40	0.60	0.300	DP22825.0xC0.6	DP22925.0xC0.6	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

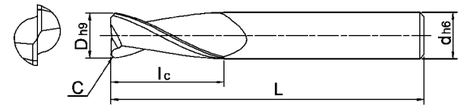
CORNER CHAMFER ENDMILL

PROPERTIES & APPLICATION

DP230	HM	Z2	AlTiN	Helix 30⁰	D_{h9}	Shank d_{h6}			
DP231	HM	Z3	AlTiN	Helix 30⁰	D_{h9}	Shank d_{h6}			
DP232	HM	Z4	AlTiCrn	Helix 30⁰	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP230	DP231	DP232
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	O	O	O	O				O	O	O
V_c (m / min)	40 ~ 50	40 ~ 50	30 ~ 35	30 ~ 35	25 ~ 30	25 ~ 30				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP230	DP231	DP232
4.0	4.0	50	8	0.10	0.036	DP2304.0xC0.1	DP2314.0xC0.1	DP2324.0xC0.1
5.0	5.0	50	10	0.10	0.043	DP2305.0xC0.1	DP2315.0xC0.1	DP2325.0xC0.1
6.0	6.0	50	10	0.15	0.051	DP2306.0xC0.15	DP2316.0xC0.15	DP2326.0xC0.15
8.0	8.0	64	16	0.15	0.063	DP2308.0xC0.15	DP2318.0xC0.15	DP2328.0xC0.15
10.0	10.0	73	20	0.20	0.073	DP23010.0xC0.2	DP23110.0xC0.2	DP23210.0xC0.2
12.0	12.0	74	22	0.20	0.084	DP23012.0xC0.2	DP23112.0xC0.2	DP23212.0xC0.2
14.0	14.0	83	22	0.25	0.095	DP23014.0xC0.25	DP23114.0xC0.25	DP23214.0xC0.25
16.0	16.0	92	26	0.35	0.105	DP23016.0xC0.35	DP23116.0xC0.35	DP23216.0xC0.35
18.0	18.0	92	26	0.40	0.116	DP23018.0xC0.4	DP23118.0xC0.4	DP23218.0xC0.4
20.0	20.0	104	32	0.45	0.127	DP23020.0xC0.45	DP23120.0xC0.45	DP23220.0xC0.45
25.0	25.0	121	40	0.60	0.142	DP23025.0xC0.6	DP23125.0xC0.6	DP23225.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

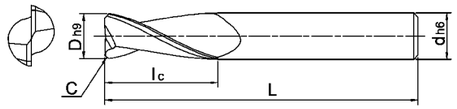
CORNER CHAMFER ENDMILL

PROPERTIES & APPLICATION

DP233	HM	Z2	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}			
DP234	HM	Z3	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}			
DP235	HM	Z4	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP233	DP234	DP235
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○				○	○	○
V_c (m / min)	30 ~ 40	30 ~ 40	20 ~ 25	20 ~ 25	15 ~ 25	15 ~ 25				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP233	DP234	DP235
4.0	4.0	50	8	0.10	0.036	DP2334.0xC0.1	DP2344.0xC0.1	DP2354.0xC0.1
5.0	5.0	50	10	0.10	0.043	DP2335.0xC0.1	DP2345.0xC0.1	DP2355.0xC0.1
6.0	6.0	50	10	0.15	0.051	DP2336.0xC0.15	DP2346.0xC0.15	DP2356.0xC0.15
8.0	8.0	64	16	0.15	0.063	DP2338.0xC0.15	DP2348.0xC0.15	DP2358.0xC0.15
10.0	10.0	73	20	0.20	0.073	DP23310.0xC0.2	DP23410.0xC0.2	DP23510.0xC0.2
12.0	12.0	74	22	0.20	0.084	DP23312.0xC0.2	DP23412.0xC0.2	DP23512.0xC0.2
14.0	14.0	83	22	0.25	0.095	DP23314.0xC0.25	DP23414.0xC0.25	DP23514.0xC0.25
16.0	16.0	92	26	0.35	0.105	DP23316.0xC0.35	DP23416.0xC0.35	DP23516.0xC0.35
18.0	18.0	92	26	0.40	0.116	DP23318.0xC0.4	DP23418.0xC0.4	DP23518.0xC0.4
20.0	20.0	104	32	0.45	0.127	DP23320.0xC0.45	DP23420.0xC0.45	DP23520.0xC0.45
25.0	25.0	121	40	0.60	0.142	DP23325.0xC0.6	DP23425.0xC0.6	DP23525.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

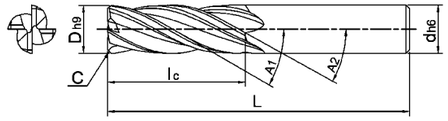
CORNER CHAMFER ENDMILL

PROPERTIES & APPLICATION

DP236	HM	Z3	AlTiN	A1≠A2	D_{h9}	Shank d_{h6}			
DP237	HM	Z4	AlTiN	A1≠A2	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP236	DP237	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40				25 ~ 30	25 ~ 30	25 ~ 30

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP236	DP237	
4.0	4.0	50	8	0.10	0.053	DP2364.0xC0.1	DP2374.0xC0.1	
5.0	5.0	50	10	0.10	0.065	DP2365.0xC0.1	DP2375.0xC0.1	
6.0	6.0	50	10	0.15	0.076	DP2366.0xC0.15	DP2376.0xC0.15	
8.0	8.0	64	16	0.15	0.094	DP2368.0xC0.15	DP2378.0xC0.15	
10.0	10.0	73	20	0.20	0.110	DP23610.0xC0.2	DP23710.0xC0.2	
12.0	12.0	74	22	0.20	0.126	DP23612.0xC0.2	DP23712.0xC0.2	
14.0	14.0	83	22	0.25	0.143	DP23614.0xC0.25	DP23714.0xC0.25	
16.0	16.0	92	26	0.35	0158	DP23616.0xC0.35	DP23716.0xC0.35	
18.0	18.0	92	26	0.40	0.175	DP23618.0xC0.4	DP23718.0xC0.4	
20.0	20.0	104	32	0.45	0.191	DP23620.0xC0.45	DP23720.0xC0.45	
25.0	25.0	121	40	0.60	0.203	DP23625.0xC0.6	DP23725.0xC0.6	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

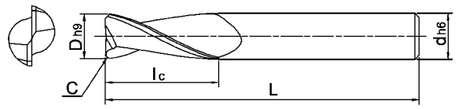
CORNER CHAMFER ENDMILL

PROPERTIES & APPLICATION

DP238	HM	Z3	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}
DP239	HM	Z4	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}
DP240	HM	Z6	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP238	DP239	DP240
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	○	○						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP238	DP239	DP240
4.0	4.0	50	8	0.10	0.036	DP2384.0xC0.1	DP2394.0xC0.1	DP2404.0xC0.1
5.0	5.0	50	10	0.10	0.043	DP2385.0xC0.1	DP2395.0xC0.1	DP2405.0xC0.1
6.0	6.0	50	10	0.15	0.051	DP2386.0xC0.15	DP2396.0xC0.15	DP2406.0xC0.15
8.0	8.0	64	16	0.15	0.063	DP2388.0xC0.15	DP2398.0xC0.15	DP2408.0xC0.15
10.0	10.0	73	20	0.20	0.073	DP23810.0xC0.2	DP23910.0xC0.2	DP24010.0xC0.2
12.0	12.0	74	22	0.20	0.084	DP23812.0xC0.2	DP23912.0xC0.2	DP24012.0xC0.2
14.0	14.0	83	22	0.25	0.095	DP23814.0xC0.25	DP23914.0xC0.25	DP24014.0xC0.25
16.0	16.0	92	26	0.35	0.105	DP23816.0xC0.35	DP23916.0xC0.35	DP24016.0xC0.35
18.0	18.0	92	26	0.40	0.116	DP23818.0xC0.4	DP23918.0xC0.4	DP24018.0xC0.4
20.0	20.0	104	32	0.45	0.127	DP23820.0xC0.45	DP23920.0xC0.45	DP24020.0xC0.45
25.0	25.0	121	40	0.60	0.142	DP23825.0xC0.6	DP23925.0xC0.6	DP24025.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

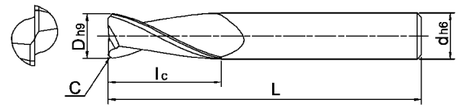
CORNER CHAMFER ENDMILL

PROPERTIES & APPLICATION

DP241	HM	Z2	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}
DP242	HM	Z3	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}
DP243	HM	Z4	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP241	DP242	DP243
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○				○	○	○
V_c (m / min)	30 ~ 40	30 ~ 40	20 ~ 25	20 ~ 25	15 ~ 25	15 ~ 25				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP241	DP243	DP243
4.0	4.0	50	8	0.10	0.036	DP2414.0xC0.1	DP2424.0xC0.1	DP2434.0xC0.1
5.0	5.0	50	10	0.10	0.043	DP2415.0xC0.1	DP2425.0xC0.1	DP2435.0xC0.1
6.0	6.0	50	10	0.15	0.051	DP2416.0xC0.15	DP2426.0xC0.15	DP2436.0xC0.15
8.0	8.0	64	16	0.15	0.063	DP2418.0xC0.15	DP2428.0xC0.15	DP2438.0xC0.15
10.0	10.0	73	20	0.20	0.073	DP24110.0xC0.2	DP24210.0xC0.2	DP24310.0xC0.2
12.0	12.0	74	22	0.20	0.084	DP24112.0xC0.2	DP24212.0xC0.2	DP24312.0xC0.2
14.0	14.0	83	22	0.25	0.095	DP24114.0xC0.25	DP24214.0xC0.25	DP24314.0xC0.25
16.0	16.0	92	26	0.35	0.105	DP24116.0xC0.35	DP24216.0xC0.35	DP24316.0xC0.35
18.0	18.0	92	26	0.40	0.116	DP24118.0xC0.4	DP24218.0xC0.4	DP24318.0xC0.4
20.0	20.0	104	32	0.45	0.127	DP24120.0xC0.45	DP24220.0xC0.45	DP24320.0xC0.45
25.0	25.0	121	40	0.60	0.142	DP24125.0xC0.6	DP24225.0xC0.6	DP24325.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

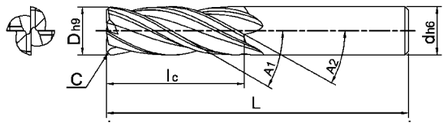
CORNER CHAMFER ENDMILL

PROPERTIES & APPLICATION

DP244	HM	Z3	AlTiN	A1≠A2	D_{h9}	Shank d_{h6}				
DP245	HM	Z4	AlTiN	A1≠A2	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP244	DP245	
4.00-25.00	4.00-25.00	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				25 ~ 30	25 ~ 30	25 ~ 30

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP244	DP245	
4.0	4.0	50	8	0.10	0.053	DP2444.0xC0.1	DP2454.0xC0.1	
5.0	5.0	50	10	0.10	0.065	DP2445.0xC0.1	DP2455.0xC0.1	
6.0	6.0	50	10	0.15	0.076	DP2446.0xC0.15	DP2456.0xC0.15	
8.0	8.0	64	16	0.15	0.094	DP2448.0xC0.15	DP2458.0xC0.15	
10.0	10.0	73	20	0.20	0.110	DP24410.0xC0.2	DP24510.0xC0.2	
12.0	12.0	74	22	0.20	0.126	DP24412.0xC0.2	DP24512.0xC0.2	
14.0	14.0	83	22	0.25	0.143	DP24414.0xC0.25	DP24514.0xC0.25	
16.0	16.0	92	26	0.35	0158	DP24416.0xC0.35	DP24516.0xC0.35	
18.0	18.0	92	26	0.40	0.175	DP24418.0xC0.4	DP24518.0xC0.4	
20.0	20.0	104	32	0.45	0.191	DP24420.0xC0.45	DP24520.0xC0.45	
25.0	25.0	121	40	0.60	0.203	DP24425.0xC0.6	DP24525.0xC0.6	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

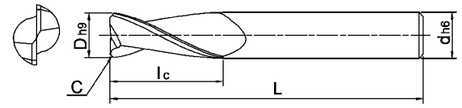
CORNER CHAMFER ENDMILL

PROPERTIES & APPLICATION

DP246	HM	Z2	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}				
DP247	HM	Z3	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}				
DP248	HM	Z4	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP246	DP247	DP248
4.00-25.00	4.00-25.00	4.00-25.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP246	DP247	DP248
4.0	4.0	50	8	0.10	0.036	DP2464.0xC0.1	DP2474.0xC0.1	DP2484.0xC0.1
5.0	5.0	50	10	0.10	0.043	DP2465.0xC0.1	DP2475.0xC0.1	DP2485.0xC0.1
6.0	6.0	50	10	0.15	0.051	DP2466.0xC0.15	DP2476.0xC0.15	DP2486.0xC0.15
8.0	8.0	64	16	0.15	0.063	DP2468.0xC0.15	DP2478.0xC0.15	DP2488.0xC0.15
10.0	10.0	73	20	0.20	0.073	DP24610.0xC0.2	DP24710.0xC0.2	DP24810.0xC0.2
12.0	12.0	74	22	0.20	0.084	DP24612.0xC0.2	DP24712.0xC0.2	DP24812.0xC0.2
14.0	14.0	83	22	0.25	0.095	DP24614.0xC0.25	DP24714.0xC0.25	DP24814.0xC0.25
16.0	16.0	92	26	0.35	0.105	DP24616.0xC0.35	DP24716.0xC0.35	DP24816.0xC0.35
18.0	18.0	92	26	0.40	0.116	DP24618.0xC0.4	DP24718.0xC0.4	DP24818.0xC0.4
20.0	20.0	104	32	0.45	0.127	DP24620.0xC0.45	DP24720.0xC0.45	DP24820.0xC0.45
25.0	25.0	121	40	0.60	0.142	DP24625.0xC0.6	DP24725.0xC0.6	DP24825.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

CORNER CHAMFER ENDMILL

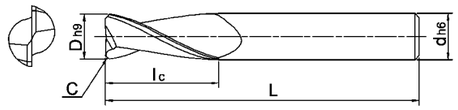
PROPERTIES & APPLICATION

DP249	HM	Z2	AlCr Blue	Helix 45°	D_{h9}	Shank d_{h6}
DP250	HM	Z3	AlCr Blue	Helix 45°	D_{h9}	Shank d_{h6}
DP251	HM	Z4	AlCr Blue	Helix 45°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP249	DP250	DP251
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●	○	○	○	○	○	○
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40	100 ~ 120	100 ~ 120	80 ~ 90	30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP249	DP250	DP251
4.0	4.0	50	8	0.10	0.027	DP2494.0xC0.1	DP2504.0xC0.1	DP2514.0xC0.1
5.0	5.0	50	10	0.10	0.027	DP2495.0xC0.1	DP2505.0xC0.1	DP2515.0xC0.1
6.0	6.0	50	10	0.15	0.038	DP2496.0xC0.15	DP2506.0xC0.15	DP2516.0xC0.15
8.0	8.0	64	16	0.15	0.047	DP2498.0xC0.15	DP2508.0xC0.15	DP2518.0xC0.15
10.0	10.0	73	20	0.20	0.055	DP24910.0xC0.2	DP25010.0xC0.2	DP25110.0xC0.2
12.0	12.0	74	22	0.20	0.063	DP24912.0xC0.2	DP25012.0xC0.2	DP25112.0xC0.2
14.0	14.0	83	22	0.25	0.072	DP24914.0xC0.25	DP25014.0xC0.25	DP25114.0xC0.25
16.0	16.0	92	26	0.35	0.072	DP24916.0xC0.35	DP25016.0xC0.35	DP25116.0xC0.35
18.0	18.0	92	26	0.40	0.080	DP24918.0xC0.4	DP25018.0xC0.4	DP25118.0xC0.4
20.0	20.0	104	32	0.45	0.080	DP24920.0xC0.45	DP25020.0xC0.45	DP25120.0xC0.45
25.0	25.0	121	40	0.60	0.100	DP24925.0xC0.6	DP25025.0xC0.6	DP25125.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

CORNER CHAMFER ENDMILL

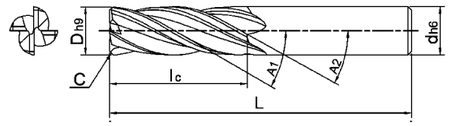
PROPERTIES & APPLICATION

DP252	HM	Z3	AlCr Blue	A1≠A2	D_{h9}	Shank d_{h6}	
DP253	HM	Z4	AlCr Blue	A1≠A2	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP252	DP253	
4.00-25.00	4.00-25.00	

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP252	DP253	
4.0	4.0	50	8	0.10	0.053	DP2524.0xC0.1	DP2534.0xC0.1	
5.0	5.0	50	10	0.10	0.065	DP2525.0xC0.1	DP2535.0xC0.1	
6.0	6.0	50	10	0.15	0.076	DP2526.0xC0.15	DP2536.0xC0.15	
8.0	8.0	64	16	0.15	0.094	DP2528.0xC0.15	DP2538.0xC0.15	
10.0	10.0	73	20	0.20	0.110	DP25210.0xC0.2	DP25310.0xC0.2	
12.0	12.0	74	22	0.20	0.126	DP25212.0xC0.2	DP25312.0xC0.2	
14.0	14.0	83	22	0.25	0.143	DP25214.0xC0.25	DP25314.0xC0.25	
16.0	16.0	92	26	0.35	0158	DP25216.0xC0.35	DP25316.0xC0.35	
18.0	18.0	92	26	0.40	0.175	DP25218.0xC0.4	DP25318.0xC0.4	
20.0	20.0	104	32	0.45	0.191	DP25220.0xC0.45	DP25320.0xC0.45	
25.0	25.0	121	40	0.60	0.203	DP25225.0xC0.6	DP25325.0xC0.6	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

CORNER CHAMFER ENDMILL

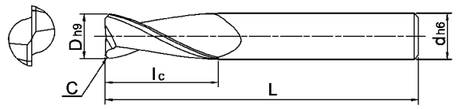
PROPERTIES & APPLICATION

DP254	HM	Z2	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}
DP255	HM	Z3	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}
DP256	HM	Z4	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP254	DP255	DP256
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP254	DP255	DP256
4.0	4.0	50	8	0.10	0.036	DP2544.0xC0.1	DP2554.0xC0.1	DP2564.0xC0.1
5.0	5.0	50	10	0.10	0.043	DP2545.0xC0.1	DP2555.0xC0.1	DP2565.0xC0.1
6.0	6.0	50	10	0.15	0.051	DP2546.0xC0.15	DP2556.0xC0.15	DP2566.0xC0.15
8.0	8.0	64	16	0.15	0.063	DP2548.0xC0.15	DP2558.0xC0.15	DP2568.0xC0.15
10.0	10.0	73	20	0.20	0.073	DP25410.0xC0.2	DP25510.0xC0.2	DP25610.0xC0.2
12.0	12.0	74	22	0.20	0.084	DP25412.0xC0.2	DP25512.0xC0.2	DP25612.0xC0.2
14.0	14.0	83	22	0.25	0.095	DP25414.0xC0.25	DP25514.0xC0.25	DP25614.0xC0.25
16.0	16.0	92	26	0.35	0.105	DP25416.0xC0.35	DP25516.0xC0.35	DP25616.0xC0.35
18.0	18.0	92	26	0.40	0.116	DP25418.0xC0.4	DP25518.0xC0.4	DP25618.0xC0.4
20.0	20.0	104	32	0.45	0.127	DP25420.0xC0.45	DP25520.0xC0.45	DP25620.0xC0.45
25.0	25.0	121	40	0.60	0.142	DP25425.0xC0.6	DP25525.0xC0.6	DP25625.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

CORNER CHAMFER ENDMILL

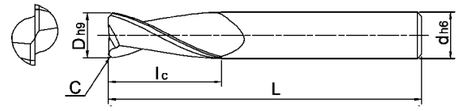
PROPERTIES & APPLICATION

DP257	HM	Z2	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}
DP258	HM	Z3	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}
DP259	HM	Z6	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP257	DP258	DP259
4.00-25.00	4.00-25.00	4.00-25.00

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●	○	○	○	●	●	●
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40	100 ~ 120	100 ~ 120	80 ~ 90	30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP257	DP258	DP259
4.0	4.0	50	8	0.10	0.027	DP2574.0xC0.1	DP2584.0xC0.1	DP2594.0xC0.1
5.0	5.0	50	10	0.10	0.027	DP2575.0xC0.1	DP2585.0xC0.1	DP2595.0xC0.1
6.0	6.0	50	10	0.15	0.038	DP2576.0xC0.15	DP2586.0xC0.15	DP2596.0xC0.15
8.0	8.0	64	16	0.15	0.047	DP2578.0xC0.15	DP2588.0xC0.15	DP2598.0xC0.15
10.0	10.0	73	20	0.20	0.055	DP25710.0xC0.2	DP25810.0xC0.2	DP25910.0xC0.2
12.0	12.0	74	22	0.20	0.063	DP25712.0xC0.2	DP25812.0xC0.2	DP25912.0xC0.2
14.0	14.0	83	22	0.25	0.072	DP25714.0xC0.25	DP25814.0xC0.25	DP25914.0xC0.25
16.0	16.0	92	26	0.35	0.072	DP25716.0xC0.35	DP25816.0xC0.35	DP25916.0xC0.35
18.0	18.0	92	26	0.40	0.080	DP25718.0xC0.4	DP25818.0xC0.4	DP25918.0xC0.4
20.0	20.0	104	32	0.45	0.080	DP25720.0xC0.45	DP25820.0xC0.45	DP25920.0xC0.45
25.0	25.0	121	40	0.60	0.100	DP25725.0xC0.6	DP25825.0xC0.6	DP2595.0xC0.6

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

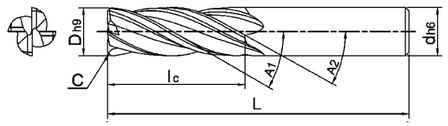
CORNER CHAMFER ENDMILL

PROPERTIES & APPLICATION

DP260	HM	Z3	AlCr Blue	A1≠A2	D_{h9}	Shank d_{h6}				
DP261	HM	Z4	AlCr Blue	A1≠A2	D_{h9}	Shank d_{h6}				

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Straight coolant hole
- Lưỡi cắt qua tâm
- Lỗ tưới nguội thẳng
- センターカット
- 直線冷却穴
- 센터 커팅
- 직선 냉각 구멍



DP260	DP261	
4.00-25.00	4.00-25.00	

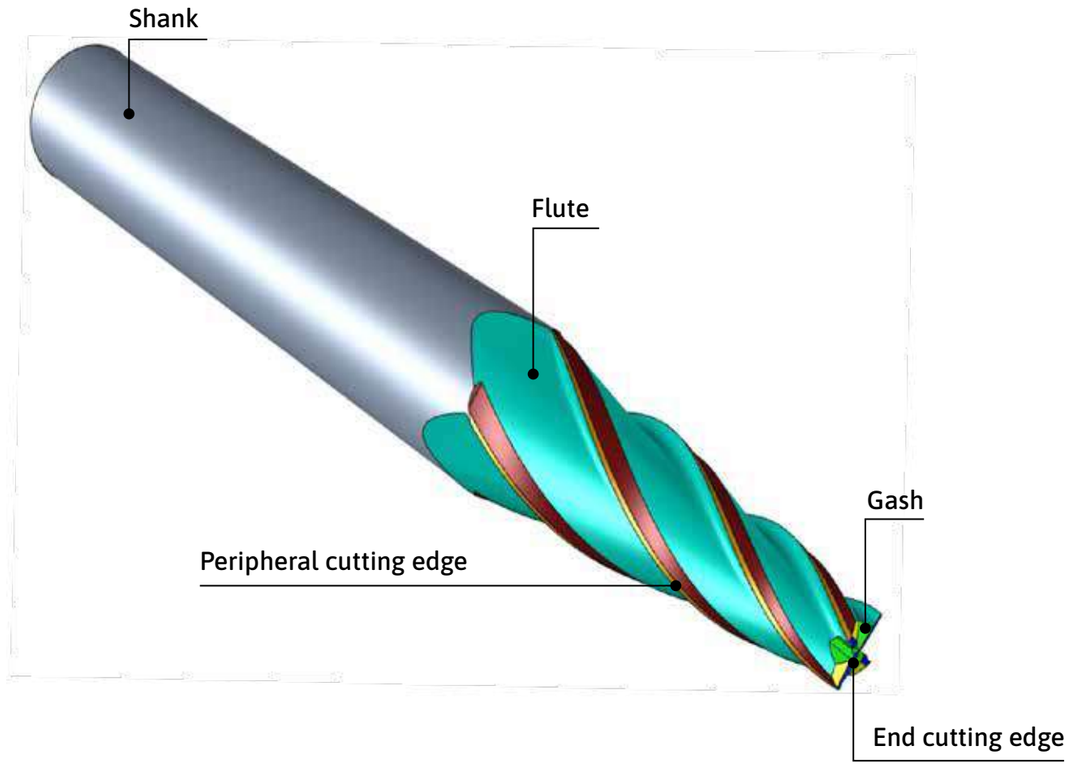
Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	80 ~ 100	80 ~ 100	60 ~ 80	60 ~ 80	50 ~ 65	50 ~ 65				50 ~ 60	50 ~ 60	50 ~ 60

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP260	DP261	
4.0	4.0	50	8	0.10	0.053	DP2604.0xC0.1	DP2614.0xC0.1	
5.0	5.0	50	10	0.10	0.065	DP2605.0xC0.1	DP2615.0xC0.1	
6.0	6.0	50	10	0.15	0.076	DP2606.0xC0.15	DP2616.0xC0.15	
8.0	8.0	64	16	0.15	0.094	DP2608.0xC0.15	DP2618.0xC0.15	
10.0	10.0	73	20	0.20	0.110	DP26010.0xC0.2	DP26110.0xC0.2	
12.0	12.0	74	22	0.20	0.126	DP26012.0xC0.2	DP26112.0xC0.2	
14.0	14.0	83	22	0.25	0.143	DP26014.0xC0.25	DP26114.0xC0.25	
16.0	16.0	92	26	0.35	0158	DP26016.0xC0.35	DP26116.0xC0.35	
18.0	18.0	92	26	0.40	0.175	DP26018.0xC0.4	DP26118.0xC0.4	
20.0	20.0	104	32	0.45	0.191	DP26020.0xC0.45	DP26120.0xC0.45	
25.0	25.0	121	40	0.60	0.203	DP26025.0xC0.6	DP26125.0xC0.6	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

Solid Carbide Tools
TAPER ENDMILL



DP

TAPER ENDMILL

PROPERTIES & APPLICATION

DP262	HM	Z2	Helix 0°	Shank d_{h6}
DP263	HM	Z3	Helix 0°	Shank d_{h6}
DP264	HM	Z4	Helix 0°	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유

DP262	DP263	DP264
3.00-10.00	3.00-10.00	3.00-10.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●				
V_c (m / min)	45~60	45~60					100~120	100~120				

D (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	α (°)	Feed (mm / rev)	Code order DP262	DP263	DP264
3.0	6.0	50	10	3°	0.030	DP2623.0x3°	DP2633.0x3°	DP2643.0x3°
3.0	6.0	50	10	5°	0.030	DP2623.0x5°	DP2633.0x5°	DP2643.0x5°
4.0	6.0	50	15	3°	0.040	DP2624.0x3°	DP2634.0x3°	DP2644.0x3°
4.0	8.0	64	15	5°	0.040	DP2624.0x5°	DP2634.0x5°	DP2644.0x5°
5.0	8.0	64	20	3°	0.050	DP2625.0x3°	DP2635.0x3°	DP2645.0x3°
5.0	10.0	73	20	5°	0.050	DP2625.0x5°	DP2635.0x5°	DP2645.0x5°
6.0	10.0	73	20	3°	0.060	DP2626.0x3°	DP2636.0x3°	DP2646.0x3°
6.0	10.0	73	20	5°	0.060	DP2626.0x5°	DP2636.0x5°	DP2646.0x5°
8.0	12.0	74	25	3°	0.080	DP2628.0x3°	DP2638.0x3°	DP2648.0x3°
8.0	12.0	74	25	5°	0.080	DP2628.0x5°	DP2638.0x5°	DP2648.0x5°
10.0	12.0	73	35	3°	0.100	DP26210.0x3°	DP26310.0x3°	DP26410.0x3°
10.0	16.0	92	35	5°	0.100	DP26210.0x5°	DP26310.0x5°	DP26410.0x5°

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

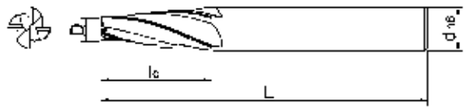
TAPER ENDMILL

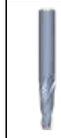
PROPERTIES & APPLICATION

DP265	HM	Z2	Helix 30°	Shank d_{h6}
DP266	HM	Z3	Helix 30°	Shank d_{h6}
DP267	HM	Z4	Helix 30°	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP265	DP266	DP267
		
3.00-20.00	3.00-20.00	3.00-10.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●				
V_c (m / min)	45~60	45~60					100~120	100~120				

D (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP265	DP266	DP267
3.0	6.0	50	10	3°	0.025	DP2623.0x3°	DP2633.0x3°	DP2643.0x3°
3.0	6.0	50	10	5°	0.025	DP2623.0x5°	DP2633.0x5°	DP2643.0x5°
4.0	6.0	50	15	3°	0.036	DP2624.0x3°	DP2634.0x3°	DP2644.0x3°
4.0	8.0	64	15	5°	0.036	DP2624.0x5°	DP2634.0x5°	DP2644.0x5°
5.0	8.0	64	20	3°	0.043	DP2625.0x3°	DP2635.0x3°	DP2645.0x3°
5.0	10.0	73	20	5°	0.043	DP2625.0x5°	DP2635.0x5°	DP2645.0x5°
6.0	10.0	73	20	3°	0.051	DP2626.0x3°	DP2636.0x3°	DP2646.0x3°
6.0	10.0	73	20	5°	0.051	DP2626.0x5°	DP2636.0x5°	DP2646.0x5°
8.0	12.0	74	25	3°	0.063	DP2628.0x3°	DP2638.0x3°	DP2648.0x3°
8.0	12.0	74	25	5°	0.063	DP2628.0x5°	DP2638.0x5°	DP2648.0x5°
10.0	12.0	73	35	3°	0.073	DP26210.0x3°	DP26310.0x3°	DP26410.0x3°
10.0	16.0	92	35	5°	0.073	DP26210.0x5°	DP26310.0x5°	DP26410.0x5°

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

TAPER ENDMILL

PROPERTIES & APPLICATION

DP268	HM	Z2	AlTiN	Helix 0^0	Shank d_{h6}			
DP269	HM	Z3	AlTiN	Helix 0^0	Shank d_{h6}			
DP270	HM	Z4	AlTiN	Helix 0^0	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유

DP268	DP269	DP270
3.00-10.00	3.00-10.00	3.00-10.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	○	○						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	α (^{0})	Feed (mm / rev)	Code order DP268	DP269	DP270
3.0	6.0	50	10	3°	0.030	DP2683.0x3°	DP2693.0x3°	DP2703.0x3°
3.0	6.0	50	10	5°	0.030	DP2683.0x5°	DP2693.0x5°	DP2703.0x5°
4.0	6.0	50	15	3°	0.040	DP2684.0x3°	DP2694.0x3°	DP2704.0x3°
4.0	8.0	64	15	5°	0.040	DP2684.0x5°	DP2694.0x5°	DP2704.0x5°
5.0	8.0	64	20	3°	0.050	DP2685.0x3°	DP2695.0x3°	DP2705.0x3°
5.0	10.0	73	20	5°	0.050	DP2685.0x5°	DP2695.0x5°	DP2705.0x5°
6.0	10.0	73	20	3°	0.060	DP2686.0x3°	DP2696.0x3°	DP2706.0x3°
6.0	10.0	73	20	5°	0.060	DP2686.0x5°	DP2696.0x5°	DP2706.0x5°
8.0	12.0	74	25	3°	0.080	DP2688.0x3°	DP2698.0x3°	DP2708.0x3°
8.0	12.0	74	25	5°	0.080	DP2688.0x5°	DP2698.0x5°	DP2708.0x5°
10.0	12.0	73	35	3°	0.100	DP26810.0x3°	DP26910.0x3°	DP27010.0x3°
10.0	16.0	92	35	5°	0.100	DP26810.0x5°	DP26910.0x5°	DP27010.0x5°

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

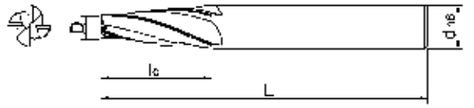
TAPER ENDMILL

PROPERTIES & APPLICATION

DP271	HM	Z3	AlTiN	Helix 30^0	Shank d_{h6}			
DP272	HM	Z4	AlTiN	Helix 30^0	Shank d_{h6}			
DP273	HM	Z6	AlTiN	Helix 30^0	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유



DP271	DP272	DP273
3.00-10.00	3.00-10.00	3.00-10.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●				○	○	○
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40				25 ~ 30	25 ~ 30	25 ~ 30

D (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP271	DP272	DP273
3.0	6.0	50	10	3°	0.025	DP2713.0x3°	DP2723.0x3°	DP2733.0x3°
3.0	6.0	50	10	5°	0.025	DP2713.0x5°	DP2723.0x5°	DP2733.0x5°
4.0	6.0	50	15	3°	0.036	DP2714.0x3°	DP2724.0x3°	DP2734.0x3°
4.0	8.0	64	15	5°	0.036	DP2714.0x5°	DP2724.0x5°	DP2734.0x5°
5.0	8.0	64	20	3°	0.043	DP2715.0x3°	DP2725.0x3°	DP7345.0x3°
5.0	10.0	73	20	5°	0.043	DP2715.0x5°	DP2725.0x5°	DP7345.0x5°
6.0	10.0	73	20	3°	0.051	DP2716.0x3°	DP2726.0x3°	DP7346.0x3°
6.0	10.0	73	20	5°	0.051	DP2716.0x5°	DP2726.0x5°	DP7346.0x5°
8.0	12.0	74	25	3°	0.063	DP2718.0x3°	DP2728.0x3°	DP7348.0x3°
8.0	12.0	74	25	5°	0.063	DP2718.0x5°	DP2728.0x5°	DP7348.0x5°
10.0	12.0	73	35	3°	0.073	DP27110.0x3°	DP27210.0x3°	DP73410.0x3°
10.0	16.0	92	35	5°	0.073	DP27110.0x5°	DP27210.0x5°	DP73410.0x5°

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

TAPER ENDMILL

PROPERTIES & APPLICATION

DP274	HM	Z2	AlCr Blue	Helix 0^0	Shank d_{h6}			
DP275	HM	Z3	AlCr Blue	Helix 0^0	Shank d_{h6}			
DP276	HM	Z4	AlCr Blue	Helix 0^0	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP274	DP275	DP276
3.00-10.00	3.00-10.00	3.00-10.00

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●	○	○	○	●	●	●
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40	100 ~ 120	100 ~ 120	80 ~ 90	30 ~ 40	30 ~ 40	30 ~ 40

D (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	α (^{0})	Feed (mm / rev)	Code order DP274	DP275	DP276
3.0	6.0	50	10	3°	0.030	DP2743.0x3°	DP2753.0x3°	DP2763.0x3°
3.0	6.0	50	10	5°	0.030	DP2743.0x5°	DP2753.0x5°	DP2763.0x5°
4.0	6.0	50	15	3°	0.040	DP2744.0x3°	DP2754.0x3°	DP2764.0x3°
4.0	8.0	64	15	5°	0.040	DP2744.0x5°	DP2754.0x5°	DP2764.0x5°
5.0	8.0	64	20	3°	0.050	DP2745.0x3°	DP2755.0x3°	DP2765.0x3°
5.0	10.0	73	20	5°	0.050	DP2745.0x5°	DP2755.0x5°	DP2765.0x5°
6.0	10.0	73	20	3°	0.060	DP2746.0x3°	DP2756.0x3°	DP2766.0x3°
6.0	10.0	73	20	5°	0.060	DP2746.0x5°	DP2756.0x5°	DP2766.0x5°
8.0	12.0	74	25	3°	0.080	DP2748.0x3°	DP2758.0x3°	DP2768.0x3°
8.0	12.0	74	25	5°	0.080	DP2748.0x5°	DP2758.0x5°	DP2768.0x5°
10.0	12.0	73	35	3°	0.100	DP27410.0x3°	DP27510.0x3°	DP27610.0x3°
10.0	16.0	92	35	5°	0.100	DP27410.0x5°	DP27510.0x5°	DP27610.0x5°

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

TAPER ENDMILL

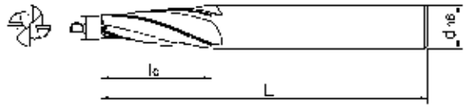
PROPERTIES & APPLICATION

DP277	HM	Z2	AlCr Blue	Helix 30^0	Shank d_{h6}			
DP278	HM	Z3	AlCr Blue	Helix 30^0	Shank d_{h6}			
DP279	HM	Z4	AlCr Blue	Helix 30^0	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DP277	DP278	DP279
3.00-10.00	3.00-10.00	

Engineering Data
- Center cutting
- Non internal coolant
- Lưỡi cắt qua tâm
- Không có lỗ tưới nguội
- センターカット
- 非内部給油
- 센터 커팅
- 비내부 절삭유

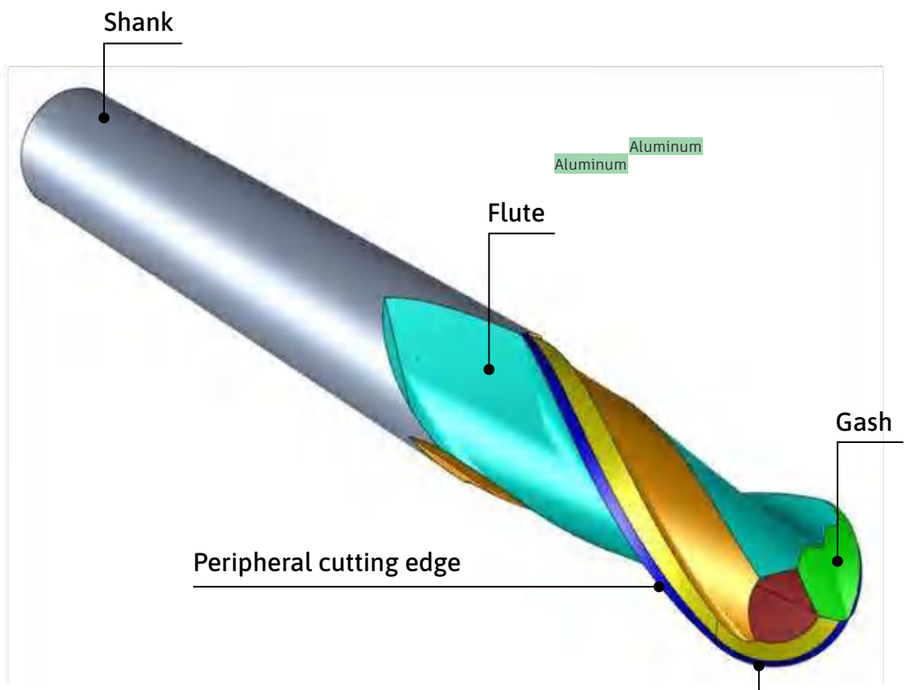


Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	80 ~ 100	80 ~ 100	60 ~ 80	60 ~ 80	50 ~ 65	50 ~ 65				50 ~ 60	50 ~ 60	50 ~ 60

D (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	C (mm)	Feed (mm / rev)	Code order DP277	DP278	DP279
3.0	6.0	50	10	3°	0.025	DP2773.0x3°	DP2783.0x3°	DP2793.0x3°
3.0	6.0	50	10	5°	0.025	DP2773.0x5°	DP2783.0x5°	DP2793.0x5°
4.0	6.0	50	15	3°	0.036	DP2774.0x3°	DP2784.0x3°	DP2794.0x3°
4.0	8.0	64	15	5°	0.036	DP2774.0x5°	DP2784.0x5°	DP2794.0x5°
5.0	8.0	64	20	3°	0.043	DP2775.0x3°	DP2785.0x3°	DP2795.0x3°
5.0	10.0	73	20	5°	0.043	DP2775.0x5°	DP2785.0x5°	DP2795.0x5°
6.0	10.0	73	20	3°	0.051	DP2776.0x3°	DP2786.0x3°	DP2796.0x3°
6.0	10.0	73	20	5°	0.051	DP2776.0x5°	DP2786.0x5°	DP2796.0x5°
8.0	12.0	74	25	3°	0.063	DP2778.0x3°	DP2788.0x3°	DP2798.0x3°
8.0	12.0	74	25	5°	0.063	DP2778.0x5°	DP2788.0x5°	DP2798.0x5°
10.0	12.0	73	35	3°	0.073	DP27710.0x3°	DP27810.0x3°	DP27910.0x3°
10.0	16.0	92	35	5°	0.073	DP27710.0x5°	DP27810.0x5°	DP27910.0x5°

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
BALL ENDMILL



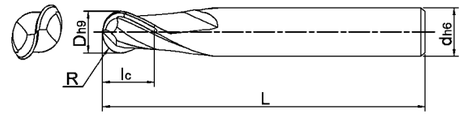
BALL ENDMILL

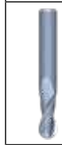
PROPERTIES & APPLICATION

DC001	HM	Z2	Helix 30°	D_{h9}	Shank d_{h6}		
DC002	HM	Z3	Helix 30°	D_{h9}	Shank d_{h6}		
DC003	HM	Z4	Helix 30°	D_{h9}	Shank d_{h6}		

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Non internal coolant
- Có lưỡi cắt ngang
- Không có lỗ tưới nguội
- チゼルエッジ
- 非内部給油
- 끌 가장자리
- 비내부 절삭유



DC001	DC002	DC003
		
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O					O	O	O			
V_c (m / min)	20 ~ 25	20 ~ 25					50 ~ 60	50 ~ 60	40 ~ 50			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC001	DC002	DC003
2.0	3.0	50	6	1.0	0.020	DC0012.0	DC0022.0	DC0032.0
3.0	3.0	50	10	1.5	0.029	DC0013.0	DC0023.0	DC0033.0
4.0	4.0	50	10	2.0	0.038	DC0014.0	DC0024.0	DC0034.0
5.0	5.0	50	13	2.5	0.046	DC0015.0	DC0025.0	DC0035.0
6.0	6.0	50	15	3.0	0.054	DC0016.0	DC0026.0	DC0036.0
8.0	8.0	50	20	4.0	0.067	DC0018.0	DC0028.0	DC0038.0
10.0	10.0	75	25	5.0	0.078	DC00110.0	DC00210.0	DC00310.0
12.0	12.0	75	30	6.0	0.089	DC00112.0	DC00212.0	DC00312.0
14.0	14.0	80	30	7.0	0.101	DC00114.0	DC00214.0	DC00314.0
16.0	16.0	100	40	8.0	0.112	DC00116.0	DC00216.0	DC00316.0
18.0	18.0	100	45	9.0	0.124	DC00118.0	DC00218.0	DC00318.0
20.0	20.0	100	45	10.0	0.135	DC00120.0	DC00220.0	DC00320.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

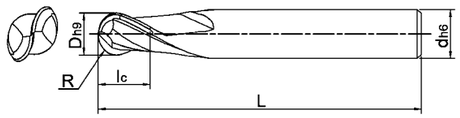
BALL ENDMILL

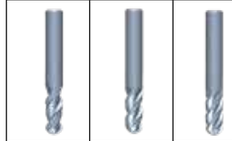
PROPERTIES & APPLICATION

DC004	HM	Z2	Helix 45°	D_{h9}	Shank d_{h6}	
DC005	HM	Z3	Helix 45°	D_{h9}	Shank d_{h6}	
DC006	HM	Z4	Helix 45°	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Non internal coolant
- Có lưỡi cắt ngang
- Không có lỗ tưới nguội
- チゼルエッジ
- 非内部給油
- 끌 가장자리
- 비내부 절삭유



DC004	DC005	DC006
		
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O					●	●	●			
V_c (m / min)	20 ~ 25	20 ~ 25					100 ~ 120	100 ~ 120	80 ~ 90			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC004	DC005	DC006
2.0	3.0	50	6	1.0	0.010	DC0042.0	DC0052.0	DC0062.0
3.0	3.0	50	10	1.5	0.012	DC0043.0	DC0053.0	DC0063.0
4.0	4.0	50	10	2.0	0.015	DC0044.0	DC0054.0	DC0064.0
5.0	5.0	50	13	2.5	0.020	DC0045.0	DC0055.0	DC0065.0
6.0	6.0	50	15	3.0	0.025	DC0046.0	DC0056.0	DC0066.0
8.0	8.0	50	20	4.0	0.028	DC0048.0	DC0058.0	DC0068.0
10.0	10.0	75	25	5.0	0.030	DC00410.0	DC0050.0	DC00610.0
12.0	12.0	75	30	6.0	0.035	DC00412.0	DC00512.0	DC00612.0
14.0	14.0	80	30	7.0	0.040	DC00414.0	DC00514.0	DC00614.0
16.0	16.0	100	40	8.0	0.043	DC00416.0	DC00516.0	DC00616.0
18.0	18.0	100	45	9.0	0.050	DC00418.0	DC00518.0	DC00618.0
20.0	20.0	100	45	10.0	0.050	DC00420.0	DC00520.0	DC00620.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

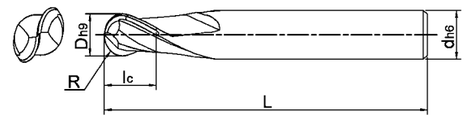
BALL ENDMILL

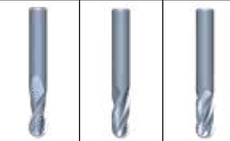
PROPERTIES & APPLICATION

DC007	HM	Z2	Helix 30°	D_{h9}	Shank d_{h6}	
DC008	HM	Z3	Helix 30°	D_{h9}	Shank d_{h6}	
DC009	HM	Z4	Helix 30°	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Straight coolant hole
- Có lưỡi cắt ngang
- Lỗ tưới nguội thẳng
- チゼルエッジ
- 直線冷却穴
- 끌 가장자리
- 직선 냉각 구멍



DC007	DC008	DC009
		
4.00-20.00	4.00-20.00	4.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	O	O					O	O	O			
V_c (m / min)	20 ~ 25	20 ~ 25					50 ~ 60	50 ~ 60	40 ~ 50			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC007	DC008	DC009
4.0	4.0	50	10	2.0	0.038	DC0074.0	DC0084.0	DC0094.0
5.0	5.0	50	13	2.5	0.046	DC0075.0	DC0085.0	DC0095.0
6.0	6.0	50	15	3.0	0.054	DC0076.0	DC0086.0	DC0096.0
8.0	8.0	50	20	4.0	0.067	DC0078.0	DC0088.0	DC0098.0
10.0	10.0	75	25	5.0	0.078	DC00710.0	DC00810.0	DC00910.0
12.0	12.0	75	30	6.0	0.089	DC00712.0	DC00812.0	DC00912.0
14.0	14.0	80	30	7.0	0.101	DC00714.0	DC00814.0	DC00914.0
16.0	16.0	100	40	8.0	0.112	DC00716.0	DC00816.0	DC00916.0
18.0	18.0	100	45	9.0	0.124	DC00718.0	DC00818.0	DC00918.0
20.0	20.0	100	45	10.0	0.135	DC00720.0	DC00820.0	DC00920.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

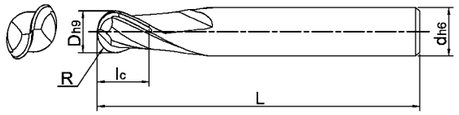
BALL ENDMILL

PROPERTIES & APPLICATION

DC010	HM	Z2	Helix 45⁰	D_{h9}	Shank d_{h6}		
DC011	HM	Z3	Helix 45⁰	D_{h9}	Shank d_{h6}		
DC012	HM	Z4	Helix 45⁰	D_{h9}	Shank d_{h6}		

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Straight coolant hole
- Có lưỡi cắt ngang
- Lỗ tưới nguội thẳng
- チゼルエッジ
- 直線冷却穴
- 끌 가장자리
- 직선 냉각 구멍



DC010	DC011	DC012
4.00-20.00	4.00-20.00	4.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○					●	●	●			
V_c (m / min)	20 ~ 25	20 ~ 25					100 ~ 120	100 ~ 120	80 ~ 90			

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC010	DC011	DC012
4.0	4.0	50	10	2.0	0.015	DC0104.0	DC0114.0	DC0124.0
5.0	5.0	50	13	2.5	0.020	DC0105.0	DC0115.0	DC0125.0
6.0	6.0	50	15	3.0	0.025	DC0106.0	DC0116.0	DC0126.0
8.0	8.0	50	20	4.0	0.028	DC0108.0	DC0118.0	DC0128.0
10.0	10.0	75	25	5.0	0.030	DC01010.0	DC01110.0	DC01210.0
12.0	12.0	75	30	6.0	0.035	DC01012.0	DC01112.0	DC01212.0
14.0	14.0	80	30	7.0	0.040	DC01014.0	DC01114.0	DC01214.0
16.0	16.0	100	40	8.0	0.043	DC01016.0	DC01116.0	DC01216.0
18.0	18.0	100	45	9.0	0.050	DC01018.0	DC01118.0	DC01218.0
20.0	20.0	100	45	10.0	0.050	DC01020.0	DC01120.0	DC01220.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

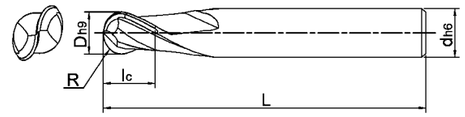
BALL ENDMILL

PROPERTIES & APPLICATION

DC013	HM	Z2	AlTiN	Helix 30⁰	D_{h9}	Shank d_{h6}		
DC014	HM	Z3	AlTiN	Helix 30⁰	D_{h9}	Shank d_{h6}		
DC015	HM	Z4	AlTiN	Helix 30⁰	D_{h9}	Shank d_{h6}		

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Non internal coolant
- Có lưỡi cắt ngang
- Không có lỗ tưới nguội
- チゼルエッジ
- 非内部給油
- 끌 가장자리
- 비내부 절삭유



DC013	DC014	DC015
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	○	○				○	○	○
V_c (m / min)	40 ~ 50	40 ~ 50	30 ~ 35	30 ~ 35	25 ~ 30	25 ~ 30				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC013	DC014	DC015
2.0	3.0	50	6	1.0	0.008	DC0132.0	DC0142.0	DC0152.0
3.0	3.0	50	10	1.5	0.012	DC0133.0	DC0143.0	DC0153.0
4.0	4.0	50	10	2.0	0.016	DC0134.0	DC0144.0	DC0154.0
5.0	5.0	50	13	2.5	0.020	DC0135.0	DC0145.0	DC0155.0
6.0	6.0	50	15	3.0	0.023	DC0136.0	DC0146.0	DC0156.0
8.0	8.0	50	20	4.0	0.029	DC0138.0	DC0148.0	DC0158.0
10.0	10.0	75	25	5.0	0.033	DC01310.0	DC01410.0	DC01510.0
12.0	12.0	75	30	6.0	0.038	DC01312.0	DC01412.0	DC01512.0
14.0	14.0	80	30	7.0	0.043	DC01314.0	DC01414.0	DC01514.0
16.0	16.0	100	40	8.0	0.048	DC01316.0	DC01416.0	DC01516.0
18.0	18.0	100	45	9.0	0.053	DC01318.0	DC01418.0	DC01518.0
20.0	20.0	100	45	10.0	0.058	DC01320.0	DC01420.0	DC01520.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

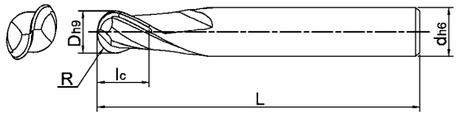
BALL ENDMILL

PROPERTIES & APPLICATION

DC016	HM	Z2	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}	
DC017	HM	Z3	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}	
DC018	HM	Z4	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Non internal coolant
- Có lưỡi cắt ngang
- Không có lỗ tưới nguội
- チゼルエッジ
- 非内部給油
- 끌 가장자리
- 비내부 절삭유



DC016	DC017	DC018
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○				○	○	○
V_c (m / min)	30 ~ 40	30 ~ 40	20 ~ 25	20 ~ 25	15 ~ 25	15 ~ 25				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC016	DC017	DC018
2.0	3.0	50	6	1.0	0.010	DC0162.0	DC0172.0	DC0182.0
3.0	3.0	50	10	1.5	0.012	DC0163.0	DC0173.0	DC0183.0
4.0	4.0	50	10	2.0	0.015	DC0164.0	DC0174.0	DC0184.0
5.0	5.0	50	13	2.5	0.020	DC0165.0	DC0175.0	DC0185.0
6.0	6.0	50	15	3.0	0.025	DC0166.0	DC0176.0	DC0186.0
8.0	8.0	50	20	4.0	0.028	DC0168.0	DC0178.0	DC0188.0
10.0	10.0	75	25	5.0	0.030	DC01610.0	DC01710.0	DC01810.0
12.0	12.0	75	30	6.0	0.035	DC01612.0	DC01712.0	DC01812.0
14.0	14.0	80	30	7.0	0.040	DC01614.0	DC01714.0	DC01814.0
16.0	16.0	100	40	8.0	0.043	DC01616.0	DC01716.0	DC01816.0
18.0	18.0	100	45	9.0	0.050	DC01618.0	DC01718.0	DC01818.0
20.0	20.0	100	45	10.0	0.050	DC01620.0	DC01720.0	DC01820.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

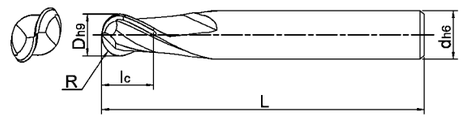
BALL ENDMILL

PROPERTIES & APPLICATION

DC019	HM	Z2	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}	
DC020	HM	Z3	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}	
DC021	HM	Z4	AlTiN	Helix 30°	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Straight coolant hole
- Có lưỡi cắt ngang
- Lỗ tưới nguội thẳng
- チゼルエッジ
- 直線冷却穴
- 끌 가장자리
- 직선 냉각 구멍



DC019	DC020	DC021
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	○	○						
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40						

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC019	DC020	DC021
4.0	4.0	50	10	2.0	0.016	DC0194.0	DC0204.0	DC0214.0
5.0	5.0	50	13	2.5	0.020	DC0195.0	DC0205.0	DC0215.0
6.0	6.0	50	15	3.0	0.023	DC0196.0	DC0206.0	DC0216.0
8.0	8.0	50	20	4.0	0.029	DC0198.0	DC0208.0	DC0218.0
10.0	10.0	75	25	5.0	0.033	DC01910.0	DC02010.0	DC02110.0
12.0	12.0	75	30	6.0	0.038	DC01912.0	DC02012.0	DC02112.0
14.0	14.0	80	30	7.0	0.043	DC01914.0	DC02014.0	DC02114.0
16.0	16.0	100	40	8.0	0.048	DC01916.0	DC02016.0	DC02116.0
18.0	18.0	100	45	9.0	0.053	DC01918.0	DC02014.0	DC02114.0
20.0	20.0	100	45	10.0	0.058	DC01920.0	DC02020.0	DC02120.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

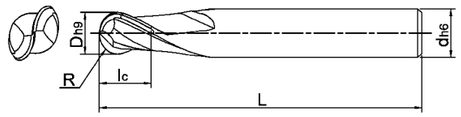
BALL ENDMILL

PROPERTIES & APPLICATION

DC022	HM	Z2	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}
DC023	HM	Z3	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}
DC024	HM	Z4	AlTiN	Helix 45°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Straight coolant hole
- Có lưỡi cắt ngang
- Lỗ tưới nguội thẳng
- チゼルエッジ
- 直線冷却穴
- 끌 가장자리
- 직선 냉각 구멍



DC022	DC023	DC024
4.00-20.00	4.00-20.00	4.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	○	○	○	○				○	○	○
V_c (m / min)	30 ~ 40	30 ~ 40	20 ~ 25	20 ~ 25	15 ~ 25	15 ~ 25				15 ~ 20	15 ~ 20	15 ~ 20

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC022	DC023	DC024
4.0	4.0	50	10	2.0	0.015	DC0224.0	DC0234.0	DC0244.0
5.0	5.0	50	13	2.5	0.020	DC0225.0	DC0235.0	DC0245.0
6.0	6.0	50	15	3.0	0.025	DC0226.0	DC0236.0	DC0246.0
8.0	8.0	50	20	4.0	0.028	DC0228.0	DC0238.0	DC0248.0
10.0	10.0	75	25	5.0	0.030	DC02210.0	DC02310.0	DC02410.0
12.0	12.0	75	30	6.0	0.035	DC02212.0	DC02312.0	DC02412.0
14.0	14.0	80	30	7.0	0.040	DC02214.0	DC02314.0	DC02414.0
16.0	16.0	100	40	8.0	0.043	DC02216.0	DC02316.0	DC02416.0
18.0	18.0	100	45	9.0	0.050	DC02218.0	DC02318.0	DC02418.0
20.0	20.0	100	45	10.0	0.050	DC02220.0	DC02320.0	DC02420.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

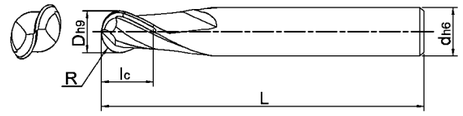
BALL ENDMILL

PROPERTIES & APPLICATION

DC025	HM	Z2	AlCr Blue	Helix 30°	D_{h9}	Shank d_{h6}
DC026	HM	Z3	AlCr Blue	Helix 30°	D_{h9}	Shank d_{h6}
DC027	HM	Z4	AlCr Blue	Helix 30°	D_{h9}	Shank d_{h6}

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Non internal coolant
- Có lưỡi cắt ngang
- Không có lỗ tưới nguội
- チゼルエッジ
- 非内部給油
- 끌 가장자리
- 비내부 절삭유



DC025	DC026	DC027
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC025	DC026	DC027
2.0	3.0	50	6	1.0	0.011	DC0252.0	DC0262.0	DC0272.0
3.0	3.0	50	10	1.5	0.017	DC0253.0	DC0263.0	DC0273.0
4.0	4.0	50	10	2.0	0.022	DC0254.0	DC0264.0	DC0274.0
5.0	5.0	50	13	2.5	0.026	DC0255.0	DC0265.0	DC0275.0
6.0	6.0	50	15	3.0	0.031	DC0256.0	DC0266.0	DC0276.0
8.0	8.0	50	20	4.0	0.038	DC0258.0	DC0268.0	DC0278.0
10.0	10.0	75	25	5.0	0.044	DC02510.0	DC02610.0	DC02710.0
12.0	12.0	75	30	6.0	0.051	DC02512.0	DC02612.0	DC02712.0
14.0	14.0	80	30	7.0	0058	DC02514.0	DC02614.0	DC02714.0
16.0	16.0	100	40	8.0	0.064	DC02516.0	DC02616.0	DC02716.0
18.0	18.0	100	45	9.0	0.071	DC02518.0	DC02618.0	DC02718.0
20.0	20.0	100	45	10.0	0.077	DC02520.0	DC02620.0	DC02720.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

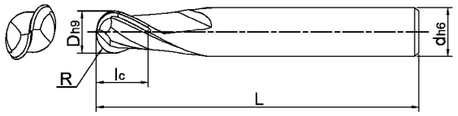
BALL ENDMILL

PROPERTIES & APPLICATION

DC028	HM	Z2	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}	
DC029	HM	Z3	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}	
DC030	HM	Z4	AlCr Blue	Helix 45⁰	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Non internal coolant
- Có lưỡi cắt ngang
- Không có lỗ tưới nguội
- チゼルエッジ
- 非内部給油
- 끌 가장자리
- 비내부 절삭유



DC028	DC029	DC030
2.00-20.00	2.00-20.00	2.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●	○	○	○	●	●	●
V_c (m / min)	40 ~ 50	40 ~ 50	35 ~ 45	35 ~ 45	30 ~ 40	30 ~ 40	100 ~ 120	100 ~ 120	80 ~ 90	30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC028	DC029	DC030
2.0	3.0	50	6	1.0	0.010	DC0282.0	DC0292.0	DC0302.0
3.0	3.0	50	10	1.5	0.012	DC0283.0	DC0293.0	DC0303.0
4.0	4.0	50	10	2.0	0.015	DC0284.0	DC0294.0	DC0304.0
5.0	5.0	50	13	2.5	0.020	DC0285.0	DC0295.0	DC0305.0
6.0	6.0	50	15	3.0	0.025	DC0286.0	DC0296.0	DC0306.0
8.0	8.0	50	20	4.0	0.028	DC0288.0	DC0298.0	DC0308.0
10.0	10.0	75	25	5.0	0.030	DC02810.0	DC02910.0	DC03010.0
12.0	12.0	75	30	6.0	0.035	DC02812.0	DC02912.0	DC03012.0
14.0	14.0	80	30	7.0	0.040	DC02814.0	DC02914.0	DC03014.0
16.0	16.0	100	40	8.0	0.043	DC02816.0	DC02916.0	DC03016.0
18.0	18.0	100	45	9.0	0.050	DC02818.0	DC02918.0	DC03018.0
20.0	20.0	100	45	10.0	0.050	DC02820.0	DC02920.0	DC03020.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

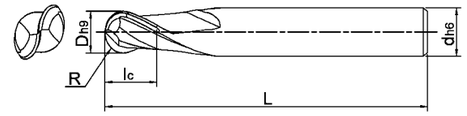
BALL ENDMILL

PROPERTIES & APPLICATION

DC031	HM	Z2	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}	
DC032	HM	Z3	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}	
DC033	HM	Z4	AlCr Blue	Helix 30⁰	D_{h9}	Shank d_{h6}	

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

Engineering Data
- Chisel edge
- Straight coolant hole
- Có lưỡi cắt ngang
- Lỗ tưới nguội thẳng
- チゼルエッジ
- 直線冷却穴
- 끌 가장자리
- 직선 냉각 구멍



DC031	DC032	DC033
4.00-20.00	4.00-20.00	4.00-20.00

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	●	●				●	●	●
V_c (m / min)	60 ~ 80	60 ~ 80	50 ~ 60	50 ~ 60	40 ~ 50	40 ~ 50				30 ~ 40	30 ~ 40	30 ~ 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC031	DC032	DC033
4.0	4.0	50	10	2.0	0.022	DC0314.0	DC0324.0	DC0334.0
5.0	5.0	50	13	2.5	0.026	DC0315.0	DC0325.0	DC0335.0
6.0	6.0	50	15	3.0	0.031	DC0316.0	DC0326.0	DC0336.0
8.0	8.0	50	20	4.0	0.038	DC0318.0	DC0328.0	DC0338.0
10.0	10.0	75	25	5.0	0.044	DC03110.0	DC03210.0	DC03310.0
12.0	12.0	75	30	6.0	0.051	DC03112.0	DC03212.0	DC03312.0
14.0	14.0	80	30	7.0	0058	DC03114.0	DC03214.0	DC03314.0
16.0	16.0	100	40	8.0	0.064	DC03116.0	DC03216.0	DC03316.0
18.0	18.0	100	45	9.0	0.071	DC03118.0	DC03218.0	DC03318.0
20.0	20.0	100	45	10.0	0.077	DC03120.0	DC03220.0	DC03320.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

BALL ENDMILL

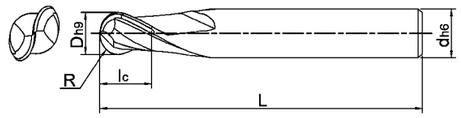
PROPERTIES & APPLICATION

DC034	HM	Z2	AlCr Blue	Helix 45°	D_{h9}	Shank d_{h6}			
DC035	HM	Z3	AlCr Blue	Helix 45°	D_{h9}	Shank d_{h6}			
DC036	HM	Z4	AlCr Blue	Helix 45°	D_{h9}	Shank d_{h6}			

D_{h9}	Tolerance	
1 < D ≤ 3	0	-0.025
3 < D ≤ 6	0	-0.030
6 < D ≤ 10	0	-0.036
10 < D ≤ 18	0	-0.043
18 < D ≤ 30	0	-0.052

DC034	DC035	DC036
4.00-20.00	4.00-20.00	4.00-20.00

Engineering Data
- Chisel edge
- Straight coolant hole
- Có lưỡi cắt ngang
- Lỗ tưới nguội thẳng
- チゼルエッジ
- 直線冷却穴
- 끝 가장자리
- 직선 냉각 구멍

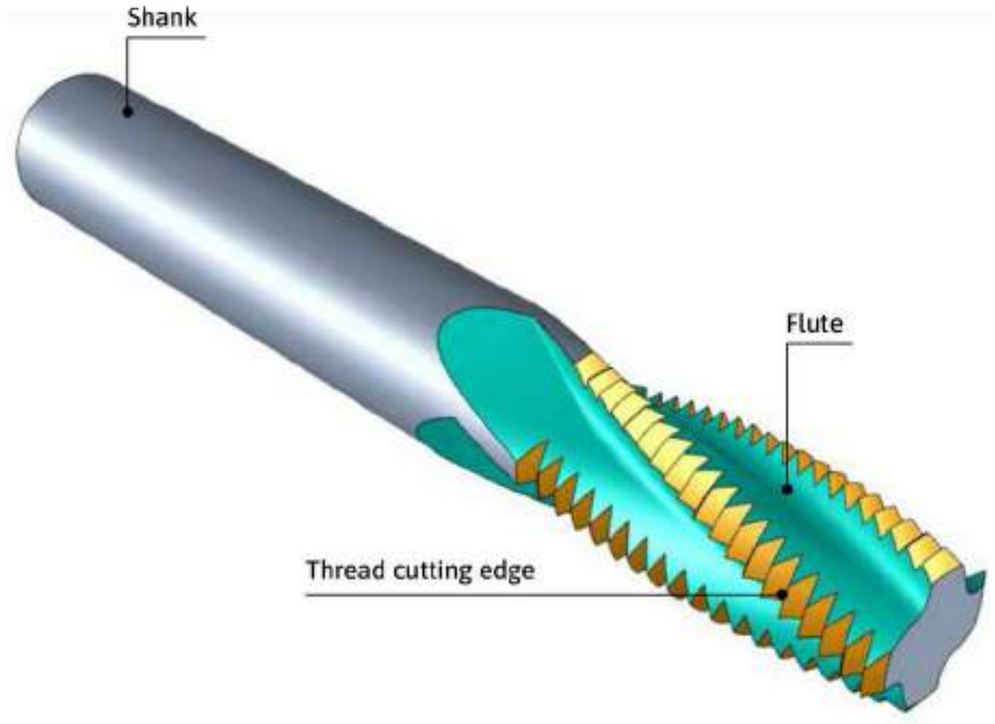


Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	○	○	●	●	●	●	○	○	○	●	●	●
V_c (m / min)	40 - 50	40 - 50	35 - 45	35 - 45	30 - 40	30 - 40	100 - 120	100 - 120	80 - 90	30 - 40	30 - 40	30 - 40

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	R (mm)	Feed (mm / rev)	Code order DC034	DC035	DC036
4.0	4.0	50	10	2.0	0.015	DC0344.0	DC0354.0	DC0364.0
5.0	5.0	50	13	2.5	0.020	DC0345.0	DC0355.0	DC0365.0
6.0	6.0	50	15	3.0	0.025	DC0346.0	DC0356.0	DC0366.0
8.0	8.0	50	20	4.0	0.028	DC0348.0	DC0358.0	DC0368.0
10.0	10.0	75	25	5.0	0.030	DC03410.0	DC03510.0	DC03610.0
12.0	12.0	75	30	6.0	0.035	DC03412.0	DC03512.0	DC03612.0
14.0	14.0	80	30	7.0	0.040	DC03414.0	DC03514.0	DC03614.0
16.0	16.0	100	40	8.0	0.043	DC03416.0	DC03516.0	DC03616.0
18.0	18.0	100	45	9.0	0.050	DC03418.0	DC03518.0	DC03618.0
20.0	20.0	100	45	10.0	0.050	DC03420.0	DC03520.0	DC03620.0

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

Solid Carbide Tools
THREAD MILL



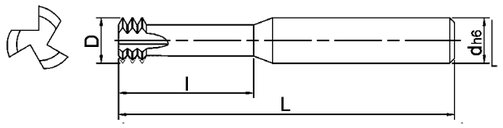
THREAD MILL

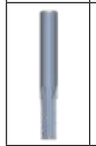
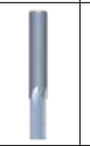
PROPERTIES & APPLICATION

DR001	HM	Z3	Helix 0^0	Shank d_{h6}
DR002	HM	Z4	Helix 0^0	Shank d_{h6}

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR001	DR002	
		
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR001	DR002	
M5	0.8	3.9	6	50	10		DR001M5	DR002M5	
M6	1.0	4.8	6	50	12		DR001M6	DR002M6	
M8	1.25	6.7	8	64	16		DR001M8	DR002M8	
M10	1.5	8.7	10	73	20		DR001M10	DR002M10	
M12	1.75	9.9	10	74	25		DR001M12	DR002M12	
M14	2.0	11.2	12	92	25		DR001M14	DR002M14	
M16	2.0	12.8	14	92	30		DR001M16	DR002M16	
M20	2.5	14.9	16	92	30		DR001M20	DR002M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

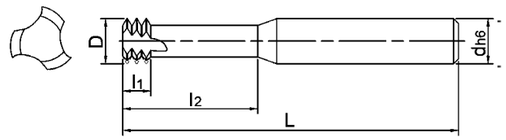
THREAD MILL

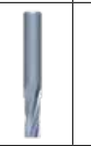
PROPERTIES & APPLICATION

DR003	HM	Z3	Helix 10^0	Shank d_{h6}
DR004	HM	Z4	Helix 10^0	Shank d_{h6}

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR003	DR004	
		
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR003	DR004	
M5	0.8	3.9	6	50	10		DR003M5	DR004M5	
M6	1.0	4.8	6	50	12		DR003M6	DR004M6	
M8	1.25	6.7	8	64	16		DR003M8	DR004M8	
M10	1.5	8.7	10	73	20		DR003M10	DR004M10	
M12	1.75	9.9	10	74	25		DR003M12	DR004M12	
M14	2.0	11.2	12	92	25		DR003M14	DR004M14	
M16	2.0	12.8	14	92	30		DR003M16	DR004M16	
M20	2.5	14.9	16	92	30		DR003M20	DR004M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

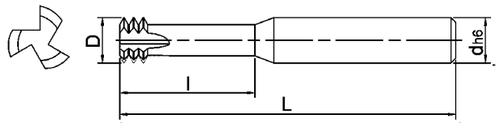
THREAD MILL

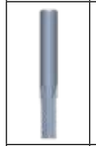
PROPERTIES & APPLICATION

DR005	HM	Z3	Helix 0^0	Shank d_{h6}		
DR006	HM	Z4	Helix 0^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR005	DR006	
		
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR005		
M5	0.8	3.9	6	50	10		DR005M5	DR006M5	
M6	1.0	4.8	6	50	12		DR005M6	DR006M6	
M8	1.25	6.7	8	64	16		DR005M8	DR006M8	
M10	1.5	8.7	10	73	20		DR005M10	DR006M10	
M12	1.75	9.9	10	74	25		DR005M12	DR006M12	
M14	2.0	11.2	12	92	25		DR005M14	DR006M14	
M16	2.0	12.8	14	92	30		DR005M16	DR006M16	
M20	2.5	14.9	16	92	30		DR005M20	DR006M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

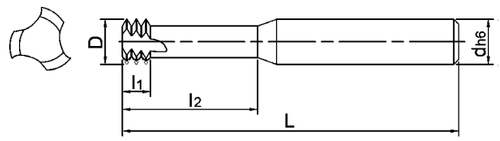
THREAD MILL

PROPERTIES & APPLICATION

DR007	HM	Z3	Helix 10^0	Shank d_{h6}		
DR008	HM	Z4	Helix 10^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR007	DR008	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR007	DR008	
M5	0.8	3.9	6	50	10		DR007M5	DR008M5	
M6	1.0	4.8	6	50	12		DR007M6	DR008M6	
M8	1.25	6.7	8	64	16		DR007M8	DR008M8	
M10	1.5	8.7	10	73	20		DR007M10	DR008M10	
M12	1.75	9.9	10	74	25		DR007M12	DR008M12	
M14	2.0	11.2	12	92	25		DR007M14	DR008M14	
M16	2.0	12.8	14	92	30		DR007M16	DR008M16	
M20	2.5	14.9	16	92	30		DR007M20	DR008M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

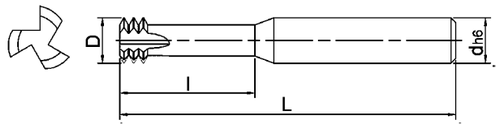
THREAD MILL

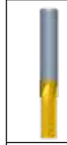
PROPERTIES & APPLICATION

DR009	HM	Z3	TiN	Helix 0^0	Shank d_{h6}	
DR010	HM	Z4	TiN	Helix 0^0	Shank d_{h6}	

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR009	DR010	
		
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	I (mm)	Feed (mm / rev)	Code order DR009	DR002	
M5	0.8	3.9	6	50	10		DR009M5	DR010M5	
M6	1.0	4.8	6	50	12		DR009M6	DR010M6	
M8	1.25	6.7	8	64	16		DR009M8	DR010M8	
M10	1.5	8.7	10	73	20		DR009M10	DR010M10	
M12	1.75	9.9	10	74	25		DR009M12	DR010M12	
M14	2.0	11.2	12	92	25		DR009M14	DR010M14	
M16	2.0	12.8	14	92	30		DR009M16	DR010M16	
M20	2.5	14.9	16	92	30		DR009M20	DR010M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

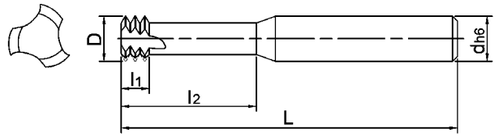
THREAD MILL

PROPERTIES & APPLICATION

DR011	HM	Z3	TiN	Helix 10^0	Shank d_{h6}	
DR012	HM	Z4	TiN	Helix 10^0	Shank d_{h6}	

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR011	DR012	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	I (mm)	Feed (mm / rev)	Code order DR011	DR012	
M5	0.8	3.9	6	50	10		DR011M5	DR012M5	
M6	1.0	4.8	6	50	12		DR011M6	DR012M6	
M8	1.25	6.7	8	64	16		DR011M8	DR012M8	
M10	1.5	8.7	10	73	20		DR011M10	DR012M10	
M12	1.75	9.9	10	74	25		DR011M12	DR012M12	
M14	2.0	11.2	12	92	25		DR011M14	DR012M14	
M16	2.0	12.8	14	92	30		DR011M16	DR012M16	
M20	2.5	14.9	16	92	30		DR011M20	DR002M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

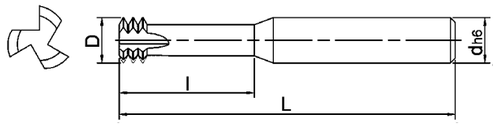
THREAD MILL

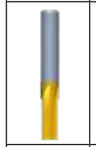
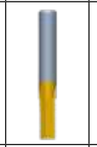
PROPERTIES & APPLICATION

DR013	HM	Z3	TiN	Helix 0^0	Shank d_{h6}		
DR014	HM	Z4	TiN	Helix 0^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR013	DR014	
		
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR013	DR014	
M5	0.8	3.9	6	50	10		DR013M5	DR014M5	
M6	1.0	4.8	6	50	12		DR013M6	DR014M6	
M8	1.25	6.7	8	64	16		DR013M8	DR014M8	
M10	1.5	8.7	10	73	20		DR013M10	DR014M10	
M12	1.75	9.9	10	74	25		DR013M12	DR014M12	
M14	2.0	11.2	12	92	25		DR013M14	DR014M14	
M16	2.0	12.8	14	92	30		DR013M16	DR014M16	
M20	2.5	14.9	16	92	30		DR013M20	DR014M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

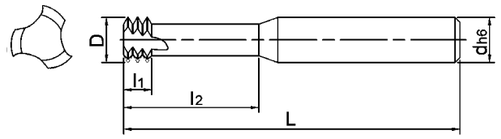
THREAD MILL

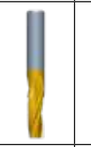
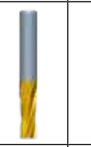
PROPERTIES & APPLICATION

DR015	HM	Z3	TiN	Helix 10^0	Shank d_{h6}		
DR016	HM	Z4	TiN	Helix 10^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR015	DR016	
		
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR015	DR016	
M5	0.8	3.9	6	50	10		DR015M5	DR016M5	
M6	1.0	4.8	6	50	12		DR015M6	DR016M6	
M8	1.25	6.7	8	64	16		DR015M8	DR016M8	
M10	1.5	8.7	10	73	20		DR015M10	DR016M10	
M12	1.75	9.9	10	74	25		DR015M12	DR016M12	
M14	2.0	11.2	12	92	25		DR015M14	DR016M14	
M16	2.0	12.8	14	92	30		DR015M16	DR016M16	
M20	2.5	14.9	16	92	30		DR015M20	DR016M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DR

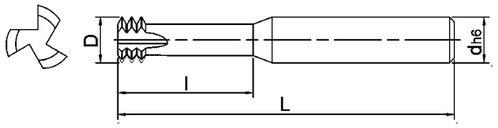
THREAD MILL

PROPERTIES & APPLICATION

DR017	HM	Z3	AlTiN	Helix 0^0	Shank d_{h6}	
DR018	HM	Z4	AlTiN	Helix 0^0	Shank d_{h6}	

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR017	DR018	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR017	DR018	
M5	0.8	3.9	6	50	10		DR017M5	DR018M5	
M6	1.0	4.8	6	50	12		DR017M6	DR018M6	
M8	1.25	6.7	8	64	16		DR017M8	DR018M8	
M10	1.5	8.7	10	73	20		DR017M10	DR018M10	
M12	1.75	9.9	10	74	25		DR017M12	DR018M12	
M14	2.0	11.2	12	92	25		DR017M14	DR018M14	
M16	2.0	12.8	14	92	30		DR017M16	DR018M16	
M20	2.5	14.9	16	92	30		DR017M20	DR018M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

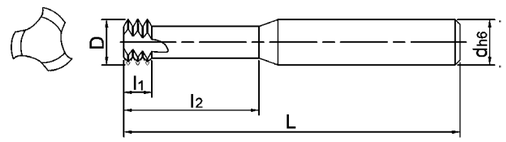
THREAD MILL

PROPERTIES & APPLICATION

DR019	HM	Z3	AlTiN	Helix 10^0	Shank d_{h6}	
DR020	HM	Z4	AlTiN	Helix 10^0	Shank d_{h6}	

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR019	DR020	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR019	DR002	
M5	0.8	3.9	6	50	10		DR019M5	DR002M5	
M6	1.0	4.8	6	50	12		DR019M6	DR020M6	
M8	1.25	6.7	8	64	16		DR019M8	DR020M8	
M10	1.5	8.7	10	73	20		DR019M10	DR020M10	
M12	1.75	9.9	10	74	25		DR019M12	DR020M12	
M14	2.0	11.2	12	92	25		DR019M14	DR020M14	
M16	2.0	12.8	14	92	30		DR019M16	DR020M16	
M20	2.5	14.9	16	92	30		DR019M20	DR020M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

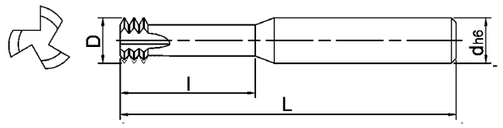
THREAD MILL

PROPERTIES & APPLICATION

DR021	HM	Z3	ALTiN	Helix 0^0	Shank d_{h6}		
DR022	HM	Z4	ALTiN	Helix 0^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR021	DR022	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR021	DR022	
M5	0.8	3.9	6	50	10		DR021M5	DR022M5	
M6	1.0	4.8	6	50	12		DR021M6	DR022M6	
M8	1.25	6.7	8	64	16		DR021M8	DR022M8	
M10	1.5	8.7	10	73	20		DR021M10	DR022M10	
M12	1.75	9.9	10	74	25		DR021M12	DR022M12	
M14	2.0	11.2	12	92	25		DR021M14	DR022M14	
M16	2.0	12.8	14	92	30		DR021M16	DR022M16	
M20	2.5	14.9	16	92	30		DR021M20	DR022M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

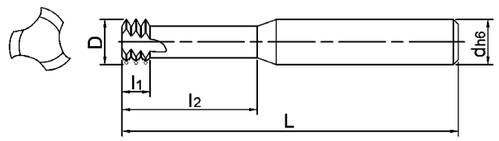
THREAD MILL

PROPERTIES & APPLICATION

DR023	HM	HM	Z3	ALTiN	Helix 10^0	Shank d_{h6}		
DR024	HM	HM	Z4	ALTiN	Helix 10^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR023	DR024	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR023	DR024	
M5	0.8	3.9	6	50	10		DR023M5	DR024M5	
M6	1.0	4.8	6	50	12		DR023M6	DR024M6	
M8	1.25	6.7	8	64	16		DR023M8	DR024M8	
M10	1.5	8.7	10	73	20		DR023M10	DR024M10	
M12	1.75	9.9	10	74	25		DR023M12	DR024M12	
M14	2.0	11.2	12	92	25		DR023M14	DR024M14	
M16	2.0	12.8	14	92	30		DR023M16	DR024M16	
M20	2.5	14.9	16	92	30		DR023M20	DR024M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

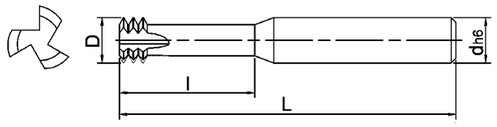
THREAD MILL

PROPERTIES & APPLICATION

DR025	HM	Z3	Helix 0^0	Shank d_{h6}	
DR026	HM	Z4	Helix 0^0	Shank d_{h6}	

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR025	DR026	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR025	DR026	
M5	0.8	3.9	6	50	10		DR025M5	DR026M5	
M6	1.0	4.8	6	50	12		DR025M6	DR026M6	
M8	1.25	6.7	8	64	16		DR025M8	DR026M8	
M10	1.5	8.7	10	73	20		DR025M10	DR026M10	
M12	1.75	9.9	10	74	25		DR025M12	DR026M12	
M14	2.0	11.2	12	92	25		DR025M14	DR026M14	
M16	2.0	12.8	14	92	30		DR025M16	DR026M16	
M20	2.5	14.9	16	92	30		DR025M20	DR026M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

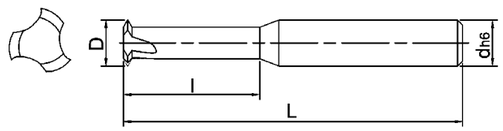
THREAD MILL

PROPERTIES & APPLICATION

DR027	HM	Z3	Helix 10^0	Shank d_{h6}	
DR028	HM	Z4	Helix 10^0	Shank d_{h6}	

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR027	DR028	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR027	DR028	
M5	0.8	3.9	6	50	10		DR027M5	DR028M5	
M6	1.0	4.8	6	50	12		DR027M6	DR028M6	
M8	1.25	6.7	8	64	16		DR027M8	DR028M8	
M10	1.5	8.7	10	73	20		DR027M10	DR028M10	
M12	1.75	9.9	10	74	25		DR027M12	DR028M12	
M14	2.0	11.2	12	92	25		DR027M14	DR028M14	
M16	2.0	12.8	14	92	30		DR027M16	DR028M16	
M20	2.5	14.9	16	92	30		DR027M20	DR028M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

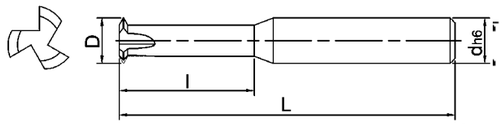
THREAD MILL

PROPERTIES & APPLICATION

DR029	HM	Z3	Helix 0^0	Shank d_{h6}		
DR030	HM	Z4	Helix 0^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR029	DR030	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR029	DR030	
M5	0.8	3.9	6	50	10		DR029M5	DR030M5	
M6	1.0	4.8	6	50	12		DR029M6	DR030M6	
M8	1.25	6.7	8	80	16		DR029M8	DR030M8	
M10	1.5	8.7	10	73	20		DR029M10	DR030M10	
M12	1.75	9.9	10	74	25		DR029M12	DR030M12	
M14	2.0	11.2	12	92	25		DR029M14	DR030M14	
M16	2.0	12.8	14	92	30		DR029M16	DR030M16	
M20	2.5	14.9	16	92	30		DR029M20	DR030M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

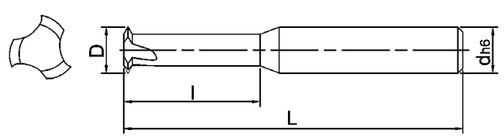
THREAD MILL

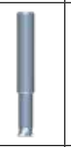
PROPERTIES & APPLICATION

DR031	HM	Z3	Helix 10^0	Shank d_{h6}		
DR032	HM	Z4	Helix 10^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR031	DR032	
		
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR031	DR032	
M5	0.8	3.9	6	50	10		DR031M5	DR032M5	
M6	1.0	4.8	6	50	12		DR031M6	DR032M6	
M8	1.25	6.7	8	64	16		DR031M8	DR032M8	
M10	1.5	8.7	10	73	20		DR031M10	DR032M10	
M12	1.75	9.9	10	74	25		DR031M12	DR032M12	
M14	2.0	11.2	12	92	25		DR031M14	DR032M14	
M16	2.0	12.8	14	92	30		DR031M16	DR032M16	
M20	2.5	14.9	16	92	30		DR031M20	DR032M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

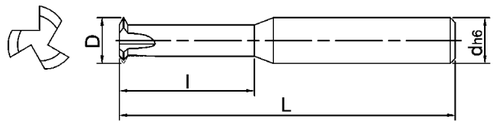
THREAD MILL

PROPERTIES & APPLICATION

DR033	HM	Z3	TiN	Helix 0^0	Shank d_{h6}	
DR034	HM	Z4	TiN	Helix 0^0	Shank d_{h6}	

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR033	DR034	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR033	DR034	
M5	0.8	3.9	6	50	10		DR033M5	DR034M5	
M6	1.0	4.8	6	50	12		DR033M6	DR034M6	
M8	1.25	6.7	8	64	16		DR033M8	DR034M8	
M10	1.5	8.7	10	73	20		DR033M10	DR034M10	
M12	1.75	9.9	10	74	25		DR033M12	DR034M12	
M14	2.0	11.2	12	92	25		DR033M14	DR034M14	
M16	2.0	12.8	14	92	30		DR033M16	DR034M16	
M20	2.5	14.9	16	92	30		DR033M20	DR034M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

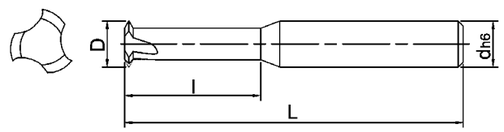
THREAD MILL

PROPERTIES & APPLICATION

DR035	HM	Z3	TiN	Helix 10^0	Shank d_{h6}	
DR036	HM	Z4	TiN	Helix 10^0	Shank d_{h6}	

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR035	DR036	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR035	DR036	
M5	0.8	3.9	6	50	10		DR035M5	DR036M5	
M6	1.0	4.8	6	50	12		DR035M6	DR036M6	
M8	1.25	6.7	8	64	16		DR035M8	DR036M8	
M10	1.5	8.7	10	73	20		DR035M10	DR036M10	
M12	1.75	9.9	10	74	25		DR035M12	DR036M12	
M14	2.0	11.2	12	92	25		DR035M14	DR036M14	
M16	2.0	12.8	14	92	30		DR035M16	DR036M16	
M20	2.5	14.9	16	92	30		DR035M20	DR036M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DR

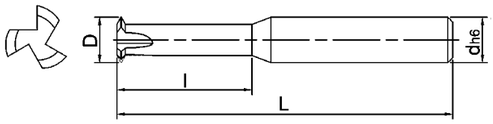
THREAD MILL

PROPERTIES & APPLICATION

DR037	HM	Z3	TiN	Helix 0^0	Shank d_{h6}		
DR038	HM	Z4	TiN	Helix 0^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR037	DR038	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR037	DR038	
M5	0.8	3.9	6	50	10		DR037M5	DR038M5	
M6	1.0	4.8	6	50	12		DR037M6	DR038M6	
M8	1.25	6.7	8	64	16		DR037M8	DR038M8	
M10	1.5	8.7	10	73	20		DR037M10	DR038M10	
M12	1.75	9.9	10	74	25		DR037M12	DR038M12	
M14	2.0	11.2	12	92	25		DR037M14	DR038M14	
M16	2.0	12.8	14	92	30		DR037M16	DR038M16	
M20	2.5	14.9	16	92	30		DR037M20	DR038M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

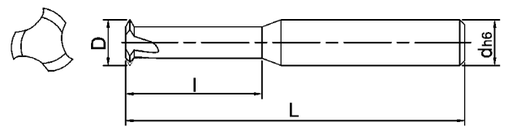
THREAD MILL

PROPERTIES & APPLICATION

DR039	HM	Z3	TiN	Helix 10^0	Shank d_{h6}		
DR040	HM	Z6	TiN	Helix 10^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR039	DR040	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR039	DR040	
M5	0.8	3.9	6	50	10		DR039M5	DR040M5	
M6	1.0	4.8	6	50	12		DR039M6	DR040M6	
M8	1.25	6.7	8	64	16		DR039M8	DR040M8	
M10	1.5	8.7	10	73	20		DR039M10	DR040M10	
M12	1.75	9.9	10	74	25		DR039M12	DR040M12	
M14	2.0	11.2	12	92	25		DR039M14	DR040M14	
M16	2.0	12.8	14	92	30		DR039M16	DR040M16	
M20	2.5	14.9	16	92	30		DR039M20	DR040M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

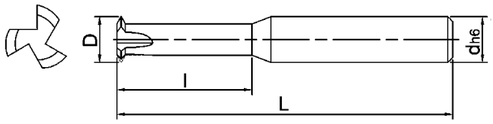
THREAD MILL

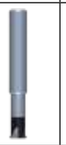
PROPERTIES & APPLICATION

DR041	HM	Z3	AlTiN	Helix 0^0	Shank d_{h6}	
DR042	HM	Z4	AlTiN	Helix 0^0	Shank d_{h6}	

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR041	DR042	
		
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR041	DR002	
M5	0.8	3.9	6	50	10		DR041M5	DR042M5	
M6	1.0	4.8	6	50	12		DR041M6	DR042M6	
M8	1.25	6.7	8	64	16		DR041M8	DR042M8	
M10	1.5	8.7	10	73	20		DR041M10	DR042M10	
M12	1.75	9.9	10	74	25		DR041M12	DR042M12	
M14	2.0	11.2	12	92	25		DR041M14	DR042M14	
M16	2.0	12.8	14	92	30		DR041M16	DR042M16	
M20	2.5	14.9	16	92	30		DR041M20	DR042M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

ANMI SYNCHRONOUS SOLUTION

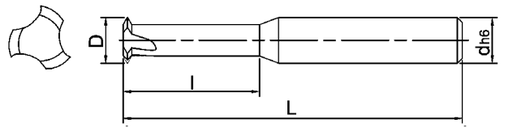
THREAD MILL

PROPERTIES & APPLICATION

DR043	HM	Z3	Helix 25^0	D_{h9}	Shank d_{h6}	
DR044	HM	Z6	Helix 25^0	D_{h9}	Shank d_{h6}	

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR043	DR044	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR043	DR044	
M5	0.8	3.9	6	50	10		DR043M5	DR044M5	
M6	1.0	4.8	6	50	12		DR043M6	DR044M6	
M8	1.25	6.7	8	64	16		DR043M8	DR044M8	
M10	1.5	8.7	10	73	20		DR043M10	DR044M10	
M12	1.75	9.9	10	74	25		DR043M12	DR044M12	
M14	2.0	11.2	12	92	25		DR043M14	DR044M14	
M16	2.0	12.8	14	92	30		DR043M16	DR044M16	
M20	2.5	14.9	16	92	30		DR043M20	DR044M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

DR

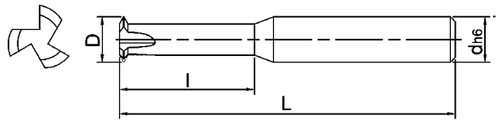
SPECIAL SOLID CARBIDE

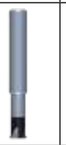
PROPERTIES & APPLICATION

DR045	HM	Z3	ALTiN	Helix 0^0	Shank d_{h6}		
DR046	HM	Z4	ALTiN	Helix 0^0	Shank d_{h6}		

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR045	DR046	
		
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR045	DR046	
M5	0.8	3.9	6	50	10		DR045M5	DR046M5	
M6	1.0	4.8	6	50	12		DR045M6	DR046M6	
M8	1.25	6.7	8	64	16		DR045M8	DR046M8	
M10	1.5	8.7	10	73	20		DR045M10	DR046M10	
M12	1.75	9.9	10	74	25		DR045M12	DR046M12	
M14	2.0	11.2	12	92	25		DR045M14	DR046M14	
M16	2.0	12.8	14	92	30		DR045M16	DR046M16	
M20	2.5	14.9	16	92	30		DR045M20	DR046M20	

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

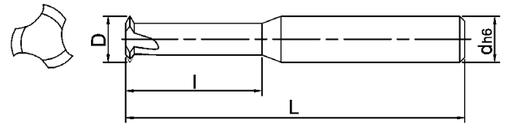
THREAD MILL

PROPERTIES & APPLICATION

DR047	HM	Z3	Helix 25^0	D_{h9}	Shank d_{h6}			
DR048	HM	Z6	Helix 25^0	D_{h9}	Shank d_{h6}			

Engineering Data

- Thread angle 60°
- Góc ren 60°
- ねじ角度 60°
- 나사산 각도 60°



DR047	DR048	
M5-M20	M5-M20	

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminum Alu Plastics	Aluminum Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

M (ISO)	P (mm)	D (mm)	D_{h6} (mm)	L (mm)	l (mm)	Feed (mm / rev)	Code order DR047	DR048	
M5	0.8	3.9	6	50	10		DR047M5	DR048M5	
M6	1.0	4.8	6	50	12		DR047M6	DR048M6	
M8	1.25	6.7	8	64	16		DR047M8	DR048M8	
M10	1.5	8.7	10	73	20		DR047M10	DR048M10	
M12	1.75	9.9	10	74	25		DR047M12	DR048M12	
M14	2.0	11.2	12	92	25		DR047M14	DR048M14	
M16	2.0	12.8	14	92	30		DR047M16	DR048M16	
M20	2.5	14.9	16	92	30		DR047M20	DR048M20	

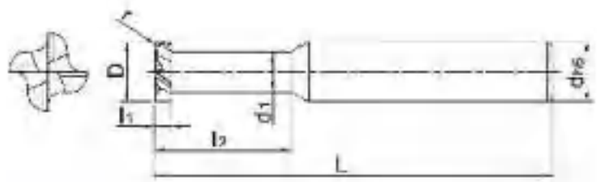
- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- Với bước tiến: dung sai ± 15%
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*
- *Tolerances of feed ± 15%*

BORING TOOLS

Z	r (mm)	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 (°)		Coating

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*

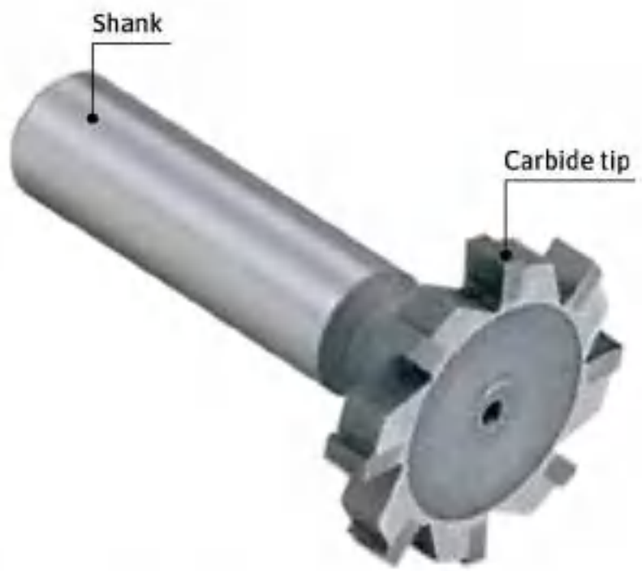
T-SLOT CUTTER

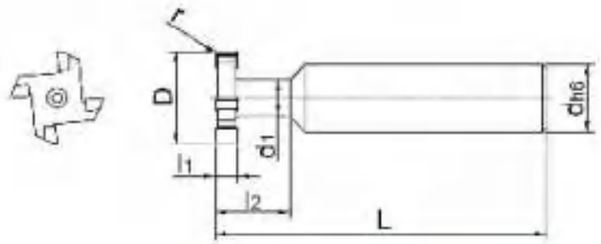


Z	r (mm)	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)	Coating

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*

BRAZED CARBIDE T-SLOT



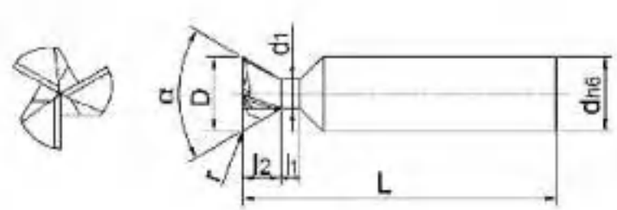


Z	r (mm)	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_3 (mm)	l_2 (mm)	d1 (mm)	α2 °	Coating		
-	-	-	-	-	-	-	-	-	Non	TiN	AlTiCrN

• Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)

• *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*

DOVE TAIL CUTTER



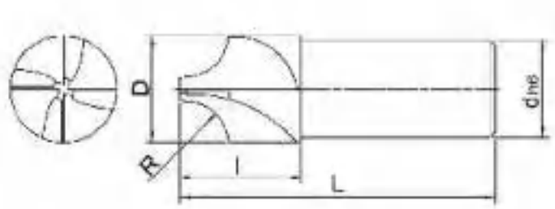
Z	r (mm)	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 °	d_1 (mm)	Coating		
-	-	-	-	-	-	-	-	-	Non	TiN	AlTiCrN

• Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)

• *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*

SPECIAL SOLID CARBIDE

Corner round endmill



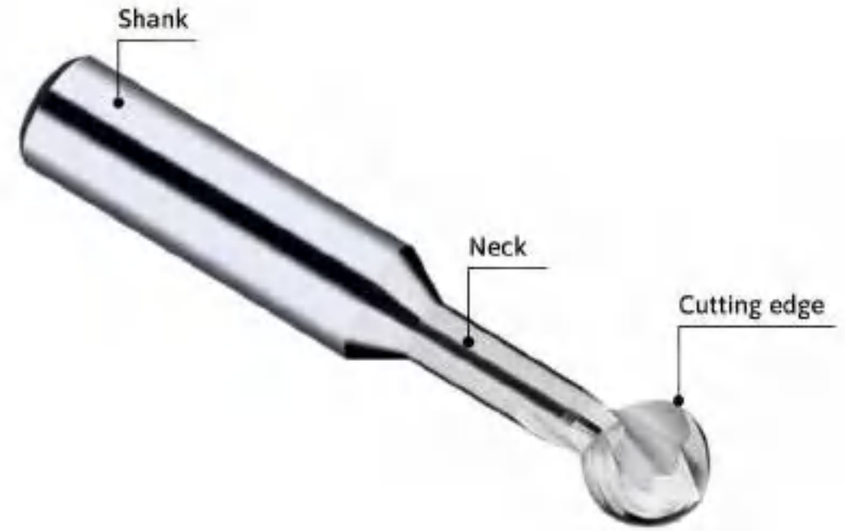
Code order	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_3 (mm)	l_2 (mm)	R (mm)	Z	Coating		
								Non	TiN	AlTiCrN
-	-	-	-	-	-	-	-			

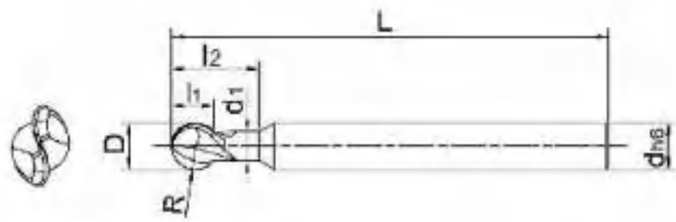
• Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)

• *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*

SPECIAL SOLID CARBIDE

Lolipop cutter



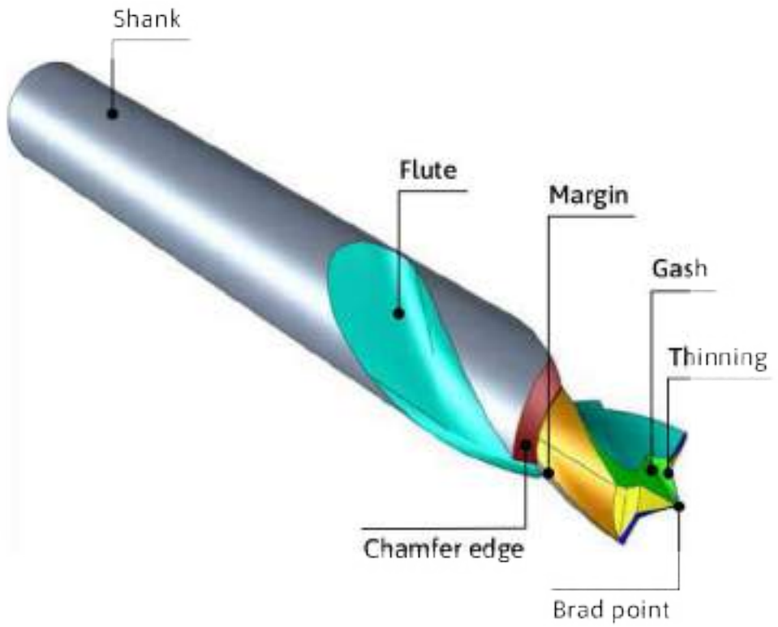


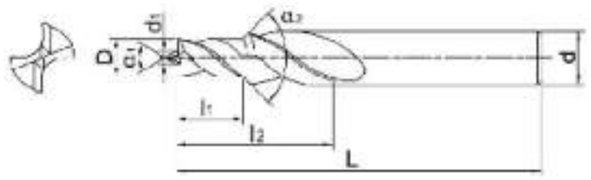
Code order	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	d1 (mm)	R (mm)	Coating		
								Non	TiN	AlTiCrN
-	-	-	-	-	-	-	-			

• Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)

• *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*

BRAD POINT DRILL

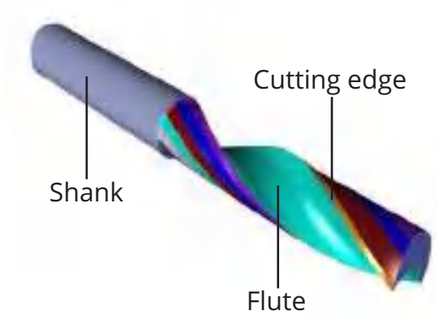




Code order	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)	Coating		
	-	-	-	-	-	-	-	Non	TiN	AlTiCrN

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*

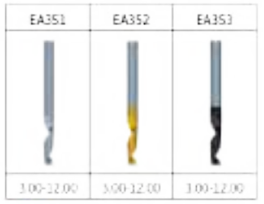
SINGLE FLUTE ENDMILL



PROPERTIES & APPLICATION

DS001	HM	Z1		Helix 30°	D_{h6}	Shank d_{h6}		
DS002	HM	Z1	TiN	Helix 30°	D_{h6}	Shank d_{h6}		
DS003	HM	Z1	AlTiN	Helix 30°	D_{h6}	Shank d_{h6}		

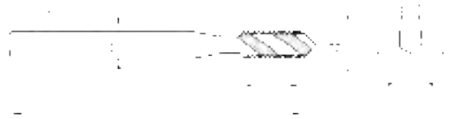
Engineering Data
- Non internal coolant
- Không có lỗ tưới nguội
- 非内部给油
- 비내부 절삭유



Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Grey Cast Iron	Nodular Cast Iron	Aluminij Alu Plastics	Aluminij Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	●	●	○	○	○	○	○	○
V_c (m / min)												

D_{h9} (mm)	d_{h6} (mm)	L (mm)	l_c (mm)	Feed (mm / rev)	Code order		
					DS001	DS002	DS003
3.0	6.0	50	12		DS0013.0	DS0023.0	DS0033.0
4.0	6.0	50	15		DS0014.0	DS0024.0	DS0034.0
5.0	6.0	50	20		DS0015.0	DS0025.0	DS0035.0
6.0	6.0	50	22		DS0016.0	DS0026.0	DS0036.0
8.0	8.0	64	30		DS0018.0	DS0028.0	DS0038.0
10.0	10.0	73	30		DS00110.0	DS00210.0	DS00310.0
12.0	12.0	74	32		DS00112.0	DS00212.0	DS00312.0

Standard	DIN 2184-1
Standard	DIN 371
Tool material	HSS-E
[illegible]	[illegible]
Tolerance	[illegible]
Coating	[illegible]



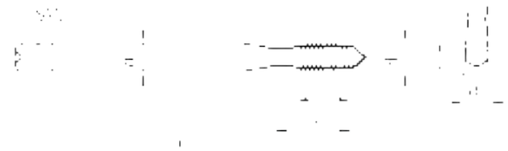
Order code	d1	P	d2	SW	dk	l1	l2
DT0013.0	M3	0.500	3.500	2.7	2.50	56.000	6.000
DT0014.0	M4	0.700	4.500	3.4	3.30	63.000	7.500
DT0015.0	M5	0.800	6.000	4.9	4.20	70.000	8.500
DT0016.0	M6	1.000	6.000	4.9	5.00	80.000	11.000
DT0018.0	M8	1.250	8.000	6.2	6.80	90.000	14.000
DT00110.0	M10	1.500	10.000	8.0	8.50	100.000	16.000

Engineering Data

[illegible]

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code*

Standard	DIN 2184-1
Standard	DIN 371
Tool material	HSS-E
Tolerance	ISO 6H
Coating	[illegible]



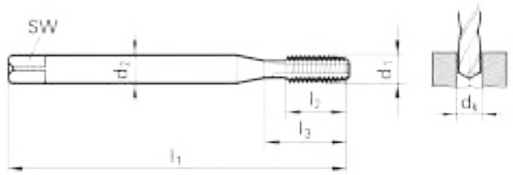
Order code	d1	P	d2	SW	dk	l1	l2
DT0023.0	M3	0.500	3.500	2.7	2.50	56.000	6.000
DT0024.0	M4	0.700	4.500	3.4	3.30	63.000	7.500
DT0035.0	M5	0.800	6.000	4.9	4.20	70.000	8.500
DT0036.0	M6	1.000	6.000	4.9	5.00	80.000	11.000
DT0038.0	M8	1.250	8.000	6.2	6.80	90.000	14.000
DT00310.0	M10	1.500	10.000	8.0	8.50	100.000	16.000

Engineering Data

[illegible]

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
- *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code*

Standard	**DIN 2184-1**
Standard	DIN 371
Tool rsaterial	**HSS-E**
Tolerance	ISO2/6H
Ø range:	M 3 - M10



Order code	d1	P	d2	SW	dk	l1	l2	l3
	mm	mm	mm		mm	mm	mm	mm
DT0033.0	M3	0.500	2.200		2.500	56.000	10.000	18.000
DT0034.0	M4	0.700	2.800	2.1	3.300	63.000	12.000	21.000
DT0035.0	M5	0.800	3.500	2.7	4.200	70.000	14.000	25.000
DT0036.0	M6	1.000	4.500	3.4	5.000	80.000	16.000	30.000
DT0038.0	M8	1.250	6.000	4.9	6.800	90.000	17.000	35.000
DT00310.0	M10	1.500	7.000	5.5	8.500	100.000	20.000	39.000
DT00312.0	M12	1.750	9.000	7.0	10.200	110.000	24.000	49.000
DT00314.0	M14	2.000	11.000	9.0	12.000	110.000	26.000	53.000
DT00316.0	M16	2.000	12.000	9.0	14.000	110.000	26.000	54.000
DT00320.0	M20	2.500	16.000	12.0	17.500	140.000	32.000	62.000

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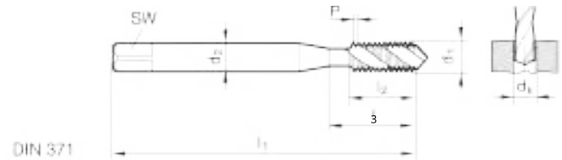

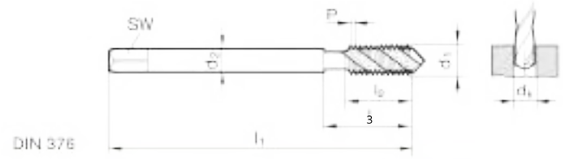

DIN 2184 - 1 DIN 371 — Order code: DT004 DT005 DT006 DT007

	d1	P	d2	SW	dk	l1	l2	l3
		mm	mm	mm	mm	mm	mm	mm
DT00...2.0	M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
DT00...2.2	M2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
DT00...2.3	M2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
DT00...2.5	M2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
DT00...2.6	M2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
DT00...3.0	M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
DT00...3.5	M3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
DT00...4.0	M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
DT00...5.0	M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
DT00...6.0	M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
DT00...8.0	M8	1.250	9.000	6.200	6.80	90.000	14.000	35.000
DT00...10.0	M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184 - 1 DIN 376 — Order code: DT008 DT009 DT010 DT011

Order code	d1	P	d2	SW	dk	l1	l2	l3
		mm	mm	mm	mm	mm	mm	mm
DT00...3.0	M3	0.500	2.200		2.50	56.000	6.000	18.000
DT00...3.5	M3.5	0.600	2.500	2.100	2.90	56.000	7.000	20.000
DT00...4.0	M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
DT00...5.0	M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
DT00...6.0	M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
DT00...7.0	M7	1.000	5.500	4.300	6.00	80.000	11.000	30.000
DT00...8.0	M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
DT00...10.0	M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
DT00...12.0	M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
DT00...14.0	M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
DT00...16.0	M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
DT00...18.0	M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
DT00...20.0	M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
DT00...22.0	M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
DT00...24.0	M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
DT00...27.0	M27	3.000	20.000	16.000	24.00	160.000	30.000	73.000
DT00...30.0	M30	3.500	22.000	18.000	26.50	180.000	35.000	86.000

• Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
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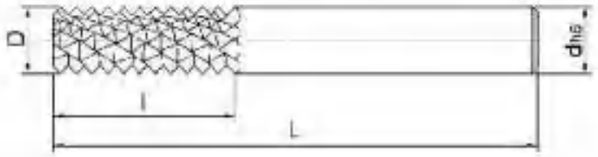

Code order	D_{n7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)	Coating		
	-	-	-	-	-	-	-	Non	TiN	AlTiCrN

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
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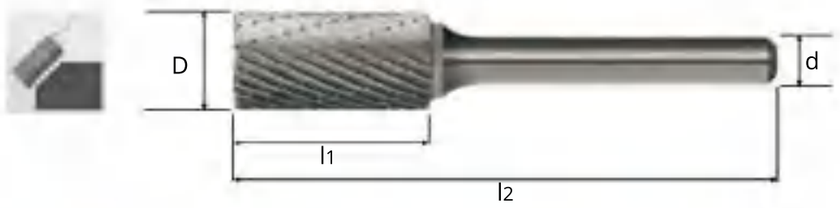

Material	Steel < 800 (N/mm²)	Steel (250) (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Alloy Cast Iron	Malleable Cast Iron	Alumini Alu Plastics	Alumini Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 63 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	○	○	○	○	○	○	○	●	●	●

Code order	D_{n7} (mm)	d_{h6} (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)	Coating		
DB0023.0	3	3	38	14	-	-	Non		
DB0026.3	6.3	3	45	12.7	-	-	Non		
DB0026.0	6	6	50	18	-	-	Non		
DB0028.0	8	6	64	19	-	-	Non		
DB0029.6	9.6	6	64	19	-	-	Non		
DB00212.7	12.7	6	70	25	-	-	Non		
DB00216.0	16	6	70	25	-	-	Non		

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IA003 IA004 IA005

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Cast Iron	Malleable Cast Iron	Aluminium Alu Plastics	Aluminium Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	○	○	○	●	○	●	●	●

Code order	D_{m7} (mm)	d_{h6} (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)	Coating		
DB0033.0	3	3	38	14	-	-	Non		
DB0036.3	6.3	3	45	12.7	-	-	Non		
DB0036.0	6	6	50	18	-	-	Non		
DB0038.0	8	6	64	19	-	-	Non		
DB0039.6	9.6	6	64	19	-	-	Non		
DB00312.7	12.7	6	70	25	-	-	Non		

Engineering Data
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n (rpm)

IA006 IA007

Material	Steel < 800 (N/mm²)	Steel < 1200 (N/mm²)	Inox < 800 (N/mm²)	Inox > 800 (N/mm²)	Cast Iron	Malleable Cast Iron	Aluminium Alu Plastics	Aluminium Alu Cast (>10% Si)	Super Alloys	Steel < 55 HRC	Steel < 60 HRC	Steel < 66 HRC
ISO Code	P	P	M	M	K	K	N	N	S	H	H	H
Suitability	●	●	●	●	○	○	○	○	○	●	●	●

Code order	D_{m7} (mm)	d_{h6} (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)	Coating		
DB0043.0	3	3	38	14	-	-	Non		
DB0046.3	6.3	3	45	12.7	-	-	Non		
DB0046.0	6	6	50	18	-	-	Non		
DB0048.0	8	6	64	19	-	-	Non		
DB0049.6	9.6	6	64	19	-	-	Non		
DB00412.7	12.7	6	70	25	-	-	Non		

Engineering Data
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n (rpm)

Code order	D_{m7} (mm)	d_{H6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 °	α2 °	Coating

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
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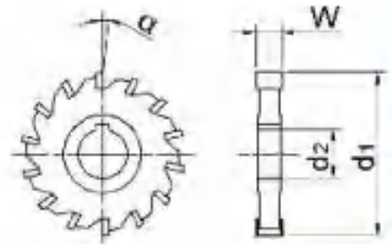

Code order	D_{m7} (mm)	d_m (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 °	α2 °	Coating

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
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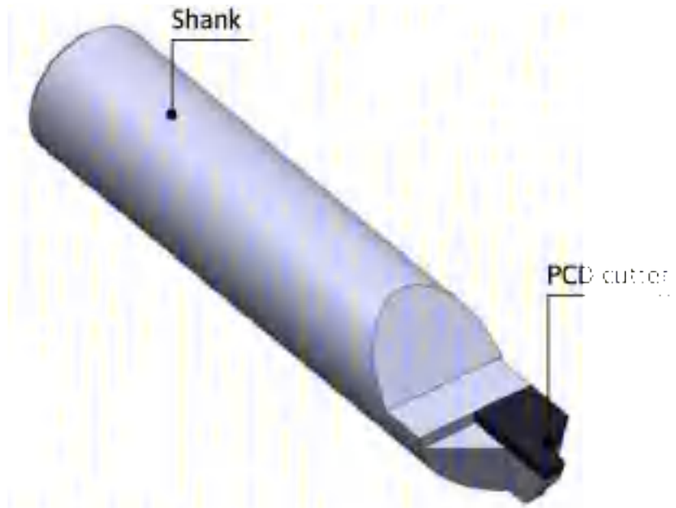
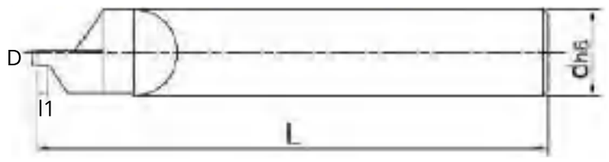
PCD BITE





Code order	D_{m7} (mm)	d_{h6} (mm)	L (mm)	L_1 (mm)	L_2 (mm)	α1 (°)	α2 (°)

• Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
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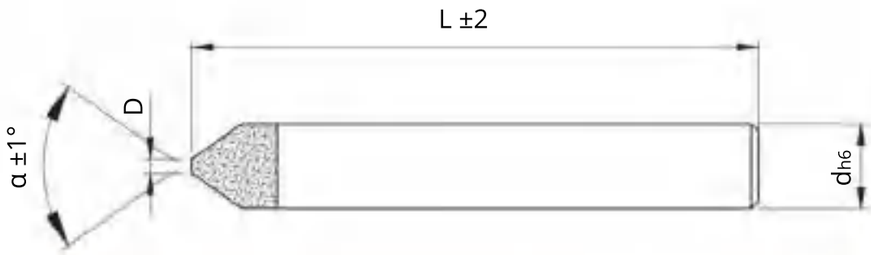
PCD BITE



Order code	D (mm)	α	d (mm)	L
DH001.01	0.2	45°	6	40
DH001.02	0.4	45°	6	40
DH001.03	0.2	60°	6	40
DH001.04	0.4	60°	6	40
DH001.05	0.2	70°	6	40
DH001.06	0.4	70°	6	40
DH001.07	1	70°	6	40
DH001.08	2	70°	6	40
DH001.09	0.2	90°	6	40
DH001.10	0.4	90°	6	40
DH001.11	1	90°	6	40
DH001.12	2	90°	6	40

• Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
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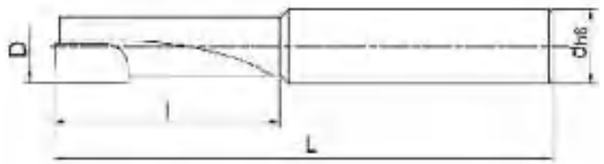
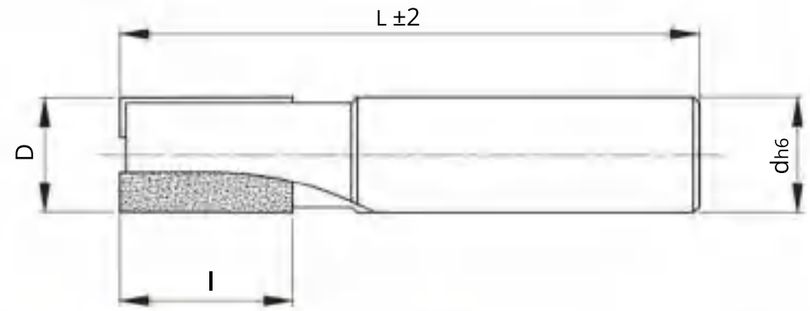
PCD SINGLE FLUTE ENDMILL



Code order	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)

• Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
• *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*

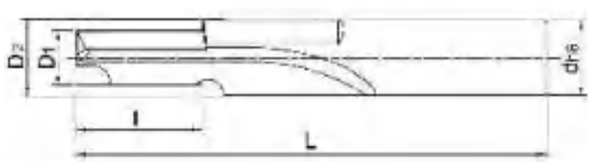
PCD DOUBLE FLUTE ENDMILL



Order code	D (mm)	l (mm)	Number of cutting edge	d (mm)	L (mm)
DH002.01	2	3	1	4	40
DH002.02	3	4	1	6	40
DH002.03	4	6	1	6	40
DH002.04	10	12	1	10	50
DH002.05	12	12	1	10	50
DH002.06	4	12	2	10	50
DH002.07	6	12	2	10	50
DH002.08	8	12	2	10	50
DH002.09	10	12	2	10	50
DH002.10	12	12	2	10	50

• Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
• *For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)*

PCD STEP REAMER



Code order	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
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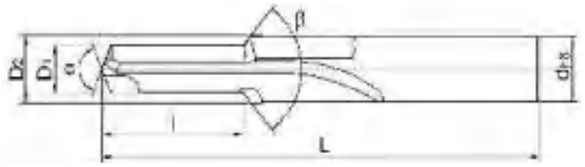
PCD STEP DRILL



Code order	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
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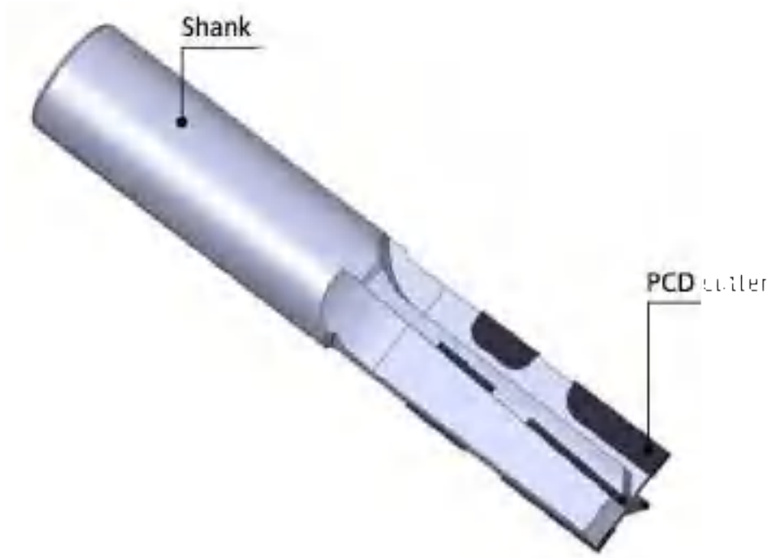
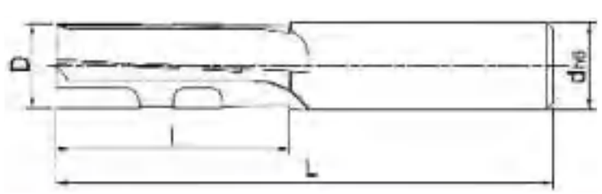
PCD PERIPHEAL MILLING



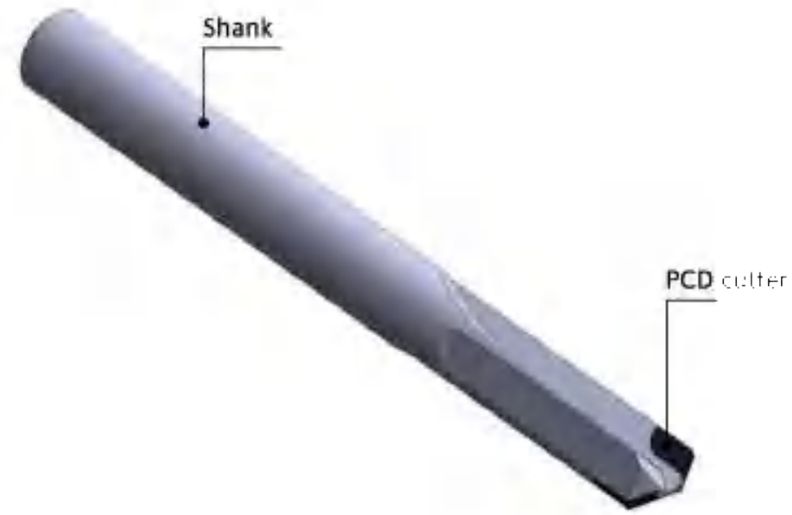


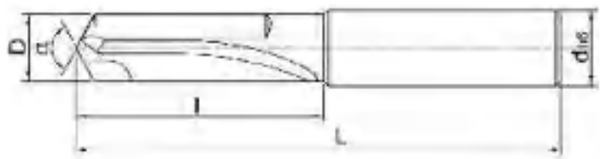
Code order	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)

Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)

For special dimensions, we manufacture according to customer's request (Order code is the same as ID code)

PCD BURNING DRILL





Code order	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)

- Với kích thước đặc biệt, chế tạo theo yêu cầu (Mã đặt hàng trùng với mã ID Code)
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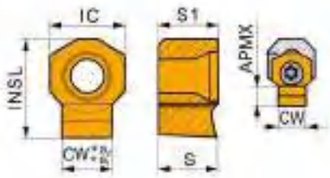
BROACHING INSERTS

DXHZ

	IC	INSL	APMX	S	S1	CW
	mm	mm	mm	mm	mm	mm
0604-30	6.000	7.5	1.60	4.66	4.76	3.00
0604-40	6.000	8.0	2.50	4.66	4.76	4.00
0604-50	6.000	8.0	3.00	4.66	4.76	5.00
1006-60	10.000	13.5	4.20	6.25	6.35	6.00
1006-80	10.000	13.5	5.20	6.25	6.35	8.00
1309-100	13.000	18.5	6.20	9.40	9.53	10.00
1309-120	13.000	18.5	7.20	9.40	9.53	12.00



Suitability and starting values for cutting speed (vc) and feed (fz). Refer to our Machining Calculator app for further calculations

Product		RE	P		M		K		N		S		H		CW	CWTOLL	CWTOLU
			vc	fz	vc	fz	vc	fz	vc	fz	vc	fz	vc	fz			
		mm	m/min	mm/tooth	m/min	mm/tooth	m/min	mm/tooth	m/min	mm/tooth	m/min	mm/tooth	m/min	mm/tooth	mm	mm	mm
DXHZ 1006-60 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	6.00	0.07	0.14
DXHZ 1006-60 D10	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	6.00	0.03	0.08
DXHZ 1006-60 H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	6.00	0.00	0.01
DXHZ 1006-60 P9	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	6.00	-0.04	-0.01
DXHZ 1006-80 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	8.00	0.08	0.17
DXHZ 1006-80 D10	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	8.00	0.04	0.10
DXHZ 1006-80 H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	8.00	0.00	0.02
DXHZ 1006-80 P9	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	8.00	-0.05	-0.02
DXHZ 1309-100 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	10.00	0.08	0.17
DXHZ 1309-100 D10	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	10.00	0.04	0.10
DXHZ 1309-100 H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	10.00	0.00	0.02
DXHZ 1309-100 P9	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	10.00	-0.05	-0.02
DXHZ 1309-120 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	12.00	0.10	0.21
DXHZ 1309-120 D10	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	12.00	0.05	0.12
DXHZ 1309-120 H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	12.00	0.00	0.02
DXHZ 1309-120 P9	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	12.00	-0.06	-0.02
DXHZ90 0604-30 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	3.00	0.06	0.12
DXHZ90 0604-30 D10	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	3.00	0.02	0.06
DXHZ90 0604-30 H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	3.00	0.00	0.01
DXHZ90 0604-30 P9	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	3.00	-0.03	-0.01
DXHZ90 0604-40 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	4.00	0.07	0.14
DXHZ90 0604-40 D10	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	4.00	0.03	0.08
DXHZ90 0604-40 H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	4.00	0.00	0.01
DXHZ90 0604-40 P9	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	4.00	-0.04	-0.01
DXHZ90 0604-50 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	5.00	0.07	0.14
DXHZ90 0604-50 D10	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	5.00	0.03	0.08
DXHZ90 0604-50 H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	5.00	0.00	0.01
DXHZ90 0604-50 P9	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	5.00	-0.04	-0.01

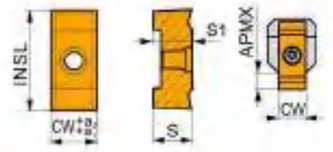
Positive geometry for broaching (one cutting edge).

DX

BROACHING INSERTS

DXHZ-2

	INSL	APMX	S	S1	CW
	mm	mm	mm	mm	mm
14-14	36.0	8.00	13.90	14.00	14.00
16-16	36.0	9.00	13.90	14.00	16.00
18-18	45.0	12.00	15.90	16.00	18.00
20-20	45.0	13.00	15.90	16.00	20.00



Suitability and starting values for cutting speed (vc) and feed (fz). Refer to our Machining Calculator app for further calculation

Product		RE	P		M		K		N		S		H		CW	CWTOLL	CWTOLU
			vc	fz	vc	fz	vc	fz	vc	fz	vc	fz	vc	fz			
		mm	m/min	mm/tooth	m/min	mm/tooth	m/min	mm/tooth	m/min	mm/tooth	m/min	mm/tooth	m/min	mm/tooth	mm	mm	mm
DXHZ/2 14-14 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	14.00	0.10	0.21
DXHZ/2 14-14 H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	14.00	0.00	0.02
DXHZ/2 14-14 P9	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	14.00	-0.06	-0.02
DXHZ/2 16-16 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	16.00	0.10	0.21
DXHZ/2 16-16H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	16.00	0.00	0.02
DXHZ/2 16-16 P9	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	16.00	-0.06	-0.02
DXHZ/2 18-18 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	18.00	0.10	0.21
DXHZ/2 18-18 H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	18.00	0.00	0.02
DXHZ/2 18-18 P9	333TN	–	50	0.10	30	0.10	45	0.10	–	–	–	–	–	–	18.00	-0.06	-0.02
DXHZ/2 20-20 C11	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	20.00	0.11	0.24
DXHZ/2 20-20 H7	333TN	–	50	0.10	30	0.09	45	0.10	–	–	–	–	–	–	20.00	0.00	0.02
DXHZ/2 20-20 P9	333TN	–	50	0.10	30	0.10	45	0.10	–	–	–	–	–	–	20.00	-0.07	-0.02

Positive geometry for broaching (two cutting edges).

DX

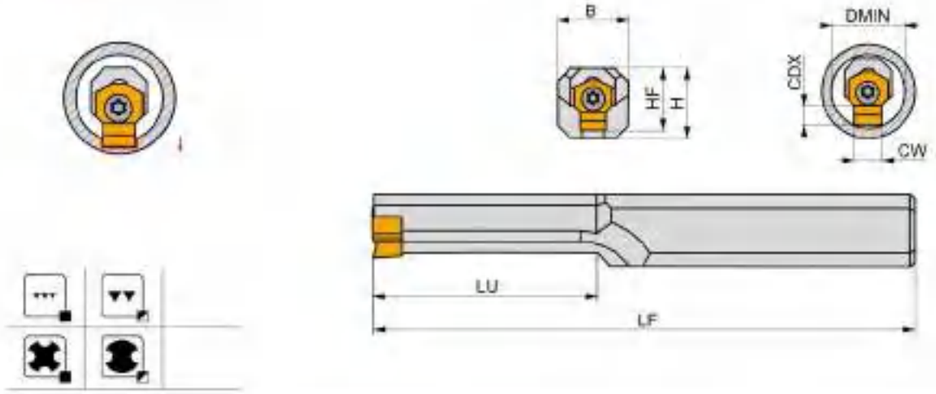
BROACHING INSERTS

DXPHZ

P M K N S H

Int. Broaching Tool Holder for Small Diameters with Single-Sided HZ Inserts

Internal tool holder for broaching up to 12 mm width. Minimum internal diameter Ø9.5 mm. Body treated for longer tool life.



	Product	H	HF	Hh	OAL	LU	CW	DMIN	CDX	kg	GI	SH
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			
N	DXPHZ 90 1104-06	11.3	9	8.5	160	35	3.00	9.5	1.6	0.17	GI239	SH21
	DXPHZ 90 1107-06	11.3	10	7	200	60	–	–	–	0.19	GI240	SH21
	DXPHZ 90 1111-06	11.3	12	–	200	60	–	–	–	0.19	GI240	SH21
	DXPHZ 1512-10	15.5	16.2	–	220	–	–	–	–	0.40	GI224	SH22
	DXPHZ 2014-13	20.6	21.5	–	250	–	–	–	–	0.65	GI225	SH23

GI224	HZ 1006-60	HZ 1006-80
GI225	HZ 1309-100	HZ 1309-120
GI239	HZ90 0604-30	–
GI240	HZ90 0604-40	HZ90 0604-50

SH21	DVF 3593	0.8	M 2.5	T8	TX207PLUS
SH22	DVF 2260	3.6	M 4	T15	TX215PLUS
SH23	SS13 020-14	8.5	M 6	T8	TX225PLUS

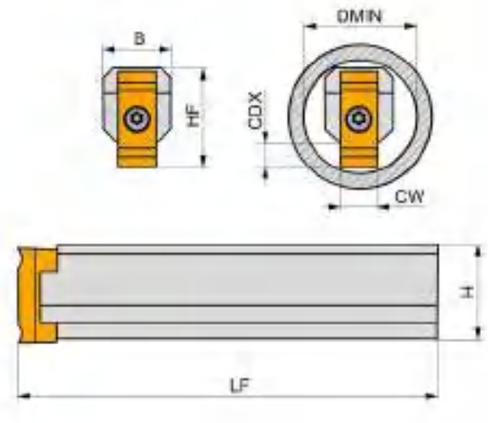
BROACHING INSERTS

DXPHZ 2

P M K N S H

Int. Broaching Tool Holder for Larger Diameters with Double-Sided HZ Inserts

Internal tool holder for broaching up to 26 mm width. Minimum internal diameter Ø44 mm. Body treated for longer tool life.

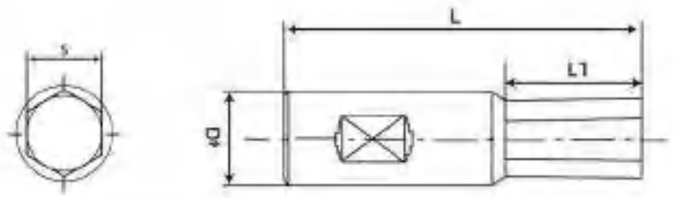


	Product	H	Hh	B	OAL	CW	DMIN	CDX	kg	GI	SH
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			
N	DXPHZ/2 3625-14	36	37.5	25	300	–	44	–	1.86	GI235	SH23
	DXPHZ/2 4832-18	48	50	32	400	–	58	–	3.08	GI241	SH24

GI235	HZ/2 14-14	HZ/2 16-16
GI241	HZ/2 18-18	HZ/2 20-20

SH23	SS13 020-14	8.5	M 6	18	TX225PLUS
SH24	SS13 027-09	13.0	M 8	22	DMN 3124

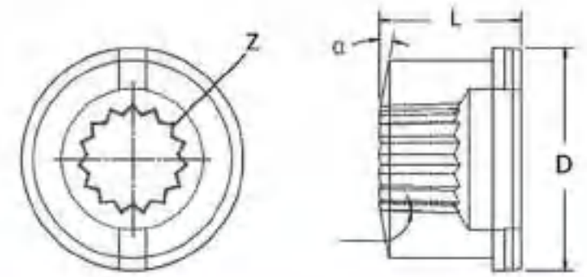
INTERNAL BROACHING TOOLS



Code order	D (mm)	S (mm)	L (mm)	L1 (mm)	Z			Coating		
DX001	-	-	-	-	-	-	-	Non	TiN	AlTiCrN

Engineering Data
- Produce according to the required size
- Optimal design consulting with machining applications
- Sản xuất theo kích thước yêu cầu
- Tư vấn thiết kế tối ưu với ứng dụng cụ thể
- 必要なサイズに合わせて製作
- アプリケーション固有の設計相談
- 필요한 사이즈에 맞게 제작
- 용도별 설계 상담

EXTERNAL BROACHING TOOLS



Code order	D (mm)	L (mm)	α (mm)	Z (mm)	(mm)			Coating		
DX002	-	-	-	-	-	-	-	Non	TiN	AlTiCrN

Engineering Data
- Produce according to the required size
- Optimal design consulting with machining applications
- Sản xuất theo kích thước yêu cầu
- Tư vấn thiết kế tối ưu với ứng dụng cụ thể
- 必要なサイズに合わせて製作
- アプリケーション固有の設計相談
- 필요한 사이즈에 맞게 제작
- 용도별 설계 상담

DRILL HEAD

IKR950

Drill Head for Steels, Ti-phon Coated

Highly cost-effective and accurate design replaceable head for high performance in steels and harder materials. A 140° split point helps with self-centering and reduces cutting forces. Ti-phon coating prevents edge build-up and greatly improves chip flow, with superior wear resistance and edge strength.

HYDRA

HM | 140° | Tiphon | R | h7

⊞51	Apply starting values for speed and feed with a correction factor of **1.10**
⊞53	Apply starting values for speed and feed with a correction factor of **1.00**
⊞55	Apply starting values for speed and feed with a correction factor of **0.95**
⊞58	Apply starting values for speed and feed with a correction factor of **0.90**
⊞512	Apply starting values for speed and feed with a correction factor of **0.80**

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M2.3	M4.2
133 W	148 W	154 W	114 W	100 W	88 W	125 W	101 W	85 W	75 W	63 W	52 T	41 T	35 T
K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3
108 V	88 V	70 V	96 V	73 V	59 V	89 V	67 V	49 V	42 V	35 V	100 V	76 V	58 V

Product	DC	DC	DC	LH
	inch	mm	inch	mm
IKR95015/32	15/32	11.91	0.4688	9.1
IKR95012.0	–	12.00	0.4724	9.1
IKR95012.1	–	12.10	0.4764	9.1
IKR95012.2	–	12.20	0.4803	9.1
IKR95031/64	31/64	12.30	0.4844	9.1
IKR95012.5	–	12.50	0.4921	9.4
IKR95012.6	–	12.60	0.4961	9.4
IKR9501/2	1/2	12.70	0.5000	9.4
IKR95012.8	–	12.80	0.5039	9.4
IKR95012.9	–	12.90	0.5079	9.4
IKR95013.0	–	13.00	0.5118	9.7
IKR95033/64	33/64	13.10	0.5156	9.7
IKR95013.2	–	13.20	0.5197	9.7
IKR95017/32	17/32	13.49	0.5313	9.7
IKR95013.5	–	13.50	0.5315	10.3
IKR95013.6	–	13.60	0.5354	10.3
IKR95013.7	–	13.70	0.5394	10.3
IKR95013.8	–	13.80	0.5433	10.3
IKR95035/64	35/64	13.89	0.5469	10.3
IKR95014.0	–	14.00	0.5512	10.3
IKR95014.1	–	14.10	0.5551	10.3
IKR95014.2	–	14.20	0.5591	10.3
IKR9509/16	9/16	14.29	0.5625	10.3
IKR95014.5	–	14.50	0.5709	10.3
IKR95014.6	–	14.60	0.5748	11.0
IKR95037/64	37/64	14.68	0.5781	11.0
IKR95014.7	–	14.70	0.5787	11.0
IKR95014.8	–	14.80	0.5827	11.0
IKR95015.0	–	15.00	0.5906	11.0
IKR95019/32	19/32	15.08	0.5938	11.0

Product	DC	DC	DC	LH
	inch	mm	inch	mm
IKR95015.1	–	15.10	0.5945	11.0
IKR95015.2	–	15.20	0.5984	11.0
IKR95015.24	–	15.24	0.6000	11.0
IKR95039/64	39/64	15.48	0.6094	11.0
IKR95015.5	–	15.50	0.6102	11.0
IKR95015.6	–	15.60	0.6142	11.6
IKR95015.7	–	15.70	0.6181	11.6
IKR9505/8	5/8	15.88	0.6250	11.6
IKR95016.0	–	16.00	0.6299	11.6
IKR95016.08	–	16.08	0.6331	11.6
IKR95016.1	–	16.10	0.6339	11.6
IKR95016.2	–	16.20	0.6378	11.6
IKR95041/64	41/64	16.27	0.6406	11.6
IKR95016.3	–	16.30	0.6417	11.6
IKR95016.5	–	16.50	0.6496	11.6
IKR95016.6	–	16.60	0.6535	12.2
IKR95021/32	21/32	16.67	0.6563	12.2
IKR95016.7	–	16.70	0.6575	12.2
IKR95017.0	–	17.00	0.6693	12.2
IKR95043/64	43/64	17.07	0.6719	12.2
IKR95017.1	–	17.10	0.6732	12.2
IKR95017.2	–	17.20	0.6772	12.2
IKR95011/16	11/16	17.46	0.6875	12.2
IKR95017.5	–	17.50	0.6890	12.2
IKR95017.6	–	17.60	0.6929	12.9
IKR95017.7	–	17.70	0.6969	12.9
IKR95045/64	45/64	17.86	0.7031	12.9
IKR95018.0	–	18.00	0.7087	12.9
IKR95018.1	–	18.10	0.7126	12.9
IKR95018.2	–	18.20	0.7165	12.9

DRILL HEAD

Product	DC	DC	DC	LH
	inch	mm	inch	mm
IKR95023/32	23/32	18.26	0.7188	12.9
IKR95018.5	–	18.50	0.7283	12.9
IKR95018.6	–	18.60	0.7323	13.5
IKR95047/64	47/64	18.65	0.7344	13.5
IKR95018.7	–	18.70	0.7362	13.5
IKR95018.9	–	18.90	0.7441	13.5
IKR95019.0	–	19.00	0.7480	13.5
IKR9503/4	3/4	19.05	0.7500	13.5
IKR95019.1	–	19.10	0.7520	13.5
IKR95019.2	–	19.20	0.7559	13.5
IKR95019.25	–	19.25	0.7579	13.5
IKR95019.3	–	19.30	0.7598	13.5
IKR95019.35	–	19.35	0.7618	13.5
IKR95049/64	49/64	19.45	0.7656	13.5
IKR95019.5	–	19.50	0.7677	13.5
IKR95019.6	–	19.60	0.7717	14.1
IKR95019.7	–	19.70	0.7756	14.1
IKR95025/32	25/32	19.84	0.7813	14.1
IKR95020.0	–	20.00	0.7874	14.1
IKR95051/64	51/64	20.24	0.7969	14.1
IKR95020.5	–	20.50	0.8071	14.1
IKR95013/16	13/16	20.64	0.8125	14.8
IKR95021.0	–	21.00	0.8268	14.8
IKR95053/64	53/64	21.01	0.8281	14.8
IKR95027/32	27/32	21.41	0.8438	14.8
IKR95021.5	–	21.50	0.8465	14.8
IKR95055/64	55/64	21.83	0.8594	15.0
IKR95022.0	–	22.00	0.8661	15.0
IKR9507/8	7/8	22.22	0.8750	15.0
IKR95022.5	–	22.50	0.8858	15.0
IKR95055/64	57/64	22.62	0.8906	15.0
IKR95022.7	–	22.70	0.8937	15.0
IKR95023.0	–	23.00	0.9055	15.1
IKR95029/32	29/32	23.02	0.9063	15.1
IKR95059/64	59/64	23.42	0.9219	15.1
IKR95023.5	–	23.50	0.9252	15.1
IKR95015/16	15/16	23.81	0.9375	15.4
IKR95024.0	–	24.00	0.9449	15.4
IKR95061/64	61/64	24.21	0.9531	15.4
IKR95024.5	–	24.50	0.9646	15.4
IKR95031/32	31/32	24.61	0.9688	15.4
IKR95025.0	–	25.00	0.9844	15.8
IKR95063/64	63/64	25.00	0.9844	15.8
IKR9501	1"	25.40	1.0000	15.8
IKR95025.5	–	25.50	1.0039	15.8
IKR95025.6	–	25.60	1.0079	15.8
IKR95025.65	–	25.65	1.0098	15.8
IKR9501.1/64	1.1/64	25.80	1.0156	15.8
IKR95026.0	–	26.00	1.0236	16.4
IKR9501.1/32	1.1/32	26.19	1.0313	16.4

Product	DC	DC	DC	LH
	inch	mm	inch	mm
IKR95026.5	–	26.50	1.0433	16.4
IKR9501.3/64	1.3/64	26.59	1.0469	16.4
IKR9501.1/16	1.1/16	26.99	1.0625	17.1
IKR95027.0	–	27.00	1.0630	17.1
IKR9501.5/64	1.5/64	27.38	1.0781	17.1
IKR95027.5	–	27.50	1.0827	17.1
IKR9501.3/32	1.3/32	27.78	1.0938	17.1
IKR95028.0	–	28.00	1.1024	17.7
IKR9501.7/64	1.7/64	28.18	1.1094	17.7
IKR95028.5	–	28.50	1.1220	17.7
IKR9501.1/8	1.1/8	28.58	1.1250	17.7
IKR9501.9/64	1.9/64	28.97	1.1406	18.3
IKR95029.0	–	29.00	1.1417	18.3
IKR9501.5/32	1.5/32	29.37	1.1563	18.3
IKR95029.5	–	29.50	1.1614	18.3
IKR9501.11/64	1.11/64	29.77	1.1719	18.3
IKR95030.0	–	30.00	1.1811	19.0
IKR9501.3/16	1.3/16	30.16	1.1875	19.0
IKR95030.5	–	30.50	1.2008	19.0
IKR9501.7/32	1.7/32	30.96	1.2188	21.0
IKR95031.0	–	31.00	1.2205	21.0
IKR9501.1/4	1.1/4	31.75	1.2500	21.0
IKR95032.0	–	32.00	1.2598	21.0
IKR95032.5	–	32.50	1.2795	21.0
IKR9501.19/64	1.19/64	32.94	1.2969	21.0
IKR95033.0	–	33.00	1.2992	21.0
IKR95033.5	–	33.50	1.3189	21.0
IKR95034.0	–	34.00	1.3386	23.0
IKR9501.11/32	1.11/32	34.13	1.3438	23.0
IKR95034.5	–	34.50	1.3583	23.0
IKR9501.3/8	1.3/8	34.93	1.3750	23.0
IKR95035.0	–	35.00	1.3780	23.0
IKR95036.0	–	36.00	1.4173	23.0
IKR9501.27/64	1.27/64	36.12	1.4219	23.0
IKR95036.5	–	36.50	1.4370	23.0
IKR95037.0	–	37.00	1.4567	25.0
IKR9501.15/32	1.15/32	37.31	1.4688	25.0
IKR95037.5	–	37.50	1.4764	25.0
IKR95038.0	–	38.00	1.4961	25.0
IKR9501.1/2	1.1/2	38.10	1.5000	25.0
IKR95038.5	–	38.50	1.5157	25.0
IKR9501.17/32	1.17/32	38.89	1.5313	25.0
IKR95039.0	–	39.00	1.5354	25.0
IKR95039.5	–	39.50	1.5551	25.0
IKR9501.9/16	1.9/16	39.69	1.5625	27.0
IKR95040.0	–	40.00	1.5748	27.0
IKR95041.0	–	41.00	1.6142	27.0
IKR9501.5/8	1.5/8	41.28	1.6250	27.0
IKR95042.0	–	42.00	1.6535	27.0

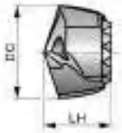
DRILL HEAD

IKR960

Drill Head for Stainless Steels, Ti-phon Coated

Highly cost-effective and accurate design replaceable head for high performance in stainless steels. A 140° split point helps with self-centering and reduces cutting forces. Ti-phon coating prevents edge build-up and greatly improves chip flow, with superior wear resistance and edge strength.

HYDRA



HM | 140° | Tiphon | R | DC h7

HBS1	Apply starting values for speed and feed with a correction factor of **1.10**
HBS3	Apply starting values for speed and feed with a correction factor of **1.00**
HBS5	Apply starting values for speed and feed with a correction factor of **0.95**
HBS8	Apply starting values for speed and feed with a correction factor of **0.90**
HBS12	Apply starting values for speed and feed with a correction factor of **0.80**

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code.

P1.1	P1.2	P1.3	P2.1	M1.1	M1.2	M2.1	M2.2	M2.3	M3.1	M3.2	M3.3	M4.1	M4.2
K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1	K4.2	K4.3	K4.4	K4.5
120 V	89 V	67 V	108 V	88 V	70 V	96 V	73 V	59 V	89 V	67 V	49 V	42 V	35 V
K5.1	K5.2	K5.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2	S4.1	S4.2		
100 V	76 V	58 V	45 T	35 T	30 S	40 S	35 S	30 S	25 S	23 S	20 S		

Product	DC	DC	DC	LH
	(inch)	(mm)	(inch)	(mm)
IKR96015/32	15/32	11.91	0.4688	9.1
IKR96012.0	–	12.00	0.4724	9.1
IKR96012.1	–	12.10	0.4764	9.1
IKR96012.2	–	12.20	0.4803	9.1
IKR96031/64	31/64	12.30	0.4844	9.1
IKR96012.5	–	12.50	0.4921	9.4
IKR96012.6	–	12.60	0.4961	9.4
IKR9601/2	1/2	12.70	0.5000	9.4
IKR96012.8	–	12.80	0.5039	9.4
IKR96012.9	–	12.90	0.5079	9.4
IKR96013.0	–	13.00	0.5118	9.7
IKR96033/64	33/64	13.10	0.5156	9.7
IKR96013.2	–	13.20	0.5197	9.7
IKR96017/32	17/32	13.49	0.5313	9.7
IKR96013.5	–	13.50	0.5315	10.3
IKR96013.6	–	13.60	0.5354	10.3
IKR96013.7	–	13.70	0.5394	10.3
IKR96013.8	–	13.80	0.5433	10.3
IKR96035/64	35/64	13.89	0.5469	10.3
IKR96014.0	–	14.00	0.5512	10.3
IKR96014.1	–	14.10	0.5551	10.3
IKR96014.2	–	14.20	0.5591	10.3
IKR9609/16	9/16	14.29	0.5625	10.3
IKR96014.5	–	14.50	0.5709	10.3
IKR96014.6	–	14.60	0.5748	11.0
IKR96037/64	37/64	14.68	0.5781	11.0
IKR96014.7	–	14.70	0.5787	11.0
IKR90614.8	–	14.80	0.5827	11.0

Product	DC	DC	DC	LH
	(inch)	(mm)	(inch)	(mm)
IKR96015.0	–	15.00	0.5906	11.0
IKR96019/32	19/32	15.08	0.5938	11.0
IKR96015.1	–	15.10	0.5945	11.0
IKR96015.2	–	15.20	0.5984	11.0
IKR96015.24	–	15.24	0.6000	11.0
IKR96039/64	39/64	15.48	0.6094	11.0
IKR96015.5	–	15.50	0.6102	11.0
IKR96015.6	–	15.60	0.6142	11.6
IKR96015.7	–	15.70	0.6181	11.6
IKR9605/8	5/8	15.88	0.6250	11.6
IKR96016.0	–	16.00	0.6299	11.6
IKR96016.08	–	16.08	0.6331	11.6
IKR96016.1	–	16.10	0.6339	11.6
IKR96016.2	–	16.20	0.6378	11.6
IKR96041/64	41/64	16.27	0.6406	11.6
IKR96016.3	–	16.30	0.6417	11.6
IKR96016.5	–	16.50	0.6496	11.6
IKR96016.6	–	16.60	0.6535	12.2
IKR96021/32	21/32	16.67	0.6563	12.2
IKR96016.7	–	16.70	0.6575	12.2
IKR96017.0	–	17.00	0.6693	12.2
IKR96043/64	43/64	17.07	0.6719	12.2
IKR96017.1	–	17.10	0.6732	12.2
IKR96017.2	–	17.20	0.6772	12.2
IKR96011/16	11/16	17.46	0.6875	12.2
IKR96017.5	–	17.50	0.6890	12.2
IKR96017.6	–	17.60	0.6929	12.9
IKR9017.7	–	17.70	0.6969	12.9

DRILL HEAD

Product	DC	DC	DC	LH
	(inch)	(mm)	(inch)	(mm)
R96045/64	IKR96045/64	17.86	0.7031	12.9
R96018.0	IKR96018.0	18.00	0.7087	12.9
R96018.1	IKR96018.1	18.10	0.7126	12.9
R96018.2	IKR96018.2	18.20	0.7165	12.9
R96023/32	IKR96023/32	18.26	0.7188	12.9
R96018.5	IKR96018.5	18.50	0.7283	12.9
R96018.6	IKR96018.6	18.60	0.7323	13.5
R96047/64	IKR96047/64	18.65	0.7344	13.5
R96018.7	IKR96018.7	18.73	0.7362	13.5
R96018.9	IKR96018.9	18.99	0.7441	13.5
R96019.0	IKR96019.0	19.00	0.7480	13.5
R9603/4	IKR9603/4	19.05	0.7500	13.5
R96019.1	IKR96019.1	19.10	0.7520	13.5
R96019.2	IKR96019.2	19.20	0.7559	13.5
R96019.25	IKR96019.25	19.25	0.7579	13.5
R96019.3	IKR96019.3	19.30	0.7598	13.5
R96019.35	IKR96019.35	19.35	0.7618	13.5
R96049/64	IKR96049/64	19.45	0.7656	13.5
R96019.5	IKR96019.5	19.50	0.7677	13.5
R96019.6	IKR96019.6	19.60	0.7717	14.1
R96019.7	IKR96019.7	19.70	0.7756	14.1
R96025/32	IKR96025/32	19.84	0.7813	14.1
R96020.0	IKR96020.0	20.00	0.7874	14.1
R96051/64	IKR96051/64	20.24	0.7969	14.1
R96020.5	IKR96020.5	20.50	0.8071	14.1
R96013/16	IKR96013/16	20.64	0.8125	14.8
R96021.0	IKR96021.0	21.00	0.8268	14.8
R96053/64	IKR96053/64	21.01	0.8281	14.8
R96027/32	IKR96027/32	21.43	0.8438	14.8
R96021.5	IKR96021.5	21.50	0.8465	14.8
R96055/64	IKR96055/64	21.83	0.8594	15.0
R96022.0	IKR96022.0	22.00	0.8661	15.0
R9607/8	IKR9607/8	22.22	0.8750	15.0
R96022.5	IKR96022.5	22.50	0.8858	15.0
R96057/64	IKR96057/64	22.62	0.8906	15.0
R96022.7	IKR96022.7	22.70	0.8937	15.0

Product	DC	DC	DC	LH
	(inch)	(mm)	(inch)	(mm)
IKR96023.0	–	23.00	0.9055	15.1
IKR96029/32	29/32	23.02	0.9063	15.1
IKR96059/64	59/64	23.42	0.9219	15.1
IKR96023.5	–	23.50	0.9252	15.1
IKR96015/16	15/16	23.81	0.9375	15.4
IKR96024.0	–	24.00	0.9449	15.4
IKR96061/64	61/64	24.21	0.9531	15.4
IKR96024.5	–	24.50	0.9646	15.4
IKR96031/32	31/32	24.61	0.9688	15.4
IKR96025.0	–	25.00	0.9844	15.8
IKR96063/64	63/64	25.00	0.9844	15.8
IKR9601	1"	25.40	1.0000	15.8
IKR96025.5	–	25.50	1.0039	15.8
IKR96025.65	–	25.65	1.0098	15.8
IKR9601.1/64	1.1/64	25.80	1.0156	15.8
IKR96026.0	–	26.00	1.0236	16.4
IKR9601.1/32	1.1/32	26.19	1.0313	16.4
IKR96026.5	–	26.50	1.0433	16.4
IKR9601.3/64	1.3/64	26.59	1.0469	16.4
IKR9601.1/16	1.1/16	26.99	1.0625	17.1
IKR96027.0	–	27.00	1.0630	17.1
IKR9601.5/64	1.5/64	27.38	1.0781	17.1
IKR96027.5	–	27.50	1.0827	17.1
IKR9601.3/32	1.3/32	27.78	1.0938	17.1
IKR96028.0	–	28.00	1.1024	17.7
IKR9601.7/64	1.7/64	28.18	1.1094	17.7
IKR96028.5	–	28.50	1.1220	17.7
IKR9601.1/8	1.1/8	28.58	1.1250	17.7
IKR9601.9/64	1.9/64	28.97	1.1406	18.3
IKR96029.0	–	29.00	1.1417	18.3
IKR9601.5/32	1.5/32	29.37	1.1563	18.3
IKR96029.5	–	29.50	1.1614	18.3
IKR9601.11/64	1.11/64	29.77	1.1719	18.3
IKR96030.0	–	30.00	1.1811	19.0
IKR9601.3/16	1.3/16	30.16	1.1875	19.0
IKR96030.5	–	30.50	1.2008	19.0

DRILL HEAD

IKR970

Drill Head for Cast Irons, Ti-phon Coated

Highly cost-effective and accurate design replaceable head for high performance in cast irons. A 140° split point helps with self-centering and reduces cutting forces. Ti-phon coating prevents edge build-up and greatly improves chip flow, with superior wear resistance and edge strength.

HYDRA

HM | 140° | Ti-phon | R | h7

H851	Apply starting values for speed and feed with a correction factor of **1.10**
H853	Apply starting values for speed and feed with a correction factor of **1.00**
H855	Apply starting values for speed and feed with a correction factor of **0.95**
H858	Apply starting values for speed and feed with a correction factor of **0.90**
H8512	Apply starting values for speed and feed with a correction factor of **0.80**

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code.

K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.2	K5.2	K6.0	K6.0	K6.0
120 V	89 V	67 V	98 V	80 V	64 V	97 V	67 V	54 V	81 V	61 V	45 V	38 V	32 V
K5.1	K5.2	K5.3											
91 V	69 V	53 V											

Product	DC	DC	DC	LH
	inch	mm	inch	mm
IKR97015/32	15/32	11.91	0.4688	9.1
IKR97012.0	–	12.00	0.4724	9.1
IKR97012.1	–	12.10	0.4764	9.1
IKR97012.2	–	12.20	0.4803	9.1
IKR97031/64	31/64	12.30	0.4844	9.1
IKR97012.5	–	12.50	0.4921	9.4
IKR97012.6	–	12.60	0.4961	9.4
IKR9701/2	1/2	12.70	0.5000	9.4
IKR97012.8	–	12.80	0.5039	9.4
IKR97012.9	–	12.90	0.5079	9.4
IKR97013.0	–	13.00	0.5118	9.7
IKR97033/64	33/64	13.10	0.5156	9.7
IKR97013.2	–	13.20	0.5197	9.7
IKR97017/32	17/32	13.49	0.5313	9.7
IKR97013.5	–	13.50	0.5315	10.3
IKR97013.6	–	13.60	0.5354	10.3
IKR97013.7	–	13.70	0.5394	10.3
IKR97013.8	–	13.80	0.5433	10.3
IKR97035/64	35/64	13.89	0.5469	10.3
IKR97014.0	–	14.00	0.5512	10.3
IKR97014.1	–	14.10	0.5551	10.3
IKR97014.2	–	14.20	0.5591	10.3
IKR9709/16	9/16	14.29	0.5625	10.3
IKR97014.5	–	14.50	0.5709	10.3
IKR97014.6	–	14.60	0.5748	11.0
IKR97037/64	37/64	14.68	0.5781	11.0
IKR97014.7	–	14.70	0.5787	11.0
IKR97014.8	–	14.80	0.5827	11.0
IKR97015.0	–	15.00	0.5906	11.0
IKR97019/32	19/32	15.08	0.5938	11.0

Product	DC	DC	DC	LH
	inch	mm	inch	mm
IKR97015.1	–	15.10	0.5945	11.0
IKR97015.2	–	15.20	0.5984	11.0
IKR97015.24	–	15.24	0.6000	11.0
IKR97039/64	39/64	15.48	0.6094	11.0
IKR97015.5	–	15.50	0.6102	11.0
IKR97015.6	–	15.60	0.6142	11.6
IKR97015.7	–	15.70	0.6181	11.6
IKR9705/8	5/8	15.88	0.6250	11.6
IKR97016.0	–	16.00	0.6299	11.6
IKR97016.08	–	16.08	0.6331	11.6
IKR97016.1	–	16.10	0.6339	11.6
IKR97016.2	–	16.20	0.6378	11.6
IKR97041/64	41/64	16.27	0.6406	11.6
IKR97016.3	–	16.30	0.6417	11.6
IKR97016.5	–	16.50	0.6496	11.6
IKR97016.6	–	16.60	0.6535	12.2
IKR97021/32	21/32	16.67	0.6563	12.2
IKR97016.7	–	16.70	0.6575	12.2
IKR97017.0	–	17.00	0.6693	12.2
IKR97043/64	43/64	17.07	0.6719	12.2
IKR97017.1	–	17.10	0.6732	12.2
IKR97017.2	–	17.20	0.6772	12.2
IKR97011/16	11/16	17.46	0.6875	12.2
IKR97017.5	–	17.50	0.6890	12.2
IKR97017.6	–	17.60	0.6929	12.9
IKR97017.7	–	17.70	0.6969	12.9
IKR97045/64	45/64	17.86	0.7031	12.9
IKR97018.0	–	18.00	0.7087	12.9
IKR97018.1	–	18.10	0.7126	12.9
IKR97018.2	–	18.20	0.7165	12.9

DRILL HEAD

Product	DC	DC	DC	LH
	inch	mm	inch	mm
IKR97023/32	23/32	18.26	0.7188	12.9
IKR97018.5	–	18.50	0.7283	12.9
IKR97018.6	–	18.60	0.7323	13.5
IKR97047/64	47/64	18.65	0.7344	13.5
IKR97018.7	–	18.70	0.7362	13.5
IKR97018.9	–	18.90	0.7441	13.5
IKR97019.0	–	19.00	0.7480	13.5
IKR9703/4	3/4	19.05	0.7500	13.5
IKR97019.1	–	19.10	0.7520	13.5
IKR97019.2	–	19.20	0.7559	13.5
IKR97019.25	–	19.25	0.7579	13.5
IKR97019.3	–	19.30	0.7598	13.5
IKR97019.35	–	19.35	0.7618	13.5
IKR97049/64	49/64	19.45	0.7656	13.5
IKR97019.5	–	19.50	0.7677	13.5
IKR97019.6	–	19.60	0.7717	14.1
IKR97019.7	–	19.70	0.7756	14.1
IKR97025/32	25/32	19.84	0.7813	14.1
IKR97020.0	–	20.00	0.7874	14.1
IKR97051/64	51/64	20.24	0.7969	14.1
IKR97020.5	–	20.50	0.8071	14.1
IKR97013/16	13/16	20.64	0.8125	14.8
IKR97021.0	–	21.00	0.8268	14.8
IKR97053/64	53/64	21.03	0.8281	14.8
IKR97027/32	27/32	21.43	0.8438	14.8
IKR97021.5	–	21.50	0.8465	14.8
IKR97055/64	55/64	21.83	0.8594	15.0
IKR97022.0	–	22.00	0.8661	15.0
IKR9707/8	7/8	22.22	0.8750	15.0
IKR97022.5	–	22.50	0.8858	15.0
IKR97055/64	57/64	22.62	0.8906	15.0
IKR97022.7	–	22.70	0.8937	15.0
IKR97023.0	–	23.00	0.9055	15.1
IKR97029/32	29/32	23.02	0.9063	15.1
IKR97059/64	59/64	23.42	0.9219	15.1
IKR97023.5	–	23.50	0.9252	15.1
IKR97015/16	15/16	23.81	0.9375	15.4
IKR97024.0	–	24.00	0.9449	15.4
IKR97061/64	61/64	24.21	0.9531	15.4
IKR97024.5	–	24.50	0.9646	15.4
IKR97031/32	31/32	24.61	0.9688	15.4
IKR97025.0	–	25.00	0.9844	15.8
IKR97063/64	63/64	25.00	0.9844	15.8
IKR9701	1"	25.40	1.0000	15.8
IKR97025.5	–	25.50	1.0039	15.8
IKR97025.65	–	25.65	1.0098	15.8
IKR9701.1/64	1.1/64	25.80	1.0156	15.8
IKR97026.0	–	26.00	1.0236	16.4
IKR9701.1/32	1.1/32	26.19	1.0313	16.4

Product	DC	DC	DC	LH
	inch	mm	inch	mm
IKR97026.5	–	26.50	1.0433	16.4
IKR9701.3/64	1.3/64	26.59	1.0469	16.4
IKR9701.1/16	1.1/16	26.99	1.0625	17.1
IKR97027.0	–	27.00	1.0630	17.1
IKR9701.5/64	1.5/64	27.38	1.0781	17.1
IKR97027.5	–	27.50	1.0827	17.1
IKR9701.3/32	1.3/32	27.78	1.0938	17.1
IKR97028.0	–	28.00	1.1024	17.7
IKR9701.7/64	1.7/64	28.18	1.1094	17.7
IKR97028.5	–	28.50	1.1220	17.7
IKR9701.1/8	1.1/8	28.58	1.1250	17.7
IKR9701.9/64	1.9/64	28.97	1.1406	18.3
IKR97029.0	–	29.00	1.1417	18.3
IKR9701.5/32	1.5/32	29.37	1.1563	18.3
IKR97029.5	–	29.50	1.1614	18.3
IKR9701.11/64	1.11/64	29.77	1.1719	18.3
IKR97030.0	–	30.00	1.1811	19.0
IKR9701.3/16	1.3/16	30.16	1.1875	19.0
IKR97030.5	–	30.50	1.2008	19.0
IKR9701.7/32	1.7/32	30.96	1.2188	21.0
IKR97031.0	–	31.00	1.2205	21.0
IKR9701.1/4	1.1/4	31.75	1.2500	21.0
IKR97032.0	–	32.00	1.2598	21.0
IKR97032.5	–	32.50	1.2795	21.0
IKR9701.19/64	1.19/64	32.94	1.2969	21.0
IKR97033.0	–	33.00	1.2992	21.0
IKR97033.5	–	33.50	1.3189	21.0
IKR97034.0	–	34.00	1.3386	23.0
IKR9701.11/32	1.11/32	34.13	1.3438	23.0
IKR97034.5	–	34.50	1.3583	23.0
IKR9701.3/8	1.3/8	34.93	1.3750	23.0
IKR97035.0	–	35.00	1.3780	23.0
IKR97036.0	–	36.00	1.4173	23.0
IKR9701.27/64	1.27/64	36.12	1.4219	23.0
IKR97036.5	–	36.50	1.4370	23.0
IKR97037.0	–	37.00	1.4567	25.0
IKR9701.15/32	1.15/32	37.31	1.4688	25.0
IKR97037.5	–	37.50	1.4764	25.0
IKR97038.0	–	38.00	1.4961	25.0
IKR9701.1/2	1.1/2	38.10	1.5000	25.0
IKR97038.5	–	38.50	1.5157	25.0
IKR9701.17/32	1.17/32	38.89	1.5313	25.0
IKR97039.0	–	39.00	1.5354	25.0
IKR97039.5	–	39.50	1.5551	25.0
IKR9701.9/16	1.9/16	39.69	1.5625	27.0
IKR97040.0	–	40.00	1.5748	27.0
IKR97041.0	–	41.00	1.6142	27.0
IKR9701.5/8	1.5/8	41.28	1.6250	27.0
IKR97042.0	–	42.00	1.6535	27.0

DRILL BODY

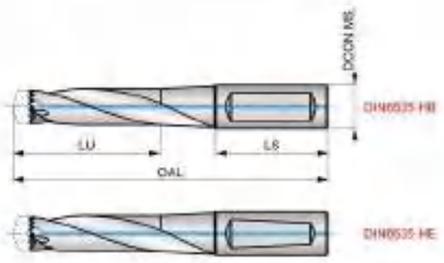
TH

THH853

Body 3XD, with Coolant Feed, Bright Nickel Plating

Used with R850, R960 and R970 HYDRA heads. A range of head diameters can be used with the same body. Coolant holes aligned with the heads offer efficient cooling. Bright Nickel Plated surface protects from rust and corrosion, and improves chip evacuation.

HYDRA



HSS		3×D
		R

Four (4) screws and one (1) screwdriver are included with a drill body. DCONMS tolerance h6.

Product	DCONMS	DCON MS	LU	OAL	LS	ADINTMS
	(inch)	(mm)	(mm)	(mm)	(mm)	
THH85132.0	–	16.00	44.00	105.0	48.0	DIN6535HE
THH5331/64	5/8	15.88	44.00	105.0	48.0	DIN6535HB
THH5312.5	–	16.00	44.00	105.0	48.0	DIN6535HE
THH8531/2	5/8	15.88	44.00	105.0	48.0	DIN6535HB
THH85313.0	–	16.00	47.00	110.0	48.0	DIN6535HE
THH85317/32	5/8	15.88	47.00	110.0	48.0	DIN6535HB
THH85314.0	–	16.00	52.50	116.5	48.0	DIN6539HE
THH8539/16	3/4	19.05	52.50	116.5	48.0	DIN6535HB
THH85315.0	–	20.00	55.50	126.5	50.0	DIN6539HE
THH85339/64	3/4	19.05	55.50	126.5	50.0	DIN6535HB
THH85316.0	–	20.00	59.50	131.5	50.0	DIN6539HE
THH85341/64	3/4	19.05	59.50	131.5	50.0	DIN6535HB
THH85317.0	–	20.00	62.50	136.5	50.0	DIN6539HE
THH85311/16	3/4	19.05	62.50	136.5	50.0	DIN6535HB
THH85318.0	–	20.00	66.50	141.5	50.0	DIN6539HE
THH85323/32	3/4	19.05	66.50	141.5	50.0	DIN6535HB
THH85319.0	–	25.00	69.50	156.5	56.0	DIN6539HE
THH85349/64	1"	25.40	69.50	156.5	56.0	DIN6535HB
THH85320.0	–	25.00	73.50	156.5	56.0	DIN6539HE
THH85351/64	1"	25.40	73.50	156.5	56.0	DIN6535HB
THH85321.0	–	25.00	76.50	156.5	56.0	DIN6539HE
THH853227/32	1"	25.40	76.50	156.5	56.0	DIN6535HB
THH85322.0	–	25.00	80.10	161.5	56.0	DIN6539HE
THH85357/64	1"	25.40	80.10	161.5	56.0	DIN6535HB
THH85323.0	–	25.00	82.50	160.5	56.0	DIN6539HE
THH85359/64	1"	25.40	82.50	160.5	56.0	DIN6535HB
THH85324.0	–	32.00	86.20	170.2	60.0	DIN6539HE
THH8533/32	1"	25.40	86.20	170.2	60.0	DIN6535HB
THH85325.0	–	32.00	88.00	170.0	60.0	DIN6539HE
THH85331.1/64	1.1/4	31.75	88.00	170.0	60.0	DIN6535HB
THH85326.0	–	32.00	92.00	175.0	60.0	DIN6539HE
THH8531.3/64	1.1/4	31.75	92.00	175.0	60.0	DIN6535HB
THH85327.0	–	32.00	94.00	175.0	60.0	DIN6539HE
TH8531.3/32	1.1/4	31.75	94.00	175.0	60.0	DIN6535HB

DRILL BODY

TH

Product	DCONMS	DCON MS	LU	OAL	LS	ADINTMS
	(inch)	(mm)	(mm)	(mm)	(mm)	
THH85328.0	–	32.00	97.00	180.0	60.0	DIN6535HE
THH8531.1/8	1.1/4	31.75	97.00	180.0	60.0	DIN6535HB
THH85329.0	–	32.00	100.00	185.0	60.0	DIN6535HE
THH8531.11/64	1.1/4	31.75	100.00	185.0	60.0	DIN6535HB
THH85330.0	–	32.00	104.00	185.0	60.0	DIN6535HE
THH8531.3/16	1.1/4	31.75	104.00	185.0	60.0	DIN6535HB
THH85332.0	–	32.00	111.50	196.5	60.0	DIN6535HE
THH85333.5	–	32.00	116.50	201.5	60.0	DIN6535HE
THH85335.0	–	40.00	121.50	216.5	70.0	DIN6535HB
THH85336.5	–	40.00	125.50	221.5	70.0	DIN6535HB
THH85338.0	–	40.00	131.50	226.5	70.0	DIN6535HB
THH85339.5	–	40.00	136.50	231.5	70.0	DIN6535HB
THH85341.0	–	40.00	146.50	246.5	70.0	DIN6535HB
THH85342.5	–	40.00	151.60	251.6	70.0	DIN6535HB

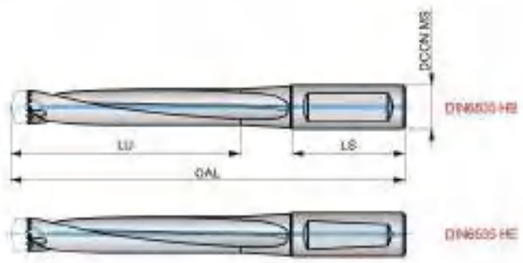
DRILL BODY

THH855

Body 5XD, with Coolant Feed, Bright Nickel Plating

Used with R950, R968 and R970 HYDRA heads. A range of head diameters can be used with the same body. Coolant holes aligned with the heads offer efficient cooling. Bright Nickel Plated surface protects from rust and corrosion, and improves chip evacuation.

HYDRA



HSS		5×D
Right h	DIN 6535HE DIN 6535HB	R

Four (4) coolant and one (1) screwdriver are included with a drill body. DCON MS tolerance h6.

Product	DCONMS	DCON MS	LU	OAL	LS	ADINTMS
	inch	mm	mm	mm	mm	
THH85512.0	–	16.00	69.00	130.0	48.0	DIN6535HE
THH5531/64	5/8	15.88	69.00	130.0	48.0	DIN6535HB
THH5512.5	–	16.00	69.00	130.0	48.0	DIN6535HE
THH8551/2	5/8	15.88	69.00	130.0	48.0	DIN6535HB
THH85513.0	–	16.00	74.00	140.0	48.0	DIN6535HE
THH85517/32	5/8	15.88	74.00	140.0	48.0	DIN6535HB
THH85514.0	–	16.00	81.50	146.5	48.0	DIN6535HE
THH8559/16	3/4	19.05	81.50	146.5	48.0	DIN6535HB
THH85515.0	–	20.00	86.50	156.5	50.0	DIN6535HE
THH85539/64	3/4	19.05	86.50	156.5	50.0	DIN6535HB
THH85516.0	–	20.00	92.50	166.5	50.0	DIN6535HE
THH85541/64	3/4	19.05	92.50	166.5	50.0	DIN6535HB
THH85517.0	–	20.00	97.50	171.5	50.0	DIN6535HE
THH85511/16	3/4	19.05	97.50	171.5	50.0	DIN6535HB
THH85518.0	–	20.00	101.50	176.5	50.0	DIN6535HE
THH85523/32	3/4	19.05	101.50	176.5	50.0	DIN6535HB
THH85519.0	–	25.00	108.50	191.5	56.0	DIN6535HE
THH85549/64	1"	25.40	108.50	191.5	56.0	DIN6535HB
THH85520.0	–	25.00	114.50	196.5	56.0	DIN6535HE
THH85551/64	1"	25.40	114.50	196.5	56.0	DIN6535HB
THH85521.0	–	25.00	119.50	196.5	56.0	DIN6535HE
THH855227/32	1"	25.40	119.50	196.5	56.0	DIN6535HB
THH85522.0	–	25.00	125.10	201.1	56.0	DIN6535HE
THH85557/64	1"	25.40	125.10	201.1	56.0	DIN6535HB
THH85523.0	–	25.00	129.50	210.5	56.0	DIN6535HE
HTH85559/64	1"	25.40	129.50	210.5	56.0	DIN6535HB
THH85524.0	–	32.00	135.20	220.2	60.0	DIN6535HE
THH85531/32	1"	25.40	135.20	220.2	60.0	DIN6535HB
THH85525.0	–	32.00	140.00	225.0	60.0	DIN6535HE
TH8551.1/64	1.1/4	31.75	140.00	225.0	60.0	DIN6535HB
THH85526.0	–	32.00	146.00	230.0	60.0	DIN6535HE
THH8551.3/64	1.1/4	31.75	146.00	230.0	60.0	DIN6535HB
THH85527.0	–	32.00	151.00	235.0	60.0	DIN6535HE
TH8551.3/32	1.1/4	31.75	151.00	235.0	60.0	DIN6535HB

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DRILL BODY

Product	DCONMS	DCON MS	LU	OAL	LS	ADINTMS
	inch	mm	mm	mm	mm	
THH85528.0	–	32.00	157.00	240.0	60.0	DIN6535HE
THH8551.1/8	1.1/4	31.75	157.00	240.0	60.0	DIN6535HB
THH85529.0	–	32.00	162.00	245.0	60.0	DIN6535HE
THH8551.11/64	1.1/4	31.75	162.00	245.0	60.0	DIN6535HB
THH85530.0	–	32.00	167.00	255.0	60.0	DIN6535HE
THH8551.3/16	1.1/4	31.75	167.00	255.0	60.0	DIN6535HB
THH85532.0	–	32.00	176.50	261.5	60.0	DIN6535HE
THH85533.5	–	32.00	186.50	271.5	60.0	DIN6535HE
THH85535.0	–	40.00	196.50	291.5	70.0	DIN6535HB
THH85536.5	–	40.00	201.50	296.5	70.0	DIN6535HB
THH85538.0	–	40.00	211.50	306.5	70.0	DIN6535HB
THH85539.5	–	40.00	221.50	316.5	70.0	DIN6535HB
THH85541.0	–	40.00	226.50	325.6	70.0	DIN6535HB
THH85542.5	–	40.00	236.50	336.5	70.0	DIN6535HB

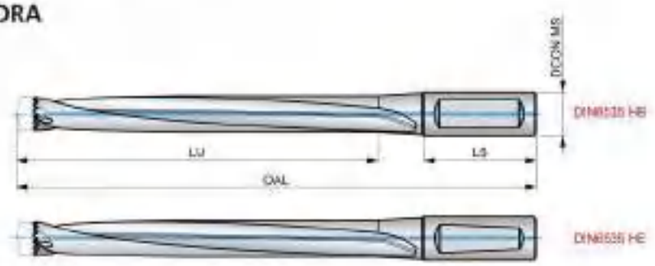
DRILL BODY

THH858

Body 8XD, with Coolant Feed, Bright Nickel Plating

Used with R950, R968 and R970 HYDRA heads. A range of head diameters can be used with the same body. Coolant holes aligned with the heads offer efficient cooling. Bright Nickel Plated surface protects from rust and corrosion, and improves chip evacuation.

HYDRA



HSS		8×D
Bright N	DIN 6535HB DIN 6535HE	R

Product	DCON M5	LU	OAL	LS	ADJUSTMS
	(mm)	(mm)	(mm)	(mm)	
THH85814.0	16.00	126.50	191.5	48.0	DIN6535HE
THH85815.0	20.00	133.50	201.5	50.0	DIN6535HE
THH85816.0	20.00	141.50	211.5	50.0	DIN6535HE
THH85817.0	20.00	150.50	221.5	50.0	DIN6535HE
THH85818.0	20.00	158.50	226.5	50.0	DIN6535HE
THH85819.0	25.00	167.50	251.5	56.0	DIN6535HE
THH85820.0	25.00	175.50	264.5	56.0	DIN6535HE
THH85821.0	25.00	184.50	366.5	56.0	DIN6535HE
THH85822.0	25.00	192.10	271.1	56.0	DIN6535HE
THH85823.0	25.00	200.50	280.5	56.0	DIN6535HE
THH85824.0	32.00	208.20	295.2	60.0	DIN6535HE
THH85825.0	32.00	217.00	300.0	60.0	DIN6535HE
THH85826.0	32.00	225.00	310.0	60.0	DIN6535HE
THH85827.0	32.00	234.00	320.0	60.0	DIN6535HE
THH85828.0	32.00	242.00	325.0	60.0	DIN6535HE
THH85829.0	32.00	251.00	335.0	60.0	DIN6535HE
THH85830.0	32.00	259.00	345.0	60.0	DIN6535HE
THH85832.0	32.00	271.50	356.5	60.0	DIN6535HE
THH85833.5	32.00	286.50	371.5	60.0	DIN6535HE
THH85835.0	40.00	301.50	396.5	70.0	DIN6535HB
THH85836.5	40.00	311.50	406.5	70.0	DIN6535HB
THH85838.0	40.00	326.50	421.5	70.0	DIN6535HB
THH85839.5	40.00	336.50	431.5	70.0	DIN6535HB
THH85841.0	40.00	351.50	451.5	70.0	DIN6535HB
THH85842.5	40.00	361.50	461.5	70.0	DIN6535HB

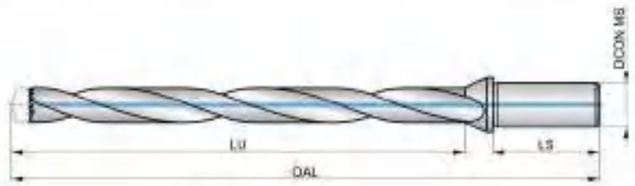
DRILL BODY

THH8512

Body 12XD, with Coolant Feed, Bright Nickel Plating

Used with R950, R968 and R970 HYDRA heads. A range of head diameters can be used with the same body. Coolant holes aligned with the heads offer efficient cooling. Ranged shank prevents the drill from wandering in the holder. Nickel Plated surface protects from rust and corrosion, and improves chip evacuation.

HYDRA



HSS		12×D
Bright N		R

Product	DCON M5	LU	OAL	LS
	(mm)	(mm)	(mm)	(mm)
THH851214.0	16.00	168.00	236.0	48.0
THH851215.0	20.00	180.00	250.3	50.0
THH851216.0	20.00	192.00	262.4	50.0
THH851217.0	20.00	204.00	275.0	50.0
THH851218.0	20.00	216.00	287.2	50.0
THH851219.0	25.00	228.00	305.6	56.0
THH851220.0	25.00	240.00	317.8	56.0
THH851221.0	25.00	252.00	330.1	56.0
THH851222.0	25.00	264.00	343.8	56.0
THH851223.0	25.00	276.00	354.8	56.0
THH851224.0	32.00	288.00	371.7	60.0
THH851225.0	32.00	300.00	383.8	60.0

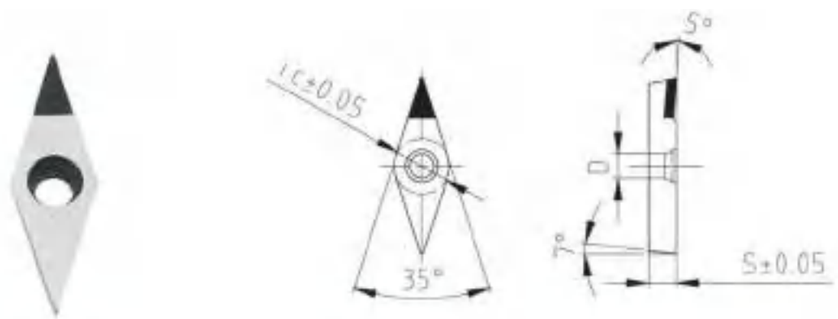
PCD INSERTS

Model	φi.c	S	R	D
IDCCGW09T302	9.525	3.97	0.2	4.4
IDCCGW09T304	9.525	3.97	0.4	4.4
IDCCGW120404	12.7	4.76	0.4	5.5
IDCCGW120408	12.7	4.76	0.8	5.5

Model	φi.c	S	R	D
IDCGW11T302	9.525	3.97	0.2	4.4
IDCGW11T304	9.525	3.97	0.4	4.4
IDCGW11T308	9.525	3.97	0.8	4.4

Model	φi.c	S	R	D
IDAPKT160402	9.525	4.76	0.2	4.4
IDAPKT160404	9.525	4.76	0.4	4.4
IDAPKT160408	9.525	4.76	0.8	4.4

PCD INSERTS



Model	φi.c	S	R	D
IDVCGW11T302	6.35	3.97	0.2	2.8
IDVCGW11T304	6.35	3.97	0.4	2.8
IDVCGW160404	9.525	4.76	0.4	4.4
IDVCGW160408	9.525	4.76	0.8	4.4

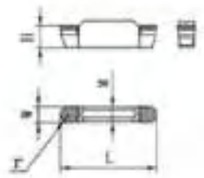
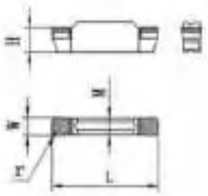
Model	φi.c	S	R	D
IDTCGW110302	6.35	3.18	0.2	2.8
IDTCGW110304	6.35	3.18	0.4	2.8
IDTCGW160404	9.525	4.76	0.4	4.4
IDTCGW160408	9.525	4.76	0.8	4.4

PCD INSERTS

Model	φi.c	S	R	D
IDDCGW11T302	9.525	3.97	0.2	4.4
IDDCGW11T304	9.525	3.97	0.4	4.4
IDDCGW11T308	9.525	3.97	0.8	4.4

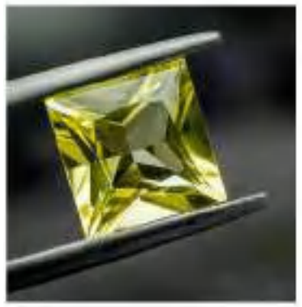
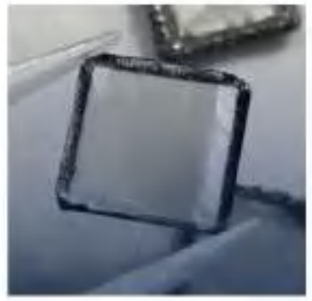
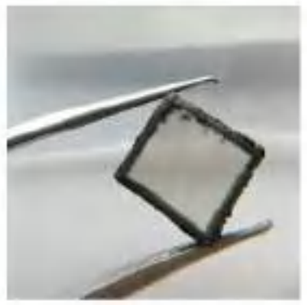
Model	φi.c	S	R	D
IDTCGW110302	6.35	3.18	0.2	2.8
IDTCGW110304	6.35	3.18	0.4	2.8
IDTCGW160404	9.525	4.76	0.4	4.4
IDTCGW160408	9.525	4.76	0.8	4.4

PCD INSERTS

Drawing	Model	Cutting Edges	Dimension (mm) W	Dimension (mm) R	Picture
	IDMRGN200-R1.0	1, 2	2	1.0	
	IDMRGN300-R1.5	1, 2	3	1.5	
	IDMRGN400-R2.0	1, 2	4	2.0	
	IDMRGN500-R2.5	1, 2	5	2.5	
	IDMRGN600-R3.0	1, 2	6	3.0	
	IDMGGN200-02	1, 2	2	0.2	
	IDMGGN300-02	1, 2	2	0.2	
	IDMGGN300-02,04,08	1, 2	3	02, 04, 08	
	IDMGGN400-02,04,08	1, 2	3	02, 04, 08	
	IDMGGN500-02,04,08	1, 2	3	02, 04, 08	
	IDMGGN600-02,04,08	1, 2	4	02, 04, 08	

Drawing	Order Code	Cutting Edge	Dimension ΦI.C	S1	W	La	r	Picture
	IDTGR/L1.25	1, 2, 3	12.7	4.76	1.25	2.5	0.2	
	IDTGR/L1.50	1, 2, 3			1.50	3.9		
	IDTGR/L2.00	1, 2, 3			2.00	3.9		
	IDTGR/L2.50	1, 2, 3			2.50	5.4	0.3	
	IDTGR/L3.00	1, 2, 3			3.00	5.4		
	IDTGR/L3.50	1, 2, 3			3.50	5.4	0.4	
	IDTGR/L4.00	1, 2, 3			4.00	5.4		

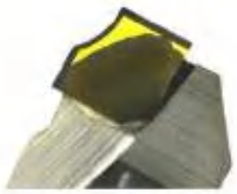
MCD/CVD/ND INSERTS

MCD, CVD, ND là những vật liệu có độ cứng lớn nhất trong các vật liệu làm dụng cụ cắt. Với tính ổn định cao, độ bền lớn, chất lượng lưỡi cắt xuất sắc chúng thường được ứng dụng trong gia công siêu tinh. Bề mặt sau gia công có thể đạt độ nhám lên đến 0.025 micron.

MCD, CVD, ND are the hardest materials among cutting tool materials. With high stability, great durability, excellent cutting edge quality, they are often used in superfine machining. The surface after machining can reach a roughness of up to 0.025 micron.

MCD/CVD/ND INSERTS



Ưu điểm:

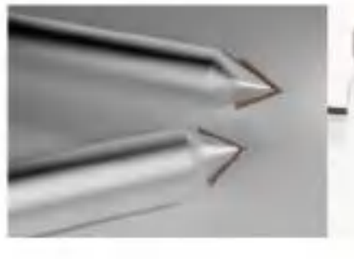
* Độ cứng cao và khả năng chống mài mòn tốt
* Hiệu suất cắt tốt
* Tuổi thọ sử dụng lớn => Tiết kiệm chi phí
* Chất lượng bề mặt gia công tốt

So với vật liệu PCD và các vật liệu dụng cụ cắt hợp kim khác, MCD,CVD,ND có tuổi thọ cao hơn từ 3-10 lần .

Advantages:

** High hardness and good wear resistance*
** Good cutting performance*
** Long service life => Cost savings*
** Good machined surface quality*

Compared with PCD materials and other alloy cutting tool materials, MCD, CVD, ND have 3-10 times longer service life.



INTRODUCE

• Tuổi thọ làm việc lớn - giảm chi phí
Tuổi thọ của mảnh CBN có thể gấp hơn 10 lần so với mảnh carbide và giảm chi phí của dụng cụ cắt tổng hợp từ 30%-50%. Thời gian giữa các lần thay thế mảnh PCBN dài và tần suất thay thế mảnh ít hơn, giúp giảm đáng kể chi phí cho mảnh cắt.

• Hiệu suất gia công cao
Hiệu quả gia công của mảnh PCBN cao gấp 5-10 lần so với mảnh carbide, điều này làm tăng công suất thiết bị và giảm đầu tư cố định vào thiết bị.

• Chất lượng bề mặt cao
Chất lượng bề mặt và độ chính xác kích thước của chi tiết gia công với mảnh PCBN có thể đạt đến mức độ đánh bóng, giảm bớt được công đoạn đánh bóng, giảm đầu tư vào thiết bị.

• Khả năng gia công linh hoạt
Mảnh PCBN có thể sử dụng cho cả gia công khô và gia công ướt, một loại có thể dùng cho gia công nhiều loại vật liệu.

• Excellent cost performance
The service life of PCBN insert can be more than 10 times that of carbide insert and reduce the cost of comprehensive cutting tool by 30%-50%. The interval time between the replacements of PCBN insert is long and the insert replacement frequency is less, which can reduce the cost on inserts.

• High machining efficiency
The machining efficiency of PCBN insert is 5-10 times that of carbide insert, which greatly improves the equipment capacity and reduces the fixed investment of equipment.

• Excellent surface quality
Surface finish and dimensional precision of machining workpiece of PCBN insert can reach the grinding level, and make turning instead of grinding to reduce equipment investment.

• Strong universality
PCBN insert can be used for both dry cutting and wet cutting and one grade normally is suitable for machining a variety of materials.

Impact-resistant Solid Insert

Grade	Machining Model	Applicable Industry	Workpiece Material	Feature
OA3500	Rough machining	•Roll •Slurry pump •Rolling mortar wall	•High nickel-chromium, high hardness alloy cast iron, cast high speed steel •High manganese steel	•High hardness with excellent impact resistance, good cutting edge stability •Suitable for heavy loading rough machining from interrupted to continuous working conditions
OA7630	Rough machining / Semi-finishing	•Brake disc •Brake drum •Parts of compressor	•gray cast iron	•Excellent combination of toughness and wear resistance, good edge stability •Good universality, suitable for high-speed roughing machining from interrupted to continuous working conditions
OA9500	Rough machining / Semi-finishing	•Gear •Bearing •Mining machinery •Coal mine machinery	•Hardened steel •Surface overlaying material	•Balanced impact toughness and good wear resistance •Suitable for heavy interrupted to continuous machining under various working conditions

Brazed Solid Tip Insert

Grade	Machining Model	Applicable Industry	Workpiece Material	Feature
OB7630	Rough machining / Semi-finishing	•Brake disc •Brake drum •Parts of compressor	•gray cast iron	•Excellent combination of toughness and wear resistance, good edge stability •Good universality, suitable for high-speed roughing machining from interrupted to continuous working conditions
OB9500	Rough machining / Semi-finishing	•Gear •Bearing •Mining machinery •Coal mine machinery	•Hardened steel •Surface overlaying material	•Balanced impact toughness and good wear resistance •Suitable for heavy interrupted to continuous machining under various working conditions

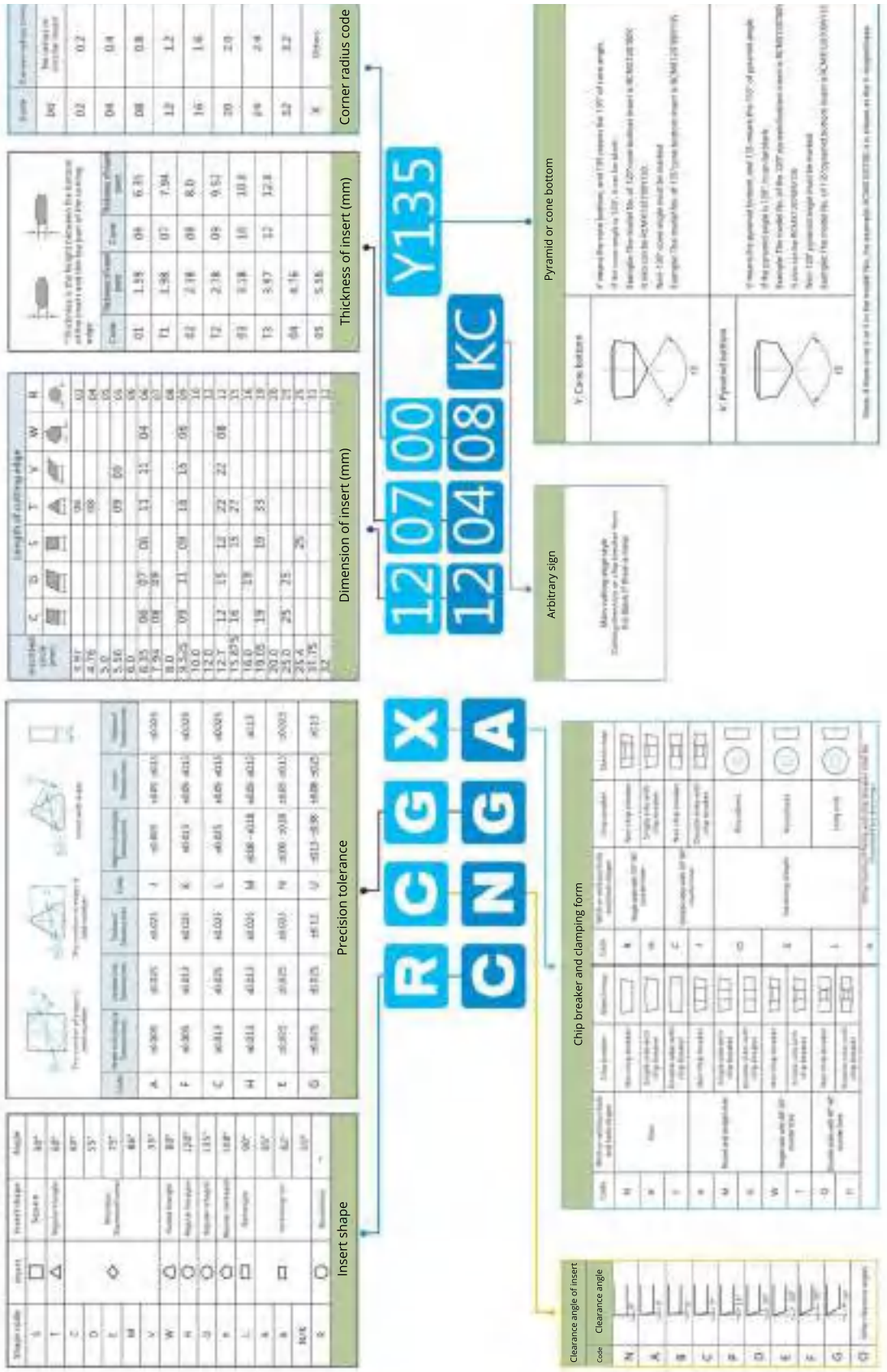
Single-layer brazed Coated Insert

Grade	Machining Model	Applicable Industry	Workpiece Material	Feature	Cutting speed Vc (m/min)	Cutting fluid
OC7510C07	Finishing	•Brake disc	•Grey cast iron •Case hardened alloy	•Mainly used for gray cast iron workpieces processing •From continuous to heavy interrupted high speed finishing •Strong coating adhesion, effectively improving tool life	600-1200 100-300	Dry cut or wet cut
OC7520C07	Finishing	•Brake disc •Gear	•Gray cast iron •Powder metallurgy	•Capable of the machining of various materials •From interrupted to continuous high speed finishing •Strong coating adhesion, effectively improving tool life	600-1200 90-200	Dry cut or wet cut
OC9540C06	Finishing	•Gear •Bearing	•Hardened steel	•Excellent thermal stability and red hardness for its excellent wear resistance •High speed continuous finishing •Excellent temperature resistance and wear resistance of the coating can significantly reduce the wear of the cutting edges	180-300	Dry cut or wet cut
OC550C06	Finishing	•Gear •Bearing	•Bearing steel •Cemented steel	•Balanced wear resistance and chipping resistance •Medium interrupted and continuous finishing •The excellent high temperature and wear resistance of the coating can significantly reduce the wear of the cutting edges	100-175	Dry cut or wet cut
OC9560C06	Finishing	•Gear •Bearing	•Cemented steel	•Strong chipping resistance and edge treatment •Heavy interrupted finishing •Excellent temperature resistance and wear resistance of the coating can significantly reduce the wear of the cutting edges	100-200	Dry cut

Single-layer brazed Insert with High Cost Performance

Grade	Machining Model	Applicable Industry	Workpiece Material	Feature	Cutting speed Vc (m/min)	Cutting fluid
OC7500	Finishing	•Brake disc •Gear	•Gray cast iron •Powder metallurgy	•High CBN content, ultra-fine grain CBN material, excellent impact resistance and high wear resistance •Excellent surface finish and cost performance	600-1200 90-200	Dry cut or wet cut
OC9400	Finishing	•Gear •Bearing	•Hardened steel	•Specialized wear-resistant CBN material to achieve high precision and dimensional stability for continuous processing of high hardness materials •The good thermal stability and chemical inertness of the base material can effectively prevent crater wear, and can be processed stably under high temperatures for a long time	180-300	Dry cut or wet cut
OC9600	Finishing	•Gear •Bearing	•Hardened steel	•Balanced toughness and wear resistance make it extremely stable in interrupted machining of hard steel, the higher the steel hardness, the better the performance •Strong chipping resistance and various cutting edge treatments, ideal for interrupted machining of high hardness materials	100-175	Dry cut

CODE INFORMATION



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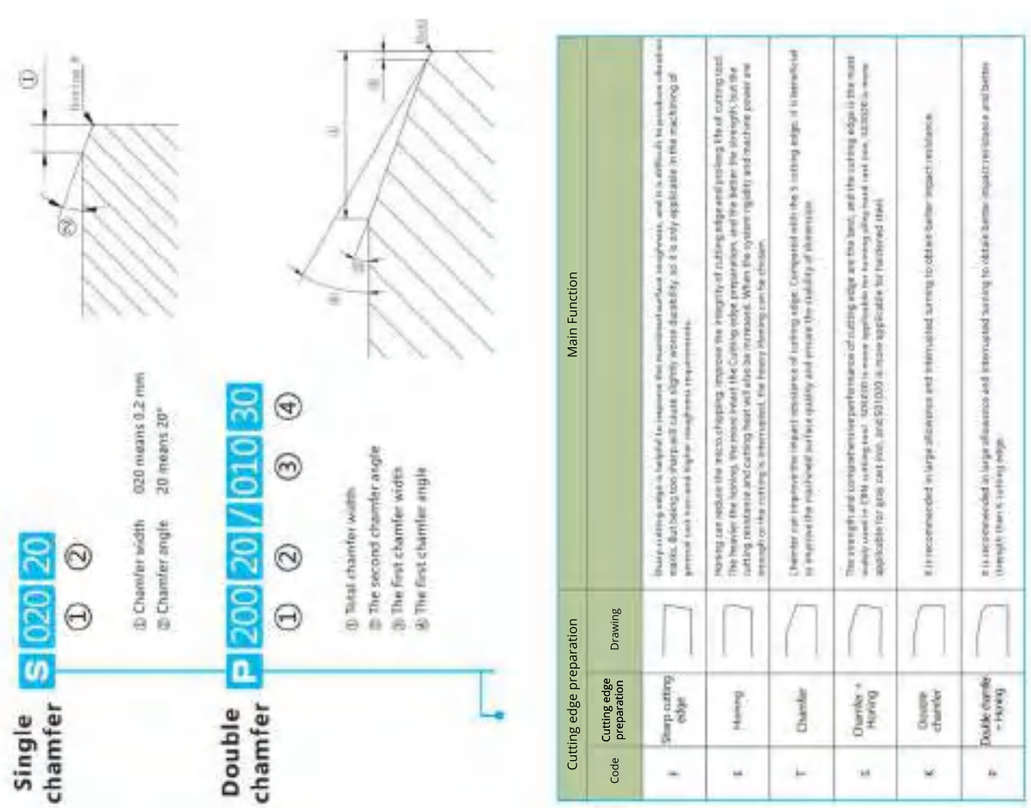

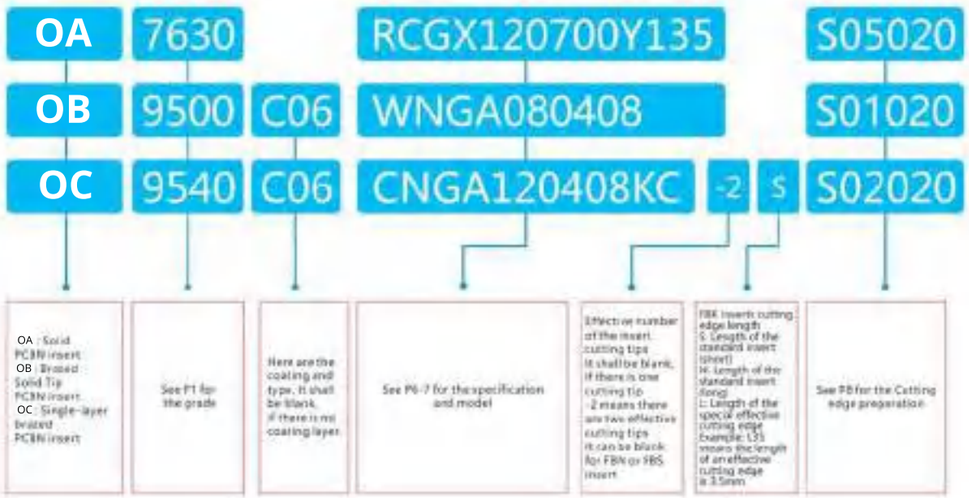

CUTTING PARAMETER

Common cutting parameters for turning insert						
Workpiece	Common material	Hardness	Cutting speed Vc (m/min)	Cutting depth ap (mm)	Feed rate (mm/rev)	Recommended structural form
Gear	20CrMnTi	58-65HRC	80-220	0.05-0.5	0.05-0.2	OC
Bearing	GCr15	55-65HRC	80-220	0.05-0.5	0.05-0.2	OC\OB\OA
Large gear	40CrMo	310-360HB	80-120	0.5-5.0	0.2-1.0	OA
	18CrNiMo	58-62HRC	80-120	0.3-1.0	0.1-0.3	OA
Slewing ring	42CrMo	55-62HRC	80-150	0.2-2.0	0.1-0.5	OA
Brake disc	HT250	220-260HB	500-1000	0.2-0.5	0.1-0.3	OA\OB
			400-1200	0.5-3	0.1-0.5	OA\OB
Brake drum			350-1000	0.2-0.5	0.1-0.3	OA\OB
			280-1000	0.5-3	0.1-0.5	OA\OB
Air Conditioning Compressor			400-1000	0.3-2.5	0.2-0.5	OA\OB
Cylinder liner	Boron copper cast iron	180-260HB	500-800	0.1-0.3	0.1-0.2	OC\OB\OA
		180-260HB	150-500	0.3-1.0	0.1-0.3	OC\OB\OA
Roll	High nickel-chromium	78HSD	50-100	1.0-10.0	0.5-1.5	OA
	High ferrochrome	75HSD	50-100	1.0-10.0		OA
	High chromium steel	75HSD	40-100	1.0-10.0		OA
	High speed steel	88HSD	40-80	0.3-3.0		OA
	High carbon semi-steel	70HSD	50-80	1.0-10.0		OA
	Chilled cast iron	67HSD	50-80	1.0-10.0		OA
Slurry pump	Wear resistant white cast iron	50-60HRC	50-100	0.5-4.0	0.2-0.5	OA
Rolling mortar wall	High manganese steel	300-500HB	30-100	0.5-8.0	0.2-0.5	OA

Common cutting parameters for milling insert						
Material	Hardness of workpiece	Cutting edge angle Kr	Cutting speed Vc (m/min)	Cutting depth ap (mm)	Feed rate (mm/rev)	Cutting fluid
Gray cast iron	200HB	75°	500-2000	0.5-2.0	0.1-0.2	Dry cut
Gray cast iron	55HRC	75°	150-300	0.5-2.0	0.05-0.2	Dry cut
Hardened steel	60HRC	75°	80-200	0.2-0.5	0.05-0.1	Dry cut

Description: The rigidity and power of machine tool, size and thickness of insert, the material, hardness and shape of workpiece, machining allowance, insert durability and other factors need to be comprehensively considered to make appropriate adjustments in the selection of specific cutting parameters.

Factors that may affect the insert life when PCBN insert is used in machining gray cast iron

- Casting blank should be properly done through aging treatment, and the general natural aging time should be more than 10 days.
- The ferrite content in casting blank should be equal to or less than 10%.
- The sulfur content should be equal to or more than 0.05%.

Failure to meet the above factors may result in a significant decrease in insert life

INDUSTRIAL APPLICATION

Grade	Insert shape	Insert model	Radius	Chamfer						
				02020	02030	02530	03020	05020	10020	20020
IB0A3500 IB0A7603		RN*N0904	00	●						
		RN*N1204	00	●					●	
		RN*N1207	00	●				●		
		RN*N1507	00	●						
		RN*N2007	00					●		
		RN*N2010	00					●		●
		RC*X0907Y	00	●				●		
		RC*X1207Y	00					●	●	
		RC*X0907V	00	●				●		
		RC*X1207V	00					●	●	
		SN*N1207	12	●			●			
		SN*N1507	16				●	●		
		SN*N2010	20					●		
		CN*N1207	12	●			●			
			16	●		●				
IB0A9500		RN*N0904	00	●						
		RN*N1204	00	●						
		RN*N1207	00	●				●		
		RC*X0907Y	00	●				●		
		RC*X1207Y	00		●		●			
		RC*X0907V	00	●				●		
		RC*X1207V	00		●		●			
		SN*N1207	12	●						
		SN*N1507	16					●		
		CN*N1207	08	●						
			12	●						

Grade	Insert shape	Insert model	Radius	Chamfer						
				E	01010	01015	01520	02020	02025	02530
IB0B3500		CNGA1204	08		●					
		DNGA1504	12					●		
		TNGA1604	08				●			
		VNGA1604	08	●	●					
			12		●					
		WNGA0804	08			●				
			12					●		
IB0B9500		CNGA1204	08				●	●		
			16						●	
		DNGA1504	08				●			
		TNGA1604	08							●
		VNGA1604	08	●	●					
		WNGA0804	08				●			
			12				●			

Grade	Insert shape	Insert model	Radius	Chamfer					
				01015	01020	01225	01520	01530	02020
IB0C7510C07 IB0C7520C07 OC7500		CCGW0602	04		•				
		CCGW09T3	04	•					
		CCGW1204	12				•		
		CNGA1204	08				•		
			16		•				
		DCGW11T3	04			•			
		DNGA1504	08			•			
		TCGW0902	04		•				
		TCGW1102	04		•				
			08		•				
		TNGA1604	16						•
		VNGA1604	04					•	
		VCGW1604	04			•			

Grade	Insert shape	Insert model	Radius							
				01010	01020	01225	01525	01535	02035	03035
IB0C9540C06 IB0C9550C06 IB0C9560C06 IBOC9400 IBOC9600		CCGW0602	04		•					
		CCGW09T3	04		•		•			
			08			•	•			
		CCGW1204	04		•					
		CNGA1204	08			•				
			12			•				
		DCGW0702	04		•					
		DCGW11T3	04			•				
			08				•			•
		DNGA1504	04			•			•	
			08			•				
		TCGW0902	04		•					
		TCGW1102	04	•		•				
		TCGW1103	04	•						
			08				•			
		TNGA1604	08			•		•		
		VNGA1604	08		•			•		
		VBGW1604	04			•				
			08		•	•				
		WNGA0804	08			•		•		

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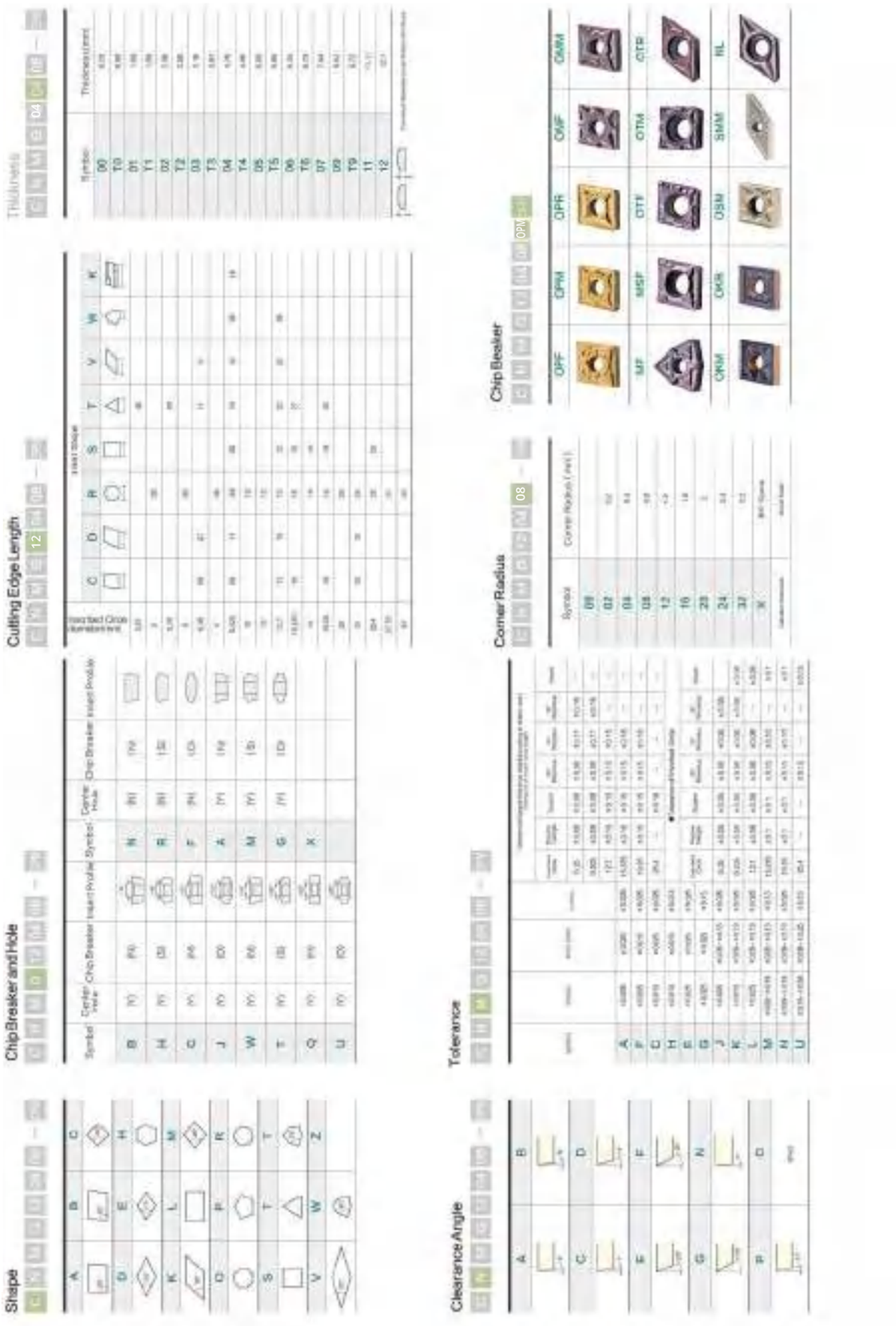
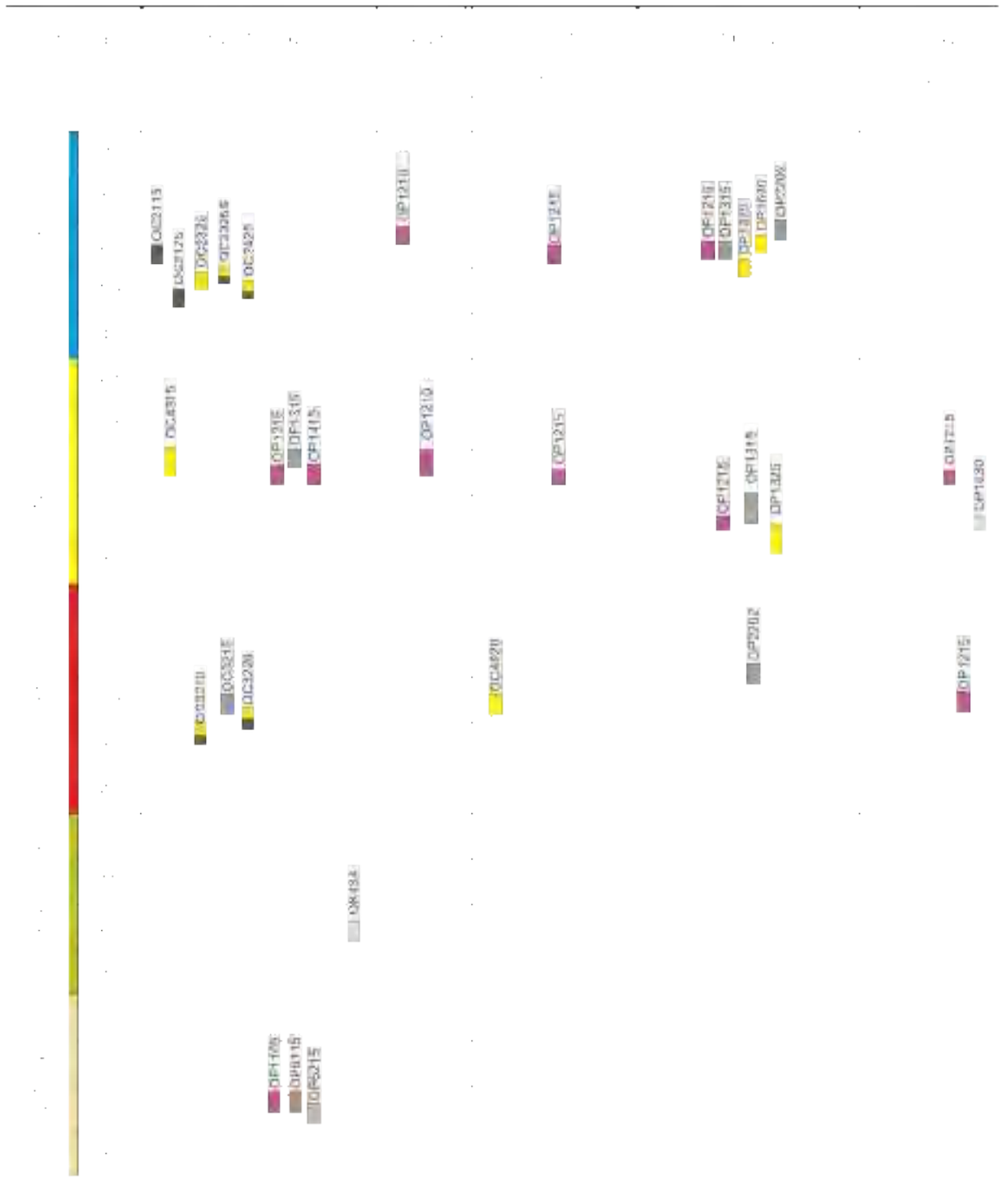


CHIP BREAKER INTRODUCE

ISO Code	P	P/M	M	K	N	S
Finishing	OPF	OTF	OMF MSF			SMM
Semi Finishing	OPM	OTM	MF OMM	OKM General chipbreaker	NL	OSM
Roughing	OPR	OTR		OKR Flat:		

CHIP BREAKER INTRODUCE



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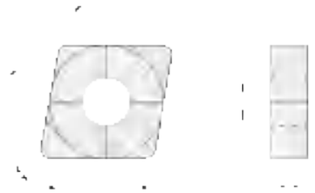
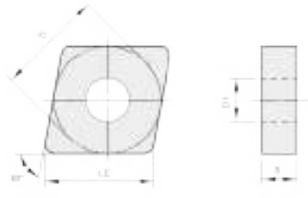


ICCNMG 120404-OFF						
ICCNMG 120408-OFF	12.9	12.7	4.76	5.16	0.8	
ICCNMG 120404-OMF						
ICCNMG 120408-OMF	12.9	12.7	4.76	5.16	0.8	
ICCNMG 090304-MSF						
ICCNMG 120404-MSF	12.9	12.7	4.76	5.16	0.4	
ICCNMG 120404-OPM						
CNMG 120408-OPM	12.9	12.7	4.76	5.16	0.8	
ICCNMG 120412-OPM						
ICCNMG 120416-OPM	12.9	12.7	4.76	5.16	1.6	
ICCNMG 160608-OPM						
ICCNMG 160612-OPM	16.1	15.875	6.35	6.35	1.2	
ICCNMG 160616-OPM						
ICCNMG 190608-OPM	19.3	19.05	6.35	7.94	0.8	
ICCNMG 190612-OPM						
ICCNMG 190616-OPM	19.3	19.05	6.35	7.94	1.6	

TURNING INSERT



Insert Shape	Type	Dimension					P					M			K			S		
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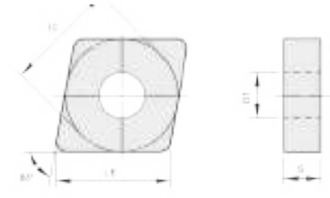
	ICCNMG 120408-OMM	12.9	12.7	4.76	5.16	0.8						●	▲	●							
	ICCNMG 160608-OMM	16.1	15.875	6.35	6.35	0.8						●	▲	●							
	ICCNMG 090308-MF	9.7	9.525	3.18	3.81	0.8						●	▲	●							
	ICCNMG 120404-MF	12.9	12.7	4.76	5.16	0.4						●	▲	●							
	ICCNMG 120408-MF	12.9	12.7	4.76	5.16	0.8						●	▲	●							
	ICCNMG 120412-MF	12.9	12.7	4.76	5.16	1.2						●	▲	●							
	ICCNMG 160612-MF	16.1	15.875	6.35	6.35	1.6						●	▲	●							
	ICCNMG 120404-OKM	12.9	12.7	4.76	5.16	0.4										▲		▲			
	ICCNMG 120408-OKM	12.9	12.7	4.76	5.16	0.8										▲		▲			
	ICCNMG 120412-OKM	12.9	12.7	4.76	5.16	1.2										▲		▲			
	ICCNMG 120408-OSM	12.9	12.7	4.76	5.16	0.8													●		
	ICCNMG 120412-OSM	12.9	12.7	4.76	5.16	1.2													●		
	ICCNMG 120408-SMM	12.9	12.7	4.76	5.16	0.8													▲		▲
	ICCNMG 120404-SMM	12.9	12.7	4.76	5.16	0.4													▲		▲

Positive Type

CARBIDE INSERT

TURNING INSERT



Insert Shape	Type	Dimension					P					M			K			S		
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	ICCNMG 120416-OPR	12.9	12.7	4.76	5.16	1.6						●	●	▲							
	ICCNMG 160608-OPR	16.1	15.875	6.35	6.35	0.8						●	●	▲							
	ICCNMG 160612-OPR	16.1	15.875	6.35	6.35	1.2						●	●	▲							
	ICCNMG 160616-OPR	16.1	15.875	6.35	6.35	1.6						●	●	▲							
	ICCNMG 190608-OPR	19.3	19.05	6.35	7.94	0.8						●	●	▲	▲						
	ICCNMG 190612-OPR	19.3	19.05	6.35	7.94	1.2						●	●	▲	▲						
	ICCNMG 190616-OPR	19.3	19.05	6.35	7.94	1.6						●	●	▲	▲						
	ICCNMG 120408-OMR	12.9	12.7	4.76	5.16	0.8									●	▲	●				
	ICCNMG 120412-OMR	12.9	12.7	4.76	5.16	1.2									●	▲	●				
	ICCNMG 120408-OKR	12.9	12.7	4.76	5.16	0.8											▲	▲			
	ICCNMG 120412-OKR	12.9	12.7	4.76	5.16	1.2											▲	▲			
	ICCNMG 120416-OKR	12.9	12.7	4.76	5.16	1.6											▲	▲			
	ICCNMG 160612-OKR	16.1	15.8	6.35	6.35	1.2											▲	▲			
	ICCNMM 190616-PR	19.3	19.05	6.35	7.94	1.6						●	●	▲							
	ICCNMM 250924-PR	25.8	25.4	9.72	9.12	2.4								▲							
	ICCNMM 250724-PR	25.8	25.4	7.94	9.12	2.4								▲							

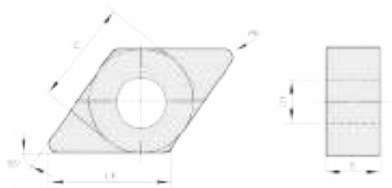
Positive Type

Negative Type

▲ Preferred grade ● Optional grade

IC

TURNING INSERT



Insert Shape	Type	Dimension					P				M			K			S		
		LE	IC	S	D1	RE	OC2115	OC2125	OC2325	OC23255	OC2425	OP1215	OP1315	OP1415	OC4315	OC3215	OC3225	OC3220	OP1105	OP6115	OP6215
	ICDNMG 110404-OPF	11.6	9.525	4.76	3.81	0.4	●	●	▲												
	ICDNMG 110408-OPF	11.6	9.525	4.76	3.81	0.8	●	●	▲												
	ICDNMG 150404-OPF	15.5	12.7	4.76	5.16	0.4	●	●	▲												
	ICDNMG 150408-OPF	15.5	12.7	4.76	5.16	0.8	●	●	▲												
	ICDNMG 150604-OPF	15.5	12.7	6.35	5.16	0.4	●	●	▲												
Finishing	ICDNMG 150608-OPF	15.5	12.7	6.35	5.16	0.8	●	●	▲												
	ICDNMG 150604-OMF	15.5	12.7	6.35	5.16	0.4						●	▲	●							
	ICDNMG 110404-OMF	15.5	12.7	6.35	5.16	0.8						●	▲	●							
	ICDNMG 110404-OMF	11.6	9.525	4.76	3.81	0.4						●	▲	●							
	ICDNMG 110404-MSF	15.5	12.7	4.76	5.16	0.4						●	▲	●							
	ICDNMG 110404-OPM	11.6	9.525	4.76	3.81	0.4	●		▲												
	ICDNMG 110408-OPM	11.6	9.525	4.76	3.81	0.8	●		▲												
	ICDNMG 110412-OPM	11.6	9.525	4.76	3.81	1.2	●		▲												
	ICDNMG 150404-OPM	15.5	12.7	4.76	5.16	0.4	●		▲												
	ICDNMG 150408-OPM	15.5	12.7	4.76	5.16	0.8	●		▲												
	ICDNMG 150412-OPM	15.5	12.7	4.76	5.16	1.2	●		▲												
	ICDNMG 150604-OPM	15.5	12.7	6.35	5.16	0.4	●		▲												
Semi Finishing	ICDNMG 150608-OPM	15.5	12.7	6.35	5.16	0.8	●		▲												
	ICDNMG 150612-OPM	15.5	12.7	6.35	5.16	1.2	●		▲												
	ICDNMG 110404-OMM	11.6	9.525	4.76	3.81	0.4						●	▲	●							
	ICDNMG 110404-OMM	11.6	9.525	4.76	3.81	0.8						●	▲	●							
	ICDNMG 150404-OMM	15.5	12.7	4.76	5.16	0.4						●	▲	●							
	ICDNMG 150408-OMM	15.5	12.7	4.76	5.16	0.8						●	▲	●							
	ICDNMG 150604-OMM	15.5	12.7	6.35	5.16	0.4						●	▲	●							
	ICDNMG 110404-OMM	15.5	12.7	6.35	5.16	0.8						●	▲	●							
	ICDNMG 150612-OMM	15.5	12.7	6.35	5.16	1.2						●	▲	●							
	ICDNMG 110408-MF	11.6	9.525	4.76	3.81	0.8						●	▲	●							
	ICDNMG 150408-MF	15.5	12.7	4.76	5.16	0.8						●	▲	●							
	ICDNMG 150608-MF	15.5	12.7	6.35	5.16	0.8						●	▲	●							

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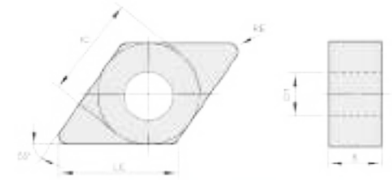
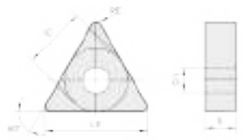


Insert Shape	Type	Dimension					P					M			K			S		
		LE	IC	S	D1	RE	OC2115	OC2125	OC2325	OC23255	OC2425	OP1215	OP1315	OP1415	OC4315	OC3215	OC3225	OP1105	OP6115	OP6215
	ICDNMG 150404-OKM	15.5	12.7	4.76	5.16	0.4										▲	▲			
	ICDNMG 150408-OKM	15.5	12.7	4.76	5.16	0.8										▲	▲			
	ICDNMG 150604-OKM	15.5	12.7	6.35	5.16	0.4										▲	▲			
	ICDNMG 150608-OKM	15.5	12.7	6.35	5.16	0.8										▲	▲			
	ICDNMG 150612-OKM	15.5	12.7	6.35	5.16	1.2										▲	▲			
Semi Finishing	ICDNMG 150608-OSM	15.5	12.7	6.35	5.16	0.8													●	
	ICDNMG 150408-OPR	15.5	12.7	4.76	5.16	0.8	●	●	▲											
	ICDNMG 150412-OPR	15.5	12.7	4.76	5.16	1.2	●	●	▲											
	ICDNMG 150608-OPR	15.5	12.7	6.35	5.16	0.8	●	●	▲											
	ICDNMG 150612-OPR	15.5	12.7	6.35	5.16	1.2	●	●	▲											
	ICDNMG 150616-OPR	15.5	12.7	6.35	5.16	1.6	●	●	▲											
	ICDNMG 150408-OKR	15.5	12.7	4.76	5.16	0.8										▲	▲			
	ICDNMG 150412-OKR	15.5	12.7	4.76	5.16	1.2										▲	▲			
	ICDNMG 150608-OKR	15.5	12.7	6.35	5.16	0.8										▲	▲			
Roughing	ICDNMG 150612-OKR	15.5	12.7	6.35	5.16	1.2										▲	▲			
	ICDNMG 110408	11.6	9.525	4.76	3.81	0.8	●	●	▲								▲			
	ICDNMG 110404	15.5	12.7	4.76	5.16	0.4	●	●	▲								▲			
	ICDNMG 150408	15.5	12.7	6.35	5.16	0.8	●	●	▲								▲			
	ICDNMG 150412	15.5	12.7	6.35	5.16	1.2	●	●	▲								▲			
	ICDNMG 150608	15.5	12.7	6.35	5.16	0.8	●	●	▲								▲			
Semi Finishing	ICDNMG 150612	15.5	12.7	6.35	5.16	1.2	●	●	▲								▲			
	ICDNMA 150404	15.5	12.7	4.76	5.16	0.4											▲			
	ICDNMA 150408	15.5	12.7	4.76	5.16	0.8											▲			
	ICDNMA 150604	15.5	12.7	6.35	5.16	0.4											▲			
	ICDNMA 150608	15.5	12.7	6.35	5.16	0.8											▲			
Roughing	ICDNMA 150612	15.5	12.7	6.35	5.16	1.2											▲			

TURNING INSERT



Insert Shape	Type	Dimension					P							M			K			S		
		LE	IC	S	D1	RE	DC2115	DC2125	DC2325	DC2325S	DC2425	DP1215	DP1315	DP1415	DC4315	DC3210	DC3215	DC3220	DP1105	DP6115	DP6215
	ICTNMG 160404-OPM	16.5	9.525	4.76	3.81	0.4	●		▲													
	ICTNMG 160408-OPM	16.5	9.525	4.76	3.81	0.8	●		▲													
	ICTNMG 160412-OPM	16.5	9.525	4.76	3.81	1.2	●		▲													
	ICTNMG 220404-OMM	22	12.7	4.76	5.16	0.4	●		▲													
	ICTNMG 160408-OPM	22	12.7	4.76	5.16	0.8	●		▲													
	ICTNMG 220412-OPM	22	12.7	4.76	5.16	1.2	●		▲													
	ICTNMG 220416-OPM	22	12.7	4.76	5.16	1.6	●		▲													
Semi Finishing	ICTNMG 160404-OMM	16.5	9.525	4.76	3.81	0.4			●	▲	●											
	ICTNMG 160408-OMM	16.5	9.525	4.76	3.81	0.8			●	▲	●											
	ICTNMG 220404-OMM	22	12.7	4.76	5.16	0.4			●	▲	●											
	ICTNMG 220408-OMM	22	12.7	4.76	5.16	0.8			●	▲	●											
	ICTNMG 220412-OMM	22	12.7	4.76	5.16	1.2			●	▲	●											
	ICTNMG 160404-MF	16.5	9.525	4.76	3.81	0.4			●	▲	●											
	ICTNMG 160408-MF	16.5	9.525	4.76	3.81	0.8			●	▲	●											
	ICTNMG 160412-MF	16.5	9.525	4.76	3.81	1.2			●	▲	●											
	ICTNMG 22404-MF	22	12.7	4.76	5.16	0.4			●	▲	●											
	ICTNMG 220408-MF	22	12.7	4.76	5.16	0.8			●	▲	●											
	ICTNMG 160404-OKM	16.5	9.525	4.76	3.81	0.4										▲		▲				
	ICTNMG 160408-OKM	16.5	9.525	4.76	3.81	0.8										▲		▲				
	ICTNMG 160412-OKM	16.5	9.525	4.76	3.81	1.2										▲		▲				
	ICTNMG 160408-SMM	16.5	9.525	4.76	3.81	0.8															▲	▲

▲ Featured grade ● Optional grade

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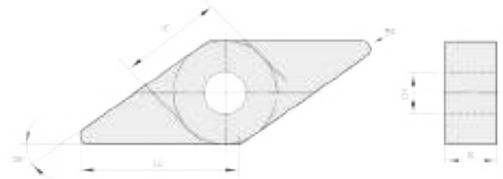
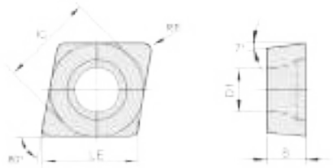


Insert Shape	Type	Dimension					P							M			K			S		
		LE	IC	S	D1	RE	DC2115	DC2125	DC2325	DC2325S	DC2425	DP1215	DP1315	DP1415	DC4315	DC3210	DC3215	DC3220	DP1105	DP6115	DP6215
	ICVNMG 160404-OPF	16.6	9.525	4.76	3.81	0.4	●	●	▲													
	ICVNMG 160408-OPF	16.6	9.525	4.76	3.81	0.8	●	●	▲													
Finishing	ICVNMG 160404-MSF	16.6	9.525	4.76	3.81	0.4							●	▲	●							
	ICVNMG 160404-OPM	16.6	9.525	4.76	3.81	0.4	●		▲													
	ICVNMG 160408-OPM	16.6	9.525	4.76	3.81	0.8	●		▲													
	ICVNMG 160412-OPM	16.6	9.525	4.76	3.81	1.2	●		▲													
Semi Finishing	ICVNMG 160404-OMM	16.6	9.525	4.76	3.81	0.4							●	▲	●							
	ICVNMG 160408-OMM	16.6	9.525	4.76	3.81	0.8							●	▲	●							
	ICVNMG 160408-MF	16.6	9.525	4.76	3.81	0.8							●	▲	●							

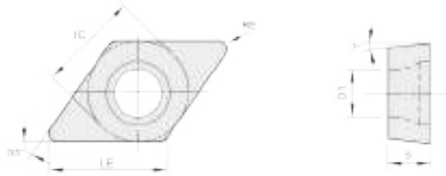
TURNING INSERT



Insert Shape		Type	Dimension					P					M			K			S		
			LE	IC	S	D1	RE	OC2115	OC2125	OC2325	OC23255	OC2425	OP1215	OP1315	OP1415	OC4315	OC3210	OC3215	OC3220	OP1105	OP6115	OP6215
	Finishing	ICCCMT 060202-OTF	6.4	6.35	2.38	2.8	0.2	▲					●	▲	●							
		ICCCMT 060204-OTF	6.4	6.35	2.38	2.8	0.4	▲					●	▲	●							
		ICCCMT 09T304-OTF	9.7	9.525	3.97	4.4	0.4	▲					●	▲	●							
		ICCCMT 09T308-OTF	9.7	9.525	3.97	4.4	0.8	▲					●	▲	●							
		ICCCMT 120404-OTF	12.9	12.7	4.76	5.5	0.4	▲					●	▲	●							
		ICCCMT 120408-OTF	12.9	12.7	4.76	5.5	0.8	▲					●	▲	●							
		ICCCMT 06202-MSF	6.4	6.35	2.38	2.8	0.2						●	▲	●							
		ICCCMT 060204-MSF	6.4	6.35	2.38	2.8	0.4						●	▲	●							
		ICCCMT 09T302-MSF	9.7	9.525	3.97	4.4	0.2						●	▲	●							
		ICCCMT 09T304-MSF	9.7	9.525	3.97	4.4	0.4						●	▲	●							
		ICCCMT 09T308-MSF	12.9	12.7	4.76	5.5	0.8						●	▲	●							
		ICCCMT 120404-MSF	12.9	12.7	4.76	5.5	0.4						●	▲	●							
	Semi Finishing	ICCCMT 0602204-OTM	6.4	6.35	2.38	2.8	0.4	●	●	●	▲		●	▲	●							
		ICCCMT 060208-OTM	6.4	6.35	2.38	2.8	0.8	●	●	●	▲		●	▲	●							
		ICCCMT 09T304-OTM	9.7	9.525	3.97	4.4	0.4	●	●	●	▲		●	▲	●							
		ICCCMT 09T308-OTM	9.7	9.525	3.97	4.4	0.8	●	●	●	▲		●	▲	●							
		ICCCMT 120404-OTM	12.9	12.7	4.76	5.5	0.4	●	●	●	▲		●	▲	●							
		ICCCMT 120408-OTM	12.9	12.7	4.76	5.5	0.8	●	●	●	▲		●	▲	●							
	Roughing	ICCCMT 060208-OTR	6.4	6.35	2.38	2.8	0.8	●	●	●	▲							▲				
		ICCCMT 09T304-OTR	9.7	9.525	3.97	4.4	0.4	●	●	●	▲							▲				
		ICCCMT 09T308-OTR	9.7	9.525	3.97	4.4	0.8	●	●	●	▲							▲				
		ICCCMT 120408-OTR	12.9	12.7	4.76	5.5	0.8	●	●	●	▲							▲				
		ICCCMT 120412-OTR	12.9	12.7	4.76	5.5	1.2	●	●	●	▲							▲				

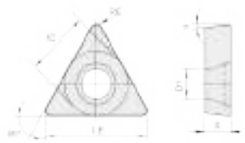
▲ Recommended grade ● Optional grade

TURNING INSERT



Insert Shape		Type	Dimension					P					M			K			S		
			LE	IC	S	D1	RE	DC2115	DC2125	DC2325	DC23255	DC2425	DP1215	DP1315	DP1415	DC4315	DC3210	DC3215	DC3220	DP1105	DP6115	DP6215
	Finishing	ICDCMT 070204-OTF	7.8	6.35	2.38	2.8	0.4	▲					●	▲	●							
		ICDCMT 11T302-OTF	11.6	9.525	3.97	4.4	0.2	▲					●	▲	●							
		ICDCMT 11T304-OTF	11.6	9.525	3.97	4.4	0.4	▲					●	▲	●							
		ICDCMT 070204-MSF	7.8	6.35	2.38	2.8	0.4						●	▲	●							
		ICDCMT 11T304-MSF	11.6	9.525	3.97	4.4	0.4						●	▲	●							
	Semi Finishing	ICDCMT 070204-OTM	7.8	6.35	2.38	2.8	0.4	●	●	●	▲		●	▲	●							
		ICDCMT 070208-OTM	7.8	6.35	2.38	2.8	0.8	●	●	●	▲		●	▲	●							
		ICDCMT 11T304-OTM	11.6	9.525	3.97	4.4	0.4	●	●	●	▲		●	▲	●							
		ICDCMT 11T308-OTM	11.6	9.525	3.97	4.4	0.8	●	●	●			●	▲	●							
	Roughing	ICDCMT 11T304-OTR	11.6	9.525	3.97	4.4	0.4	●	●	●	▲		●	▲	●							
		ICDCMT 11T308-OTR	11.6	9.525	3.97	4.4	0.8	●	●	●	▲		●	▲	●							

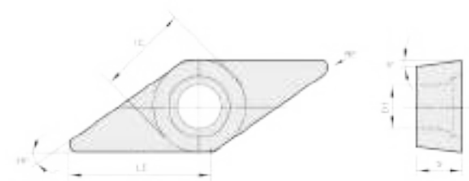
TURNING INSERT



Insert Shape		Type	Dimension					P					M				K			S		
			LE	IC	S	D1	RE	OC2115	OC2125	OC2325	OC23255	OC2425	OP1210	OP1315	OP1415	OC4315	OC3210	OC3245	OC3320	OP1105	OP6115	OP6215
	Finishing	ICTCMT 110202-OTF	11	6.35	2.38	2.8	0.2	▲					●	▲	●							
		ICTCMT 110204-OTF	11	6.35	2.38	2.8	0.4	▲					●	▲	●							
		ICTCMT 16T304-OTF	16.5	9.525	3.97	4.4	0.4	▲					●	▲	●							
		ICTCMT 16T308-OTF	16.5	9.525	3.97	4.4	0.8	▲					●	▲	●							
	Semi Finishing	ICTCMT 090204-OTM	9.6	5.56	2.38	2.5	0.4	●	●	●	▲		●	▲	●							
		ICTCMT 090208-OTM	9.6	5.56	2.38	2.5	0.8	●	●	●	▲		●	▲	●							
		ICTCMT 110204-OTM	11	6.35	2.38	2.8	0.4	●	●	●	▲		●	▲	●							
		ICTCMT 110208-OTM	11	6.35	2.38	2.8	0.8	●	●	●	▲		●	▲	●							
		ICTCMT 16T304-OTM	16.5	9.525	3.97	4.4	0.4	●	●	●	▲		●	▲	●							
		ICTCMT 16T308-OTR	16.5	9.525	3.97	4.4	0.8	●	●	●	▲		●	▲	●							
		ICTCMT 16T312-OTM	16.5	9.525	3.97	4.4	1.2	●	●	●	▲		●	▲	●							
	Roughing	ICTCMT 16T308-OTR	16.5	9.525	3.97	4.4	0.8	●	●	●	▲							▲				
		ICTCMT 220408-OTR	22	12.7	4.76	5.5	0.8	●	●	●	▲							▲				

▲ Preferred grade ● Optional grade

TURNING INSERT



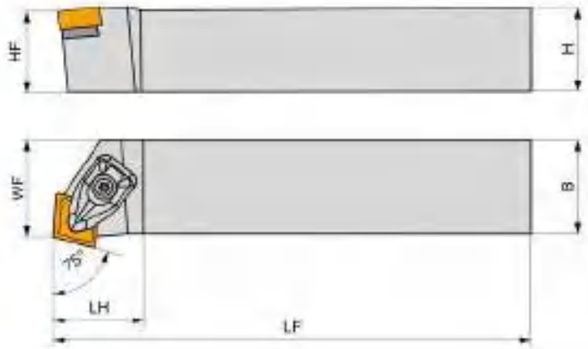
Insert Shape		Type	Dimension					P					M				K			S		
			LE	IC	S	D1	RE	OC2115	OC2125	OC2325	OC23255	OC2425	OP1215	OP1315	OP1415	OC4315	OC3210	OC3215	OC3320	OP1105	OP6115	OP6215
	Finishing	ICVBMT 160404-OTF	16.5	9.525	4.76	4.4	0.4	▲					●	▲	●							
		ICVBMT 160408-OTF	16.5	9.525	4.76	4.4	0.8	▲					●	▲	●							
	Semi Finishing	ICVBMT 110304-OTM	11	6.35	3.18	2.8	0.4	●	●	●	▲		●	▲	●							
		ICVBMT 110304-OTM	16.5	9.525	4.76	4.4	0.4	●	●	●	▲		●	▲	●							
		ICVBMT 160408-OTM	16.5	9.525	4.76	4.4	0.8	●	●	●	▲		●	▲	●							
		ICVBMT 160412-OTM	16.5	9.525	4.76	4.4	1.2	●	●	●	▲		●	▲	●							
		ICVBMT 160404-OMM	16.5	9.525	4.76	4.4	0.4						●	▲	●							
		ICVBMT 160404-OSM	16.5	9.525	4.76	4.4	0.4													●	▲	▲
		ICVBMT 160408-OSM	16.5	9.525	4.76	4.4	0.8													●	▲	▲
	Roughing	ICVBMT 160404-OTR	16.5	9.525	4.76	4.4	0.4	●	●	●	▲							▲				
		ICVBMT 160408-OTR	16.5	9.525	4.76	4.4	0.8	●	●	●	▲							▲				

THDTFR(RL)

P M K N S H

External Double Clamp Turning Holder with 75° Cutting Angle for CN.. Insert

External Right/Left hand double clamp 75° tool holder. Suited for longitudinal and face turning without shoulder and chamfering with negative CN.. 12 up to 19 size inserts. Available with shanks 20x20 up to 40x40 mm. Body treated for longer tool life.



	Product	W	H	HF	WF	LF	LH	LAMS	GAMO				
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	[°]				
R	THDCBNR 2020 K 12	20	20	20	17	125	34.2	-6	-6	0.43	GI043	DC12	AT001
	THDCBNR 2525 M 12	25	25	25	22	150	34.6	-6	-6	0.76	GI043	DC12	AT001
	THDCBNR 3225 P 12	32	25	32	22	170	34.6	-6	-6	1.09	GI043	DC12	AT001
	THDCBNR 2525 M 16	25	25	25	22	150	41.5	-6	-6	0.80	GI050	DC16	AT005
	THDCBNR 3225 P 16	32	25	32	22	170	37	-6	-6	1.11	GI050	DC16	AT005
	THDCBNR 3232 P 19	32	32	32	27	170	46.1	-6	-6	1.39	GI042	DC19	–
	THDCBNR 4040 S 19	40	40	40	35	250	46.7	-6	-6	3.16	GI042	DC19	–
L	THDCBNL 2020 K 12	20	20	20	17	125	34.2	-6	-6	0.43	GI043	DC12	AT001
	THDCBNL 2525 M 12	25	25	25	22	150	34.6	-6	6	0.76	GI043	DC12	AT001
	THDCBNR 3525 P 12	32	25	32	22	170	34.6	-6	-6	1.09	GI043	DC12	AT001
	THDCBNR 2525 M 16	25	25	25	22	150	41.5	-6	-6	0.79	GI050	DC16	AT005
	THDCBNR 3225 P 16	32	25	32	22	170	37	-6	-6	1.11	GI050	DC16	AT005
	THDCBNR 3232 P 19	32	32	32	27	170	46.1	-6	-6	1.39	GI042	DC19	–

GI042	CN.. 1906..
GI043	CN.. 1204..
GI050	CN.. 1606..

		Nm				
DC12	DCS 12	3.9	DCS 234-01	US 2002-T15P	FLAGT15P/3.5	–
DC16	DCS 16	6.4	DCS 234-03	US 2007-T20P	–	LKT20P
DC19	DCS 19	6.4	DCS 234-01	US 2007-T20P	–	LKT20P

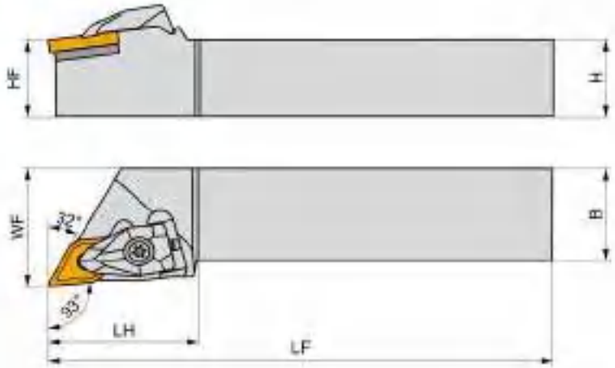
AT001a	CN.. 1207..	–	DCS 234-02
AT001d	CN.. 1607..	–	DCS 234-04
AT001b	CER CN.N 1204..	DCS 12C4	–
AT001c	CER CN.A 1204..	DCS 12C2	–
AT005b	CER CN.N 1606..	DCS 16C4	–
AT005c	CER CN.A 1606..	DCS 16C2	–

THDDJN(RL)

P M K N S H

External Double Clamp Turning Holder with 93° Cutting Angle for DN.. Insert

External Right/Left hand double clamp tool holder with 93° cutting angle. Suited for longitudinal turning with shoulder, copying, chamfering and facing with negative DN.. 11 or 15 size inserts. Available with shank size 20x20 up to 32x32 mm. Body treated for longer tool life.



	Product	W	H	HF	WF	LF	LH	LAMS	GAMO				
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	[°]				
R	THDDJNR 2020 K 11	20	20	20	25	125	30.2	-7	-6	0.45	GI046	DD11	–
	THDDJNR 2525 M 11	25	25	25	32	150	30.2	-7	-6	0.77	GI046	DD11	–
	THDDJNR 2020 K 15	20	20	20	25	125	39.4	-7	-6	0.42	GI044	DD154	AT002
	THDDJNR 2525 M 15	25	25	25	32	150	39.4	-7	-6	0.74	GI044	DD154	AT002
	THDDJNR 3225 P 15	32	25	32	32	170	39.4	-7	-6	1.12	GI044	DD154	AT002
	THDDJNR 3232 P 15	32	32	32	40	170	39.4	-7	-6	1.33	GI044	DD154	AT002
	THDDJNL 2020 K11	20	20	20	25	125	30.2	-7	-6	0.45	GI046	DD11	–
	THDDJNL 2525 M 11	25	25	25	32	150	30.2	-7	-6	0.77	GI046	DD11	–
	THDDJNL 2020 K 15	20	20	20	25	125	39.4	-7	-6	0.42	GI044	DD154	AT002
	THDDJNL 2525 M 15	25	25	25	32	150	39.4	-7	-6	0.74	GI044	DD154	AT002
L	THDDJNL 3225 P 15	32	25	32	32	170	39.4	-7	-6	1.01	GI044	DD154	AT002
	THDDJNL 3232 P 15	32	32	32	40	170	39.4	-7	-6	1.34	GI044	DD154	AT002

GI044	DN.. 1506..
GI046	DN.. 1104..

		Nm			
DD11	DCS 09	1.7	DDS 267-01	US 2004-T8IP	FLAGT09P
DD154	DCS T2	3.9	DDS 266-02	US 2002-T15P	FLAGT15P/3.5

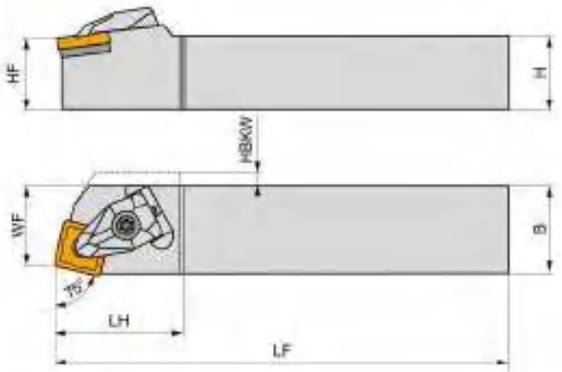
AT002a	DN.. 1504..	–	DDS 266-01
AT002b	CER DN.N 1506..	DCS 12C4	–
AT002c	CER DN.A 1506..	DCS 12C2	–

THDSBN(RL)

P M K N S H

External Double Clamp Holder with 75° Cutting Angle for SN.. Insert

External Right/Left hand double clamp tool holder with 75° cutting angle. Suited for longitudinal turning without shoulder, taper and chamfer turning with negative SN.. 12, 15 or 19 size inserts. Available in 20x20 up to 40x40 mm shanks. Body treated for longer tool life.



	Product	H	B	HF	WF	LF	LH	HBKW	LAMS	GAMO	kg			
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	[°]				
R	THDSBNR 2020 K 12	20	20	20	17	125	34.2	2.5	-6	-6	0.43	GI028	DS12	AT003
R	THDSBNR 2525 M 12	25	25	25	22	150	34.3	–	-6	-6	0.74	GI029	DS12	AT003
R	THDSBNR 2525 M 15	25	25	25	22	150	41.6	2	-6	-6	0.80	GI082	DS15	AT006
R	THDSBNR 3225 P 15	32	25	32	22	170	41.7	2	-6	-6	1.07	GI082	DS15	AT006
R	THDSBNR 3232 P 19	32	32	32	27	170	46.4	–	-6	-6	1.38	GI026	DS19	–
R	THDSBNR 4040 S 19	40	40	40	35	250	46.5	–	-6	-6	3.18	GI026	DS19	–
L	THDSBNL 2525 M 12	25	25	25	22	150	34.3	–	-6	-6	0.74	GI029	DS12	AT003
L	THDSBNL 2525 M 15	25	25	25	22	150	41.6	2	-6	-6	0.80	GI082	DS15	AT006
L	THDSBNL 3225 P 15	32	25	32	22	170	41.7	2	-6	-6	1.16	GI082	DS15	AT006
L	THDSBNL 3232 P 19	32	32	32	27	170	46.4	–	-6	-6	1.38	GI026	DS19	–
L	THDSBNL 4040 S 19	40	40	40	35	250	46.5	–	-6	-6	3.18	GI026	DS19	–

GI026	SN.. 1906..
GI029	SN.. 1204..
GI082	SN.. 1506..

		Nm				
DS12	DCS 12	3.9	DSS 425-01	US 2002-T15P	FLAG T15P/3,5	–
DS15	DCS 16	6.4	DSS 425-03	US 2007-T20P	–	LKT20P
DS19	DCS 19	6.4	DSS 425-04	US 2007-T20P	–	LKT20P

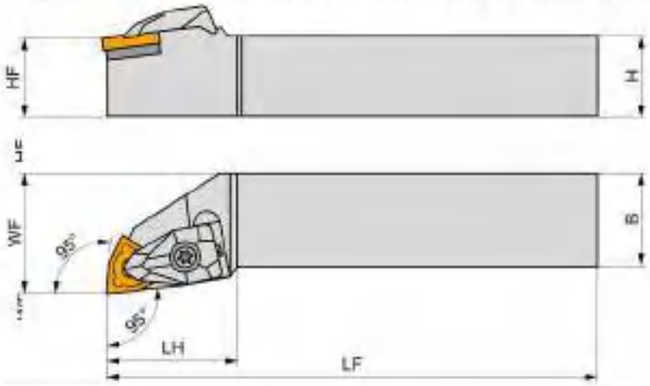
AT003	SN.. 1207..	–	DSS 425-02
AT006	SN.. 1507..	–	DSS 425-05
AT003	CER SN.N 1204..	DCS 12C4	–
AT003	CER SN.A 1204..	DCS 12C3	–
AT006	CER CN.N 1606..	DCS 16C4	–
AT006	CER CN.A 1606..	DCS 16C2	–

THDWLN(RL)

P M K N S H

External Double Clamp Holder with 95° Cutting Angle for WN.. Insert

External Right/Left hand double clamp turning holder with 95° cutting angle. Suited for longitudinal turning with shoulder, face, taper and chamfer turning with negative WN.. 06 to 13 inserts. Available with shank size 16x16 up to 40x40 mm. Body treated for longer tool life.



	Product	H	B	HF	WF	LF	LH	LAMS	GAMO	kg			
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	[°]				
R	THDWLNR 1616 H 06	16	16	16	20	100	26.4	-6	-6	0.22	GI028	DW06	–
R	THDWLNR 2020 K 06	20	20	20	25	125	27.1	-6	-6	0.41	GI028	DW06	–
R	THDWLNR 2525 M 06	25	25	25	32	150	27.1	-6	-6	0.75	GI028	DW06	–
R	THDWLNR 2020 K 08	20	20	20	25	125	34.3	-6	-6	0.43	GI072	DW08	AT004
R	THDWLNR 2525 M 08	25	25	25	32	150	35	-6	-6	0.75	GI072	DW08	AT004
R	THDWLNR 3225 P 08	32	25	32	32	170	35	-6	-6	1.01	GI072	DW08	AT004
R	THDWLNR 3225 P 10	32	25	32	32	170	38	-6	-6	1.06	GI166	DW10	–
R	THDWLNR 3232 P 13	32	32	32	40	170	40	-6	-6	1.44	GI167	DW13	–
R	THDWLNR 4040 S13	40	40	40	50	250	41	-6	-6	3.19	GI167	DW13	–
L	THDWLNL 1616 H 06	16	16	16	20	100	26.4	-6	-6	0.22	GI028	DW06	–
L	THDWLNL 2020 K 06	20	20	20	25	125	27.1	-6	-6	0.41	GI028	DW06	–
L	THDWLNL 2525 M 06	25	25	25	32	150	27.1	-6	-6	0.76	GI028	DW06	–
L	THDWLNL 2020 K 08	20	20	20	25	125	34.3	-6	-6	0.43	GI072	DW08	AT004
L	THDWLNL 2525 M 08	25	25	25	32	150	35	-6	-6	0.75	GI072	DW08	AT004
L	THDWLNL 3225 P 08	32	25	32	32	170	35	-6	-6	1.10	GI072	DW08	AT004
L	THDWLNL 3225 P 10	32	25	32	32	170	38	-6	-6	1.14	GI166	DW10	–
L	THDWLNL 3232 P 13	32	32	32	40	170	40	-6	-6	1.45	GI167	DW13	–
L	THDWLNL 4040 S 13	40	40	40	50	250	41	-6	-6	3.17	GI167	DW13	–

GI028	WN.. 0604..
GI072	WN.. 0804..
GI166	WN.. 1006..
GI167	WN.. 1306..

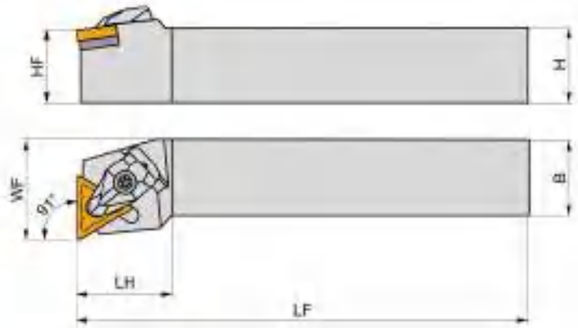
		Nm				
DW06	DCS 09	1.7	DWS 328-01	US 2004-T09P	FLAG T09P	–
DW08	DCS 12	3.9	DWS 331-12	US 2002-T15P	FLAG T15P/3,5	–
DW10	DCS 16	6.4	DWN 100612	US 5018-T20P	–	LKT20P
DW13	DCS 19	6.4	DWN 130612	US 6013-T20P	–	LKT20P

THDTFN(RL)

P M K N S H

External Double Clamp Holder with 91° (Face) Cutting Angle for TK.. Insert

External Right/Left hand double clamp tool holder with 91° cutting angle. Suited for face turning with shoulder and chamfering with negative TK.. 16 or 22 size inserts. Available in 20x20 and 25x25 mm shank. Body treated for longer tool life.



	Product	H1	A0	HF	WF	LF	LH	LAMS	GAMO	kg		
		mm	mm	mm	mm	mm	mm	°	°			
R	THDTFNR 2020 K 16	20	20	20	25	125	23.6	-6	-6	0.41	GI024	DT16
	THDTFNR 2525 M 16	25	25	25	32	150	23.6	-6	-6	0.77	GI024	DT16
	THDTFNR 2525 M 22	25	25	25	32	150	38.5	-6	-6	0.79	GI025	DT22
L	THDTFNL 2020 K 16	20	20	20	25	125	23.6	-6	-6	0.41	GI024	DT16
	THDTFNL 2525 M 16	25	25	25	32	150	23.6	-6	-6	0.76	GI024	DT16
	THDTFNL 2525 M 22	25	25	25	32	150	38.5	-6	-6	0.79	GI025	DT22

GI024	TK.. 1604..
GI025	TK.. 2204..

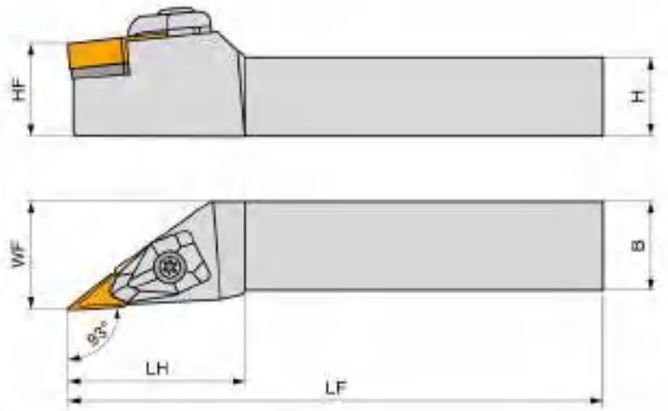
DT16	DCS 09	1.7	DTS 315-02	DS 2004-T09P	FLAG T09P
DT22	DCS 12	3.9	DTS 315-04	DS 2002-T15P	FLAG T15P/3,5

THDVJN(RL)

P M K N S H

External Double Clamp Holder with 93° Cutting Angle for VN.. Insert

External Right/Left hand double clamp tool holder with 93° cutting angle. Suited for longitudinal turning with shoulder, copy and taper turing and chamfering with negative VN.. 16 size inserts. Available in 20x20 up to 32x32 mm shank. Body treated for longer tool life.



	Product	H1	A0	HF	WF	LF	LH	LAMS	GAMO	kg		
		mm	mm	mm	mm	mm	mm	°	°			
R	THDVJNR 2020 K 16	20	20	20	25	125	46.4	-13	-4	0.43	GI048	DV16
	THDVJNR 2525 M 16	25	25	25	32	150	46.4	-13	-4	0.75	GI048	DV16
	THDVJNR 3225 P 16	32	25	32	32	170	46.4	-13	-4	1.05	GI048	DV16
L	THDVJNL 2020 K 16	20	20	20	25	125	46.4	-13	-4	0.43	GI048	DV16
	THDVJNL 2525 M 16	25	25	25	32	150	46.4	-13	-4	0.75	GI048	DV16
	THDVJNL 3225 P 16	32	25	32	32	170	46.4	-13	-4	1.06	GI048	DV16

GI048	VN.. 1604..

DV16	DCS 16V	3.0	DVS 269-01	DS 2009-T15P	FLAG T15P/3,5

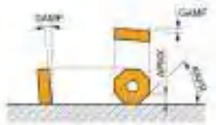
CARBIDE MILLING INSERT & HOLDER

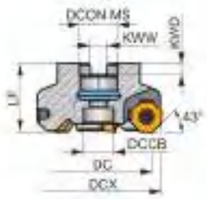
THSON06C

ECON ON06 43° Face Mill with Double Negative Design and Internal Coolant

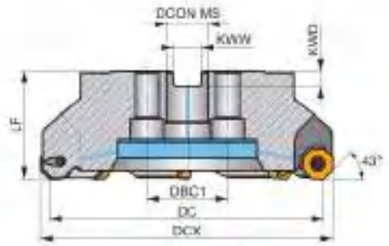
Highly economical and productive face mill utilising two types of double-sided negative inserts. Economical octagonal ON..06 inserts with 16 cutting edges and APMX of 4 mm, and productive square SN.. 17 inserts with 8 cutting edges and APMX of 7 mm. Arbor style available with differential tooth pitch. Body treated for longer tool life.

KAPR	43°
APMX	4.0 (7.0)





DC 50 – 125 mm



DC 160 – 250 mm

1.04 - 0.25

Product	DC	DCX	DCON MS	DCCB	DBC1	LF	KWW	KWD	GAMF	GAMP			max.		kg			
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(°)	(°)								
TH50A04R-S45ON06-C	50	60.8	22	16.5	–	40	18.4	6.3	-10	-5	4	✓	9400	✓	0.42	GI342	CD621	–
TH50A05R-S45ON06-C	50	60.8	22	16.5	–	40	18.4	6.3	-10	-5	5	–	9400	✓	0.39	GI342	CD621	–
TH63A05R-S45ON06-C	63	73.8	22	18.1	–	40	18.4	6.3	-10	-5	5	✓	8400	✓	0.59	GI342	CD621	–
TH63A06R-S45ON06-C	63	73.8	22	18.1	–	40	18.4	6.3	-10	-5	6	✓	8400	✓	0.55	GI342	CD621	–
TH80A06R-S45ON06-C	80	90.8	27	22.1	–	50	12.4	7	-10	-5	6	✓	7500	✓	1.27	GI342	CD622	–
TH80A08R-S45ON06-C	80	90.8	27	22.1	–	50	12.4	7	-10	-5	8	–	7500	✓	1.19	GI342	CD622	–
TH100A08R-S45ON06-C	100	110.8	32	30.1	–	50	14.4	8	-10	-5	8	✓	6700	✓	1.88	GI342	CD620	AC002
TH100A10R-S45ON06-C	100	110.8	32	30.1	–	50	14.4	8	-10	-5	10	–	6700	✓	1.81	GI342	CD620	AC002
TH125A08R-S45ON06-C	125	135.8	40	56.1	–	63	16.4	9	-10	-5	8	✓	6000	✓	3.53	GI342	CD620	AC003
TH125A10R-S45ON06-C	125	135.8	40	56.1	–	63	16.4	9	-10	-5	10	✓	6000	✓	3.45	GI342	CD620	AC003
TH125A12R-S45ON06-C	125	135.8	40	56.1	–	63	16.4	9	-11	-5	12	–	6000	✓	3.35	GI342	CD620	AC003
TH160C08R-S45ON06-C	160	170.8	40	–	66.7	63	16.4	9.25	-10	-5	8	✓	5700	✓	5.54	GI342	CD623	–
TH160C12R-S45ON06-C	160	170.8	40	–	66.7	63	16.4	9.25	-10	-5	12	✓	5700	✓	5.74	GI342	CD623	–
TH160C14R-S45ON06-C	160	170.8	40	–	66.7	63	16.4	9.25	-11	-5	14	–	5700	✓	5.65	GI342	CD623	–
TH200C12R-S45ON06-C	200	210.8	60	–	101.6	63	25.8	14.25	-10	-5	12	✓	4700	✓	9.00	GI342	CD624	–
TH200C16R-S45ON06-C	200	210.8	60	–	101.6	63	25.8	14.25	-10	-5	16	–	4700	✓	9.02	GI342	CD624	–
TH250C14R-S45ON06-C	250	260.8	60	–	101.6	63	25.8	14.25	-10	-5	14	✓	4300	✓	15.46	GI342	CD625	–
TH250C18R-S45ON06-C	250	260.8	60	–	101.6	63	25.8	14.25	-10	-5	18	–	4300	✓	15.51	GI342	CD625	–

GI342	ONMX 0605..	ONMX 0605..-W..	SNMX 1705..

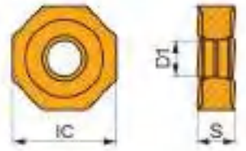
CARBIDE MILLING INSERT & HOLDER

		Nm							
CD620	US 45013A-T20P	5.0	M5	13	SDRT20P-T	–	–	–	–
CD621	US 45013A-T20P	5.0	M5	13	SDRT20P-T	HS 1030C	–	–	–
CD622	US 45013A-T20P	5.0	M5	13	SDRT20P-T	HS 1230C	–	–	–
CD623	US 45013A-T20P	5.0	M5	13	SDRT20P-T	HS 1240C	CAC 160C	HSD 0825C	HXK 5
CD624	US 45013A-T20P	5.0	M5	13	SDRT20P-T	HS 1655C	CAC 200C	HSD 1025C	HXK 7
CD625	US 45013A-T20P	5.0	M5	13	SDRT20P-T	HS 1655C	CAC 250C	HSD 1025C	HXK 7

AC002	KS 1635	K.SMH32
AC003	KS 2040	K.SMH40

ICONMX06

	IC	D1	S
	(mm)	(mm)	(mm)
0605	17.000	5.70	7.08



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE	P			M			K			N			S			H		
		(mm)	vc (m/min)	f (mm/tooth)	ap (mm)	vc (m/min)	f (mm/tooth)	ap (mm)	vc (m/min)	f (mm/tooth)	ap (mm)	vc (m/min)	f (mm/tooth)	ap (mm)	vc (m/min)	f (mm/tooth)	ap (mm)	vc (m/min)	f (mm/tooth)	ap (mm)
ICONMX 060508SR-F																				
	8215	0.8	275	0.10	2.0	165	0.09	2.0	–	–	–	–	–	–	65	0.07	1.6	–	–	–
	M6330	0.8	230	0.10	2.0	165	0.09	2.0	–	–	–	–	–	–	65	0.07	1.6	–	–	–
	M8330	0.8	270	0.10	2.0	160	0.09	2.0	–	–	–	–	–	–	65	0.07	1.6	–	–	–
	M8340	0.8	245	0.10	2.0	145	0.09	2.0	–	–	–	–	–	–	60	0.07	1.6	–	–	–
	M9340	0.8	320	0.10	2.0	190	0.09	2.0	–	–	–	–	–	–	80	0.07	1.6	–	–	–
ICONMX 060508SR-M																				
	8215	0.8	230	0.20	2.0	135	0.18	2.0	–	–	–	–	–	–	55	0.14	1.6	45	0.14	1.0
	M6330	0.8	195	0.20	2.0	140	0.18	2.0	–	–	–	–	–	–	55	0.14	1.6	–	–	–
	M8330	0.8	230	0.20	2.0	135	0.18	2.0	–	–	–	–	–	–	55	0.14	1.6	45	0.14	1.0
	M8340	0.8	210	0.20	2.0	125	0.18	2.0	–	–	–	–	–	–	50	0.14	1.6	–	–	–
	M9325	0.8	285	0.20	2.0	–	–	–	–	–	–	–	–	–	–	–	–	55	0.14	1.0
	M9340	0.8	255	0.20	2.0	150	0.18	2.0	–	–	–	–	–	–	60	0.14	1.6	–	–	–

F geometry is sharp and used for finishing, suitable for large overhang or thin walled and slim workpiece applications. Designed with highly positive rake, narrow T-land and rounding of cutting edge for light machining.

M geometry is versatile and the first choice for a wide range of working conditions. Designed with positive rake, medium T-land and rounding of cutting edge for medium machining.

CARBIDE MILLING INSERT & HOLDER

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE	P			M			K			N			S			H		
			vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap
			m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm
ICONMX 060508SR-R																				
	8215	0.8	210	0.30	2.0	–	–	–	195	0.30	2.0	–	–	–	–	–	–	40	0.21	1.0
	M5315	0.8	255	0.30	2.0	–	–	–	240	0.30	2.0	–	–	–	–	–	–	50	0.21	1.0
	M8330	0.8	210	0.30	2.0	–	–	–	195	0.30	2.0	–	–	–	–	–	–	40	0.21	1.0
	M8340	0.8	190	0.30	2.0	–	–	–	180	0.30	2.0	–	–	–	–	–	–	–	–	–
	M9325	0.8	250	0.30	2.0	–	–	–	235	0.30	2.0	–	–	–	–	–	–	50	0.21	1.0
ICONMX 060508SR-W																				
	8215	0.8	340	0.10	0.3	200	0.09	0.3	–	–	–	–	–	–	–	–	–	–	–	–
	M8330	0.8	325	0.10	0.3	195	0.09	0.3	–	–	–	–	–	–	–	–	–	–	–	–

R geometry is strong and used for roughing and heavy working conditions. Designed with slightly positive rake, wide T-land and rounding of cutting edge for rough machining.

W geometry for improved surface finish when machining with large cutters and high feed rate.

ICSNMX 17

	IC	D1	S
	mm	mm	mm
1705	17.000	5.70	5.56

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE	P			M			K			N			S			H		
			vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap
			m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm
ICSNMX170508SR-M																				
	8215	0.8	265	0.20	4.0	155	0.18	4.0	–	–	–	–	–	–	65	0.14	3.2	50	0.14	1.0
	M6330	0.8	225	0.20	4.0	160	0.18	4.0	–	–	–	–	–	–	65	0.14	3.2	–	–	–
	M8330	0.8	265	0.20	4.0	155	0.18	4.0	–	–	–	–	–	–	65	0.14	3.2	50	0.14	1.0
	M8340	0.8	240	0.20	4.0	149	0.18	4.0	–	–	–	–	–	–	60	0.14	3.2	–	–	–
	M9325	0.8	325	0.20	4.0	–	–	–	–	–	–	–	–	–	–	–	–	65	0.14	1.0
	M9340	0.8	295	0.20	4.0	175	0.18	4.0	–	–	–	–	–	–	70	0.14	3.2	–	–	–
ICSNMX 170508SR-R																				
	8215	0.8	240	0.30	4.0	–	–	–	225	0.30	4.0	–	–	–	–	–	–	45	0.21	1.0
	M5315	0.8	300	0.30	4.0	–	–	–	285	0.30	4.0	–	–	–	–	–	–	60	0.21	1.0
	M8330	0.8	240	0.30	4.0	–	–	–	225	0.30	4.0	–	–	–	–	–	–	45	0.21	1.0
	M8340	0.8	220	0.30	4.0	–	–	–	205	0.30	4.0	–	–	–	–	–	–	–	–	–
	M9325	0.8	290	0.30	4.0	–	–	–	275	0.30	4.0	–	–	–	–	–	–	55	0.21	1.0

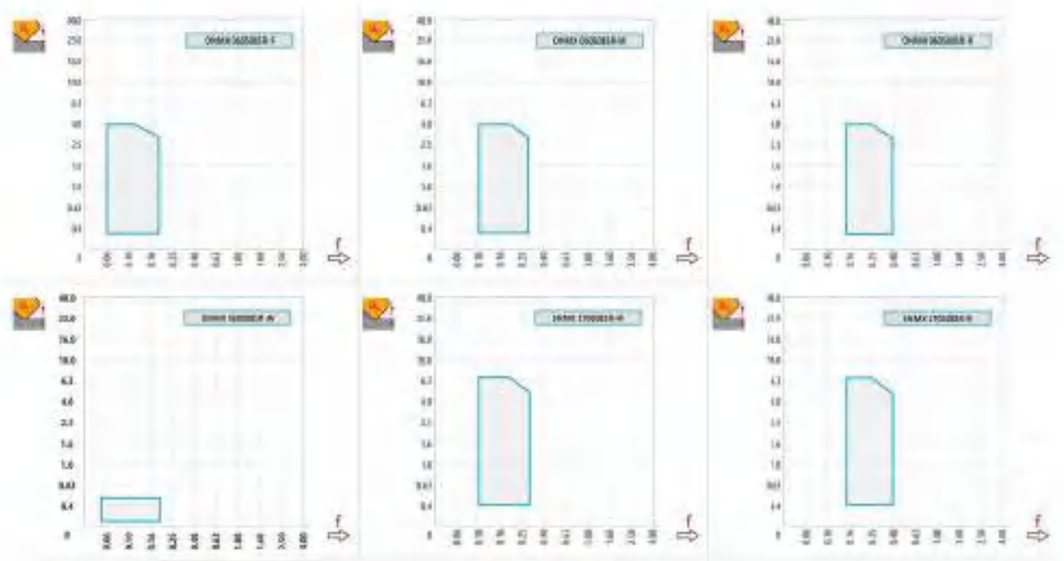
R geometry is strong and used for roughing and heavy working conditions. Designed with slightly positive rake, wide T-land and rounding of cutting edge for rough machining.

M geometry is versatile and the first choice for a wide range of working conditions. Designed with positive rake, medium T-land and rounding of cutting edge for medium machining.

CARBIDE MILLING INSERT & HOLDER

ae/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	–	–	–	–	1.00	1.00	1.00	1.00
⇨ X.f	2.20	1.60	1.35	1.20	1.10	–	–	–	–	–	1.00	1.00	1.00	1.00
⇦ X.f	–	–	–	–	–	–	–	–	0.68	0.71	0.72	0.74	0.79	1.00

	ONMX 06-F	ONMX 06-M	ONMX 06-R	ONMX 06-W	SNMX 17-N	SNMX 17-R
RE	0.80	0.80	0.80	0.80	0.80	0.80
RT	0.75	0.75	0.75	4.30	0.70	0.70



DC	O							
	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00
50	51.06	52.11	53.19	54.27	55.35	56.43	57.51	58.59
63	64.06	65.11	66.19	67.27	68.35	69.43	70.51	71.59
80	81.06	82.11	83.19	84.27	85.35	86.43	87.51	88.59
100	101.06	102.11	103.19	104.27	105.35	106.43	107.51	108.59
125	126.06	127.11	128.19	129.27	130.35	131.43	132.51	133.59
160	161.06	162.11	163.19	164.27	165.35	166.43	167.51	168.59
200	201.06	202.11	203.19	204.27	205.35	206.43	207.51	208.59
250	251.06	252.11	253.19	254.27	255.35	256.43	257.51	258.59

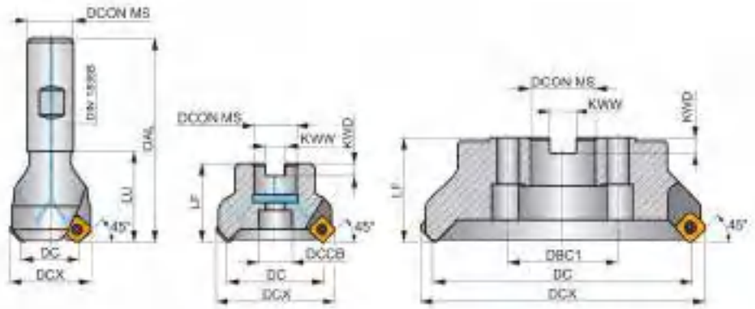
CARBIDE MILLING INSERT & HOLDER

THSSD13F

VER SD13 45° Face Mill with Positive Design and Internal Coolant

Highly versatile 45° face mill utilising single sided SD.. 13 style inserts with APMX of 6.4 mm. Suited for a wide range of applications in any workpiece material. Weldon and arbor style available, with differential tooth pitch. Body treated for longer tool life, carbide shims on seating place for process security.

KAPR	45°
APMX	6.4 mm



DC 80 – 125 mm

DC 160 – 250 mm

	0.04 - 0.32
	0.04 - 0.28

Product	DC	DCX	OAL	DCON MS	DCCB	DBC1	LU	LF	KWW	KWD	GAMF	GAMP			max.						
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	°	°									
TH32N3R045B25-SSD13F-C	32	44.9	120	25	–	–	45	–	–	–	-15	15	3	–	16100	✓	0.43	GI341	CD610	–	
TH40N3R045B32-SSD13F-C	40	53.5	120	32	–	–	45	–	–	–	-7	15	3	–	14400	✓	0.72	GI341	CD610	–	
TH40A03R-S45SD13F-C	40	53.5	–	16	14	–	–	40	8.4	5.6	-7	15	3	–	14400	✓	0.27	GI341	CD611	–	
TH50A04R-S45SD13F-C	50	63.5	–	22	18	–	–	40	10.4	6.3	-7	15	4	✓	12900	✓	0.51	GI341	CD612	–	
TH63A05R-S45SD13F-C	63	76.4	–	22	18	–	–	40	10.4	6.3	-7	15	5	✓	11500	✓	0.53	GI341	CD612	–	
TH80A07R-S45SD13F-C	80	93.4	–	27	22	–	–	50	12.4	7	-7	15	7	✓	10200	✓	1.32	GI341	CD613	AC001	
TH100A08R-S45SD13F-C	100	112.9	–	32	45	–	–	50	14.4	8	-12	15	8	✓	9100	✓	1.83	GI341	CD613	AC002	
TH100A10R-S45SD13F-C	100	112.9	–	32	45	–	–	50	14.4	8	-12	15	10	–	9100	✓	1.94	GI341	CD613	AC002	
TH125A08R-S45SD13F-C	125	137.8	–	40	56	–	–	63	16.4	9	-12	15	8	✓	8100	✓	3.41	GI341	CD613	AC003	
TH125A12R-S45SD13F-C	125	137.8	–	40	56	–	–	63	16.4	9	-12	15	12	–	8100	✓	3.31	GI341	CD613	AC003	
TH160A10R-S45SD13F-C	160	172.8	–	40	–	66.7	–	63	16.4	9	-12	15	10	✓	7200	✓	6.69	GI341	CD614	–	
TH160C14R-S45SD13F-C	160	172.8	–	40	–	66.7	–	63	16.4	9	-12	15	14	✓	7200	✓	6.62	GI341	CD614	–	
TH200C12R-S45SD13F-C	200	212.8	–	60	–	101.6	–	63	25.7	14	-12	15	12	✓	6400	✓	9.06	GI341	CD615	–	
TH200C16R-S45SD13F-C	200	212.8	–	60	–	101.6	–	63	25.7	14	-12	15	16	✓	6400	✓	11.85	GI341	CD615	–	
TH250C14R-S45SD13F-C	250	262.8	–	60	–	101.6	–	63	25.7	14	-12	15	14	✓	5700	✓	19.50	GI341	CD616	–	
TH250C20R-S45SD13F-C	250	262.8	–	60	–	101.6	–	63	25.7	14	-12	15	20	✓	5700	✓	19.20	GI341	CD616	–	

GI341 SDET 13T3.. SDMT 13T3.. XDET 11T3..

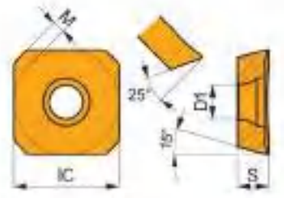
CARBIDE MILLING INSERT & HOLDER

CD610	US 635 13-T15P	3.0	M 3.5	13	Flag T15P	–	–	–	SDW 1103AF	MS 3507	HXX 3.5	–	–	–
CD611	US 635 13-T15P	3.0	M 3.5	13	–	D-7088P/T15P	FG-15	HS 0830C	SDW 1103AF	MS 3507	HXX 3.5	–	–	–
CD612	US 635 13-T15P	3.0	M 3.5	13	–	D-7088P/T15P	FG-15	HSD 1025C	SDW 1103AF	MS 3507	HXX 3.5	–	–	–
CD613	US 635 13-T15P	3.0	M 3.5	13	–	D-7088P/T15P	FG-15	–	SDW 1103AF	MS 3507	HXX 3.5	–	–	–
CD614	US 635 13-T15P	3.0	M 3.5	13	–	D-7088P/T15P	FG-15	HS 1240C	SDW 1103AF	MS 3507	HXX 3.5	CAC 160C	HSD 0825C	HXX 5
CD615	US 635 13-T15P	3.0	M 3.5	13	–	D-7088P/T15P	FG-15	HS 1655C	SDW 1103AF	MS 3507	HXX 3.5	CAC 200C	HSD 1025C	HXX 7
CD616	US 635 13-T15P	3.0	M 3.5	13	–	D-7088P/T15P	FG-15	HS 1655C	SDW 1103AF	MS 3507	HXX 3.5	CAC 250C	HSD 1025C	HXX 7

AC001	KS 1230	K.FMH27
AC002	KS 1635	K.FMH32
AC003	KS 2040	K.FMH40

ICSDET 13

	IC	D1	M	S
	mm	mm	mm	mm
13T3	13.385	4.40	1.5	3.97



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE	P			M			K			N			S			H		
			vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap
			m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm	m/min	mm/tooth	mm
ICSDET 13T3AFSN-F																				
	N6330	–	250	0.15	3.0	175	0.14	3.0	–	–	–	–	–	–	70	0.11	2.4	–	–	–
	N8310	–	315	0.15	3.0	160	0.14	3.0	295	0.15	3.0	–	–	–	–	–	–	–	–	–
	N8330	–	285	0.15	3.0	170	0.14	3.0	270	0.15	3.0	855	0.18	3.0	70	0.11	2.4	–	–	–
	N8340	–	265	0.15	3.0	155	0.14	3.0	250	0.15	3.0	–	–	–	65	0.11	2.4	–	–	–
	N9340	–	330	0.15	3.0	195	0.14	3.0	–	–	–	–	–	–	80	0.11	2.4	–	–	–
ICSDET 13T3AFFN-FA																				
	HF7	–	–	–	–	–	–	–	–	–	–	360	0.12	3.0	–	–	–	–	–	–
	N0315	–	–	–	–	–	–	–	–	–	–	840	0.12	3.0	–	–	–	–	–	–

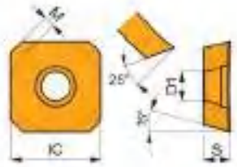
F geometry is sharp and used for finishing, suitable for large overhang or thin walled and slim workpiece applications. Designed with highly positive rake, narrow f-land and rounding of cutting edge for light machining.

FA geometry is sharp and used for non-ferrous alloys machining, suitable for large overhang or thin walled and slim workpiece applications. Polished and ground design with highly positive rake.

CARBIDE MILLING INSERT & HOLDER

ICSDMT 13

	IC	D1	M	S
13T3	13.385	4.40	1.5	3.97

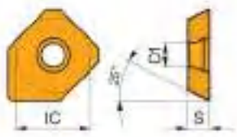


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE	P			M			K			N			S			H		
			vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap
			(m/min)	(mm/tooth)	(mm)	(m/min)	(mm/tooth)	(mm)	(m/min)	(mm/tooth)	(mm)	(m/min)	(mm/tooth)	(mm)	(m/min)	(mm/tooth)	(mm)	(m/min)	(mm/tooth)	(mm)
ICSDMT 13T3AFSN-M	8215	–	245	0.30	3.0	145	0.27	3.0	230	0.30	3.0	–	–	–	66	0.24	2.4	45	0.21	1.0
	M6330	–	215	0.30	3.0	130	0.27	3.0				–	–	–	66	0.24	2.4	–	–	–
	M8330	–	245	0.30	3.0	145	0.27	3.0	230	0.30	3.0	–	–	–	66	0.24	2.4	45	0.21	1.0
	M8340	–	225	0.30	3.0	135	0.27	3.0	210	0.30	3.0	–	–	–	55	0.24	2.4	–	–	–
	M9325	–	295	0.30	3.0	–	–	–	280	0.30	3.0	–	–	–	–	–	–	55	0.21	1.0
	M9340	–	265	0.30	3.0	155	0.27	3.0	–	–	–	–	–	–	66	0.24	2.4	–	–	–
ICSDMT 13T3AFSN-R	M5315	–	285	0.35	3.0	–	–	–	270	0.35	3.0	–	–	–	–	–	–	55	0.25	1.0
	M8310	–	255	0.35	3.0	130	0.32	3.0	240	0.35	3.0	–	–	–	–	–	–	50	0.25	1.0
	M8330	–	240	0.35	3.0	140	0.32	3.0	225	0.35	3.0	–	–	–	–	–	–	45	0.25	1.0
	M8340	–	220	0.35	3.0	130	0.32	3.0	205	0.35	3.0	–	–	–	–	–	–	–	–	–
	M9325	–	200	0.35	3.0	–	–	–	265	0.35	3.0	–	–	–	–	–	–	55	0.25	1.0

ICXDET 13

	IC	D1	S
13T3	13.385	4.40	3.97



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

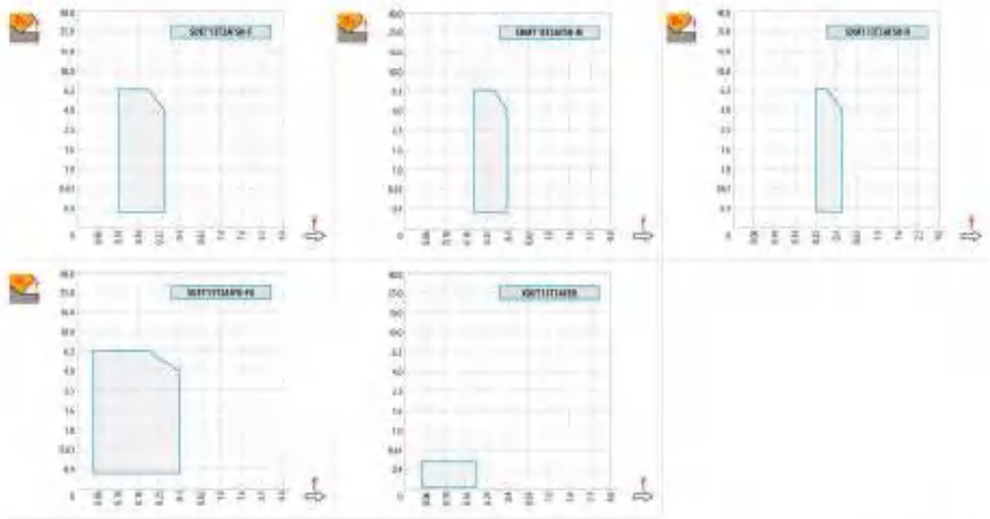
Product		RE	P			M			K			N			S			H		
			vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap	vc	f	ap
			(m/min)	(mm/tooth)	(mm)	(m/min)	(mm/tooth)	(mm)	(m/min)	(mm/tooth)	(mm)	(m/min)	(mm/tooth)	(mm)	(m/min)	(mm/tooth)	(mm)	(m/min)	(mm/tooth)	(mm)
ICXDET 13T3AFER	8215	–	400	0.10	0.2	250	0.09	0.2	395	0.10	0.2	–	–	–	–	–	–	–	–	–
	M8330	–	395	0.10	0.2	235	0.09	0.2	375	0.10	0.2	–	–	–	–	–	–	–	–	–

CARBIDE INSERT & HOLDER

CARBIDE MILLING INSERT & HOLDER

ap/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	88 %	90 %	100 %
X,Y	1.48	1.35	1.27	1.22	1.19	1.16					1.08	1.00	1.00	1.00
vc x f	2.20	1.68	1.35	1.20	1.10						1.08	1.00	1.00	1.00
vc x f									0.68	0.71	0.72	0.74	0.79	1.00

	SDET 13-F	SDMT 13-N	SDMT 13-R	SDET 13-FA	XDET 13
	–	–	–	–	–
	1.75	1.75	1.75	1.75	8.19



DC	X,Y	f_{max}
32	1.22	0.15
40	1.26	0.16
50	1.30	0.18
63	1.34	0.20
80	1.39	0.22
100	1.43	0.24
125	1.48	0.26
160	1.53	0.29
200	1.58	0.33
250	1.63	0.36

DC	RPMX	RPMX
32	14.1°	6.4/27
40	11.8°	6.4/32
50	9.8°	6.4/39
63	7.7°	6.4/49
80	5.2°	6.4/72
100	4.1°	6.4/91
125	3.2°	5.45/100
160	1.0°	1.6/100
200	0.4°	0.55/100
250	0.3°	0.4/100

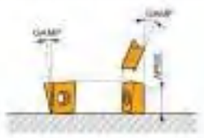
DC	DMIN	DMAX		
32	68.0	89.8	1.7	1.7
40	75.0	107.0	1.7	1.7
50	94.0	127.0	1.7	1.7
63	120.0	152.8	1.7	1.7
80	155.0	186.8	1.7	1.7
100	193.0	225.8	1.7	1.7
125	245.0	279.6	1.7	1.7
160	322.0	345.6	1.7	1.7
200	405.0	425.6	1.7	1.7
250	505.0	525.6	1.7	1.7

1.5

CARBIDE MILLING INSERT & HOLDER

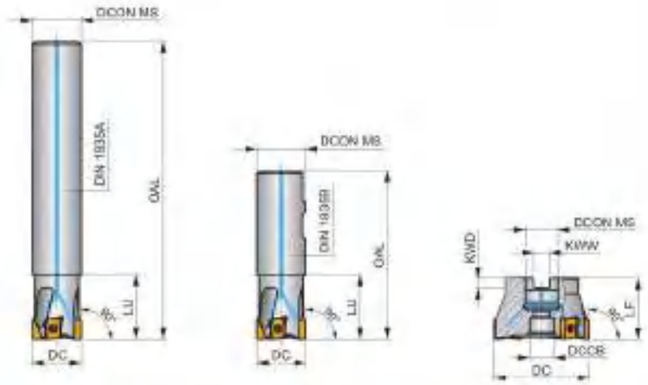
THSLN12X

KAPR	90°
APMX	10.0 mm



PROD LN12 90° Tangential Square Shoulder Mill with Internal Coolant

Highly productive 90° shoulder mills utilising tangential LNEX 12 insert with 4 cutting edges and APMX of 10 mm. Suited for a wide range of applications. Available in cylindrical, weldon and arbor style. Robust cutter body supports long tool life and excellent breakage resistance.



0.36 – 0.20 mm

0.36 – 0.18 mm

Product	DC	OAL	DCON MS	DCSB	LU	LF	KWW	KWD	GAMF	GAMP			max.		kg		
	mm	mm	mm	mm	mm	mm	mm	mm	°	°							
TH25A2R042A25-SLN12X-C	25	170	25	–	42	–	–	–	-50	-5	2	–	17300	✓	0.55	G1206	C0382
TH25A2R082A25-SLN12X-C	25	170	25	–	80	–	–	–	-30	-5	2	–	17300	✓	0.50	G1206	C0382
TH32A3R042A32-SLN12X-C	32	195	32	–	42	–	–	–	-22.5	-5	3	–	15300	✓	1.01	G1206	SQ340
TH32A3R090A32-SLN12X-C	32	195	32	–	90	–	–	–	-22.5	-5	3	–	15300	✓	0.99	G1206	SQ340
TH40A4R050A32-SLN12X-C	40	195	32	–	50	–	–	–	-22.5	-5	4	–	13700	✓	1.17	G1206	SQ340
TH25A2R042B25-SLN12X-C	25	100	25	–	42	–	–	–	-30	-5	2	–	17300	✓	0.29	G1206	C0382
TH32A3R042B32-SLN12X-C	32	110	32	–	42	–	–	–	-22.5	-5	3	–	15300	✓	0.55	G1206	SQ340
TH40A4R0520B32-SLN12X-C	40	120	32	–	50	–	–	–	-22.5	-5	4	–	13700	✓	0.73	G1206	SQ340
TH40A03R-S90LN12X-C	40	–	16	12.4	–	40	8.4	5.6	-22.5	-5	3	–	13700	✓	0.15	G1206	SQ345
TH40A04R-S90LN12X-C	40	–	16	12.4	–	40	8.4	5.6	-22.5	-5	4	✓	13700	✓	0.23	G1206	SQ345
TH50A05R-S90LN12X-C	50	–	22	16.5	–	40	10.4	6.3	-19.5	-5	5	–	12300	✓	0.34	G1206	SQ343
TH50A06R-S90LN12X-C	50	–	22	16.5	–	40	10.4	6.3	-19.5	-5	6	–	12300	✓	0.34	G1206	SQ343
TH52A05R-S90LN12X-C	52	–	22	16.5	–	40	10.4	6.3	-19.5	-5	5	–	12300	✓	0.37	G1206	SQ343
TH63A06R-S90LN12X-C	63	–	22	16.5	–	40	10.4	6.3	-19.5	-5	6	✓	10900	✓	0.52	G1206	SQ343
TH63A08R-S90LN12X-C	63	–	22	16.5	–	40	10.4	6.3	-19.5	-5	8	–	10900	✓	0.50	G1206	SQ343
TH66A06R-S90LN12X-C	66	–	22	16.5	–	40	10.4	6.3	-19.5	-5	6	✓	10900	✓	0.54	G1206	SQ343
TH80A07R-S90LN12X-C	80	–	27	38.1	–	50	12.4	7	-19.5	-5	7	✓	9700	✓	1.00	G1206	SQ341
TH80A10R-S90LN12X-C	80	–	27	38.1	–	50	12.4	7	-19.5	-5	10	–	9700	✓	0.98	G1206	SQ341
TH100A08R-S90LN12X-C	100	–	32	45.1	–	50	14.4	8	-17.5	-5	8	✓	8700	✓	1.91	G1206	SQ341
TH100A11R-S90LN12X-C	100	–	32	45.1	–	50	14.4	8	-17.5	-5	11	–	8700	✓	1.88	G1206	SQ341
TH125A12R-S90LN12X-C	125	–	40	56.1	–	63	16.4	9	-17.5	-5	12	✓	7800	✓	3.39	G1206	SQ341

G1206

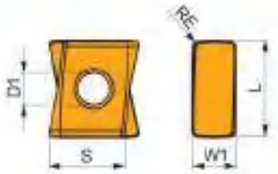
LNEX1210..

CARBIDE MILLING INSERT & HOLDER

		Nm						
C0382	US 44E10-T15P	3.5	M 4	10	–	–	Flag T15P	–
SQ340	US 44E12-T15P	3.5	M 4	12	–	–	Flag T15P	–
SQ341	US 44E12-T15P	3.5	M 4	12	B-TORP/T15P	FG-15	–	–
SQ343	US 44E12-T15P	3.5	M 4	12	B-TORP/T15P	FG-15	–	HS 1038C
SQ345	US 44E12-T15P	3.5	M 4	12	B-TORP/T15P	FG-15	–	HS 9083S

ICLNEX12

	WT	D1	L	S
	mm	mm	mm	mm
1210	6.000	4.40	12.30	10.26



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE	P			M			K			N			S			H		
		mm	vc m/min	f mm/rev	ap mm	vc m/min	f mm/rev	ap mm	vc m/min	f mm/rev	ap mm	vc m/min	f mm/rev	ap mm	vc m/min	f mm/rev	ap mm	vc m/min	f mm/rev	ap mm
ICLNEX 121008SR-F	M6330	0.8	220	0.17	3.0	155	0.15	3.0	–	–	–	–	–	–	–	–	–	–	–	–
	M8310	0.8	280	0.17	3.0	140	0.15	3.0	265	0.17	3.0	–	–	–	–	–	–	55	0.11	1.0
	M8330	0.8	260	0.17	3.0	155	0.15	3.0	245	0.17	3.0	–	–	–	–	–	–	50	0.11	1.0
	M8340	0.8	235	0.17	3.0	140	0.15	3.0	220	0.17	3.0	–	–	–	–	–	–	–	–	–
ICLNEX 121012SR-F	M6330	1.2	230	0.17	3.0	165	0.15	3.0	–	–	–	–	–	–	–	–	–	–	–	–
	M8310	1.2	295	0.17	3.0	150	0.15	3.0	280	0.17	3.0	–	–	–	–	–	–	55	0.11	1.0
	M8330	1.2	270	0.17	3.0	160	0.15	3.0	255	0.17	3.0	–	–	–	–	–	–	50	0.11	1.0
ICLNEX 121008SR-M	M6330	0.8	210	0.20	3.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	M8310	0.8	265	0.20	3.5	–	–	–	250	0.20	3.5	–	–	–	–	–	–	50	0.16	1.0
	M8330	0.8	245	0.20	3.5	–	–	–	230	0.20	3.5	–	–	–	–	–	–	45	0.16	1.0
	M8340	0.8	220	0.20	3.5	–	–	–	205	0.20	3.5	–	–	–	–	–	–	–	–	–
	M9315	0.8	320	0.20	3.5	–	–	–	300	0.20	3.5	–	–	–	–	–	–	60	0.16	1.0
	M9325	0.8	300	0.20	3.5	–	–	–	285	0.20	3.5	–	–	–	–	–	–	60	0.16	1.0
	M9340	0.8	270	0.20	3.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
ICLNEX 121012SR-M	M8310	1.2	280	0.20	3.5	–	–	–	265	0.20	3.5	–	–	–	–	–	–	55	0.16	1.0
	M8330	1.2	255	0.20	3.5	–	–	–	240	0.20	3.5	–	–	–	–	–	–	50	0.16	1.0
	M8340	1.2	235	0.20	3.5	–	–	–	220	0.20	3.5	–	–	–	–	–	–	–	–	–
ICLNEX 121012SR-M	M8310	1.6	295	0.20	3.5	–	–	–	280	0.20	3.5	–	–	–	–	–	–	55	0.16	1.0
	M8330	1.6	270	0.20	3.5	–	–	–	255	0.20	3.5	–	–	–	–	–	–	50	0.16	1.0
	M8340	1.6	245	0.20	3.5	–	–	–	210	0.20	3.5	–	–	–	–	–	–	–	–	–
ICLNEX 121020SR-M	M8330	2.0	285	0.20	3.5	–	–	–	270	0.20	3.5	–	–	–	–	–	–	55	0.16	1.0
	M8340	2.0	255	0.20	3.5	–	–	–	240	0.20	3.5	–	–	–	–	–	–	–	–	–
ICLNEX 121024SR-M	M8330	2.4	285	0.20	3.5	–	–	–	270	0.20	3.5	–	–	–	–	–	–	55	0.16	1.0
	M8340	2.4	255	0.20	3.5	–	–	–	240	0.20	3.5	–	–	–	–	–	–	–	–	–

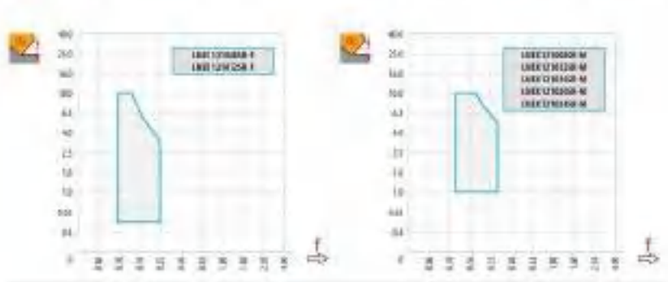
F geometry is sharp and used for light and medium machining, suitable for large overhang applications. Designed with highly positive rake, narrow T-land and rounding of cutting edge for light to medium machining.

M geometry is versatile and the first choice for a wide range of working conditions. Designed with positive rake, medium T-land and rounding of cutting edge for medium ap to semi-roughing machining.

CARBIDE MILLING INSERT & HOLDER

αx/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X,Y	1.48	1.35	1.27	1.22	1.19	1.16					1.00	1.00	1.00	1.00
⇨x f	2.20	1.60	1.35	1.20	1.10						1.00	1.00	1.00	1.00
⇨x f									0.68	0.71	0.72	0.74	0.79	1.00

	LNEX 12-F		LNEX 12-M				
RE	0.8	1.2	0.8	1.2	1.6	2.0	2.4
	2.25	1.73	2.25	1.73	1.33	1.15	0.79



2.5

	2.0	3.0	4.0	5.0
	0.30	0.20	0.20	0.15

DC	RPMX	
25	0.80"	1.40/100
32	0.60"	1.00/100
40	0.35"	0.60/100
50	0.30"	0.50/100
52	0.30"	0.50/100
63	0.20"	0.35/100

DC	DMIN	DMAX		
25	44.0	48.0	0.6	0.7
32	58.0	62.0	0.8	1.0
40	74.0	78.0	0.7	0.8
50	94.0	98.0	0.7	0.8
52	98.0	102.0	0.7	0.8
63	128.0	134.0	0.3	0.4

CARBIDE MILLING INSERT & HOLDER

DC \ µm	3	5	10	15	20	30	40	50	60	80	100
25	0.548	0.707	1.000	1.225	1.414	1.732	2.000	2.236	2.449	2.828	3.162
32	0.620	0.800	1.131	1.386	1.600	1.960	2.263	2.530	2.771	3.200	3.578
40	0.693	0.894	1.265	1.549	1.789	2.191	2.530	2.828	3.098	3.578	4.000
50	0.775	1.000	1.414	1.732	2.000	2.449	2.828	3.162	3.464	4.000	4.472
52	0.869	1.122	1.587	1.944	2.245	2.750	3.175	3.550	3.888	4.490	5.020
63	0.980	1.265	1.789	2.191	2.530	3.098	3.578	4.000	4.382	5.060	5.657

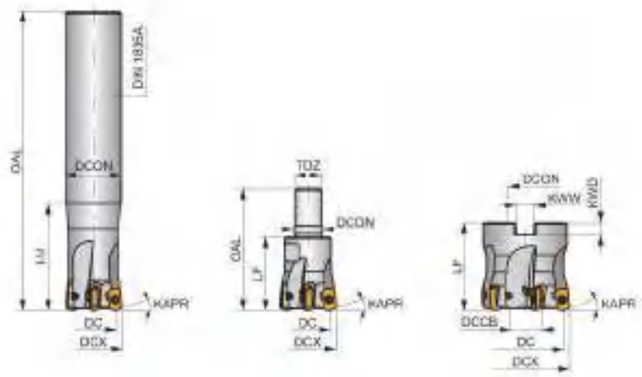
RE \ µm	3	5	10	15	20	30	40	50	60	80	100
0.8	0.155	0.200	0.283	0.346	0.400	0.490	0.566	0.632	0.693	0.800	0.894
1.2	0.170	0.219	0.310	0.379	0.438	0.537	0.620	0.693	0.759	0.876	0.980
1.6	0.196	0.253	0.358	0.438	0.506	0.620	0.716	0.800	0.876	1.012	1.131
2.0	0.219	0.283	0.400	0.490	0.566	0.693	0.800	0.894	0.980	1.131	1.265
2.4	0.245	0.316	0.447	0.548	0.632	0.775	0.894	1.000	1.095	1.265	1.414

CARBIDE MILLING INSERT & HOLDER

TH

THSBN10

KAPR	23°
APMX	1,0 mm



0,17-9,41

0,17-9,41

	ISO	DCX [mm]	OAL [mm]	DCON [mm]	DCCB [mm]	LU [mm]	LF [mm]	TDZ	KWW [mm]	KWD [mm]	GAMP [°]	GAMF [°]							
	TH16E2R030A16-SBN10-C	16	100	16	–	30	–	–	–	–	-10	-12	2	–	31100	✓	0,12	GB29	CO310
	TH16E2R050A16-SBN10-C	16	150	16	–	50	–	–	–	–	-10	-12	2	–	31100	✓	0,18	GB29	CO310
	TH16E2R030A14-SBN10-C	16	150	14	–	30	–	–	–	–	-10	-12	2	–	31100	✓	0,15	GB29	CO310
	TH18E2R030A16-SBN10-C	18	150	16	–	30	–	–	–	–	-10	-11	2	–	29200	✓	0,20	GB29	CO310
	TH20E3R040A20-SBN10-C	20	130	20	–	40	–	–	–	–	-10	-10	3	–	27700	✓	0,25	GB29	CO310
	TH20E3R080A20-SBN10-C	20	160	20	–	80	–	–	–	–	-10	-10	3	–	27700	✓	0,29	GB29	CO310
	TH20E3R040A18-SBN10-C	20	180	18	–	40	–	–	–	–	-10	-10	3	–	27700	✓	0,30	GB29	CO310
	TH20E4R040A20-SBN10-C	20	130	20	–	40	–	–	–	–	-10	-10	4	–	27700	✓	0,26	GB29	CO310
	TH25E4R050A25-SBN10-C	25	140	25	–	50	–	–	–	–	-10	-9	4	✓	24800	✓	0,42	GB29	CO310
	TH25E4R100A25-SBN10-C	25	180	25	–	100	–	–	–	–	-10	-9	4	✓	24800	✓	0,51	GB29	CO310
	TH25E4R050A22-SBN10-C	25	220	22	–	50	–	–	–	–	-10	-9	4	✓	24800	✓	0,54	GB29	CO310
	TH25E5R050A25-SBN10-C	25	140	25	–	50	–	–	–	–	-10	-9	5	–	24800	✓	0,50	GB29	CO310
	TH32E5R070A32-SBN10-C	32	150	32	–	70	–	–	–	–	-10	-8	5	✓	23900	✓	0,73	GB29	CO310
	TH32E6R070A32-SBN10-C	32	150	32	–	70	–	–	–	–	-10	-8	6	✓	23900	✓	0,73	GB29	CO310
	TH32E5R120A32-SBN10-C	32	200	32	–	120	–	–	–	–	-10	-8	5	✓	23900	✓	0,94	GB29	CO310
	TH35E5R050A32-SBN10-C	35	200	33	–	50	–	–	–	–	-10	-7,5	5	✓	23000	✓	1,08	GB29	CO310
	TH35E6R050A32-SBN10-C	35	200	32	–	50	–	–	–	–	-10	-7,5	6	✓	23000	✓	1,08	GB29	CO310
	TH16E2R025M08-SBN10-C	16	43	8,5	–	–	25	M8	–	–	-10	-12	2	–	31100	✓	0,03	GB29	CO310
	TH18E2R025M08-SBN10-C	18	43	8,5	–	–	25	M8	–	–	-10	-11	2	–	29200	✓	0,03	GB29	CO310
	TH20E3R030M10-SBN10-C	20	49	10,5	–	–	30	M10	–	–	-10	-10	3	–	27700	✓	0,05	GB29	CO310
	TH20E4R030M10-SBN10-C	20	49	10,5	–	–	30	M10	–	–	-10	-10	4	–	27700	✓	0,05	GB29	CO310
	TH25E3R033M12-SBN10-C	25	55	12,5	–	–	33	M12	–	–	-10	-9	4	✓	24800	✓	0,08	GB29	CO310
	TH25E5R033M12-SBN10-C	25	55	12,5	–	–	33	M12	–	–	-10	-9	5	–	24800	✓	0,19	GB29	CO310
	TH28E5R035M12-SBN10-C	28	57	12,5	–	–	35	M12	–	–	-10	-8,5	5	✓	23400	✓	0,10	GB29	CO310
	TH32E5R040M16-SBN10-C	32	63	17	–	–	40	M16	–	–	-10	-8	5	✓	22900	✓	0,19	GB29	CO310
	TH32E6R040M16-SBN10-C	32	63	17	–	–	40	M16	–	–	-10	-8	6	✓	22900	✓	0,19	GB29	CO310
	TH35E6R043M16-SBN10-C	35	66	17	–	–	43	M16	–	–	-10	-7,5	6	✓	22000	✓	0,22	GB29	CO310

CARBIDE MILLING INSERT & HOLDER

IC

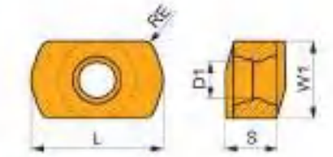
	ISO	DCX [mm]	OAL [mm]	DCON [mm]	DCCB [mm]	LU [mm]	LF [mm]	TDZ	KWW [mm]	KWD [mm]	GAMP [°]	GAMF [°]							
	40E6R043M16-SBN10-C	40	66	17	–	–	43	M16	–	–	-10	-7	6	✓	19600	✓	0,26	GB29	CO310
	40E7R043M16-SBN10-C	40	66	17	–	–	43	M16	–	–	-10	-7	7	✓	19600	✓	0,26	GB29	CO310
	40A05R-SMO8N10-C	40	–	16	14,1	–	40	–	8,4	5,6	-10	-7	5	✓	19600	✓	0,21	GB29	CO312
	40A07R-SMO8N10-C	40	–	16	14,1	–	40	–	8,4	5,6	-10	-7	7	✓	19600	✓	0,22	GB29	CO312
	42A05R-SMO8N10-C	42	–	16	14,1	–	40	–	8,4	5,6	-10	-7	5	✓	19100	✓	0,23	GB29	CO312
	42A07R-SMO8N10-C	42	–	16	14,1	–	40	–	8,4	5,6	-10	-7	7	✓	19100	✓	0,24	GB29	CO312

GB29	ENGX 10T3..		ANHX 10T3..

CO310	US42507-T07P	0,3	M 2,5	7	–	–	Flag T07P	–
CO312	US42507-T07P	0,3	M 2,5	7	D-T07P/T09P	FG-15	–	HS0830C

ICBNGX10

	W1	D1	L	S
10T3	5,800	2,76	9,92	3,99



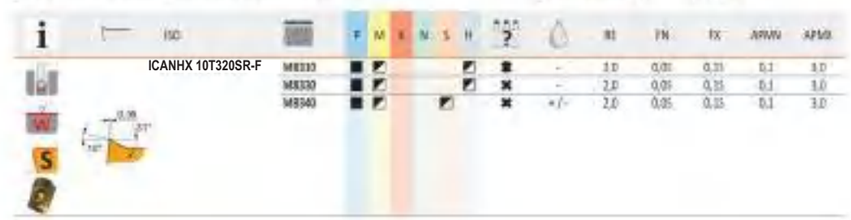
	ISO		IP	N	K	M	S	H			RE	FN	FX	APMN	APMX
	ICBNGX 10T308SR-M	M3325	■						❦	----	0,8	0,20	1,05	0,3	1,0
		M6330	◩						✖	-	0,8	0,20	1,40	0,3	1,0
		M8310	■		■			◩	❦	-	0,8	0,20	1,40	0,3	1,0
		M8330	■		■			◩	❦	-	0,8	0,20	1,40	0,3	1,0
		M8340	■		◩				✖	+/-	0,8	0,20	1,40	0,3	1,0
		M8345	■						✖	+/-	0,8	0,20	1,40	0,3	1,0
		BZL5	■		■			◩	❦	-	0,8	0,20	1,40	0,3	1,0
	ICBNGX 10T308SR-MM	M3325	◩	◩			◩		❦	----	0,8	0,20	0,83	0,3	1,0
		M3340	◩	■			■		❦	----	0,8	0,20	0,83	0,3	1,0
		M6330	◩	■			■		❦	-	0,8	0,25	1,10	0,3	1,0
		M8310	◩	◩					❦	-	0,8	0,25	1,10	0,3	1,0
		M8330	◩	◩					❦	-	0,8	0,25	1,10	0,3	1,0
		M8340	◩	■			■		❦	+/-	0,8	0,25	1,10	0,3	1,0
		M8345	◩	■			■		❦	+/-	0,8	0,25	1,10	0,3	1,0

CARBIDE MILLING INSERT & HOLDER

ISO		FN	FX	M8325	M5330	M6330	M8310	M8330	M8340	M8345	8215
P	●	0,20	1,40	206	164	212	267	144	222	177	257
	✱	0,20	1,15	272	243	195	246	224	204	162	236
	✖	0,26	0,93	294	209	167	205	187	175	140	194
M	●	0,20	1,10	149	155	149	127	137	132	104	142
	✱	0,25	0,88	137	143	117	117	126	121	95	130
	✖	0,25	0,66	117	123	117	100	108	104	82	112
K	●	0,20	1,50	–	–	–	253	210	208	–	242
	✱	0,20	1,25	–	–	–	233	211	191	–	223
	✖	0,20	1,00	–	–	–	200	181	164	–	191
S	●	0,20	0,90	68	72	65	59	63	58	47	–
	✱	0,20	0,77	62	66	60	54	58	54	43	–
	✖	0,10	0,66	53	57	52	46	50	46	37	–
H	●	0,05	0,70	–	–	–	55	48	–	–	51
	✱	0,05	0,56	–	–	–	49	45	–	–	47
	✖	0,05	0,42	–	–	–	42	38	–	–	40

ICANHX 10

M1	D1	L	S
1,073	5,800	2,78	9,72	4,70



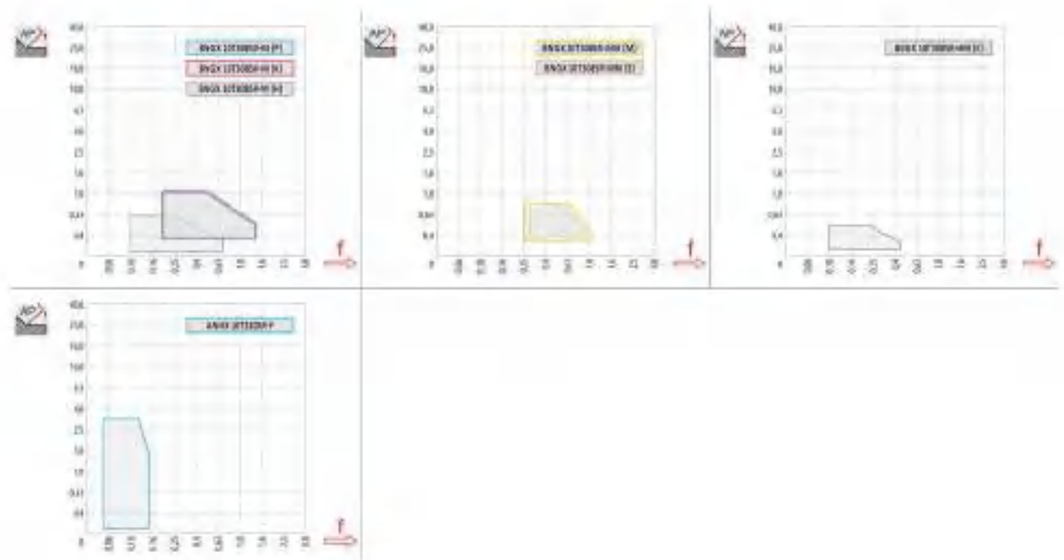
ISO		FN	FX	M8310	M8330	M8340
P	●	0,05	0,15	400	323	323
	✱	0,05	0,12	348	297	297
	✖	0,05	0,10	326	255	255
M	●	0,05	0,15	203	190	213
	✱	0,05	0,12	186	175	196
	✖	0,05	0,09	160	150	168
K	●	0,05	0,15	378	303	340
	✱	0,05	0,12	347	278	313
	✖	0,05	0,10	298	239	269
S	●	0,05	0,15	98	85	95
	✱	0,05	0,13	88	78	87
	✖	0,05	0,11	75	67	75
H	●	0,05	0,15	78	70	–
	✱	0,05	0,12	71	64	–
	✖	0,05	0,09	61	55	–

CARBIDE MILLING INSERT & HOLDER

a_p / DCX	0,05	0,10	0,15	0,20	0,25	0,30	0,40	0,50	0,60	0,70	0,75	0,80	0,90	1,00
X.V	1,48	1,35	1,27	1,22	1,19	1,16	1,11	1,09	1,05	1,03	1,00	1,00	1,00	1,00
X.f	2,87	2,05	1,69	1,48	1,33	1,23	1,09	1,01	0,94	0,90	0,89	0,88	0,88	1,00
X.f	1,09	0,94	0,84	0,76	0,70	0,65	0,65	0,67	0,68	0,71	0,72	0,74	0,79	1,00

	BNGX 10-M	BNGX 10-MM	BNGX 10-HM
RE	0,8	0,8	0,8
BS	–	–	–

	ANHX 10 - F
RE	2,0
BS	0,92



CARBIDE MILLING INSERT & HOLDER

BNGX 10 (HFC)

DCX	AP	0,00	0,30	0,40	0,50	0,60	0,70	0,80	0,90	1,00
16		9,40	12,85	13,36	13,80	14,20	14,56	14,88	15,19	15,47
18		11,40	14,85	15,36	15,80	16,20	16,56	16,88	17,19	17,47
20		13,43	16,85	17,36	17,80	18,20	18,56	18,88	19,19	19,47
25		18,43	21,85	22,36	22,80	23,20	23,56	23,88	24,19	24,47
32		25,43	28,85	29,36	29,80	30,20	30,56	30,88	31,19	31,47
35		28,43	31,85	32,36	32,80	33,20	33,56	33,88	34,19	34,47
40		33,43	36,85	37,36	37,80	38,20	38,56	38,88	39,19	39,47
42		35,43	38,85	39,36	39,80	40,20	40,56	40,88	41,19	41,47

AP	0,00	0,30	0,40	0,50	0,60	0,70	0,80	0,90	1,00
	–	1,50	1,10	0,90	0,80	0,72	0,68	0,65	1,50

BNGX 10

DCX		FX
16	3,5	0,12
18	3,5	0,12
20	4,0	0,15
25	4,0	0,15
28	4,0	0,17
32	4,0	0,17
35	4,0	0,17
40	4,0	0,17
42	4,0	0,17

BNGX 10 (HFC)

AP	0,3	0,6	1,0
	1,10	0,60	0,30

BNGX 10 (HFC)

DCX	RPMX	APMAX
16	4,0	1/16
18	4,0	1/16
20	4,0	1/16
25	2,8	1/22
28	2,3	1/26
32	1,9	1/32
35	1,7	1/35
40	1,3	1/46
42	1,3	1/46

ANHX 10

DCX	RPMX	APMAX
16	1,6	2,85/100
18	1,3	2,15/100
20	1,1	1,80/100
25	0,8	1,25/100
28	0,7	1,10/100
32	0,5	0,75/100
35	0,5	0,75/100
40	0,4	0,55/100
42	0,4	0,55/100

CARBIDE MILLING INSERT & HOLDER

BNGX 10 (HFC)

DCX	AP	FX
16	0,4	0,15
18	0,7	0,15
20	0,7	0,15
25	0,7	0,15
32	0,7	0,2
35	0,7	0,2
40	0,7	0,2
42	0,7	0,2

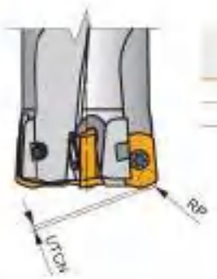
BNGX 10 (HFC)

DCX	d_{min}	d_{max}		
16	22,4	31,8	0,5	0,5
18	25,4	35,8	0,5	0,5
20	29,4	39,8	0,5	0,5
25	39,4	49,8	0,5	0,5
28	45,4	55,8	0,5	0,5
32	53,4	63,8	0,5	0,5
35	59,4	69,8	0,5	0,5
40	69,4	79,8	0,5	0,5
42	73,4	83,8	0,5	0,5

DCX	µm	3	5	10	15	20	30	40	50	60	80	100
16		0,438	0,566	0,800	0,980	1,131	1,386	1,600	1,789	1,960	2,263	2,530
18		0,465	0,600	0,849	1,039	1,200	1,470	1,697	1,897	2,078	2,400	2,683
20		0,490	0,632	0,894	1,095	1,265	1,549	1,789	2,000	2,191	2,530	2,828
25		0,548	0,707	1,000	1,225	1,414	1,732	2,000	2,236	2,449	2,828	3,162
32		0,620	0,800	1,131	1,386	1,600	1,960	2,263	2,530	2,771	3,200	3,578
35		0,648	0,837	1,183	1,449	1,673	2,049	2,366	2,646	2,898	3,347	3,742
40		0,693	0,894	1,265	1,549	1,789	2,191	2,530	2,828	3,098	3,578	4,000
42		0,710	0,937	1,296	1,587	1,833	2,245	2,592	2,898	3,175	3,666	4,099

ANHX 10

RE	µm	3	5	10	15	20	30	40	50	60	80	100
2,0		0,219	0,283	0,400	0,490	0,566	0,693	0,800	0,894	0,980	1,131	1,265



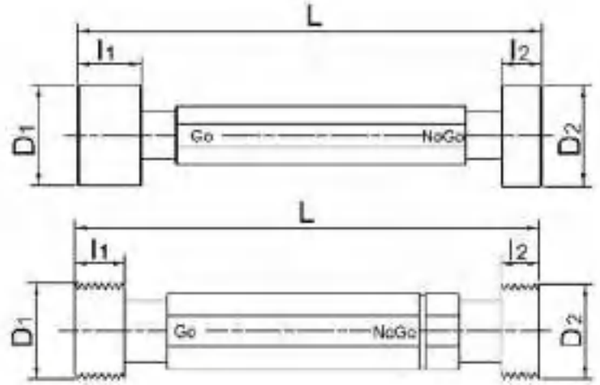
BNGX	RP	UTCN
	[mm]	[mm]
BNGX 10T308	1,60	0,44

ANHX	max a_p/DCX
	[mm]
ANHX 10T320	0,05

Mã đặt hàng: KI001
Order code

Mã đặt hàng: GC001
Order code

Mã đặt hàng: KT001
Order code



Engineering Data
- Produce according to the required size
- Optimal design consulting with machining applications
- Sản xuất theo kích thước yêu cầu
- Tư vấn thiết kế tối ưu với ứng dụng cụ thể
- 必要なサイズに合わせて製作
- アプリケーション固有の設計相談
- 필요한 사이즈에 맞게 제작
- 용도별 설계 상담

Code order	D_{m7} (mm)	d_{h6} (mm)	L (mm)	l_1 (mm)	l_2 (mm)	α1 (°)	α2 (°)	Coating		
KT001	-	-	-	-	-	-	-	Non	TIN	AlTiCrN

Mã đặt hàng: JF001
Order code

AN MI Tools cung cấp dịch vụ gia công đồ gá chất lượng cao với sự hỗ trợ của hệ thống máy móc CNC hiện đại. Chúng tôi chuyên thiết kế và chế tạo đồ gá chính xác, đáp ứng các yêu cầu khắt khe nhất của khách hàng. Với công nghệ gia công tiên tiến, AN MI Tools cam kết mang đến giải pháp tối ưu, giúp nâng cao hiệu quả sản xuất và đảm bảo sự chính xác trong từng chi tiết.

AN MI Tools provides high-quality fixture processing services with the support of modern CNC machinery systems. We specialize in designing and manufacturing precision fixtures, meeting the most stringent requirements of customers. With advanced processing technology, AN MI Tools is committed to providing optimal solutions, helping to improve production efficiency and ensure accuracy in every detail.

Bên cạnh các chi tết gá đỡ, kiểm tra thông thường, AN MI Tools đặc biệt chuyên sâu trong thiết kế và chế tạo thanh tỳ thanh dẫn hướng sử dụng trong các máy gia công: thanh dẫn hướng thẳng, thanh dẫn hướng bậc,...

Besides the usual support and inspection parts, AN MI Tools is especially specialized in designing and manufacturing guide bars used in processing machines: straight guide bars, step guide bars,...

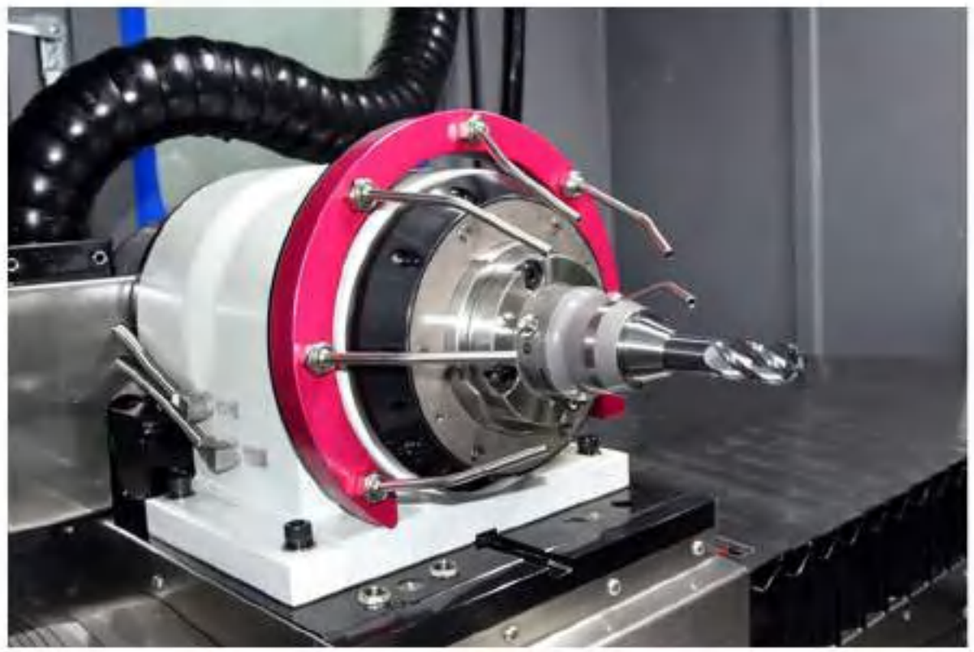
AN MI đảm bảo:

- Sản xuất với máy móc hiện đại, độ chính xác cao
- Kiểm soát được độ nhám bề mặt gia công
- Hỗ trợ bảo hành, sửa chữa sản phẩm
- Sản xuất theo nhu cầu, yêu cầu của khách hàng
- Bảo mật thông tin khách hàng, sản phẩm

AN MI's commitment:

- *Manufactured with modern machinery, high precision*
- *Control the roughness of the processed surface*
- *Support warranty, product repair*
- *Produce according to customer needs and requirements*
- *Keep customer, product information confidential*

SMART GRINDING MACHINE



ANMI TOOLS

5 AXIS CNC TOOLS GRINDER

Mã đặt hàng/*Ordercode:* **MA001**

Máy mài công cụ CNC 5 trục MA001 là máy mài công suất lớn, ứng dụng để mài dao phay, mũi khoan,... Với nhiều kích thước đường kính khác nhau - tiêu chuẩn và không tiêu chuẩn.

Máy được trang bị hệ thống robot gá - tháo phôi hệ thống chống va chạm tự động và cơ cấu kẹp chính xác.

MA001 5-axis CNC tool grinder is a high efficiency grinder that is suitable for product or grind various diameters of milling tools, drilling tools,...

The machine can be equipped with automatic loading and unloading and anticollision system

Thân máy

- Các trục của máy có phạm vi hoạt động lớn: Trục X _ 520mm; Y _ 540mm; Trục Z _ 350mm
- Phần đế được làm bằng đá Granit nguyên khối siêu chắc chắn và giảm sự sai lệch do rung động khi vận hành

- Linear axis X, Y, and Z has a distance between centres of 520 millimeters, 540 millimeters and a centre height of 350 millimeters.

- The fuselage bases(X carrier, Y carrier, Z carrier, and Z column) are all made of artificial granite, with unmatched thermal stability and excellent vibration absorption.

Trục đá kép

- Trục đá thể lắp được 2 pack đá và có thể lắp từ 4 - 8 viên đá, giúp linh hoạt và tiết kiệm thời gian khi mài liên tiếp các thông số kĩ thuật khác nhau của dụng cụ.

- The wheel spindle can set up 2 packs of wheel and can set 4 - 8 wheeel, helping to be flexible and save time when grinding different specifications of the tool consecutively.

Trục kẹp phôi

- Trục kẹp phôi khí nén giúp kẹp chặt phôi khi mài, giảm sự rung động và các kích thước đạt độ chính xác lớn nhất.
- Collet kẹp phôi kích thước tiêu chuẩn, sử dụng được cho nhiều máy.

- Air pressure clamps help clamp the workpiece tightly when grinding, reducing vibration and achieving maximum dimensional accuracy.

- Standard size workpiece clamping collet, can be used for many machines.

Robot tháo lắp

- Máy được trang bị cánh tay robot tháo lắp phôi NACHI, hoạt động chính xác và liên tục, tăng năng suất làm việc cho máy

- The machine is equipped with a NACHI robot arm for workpiece disassembly and assembly, which operates accurately and continuously, increasing the machine's productivity.

MA

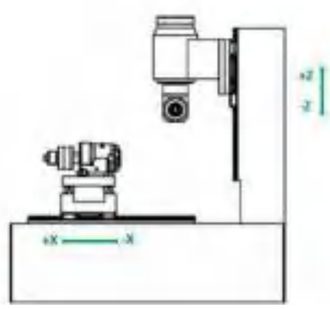
5 AXIS CNC TOOLS GRINDER

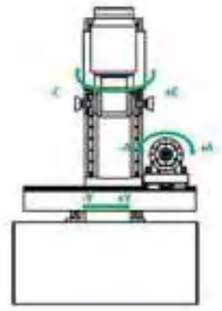
***Thông số kỹ thuật/** *Specifications*

Chiều dài phôi lớn nhất/ *Max processing workpiece length*	200mm
Khối lượng phôi lớn nhất/ *Max workpiece weight*	20Kg
Công suất động cơ trục/ *Grinding head max power*	12KW
Tốc độ quay trục đá/ *Grinding spindle rotation speed*	0-8000rpm
Đường kính đá mài/ *Grinding wheel diameter*	Φ50~Φ200mm
Tốc độ quay phôi/ *Workpiece spindle rotation speed(A axis)*	200rpm
Tốc độ quay trục C/ *Grinding angle rotation speed(C axis)*	75rpm
Phạm vi di chuyển các trục/ *Workable travel X axis/ Y axis/ Z axis*	X：520 / Y：540 / Z：350
Tốc độ di chuyển nhanh các trục/ *Axis quick travel speed*	10m/min
Độ đảo của phôi/ *Workpiece spindle radial runout*	≤0.005mm
Độ đảo của đá mài/ *Grinding wheel spindle radial runout*	≤0.005mm
Phạm vi đường kính phôi/ *Workpiece diameter range*	2~25mm
Điện áp/ *Voltage*	AC 380V 50HZ 3 phase
Kích thước/ *Machine size*	2200×1600×2400mm
Khối lượng/ *Machine weight*	5T

***Thiết bị, phụ kiện kèm theo/** *Accessories including*

- Máy hút bụi dầu/ *Oil mist collector* - 1pcs
- Hệ thống làm mát dầu/ *Cool system* - 1pcs
- Hệ thống làm mát tủ điện/ Air conditioning for electric cabinet - 1 set
- Bình chữa cháy tự động/ Automatic fire extinguisher - 1 set
- Trục đá mài/ *Grinding wheel abour*





MA

6 AXIS CNC TOOLS GRINDER

Mã đặt hàng/*Ordercode:* **MA002**

Máy mài dụng cụ cắt CNC 6 trục MA002 là máy mài có độ chính xác cao, hiệu quả tốt, thường ứng dụng để mài dao phay, mũi khoan, dụng cụ cắt... có đường kính nhỏ từ (φ1-8mm).

MA002 6-axis CNC cutting tool grinding machine is a grinding machine with high precision and good efficiency, often used to sharpen milling tools, drill tools, cutting tools... with small diameters from (φ1-8mm).

Thân máy
- Các trục của máy có phạm vi hoạt động lớn: Trục X _ 285mm; Y _ 300mm; Trục Z _ 320mm
- Phần đế được làm bằng đá Granit nguyên khối siêu chắc chắn và giảm sự sai lệch do rung động khi vận hành
- Linear axis X, Y, and Z has a distance between centres of 285 millimeters, 300 millimeters and a centre height of 320 millimeters.
- The fuselage bases(X carrier, Y carrier, Z carrier, and Z column) are all made of artificial granite, with unmatched thermal stability and excellent vibration absorption.

Trục đá kép
- Trục đá thể lắp được 2 pack đá và có thể lắp từ 4 - 8 viên đá, giúp linh hoạt và tiết kiệm thời gian khi mài liên tiếp các thông số kĩ thuật khác nhau của dụng cụ.
- The wheel spindle can set up 2 packs of wheel and can set 4 - 8 wheeel, helping to be flexible and save time when grinding different specifications of the tool consecutively.

Trục kẹp phôi
- Trục kẹp phôi khí nén giúp kẹp chặt phôi khi mài, giảm sự rung động và các kích thước đạt độ chính xác lớn nhất.
- Collet kẹp phôi kích thước tiêu chuẩn, sử dụng được cho nhiều máy.
- Air pressure clamps help clamp the workpiece tightly when grinding, reducing vibration and achieving maximum dimensional accuracy.
- Standard size workpiece clamping collet, can be used for many machines.

Robot tháo lắp
- Máy được trang bị cánh tay robot tháo lắp phôi NACHI, hoạt động chính xác và liên tục, tăng năng suất làm việc cho máy
- The machine is equipped with a NACHI robot arm for workpiece disassembly and assembly, which operates accurately and continuously, increasing the machine's productivity.

MA

TOOLS GRINDING MACHINE

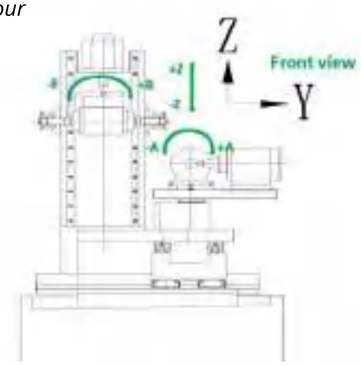
6 AXIS CNC TOOLS GRINDER

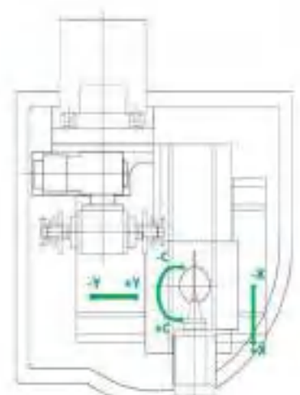
Máy mài CNC 6 trục */6 axis CNC tool grinder*

***Thông số kỹ thuật/** *Specifications*

Chiều dài phôi lớn nhất/ *Max processing workpiece length*	200mm
Khối lượng phôi lớn nhất/ *Max workpiece weight*	10Kg
Công suất động cơ trục/ *Grinding head max power*	7 KW
Tốc độ quay trục đá/ *Grinding spindle rotation speed*	0-8000rpm
Đường kính đá mài/ *Grinding wheel diameter*	Φ50~Φ200mm
Tốc độ quay phôi/ *Workpiece spindle rotation speed(A axis)*	200rpm
Tốc độ quay trục C/ *Grinding angle rotation speed(C axis)*	75rpm
Phạm vi di chuyển các trục/ *Workable travel X axis/ Y axis/ Z axis*	X：285 / Y：300 / Z：320
Tốc độ di chuyển nhanh các trục/ *Axis quick travel speed*	10m/min
Độ đảo của phôi/ *Workpiece spindle radial runout*	≤0.005mm
Độ đảo của đá mài/ *Grinding wheel spindle radial runout*	≤0.005mm
Phạm vi đường kính phôi/ *Workpiece diameter range*	2~25mm
Điện áp/ *Voltage*	AC 380V 50HZ 3 phase
Kích thước/ *Machine size*	1600×1550×2100mm
Khối lượng/ *Machine weight*	3.5T

***Thiết bị, phụ kiện kèm theo/** *Accessories including*
- Máy hút bụi dầu/ *Oil mist collector* - 1pcs
- Hệ thống làm mát dầu/ *Cool system* - 1pcs
- Hệ thống làm mát tủ điện/ Air conditioning for electric cabinet - 1 set
- Bình chữa cháy tự động/ Automatic fire extinguisher - 1 set
- Trục đá mài/ *Grinding wheel abour*
- Hộp công cụ/ *Toolbox*





MA

PCD & PCBN GRINDING MACHINE

Mã đặt hàng/*Ordercode:* **MA003**

Máy mài dụng cụ cắt siêu cứng MA003 là một giải pháp tối ưu để gia công các vật liệu PCD, PCBN và CVD; Máy thường ứng dụng mài các vật liệu carbide và thép gió không theo tiêu chuẩn.... Khi mài các dụng cụ cắt hàn mảnh, dao tiện,... và các loại dụng cụ khác, có thể dễ dàng mài các cạnh chuyển tiếp và các góc bo R.

Manufacturing and grinding cemented carbide and high-speed steel non-standard blades. When grinding standard or non-standard welding turning tools, clamping blades, boring tools, grooving tools and other types of tools, it is easy to grind angle and arc transition edges on these tools.

***Thông số kỹ thuật/** *Specifications*

Công suất trục đá/ *Grinding spindle power*	3KW
Hành trình ngang của máy/ *Table transvervbe travel*	70mm
Hành trình dọc của máy/ *Table longitufinal travel*	65mm
Độ phóng đại/ *Optical magnification*	0.7x - 4.5x
Chiều cao trục chính/ *Spindle center height*	150mm
Độ phân giải/ *Image resolution*	1280*1024/470
Biên độ góc trục/ *Variable swing amplitude*	0-30mm
Tốc độ tịnh tiến góc qua lại/ *Variable swing speed*	0-60times/min
Điện áp/ *Voltage*	AC 380V 50HZ 3 phase
Kích thước/ *Machine size*	1890*1650*1980mm
Khối lượng/ *Machine weight*	2000kg
Trục điều chỉnh nâng đầu mài (Tùy chọn/ optional)	±75 cm

MA

TOOLS GRINDING MACHINE

PCD & PCBN GRINDING MACHINE

Mã đặt hàng/*Ordercode:* **MA004**

So với máy mài công cụ CNC 5 trục thông thường, MA004 có thêm một trục để nghiêng đá mài. Điều đó làm tăng sự linh hoạt để mài các dụng cụ quay PCD & PCBN, mảnh carbide không tiêu chuẩn,.... Đầu dò hoặc hệ thống đo video có thể được trang bị tùy chọn theo yêu cầu của người dùng. Vì vậy, việc mài lại công cụ cacbua và công cụ nhỏ sản xuất cũng có thể được thực hiện trên máy này.

Compared with traditional five-axis CNC tool grinder, BI-150DS has one more axis for grinding wheel inclination.It is flexible enough to grind PCD & PCBN rotary tools, nonstandardcarbide insert by means of special fixture and software packages.Probe or video measurement system can be equipped according to user requirements. So carbide tool resharpening and small toolproduction is also possible on this machine.

***Thông số kỹ thuật/** *Specifications*

Công suất trục đá/ *Grinding spindle power*	5KW
Đường kính đá mài/ *Diameter of grinding wheel*	150mm
Tốc độ quay trục đá/ *Speed of grinding spindle*	0 - 5000rpm
Góc thoát/ *Clearance angle*	-5° - 25°
Độ phóng đại của camera/ *Magnification of camera*	0.7x - 4.5x
Màn hình/ *Screen*	15 inches
Độ phóng đại hệ thống đo CCD/ *Magnification of CCD system*	70 lần
Thùng dầu làm mát/ *Coolant tank*	70L
Điện áp/ *Voltage*	AC 380V 50HZ 3 phase
Kích thước/ *Machine size*	1890*1650*1980mm
Khối lượng/ *Machine weight*	2000kg
Trục điều chỉnh nâng đầu mài (Tùy chọn/ optional)	±75 cm

MA

PCD & PCBN GRINDING MACHINE

Mã đặt hàng/*Ordercode:* **MA005**

Máy mài MA005 là máy mài dụng cụ cắt siêu cứng có hiệu suất tốt và phù hợp để sản xuất hàng loạt các mảnh carbide, mảnh PCD và mảnh CBN. Sau khi định tâm xong, quá trình mài sẽ được thực hiện tự động. Hệ thống có thể đo và bù lượng mòn đá, do đó sản xuất với chu kỳ thời gian dài vẫn có thể đạt được độ chính xác và độ bóng bề mặt dụng cụ.

MA001 tool grinder is reliable in performance and it is suitable for massive production of carbide inserts, PCD and CBN inserts. Once centering is finished, grinding will be done automatically. The even consumption of grinding wheel can be measured and compensated by the system, so production with long cycle time can be achieved.

***Thông số kỹ thuật/** *Specifications*

Công suất trục đá/ *Grinding spindle power*	5KW
Đường kính đá mài/ *Diameter of grinding wheel*	150mm
Tốc độ quay trục đá/ *Speed of grinding spindle*	0 - 5000rpm
Góc thoát/ *Clearance angle*	-5° - 25°
Độ phóng đại của camera/ *Magnification of camera*	0.7x - 4.5x
Màn hình/ *Screen*	15 inches
Độ phóng đại hệ thống đo CCD/ *Magnification of CCD system*	70 lần
Thùng dầu làm mát/ *Coolant tank*	70L
Điện áp/ *Voltage*	AC 380V 50HZ 3 phase
Kích thước/ *Machine size*	1890*1650*1980mm
Khối lượng/ *Machine weight*	2000kg
Trục điều chỉnh nâng đầu mài (Tùy chọn/ optional)	±75 cm

SMALL SIZE LASER CUTTING MACHINE

Mã đặt hàng/*Ordercode:* **MA006**

MA006 là máy cắt sử dụng công nghệ laser, chuyên dùng cho các vật liệu siêu cứng PCD, PCBN,... Với công suất mạnh mẽ, máy có thể gia công đạt độ chính xác cao, chất lượng vết cắt tốt và hiệu suất vượt trội hơn hẳn so với các máy cắt sử dụng phương pháp khác. phần mềm của máy đơn giản, dễ sử dụng kèm theo màn hình thao tác cảm ứng thuận tiện cho người dùng.

MA001 is a cutting machine using laser technology, specialized for super hard materials PCD, PCBN,... With strong capacity, the machine can process with high precision, good cut quality and performance. Much superior to cutting machines using other methods. The machine's software is simple and easy to use with a convenient touch screen for users.

***Thông số kỹ thuật/** *Specifications*

Bước sóng/ *Central wavelength*	1080nm
Công suất đầu ra trung bình/ *Average output power*	300W
Công suất lớn nhất/ *Maximum peak power*	3000W
Năng lượng xung lớn nhất/ *Maximum pulse energy*	30J
Tần số lặp lại/ *Repetition frequency*	0.001 - 10kHz
Độ rộng xung/ *Pulse width*	0.01 - 10ms
Chiều dày cắt lớn nhất/ *Maximum cutting thickness*	6mm
Phạm vi vận hành/ *Operating stroke*	200*200mm
Độ chính xác vị trí/ *Positioning accuracy*	±0.01mm
Khoảng cách cắt nhỏ nhất/ *Minimum cut gap*	0.06mm
Khối lượng/ *Machine weight*	400kg
Kích thước/ *Dimension*	1350*1450*1730mm

Mã đặt hàng/*Ordercode:* **MA007**

Máy sửa đá MA007 có khả năng sửa, tái tạo biên dạng cho đá mài kim cương hoặc CBN dùng trên máy mài CNC, đặc biệt các biên dạng góc vuông, biên dạng R,....

MA003 CNC grinding wheel dresser is capable of repairing and recreating profiles for diamond or CBN grinding wheels used on CNC grinding machines, especially right angle profiles, R profiles,...

Trục chính của đá mài kim cương hoặc CBN cần sửa được lắp trên bàn trượt hình chữ thập. Trong quá trình gia công, có thể vẽ các đường thẳng và cung tròn trên giao diện phần mềm hoặc nhập bản vẽ ở định dạng .dxf vào phần mềm đo để so sánh hoặc có thể đo độ lệch của kích thước đá mài sau khi sửa so với lý thuyết.

The spindle of the diamond or CBN grinding wheel to be dressed is installed on a cross-shaped slide table. During the dressing, straight lines and arcs can be drawn on the software interface, or the drawings in .dxf format can be imported to the measurement software for comparison, or the deviation of the dimensions of grinding wheel after dressing from the theoretical curve can be measured.

- Phần mềm đo có thể cài đặt trước một số biên dạng, kích thước đá mài tiêu chuẩn, có thể gọi và chỉnh sửa.
- Sau khi cài đặt trên phần mềm đo, đá mài sẽ tự động quay, đưa qua đưa lại, đưa vào tự động và tự động hiệu chỉnh bằng điều khiển số.

- After tool setting with the measurement software, grinding wheel parts rotate automatically, feed back and forth, feed in automatically and correct automatically by numerical control

CNC GRINDING WHEEL DRESSER

***Thông số kỹ thuật/** *Specifications*

Đường kính đá cần mài lớn nhất/ *Max diameter of grinding wheel to be dressed*	300mm
Đường kính đá cần mài nhỏ nhất/ *Min diameter of grinding wheel to be dressed*	30mm
Chiều dày tối đa có thể sửa/ *Maximum width of grinding wheel to be dressed*	40mm
Tốc độ quay trục đá/ *Maximum speed of dressing Wheel*	2800rpm
Đường kính ngoài đá sửa/ *Grinding wheel outside diameter*	200mm
Đường kính trong đá sửa/ *Grinding wheel inside diameter*	32mm
Chiều dày đá sửa/ *Grinding wheel thickness*	10mm
Phạm vi di chuyển các trục/ *Workable travel X axis/ Y axis*	X: 100mm; Y: 100mm
Camera/ *Camera*	High resolution camera
Màn hình/ *Screen*	19 inches
Chế độ sửa đá/ *Dressing method*	Dry, wet, mist
Phạm vi đường kính phôi/ *Workpiece diameter range*	2~25mm
Điện áp/ *Voltage*	AC 380V 50HZ 3 phase
Kích thước/ *Machine size*	1900x2100x2400mm
Khối lượng/ *Machine weight*	2100KG

TOOLS PRESETER

Mã đặt hàng/*Ordercode:* **MA008**

Chất lượng cao
Chất lượng đảm bảo – sử dụng nhất quán các thành phần cấu thành có thương hiệu chất lượng cao
Chính xác
Trục chính SK 50 độ chính xác cao, đầu soi quang học chất lượng cao, công nghệ xử lý hình ảnh hàng đầu
Linh hoạt
Bộ điều khiển có thể điều chỉnh, thiết bị vận hành một tay tiện dụng »eQ«, bàn phím màng và bộ phận kẹp công cụ có thể sử dụng đơn giản.
Dễ sử dụng
Dễ dàng đọc các thông số đồ họa từ phần mềm quản lý công cụ trọn gói »pilot«
Hiện đại & hiệu quả
Thiết kế hiện đại đảm bảo dễ sử dụng dẫn đến hiệu suất tốt hơn
Có thể kết nối mạng
Truyền dữ liệu trực tiếp đến thiết bị điều khiển máy gia công của bạn.

High quality
Quality assured – consistent use of high quality branded components
Precision
High precision SK 50 spindle, high-quality optical probe, leading image processing technology
Flexible
Adjustable controls, ergonomic one-handed operation »eQ«, membrane keyboard and tool clamping unit for easy use.
Ease of use
Easy to read graphical parameters from the all-inclusive tool management software »pilot«
Modern & efficient
Modern design ensures ease of use leading to better performance
Networkable
Transfer data directly to your machine control device

Hệ trục/ axis system	Bằng tay/ By hand
	CNC
Màn hình hiển thị/ Display screen	13"/ 24" pilot 1.0
	17" pilot 2 mT
	24" pilot 3.0
Trục chính/ Spindle	SK50
	SK50-VAK
	Trục đá
Bắt điểm tự động	
Tùy chọn trục chính/ Spindle option	Bằng tay/ By hand
	Tự động lấy nét/ Auto focus
Công cụ điều chỉnh độ dài	aszm-lin
	aszm-rot
Nhận dạng dụng cụ/ Tool identification	Man./MSLZ
	Ghi điểm gốc thủ công
Thiết bị đo chiều cao/ Height measuring device	DME
Kiểm tra lưỡi cắt/ Check the cutting edge	
Kiểm tra dụng cụ/ Check the tool	
Bàn máy/ Machine table	
Ngăn kệ/ Cabinet	Máy in/ Printer
	Bạc nối, Bạc chuyển côn/ Conical adapter
Bàn phím có màng bọc/ Covered keyboard	
Điều khiển bằng tay/ Manual control	
Thiết bị bảo trì/ Maintenance	

ANMI CLAMP

Mã đặt hàng/*Ordercode:* **MA009**

- Lắp ráp dụng cụ an toàn mà không cần dùng lực lớn
- Tháo lắp nhanh mà không cần dụng thêm dụng cụ khác
- Tháo lắp , gá đặt dễ dàng linh hoạt
- Tùy chọn góc xoay 8x45⁰ hoặc 4x90⁰

Chức năng thay nhanh cho các dạng chuôi côn: BT-SK-ISO, HSK, CAPTO, VDI, KM...
• Chốt khóa chịu tải lò xo – lực kẹp nhỏ.
• Mặt tiếp xúc côn bằng đồng an toàn cho chuôi côn và có thể thay thế.
• Kích thước nhỏ gọn, linh hoạt.
• Tích hợp thước đo cao

Màu sắc tùy chọn

Đồ gá tháo đá (tùy chọn)

Thước đo cao (tùy chọn)

Thân chính chia góc 90 độ

Đầu lắp chuôi: BT/SK/ISO, HSK–A/E..(DIN69893/1), VDI (DIN 69880),...

MODEL X

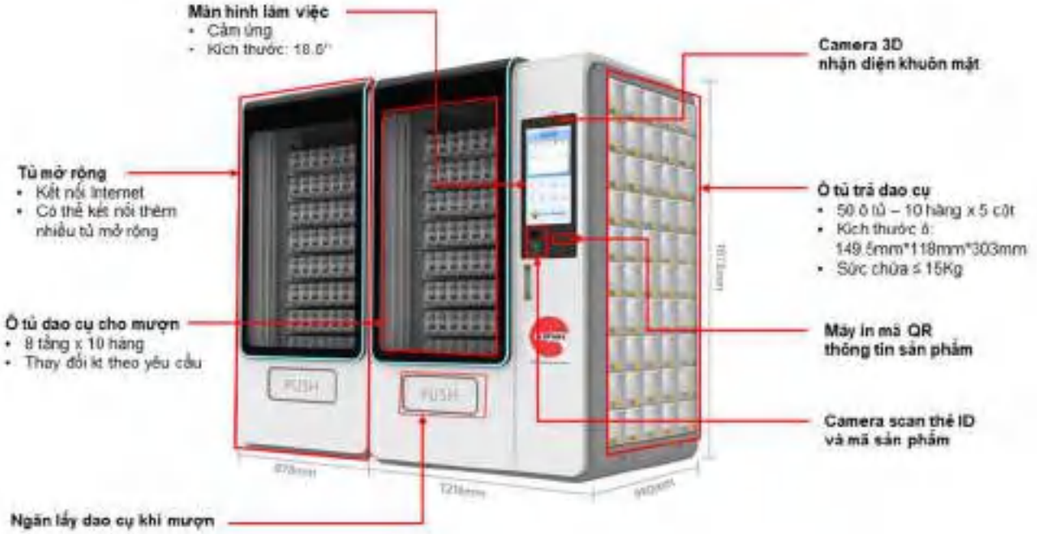
Tiết kiệm nhân công quản lý
Less labor

Quản lý số lượng chính xác
Accurate quantity management

Loại bỏ việc chọn nhầm lẫn
Accurate quantity management

Quản lý tuổi thọ dụng cụ
Tool life management

Tạo báo cáo tự động
Process automation



SƠ ĐỒ CẤU TẠO CHUNG TỦ DỤNG CỤ THÔNG MINH - SMART AN MI BOX

MODEL X

- Tốn nhân công quản lý, diện tích kho lưu trữ
- Phương pháp quản lý thủ công, khó kiểm soát chính xác
- Quy trình mượn - trả phức tạp
- Người dùng không thể mượn - trả nếu không có người quản lý

- Costs labor to manage and store inventory
- Manual management method, difficult to control accurately
- Complicated borrow and return process
- Users cannot borrow and return if managed

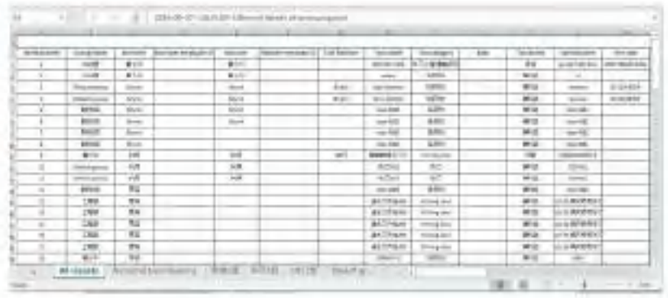
- Quản lý có thể làm việc part time, cải thiện 5S
- Thông tin, dữ liệu quản lý chính xác bằng phần mềm
- Quy trình đơn giản, kiểm soát bằng tài khoản cá nhân
- Thao tác mượn - trả độc lập, có thể mượn trả mà không cần qua người quản lý => Thuận lợi cho ca đêm

- Managers can work part time, improve 5S
- Information and data managed accurately by software
- Simple process, controlled by personal account
- Independent borrowing and returning operations, can borrow and return without going through a manager => Convenient for night shifts

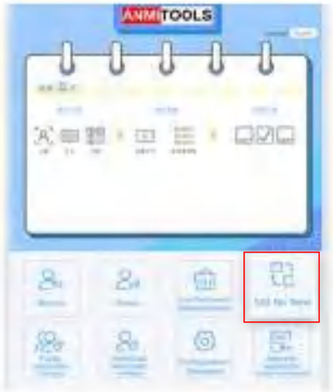
Cập nhật, theo dõi chính xác tình trạng và tuổi thọ của dụng cụ => Tránh lãng phí
Update and accurately monitor the condition and lifespan of tools => Avoid waste

Phần mềm tự động tính toán, thống kê và xếp hạng các dữ liệu theo chu kì thời gian: Tuần, tháng,...
The software automatically calculates, statistics and ranks data according to time cycles: Week, month,..

MODEL X



Dữ liệu tự động tổng hợp, trả về dưới định dạng file excel dễ dàng quản lý
Data is automatically synthesized and export in excel format for easy management



- Chế độ **"Old for New"** bắt buộc người dùng phải trả lại dụng cụ đã mượn mới có thể mượn dụng cụ mới => Tránh thất lạc và lãng phí
- Người dùng phải lựa chọn máy hoặc sản phẩm sử dụng dụng cụ trước khi mượn
=> Loại bỏ việc chọn nhầm dụng cụ, hỗ trợ tính toán chi phí dụng cụ cho sản phẩm

*- **"Old for New"** mode forces users to return borrowed tools to be able to borrow new tools*
=> Avoid loss and waste
- Users must select the machine or product to use the tool before borrowing
=> Eliminate choosing the wrong tools, support calculating tool costs for products

Hệ thống tự động và thường xuyên cập nhật tình trạng số lượng tồn kho qua e-mail.
=> Người quản lý chủ động trong việc bổ sung hàng tồn kho kịp thời, đảm bảo tiến độ sản xuất

The system automatically and regularly pushes the inventory status of cutting tools via e-mail.
This benefits admins to apply for the replenishment of inventory in time, ensure the production progress.

MA

MODEL X

Order code	MA010	MA011	MA012	MA013	MA014
Model	X	Pro	S	X-E	PRO-E
Hình ảnh *Apperance*					
Kích thước *Demension (mm)*	1873*1216*990	1823*1210*968	1722*1120*900	1873*878*990	1823*856*968
Sức chứa *Capacity*	80 Lanes+ 50 SideBoxes	80 Lanes+ 50 SideBoxes	60 Lanes+ 36 SideBoxes	80 Lanes	80 Lanes
Mở rộng *Extension*	Supported (Max.4 XE)	Supported (Max.9 Pro-E)	Not Supported	Not Supported	Not Supported
Thiết bị đi kèm *Equipment Jobuilt*	Lifting plate, Scanner, Printer	N/A	N/A	Lifting plate	N/A
Sức chứa tối đa *Maximum capacity*	400(1X-4XE)	800(1Pro+9Pro-E)	60		
Số lượng dụng cụ *Maximum capacity*	8000Milling tool 80000Turning tool (1X+4XE)	16000Milling tool 160000Turning tool (1Pro+9Pro-E)	1200Milling tool 12000Turning tool		
Đăng nhập *Log in*	FaceID, Account, IC card	FaceID, Account, IC card	FaceID, Account		

Thông số - Cấu hình máy
Parameters - Configuration

MA

MODEL T

Tủ dụng cụ thông minh “Smart AN MI box - model T” là một phiên bản cải tiến áp dụng cho việc lưu trữ và quản lý các sản phẩm hay các dụng cụ cắt có hình dáng đặc biệt với các chức năng và phần mềm quản lý tương tự các mẫu tủ “Smart AN MI box” khác. Các thông số, dữ liệu đều được quản lý bằng phần mềm và dễ dàng xuất file quản lý, tối ưu cho quá trình quản lý và lưu kho.

The smart tool cabinet "Smart AN MI box - model T" is an improved version applied to the storage and management of products or specially shaped cutting tools with functions and management software. Similar to other "Smart AN MI box" cabinet models. All parameters and data are managed by software and can easily be exported to management files, optimizing the management and storage process.

Tính năng đặc biệt:
- Tủ có thể lưu trữ các sản phẩm có kích thước lớn, các dụng cụ cắt có hình dáng đặc biệt
- Các ngăn tủ được thiết kế chắc chắn, có thể chịu tải lên đến 10kg
- Thiết bị Scan di động, linh hoạt để quét mã trên các sản phẩm có khối lượng lớn, hình dáng đặc biệt

Special features:
- The cabinet can store large sized products and specially shaped cutting tools
- The cabinets are firmly designed and can bear a load of up to 10kg
- Portable, flexible scanning device to scan codes on products with large volumes and special shapes

SMART ANMI BOX

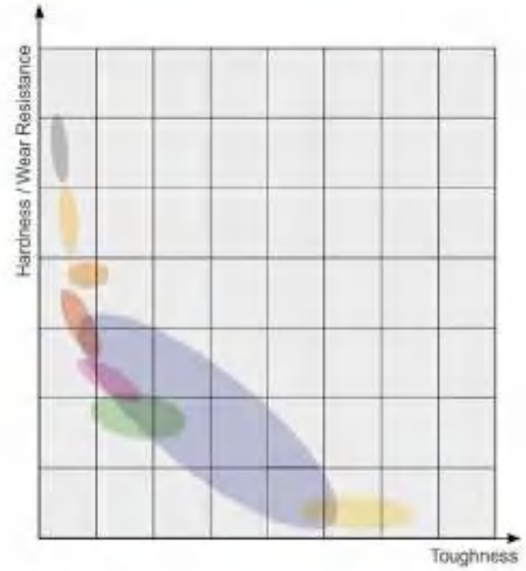
MODEL T

Phần mềm quản lý dữ liệu tự động: toàn diện, chính xác
Automatic data management software: comprehensive and accurate

Order code	MA017	MA018	MA019
Model	T108	T100	T57
Hình ảnh *Appearance*			
Thông số kỹ thuật *Specifications*	• **Overall dimensions (H * W * D):** 2000*1450*500(mm) • **Capacity：** 108 grids • **Inbuilt：** Scanner, Security camera • **Net size of single grids(H*W*D):** 120*120*400(mm) • Bearing for single grids≤10kg • Net Weight:370KG(Around) Weight with package: 420KG(Around)	• **Overall dimensions (H * W * D):** 2000*1544*500(mm) • **Capacity：** 100 grids • **Inbuilt：** Scanner, Security camera • **Net size of 96 grids(H*W*D):** 91*152*400(mm) • **Size of 4 grids(H*W*D):** 228*339*400(mm) • Net Weight:405KG(Around) Weight with package: 455KG(Around)	• **Overall dimensions (H * W * D):** 2000*1596*500(mm) • **Capacity：** 57 grids • **Inbuilt：** Scanner, Security camera • **Net size of 54 grids(H*W*D):** 132.5*223*400(mm) • **Size of 3 grids(H*W*D):** 182.5*481*400(mm) • Net Weight:325KG(Around) Weight with package:375KG(Around)

Thông số - Cấu hình máy
Parameters - Configuration

MA



The mechanical property of carbide can be altered by changing grain size and constitute to cope with wide range of tool performance demand. Consequently, features of AN MI TOOLS 's grade can also be modified in accordance with different machining methodology.

AN MI TOOLS can offer best-fit solutions for special work piece metals such as harden material with high wear resistance, Nicochrome which can withstand high temperature, and Composite material with complicated mechanical properties.

Criteria relevant for application

- Wear resistance, Hardness
- Compressive strength
- Impact strength
- Transverse rupture strength
- Tribological properties
- Specific weight
- Magnetic properties
- Modulus of elasticity, Rigidity
- Thermal properties
- Corrosion resistance, Resistance to oxidation
- Toughness

COMPOSITION & PROPERTY

	Grade	ISO Code	Co (±0.5%)	Density (g/cm³)	Hardness HRA	Hardness HV30	TRS (MPa)
Ultrafine	K180	K05 - K10	9.0	14.34	93.8	1,970	3,600
	UF25	K10 - K20	12.0	14.10	92.4	1,660	4,000
	WF25	K10 - K20	11.5	14.15	92.2	1,650	3,800
Submicron	KS09	K20 - K40	9.0	14.48	91.8	1,580	3,600
	WF15	K20 - K40	10.0	14.35	91.8	1,580	3,800
	K200	K20 - K40	10.0	14.40	91.3	1,510	4,000
Fine	K100L	K10 - K20	6.0	14.83	92.2	1,650	3,000
	KR10	K10 - K20	5.8	14.80	92.2	1,650	3,000

*Please contact our representative if additional grade requirement is needed.

Grade Recommendation

	Work Material	K180	UF25	WF25	KS09	WF15	K200	K100L	KR10
P	Non Alloy Steel		○	○	●	●	●		
	Low / Medium Alloy Steel	●	○	○	●	●	●		●
	High Alloy Steel		●	●	○	●	○		
	Ferritic Stainless Steel		●	●	●	○	●		
	Martensitic Stainless Steel		●	●	●	○	●		
M	Austenitic Stainless Steel		●	●	●	○	●		
	Duplex Stainless Steel		●	○	●	○	●		
K	Grey Cast Iron	●		○	○	●	●	○	●
	Nodular Cast Iron	●		○	○	●	●	○	●
	Ductile Cast Iron	●		○	○	●	●	○	●
N	Plastic	●	○	○		○	○	●	●
	Composite Material	●						●	
	Aluminium Alloy (Si<12%)	●	○	○		○	○	●	
	Copper Based Alloy	●				○	○	○	○
S	Super Alloy		●	●	●	○	○		
	Titanium Alloy		●	○	●	○	●		
H	Harden Steel	●	●	●	●	○	○		

*Grade recommendation sheet is for reference only. Actual performance of cutting tool will be affected by different geometry and coating, please select appropriate grade according to individual property

● Best ○ Fit

COMPOSITION & PROPERTY

Ultrafine grain

K180 : Ultrafine grade for HSC machining of tempered steel (HRC>60), abrasive aluminium, or CFRP.

UF25 : Ultrafine grade for HSC machining of tempered steel (HRC≤60)and stainless steel. Even more concentrated grain distributionenhances tool life and work performance.

WF25 : Appropriate for machining tempered steel (HRC<45) and stainless steel. It is a well-balanced high performance grade.

Submicron grain

KS09 : Appropriate for machining stainless steels, heat-resistant alloys, & difficult-to-machine materials (Ti-based, Ni-based Alloy). Excellent performance especially under unfavorable conditions.

WF15 : Well balanced physical properties, very good at universal machining of alloyed / non-alloyed steel.

K200 : For stainless steel & heat-resistant alloys machining under work-condition of low cutting speed & high feed rate. Selective submicron carbide grade for optimum tool toughness.

Fine grain

K100L : Certified fine carbide grade for diamond coating tool. For machining graphite, composite material, and high-silicon aluminium alloy.

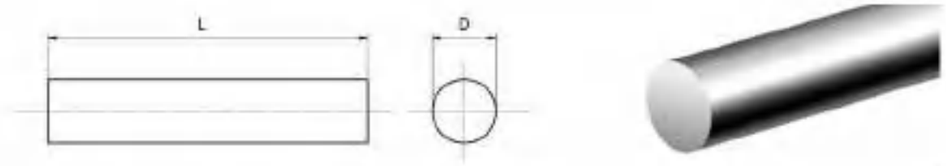
KR10 : Fine grain grade specially design for machining Non-ferrous metal, Cast Iron, and Plastic.

Tungsten carbide grain size (μm)	Classification
0.2 - 0.5	Ultrafine
0.5 - 0.8	Submicron
0.8 - 1.3	Fine
1.3 - 2.5	Medium
2.5 - 6.0	Coarse

* The classification of carbides according to grain size corresponds to the recommendations of the Powder Metallurgy Association.

MB

SOLID RODS



Sintered Solid Rods (Metric)									
Code	D	L	Grade						
	mm	mm	K180	UF25	WF25	KS09	WF15	K200	K100L
MB001.01	2.0	330			●		●	●	
MB001.02	3.0	330	●	●	●		●	●	●
MB001.03	3.5	330			●		●	●	
MB001.04	4.0	330	●	●	●	●	●	●	●
MB001.05	4.5	330			●		●	●	
MB001.06	5.0	330		●	●		●	●	
MB001.07	5.5	330			●		●	●	
MB001.08	6.0	330	●	●	●	●	●	●	●
MB001.09	6.5	330			●		●	●	
MB001.10	7.0	330			●		●	●	
MB001.11	7.5	330			●		●	●	
MB001.12	8.0	330	●	●	●	●	●	●	●
MB001.13	8.5	330			●		●	●	
MB001.14	9.0	330			●		●	●	
MB001.15	9.5	330			●		●	●	
MB001.16	10.5	330			●		●	●	
MB001.17	11.0	330			●		●	●	
MB001.18	11.5	330			●		●	●	
MB001.19	12.0	330	●	●	●	●	●	●	●
MB001.20	12.5	330			●		●	●	
MB001.21	13.0	330			●		●	●	
MB001.22	14.0	330		●	●		●	●	
MB001.23	15.0	330			●		●	●	
MB001.24	16.0	330	●	●	●	●	●	●	●
MB001.25	17.0	330			●		●	●	
MB001.26	18.0	330		●	●	●	●	●	●
MB001.27	19.0	330			●		●	●	
MB001.28	20.0	330	●	●	●	●	●	●	●
MB001.29	24.0	330					●	●	
MB001.30	25.0	330					●	●	
MB001.31	32.0	330					●	●	

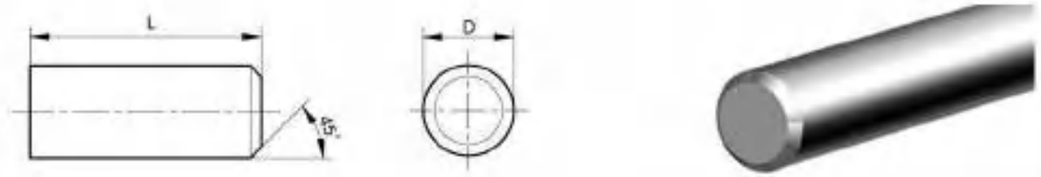
1. Standard Diameter: Ø2 ~ Ø32, other dimensions are upon request.
2. Standard Length: 310 / 330 mm.

●=Standard Stock

We offer below post-processing services:

MB

SOLID RODS



Ground Solid Rods - Cut to Length (Metric)											
Code	D	h5 D Tol.	L	Chamfer	Grade						
	mm	mm	mm	mm	K180	UF25	WF25	KS09	WF15	K200
MB001.32	3.0	-0/-0.004	50	0.3		●	●		●	●
MB001.33	4.0	-0/-0.005	50	0.4	●	●	●	●	●	●
MB001.34	4.0	-0/-0.005	75	0.4		●	●			
MB001.35	4.0	-0/-0.005	100	0.4			●			
MB001.36	6.0	-0/-0.005	50	0.6	●	●	●	●	●	●
MB001.37	6.0	-0/-0.005	75	0.6			●			
MB001.38	6.0	-0/-0.005	100	0.6		●	●			
MB001.39	8.0	-0/-0.006	60	0.8	●	●	●	●	●	●
MB001.40	8.0	-0/-0.006	75	0.8			●			
MB001.41	8.0	-0/-0.006	100	0.8		●	●			
MB001.42	10.0	-0/-0.006	75	1.0	●	●	●	●	●	●
MB001.43	10.0	-0/-0.006	100	1.0		●	●			
MB001.44	10.0	-0/-0.006	150	1.0			●			
MB001.45	12.0	-0/-0.008	75	1.0	●	●	●	●	●	●
MB001.46	12.0	-0/-0.008	100	1.0		●	●			
MB001.47	12.0	-0/-0.008	150	1.0			●			
MB001.48	16.0	-0/-0.008	100	1.0	●	●	●	●	●	●
MB001.49	16.0	-0/-0.008	150	1.0			●		●	●
MB001.50	20.0	-0/-0.009	100	1.5	●	●	●			
MB001.51	20.0	-0/-0.009	150	1.5	●	●	●			

1. Standard Diameter: Ø3 ~ Ø20, other dimensions are upon request.
2. Standard Length: Metric standard, other dimensions are upon requst.

●=Standard Stock

We offer below post-processing services:

MB

APPLICATIONS

APPLICATIONS

POWDER METALLURGY DIES

Mã đặt hàng: MB002
Order code

Khuôn luyện kim
Sử dụng rộng rãi để sản xuất các bộ phận,chi tiết khác nhau bằng cách đúc bột hợp kim, cung cấp giải pháp tiết kiệm chi phí cho khách hàng

Bearing Die
Widely used for manufacture various parts of alloy powder molding, in order to provide customer cost saving solution

OPTICAL MOLDS

Mã đặt hàng: MB003
Order code

Khuôn ngành quang học
Để đáp ứng yêu cầu của khách hàng môi trường khắc nghiệt (nhiệt độ cao và áp suất cao trong quá trình ép thấu kính thủy tinh), AN MI Tools đã phát triển dòng sản phẩm CBN mới, tránh quá trình oxy hóa và có độ chính xác cao hoàn chỉnh.

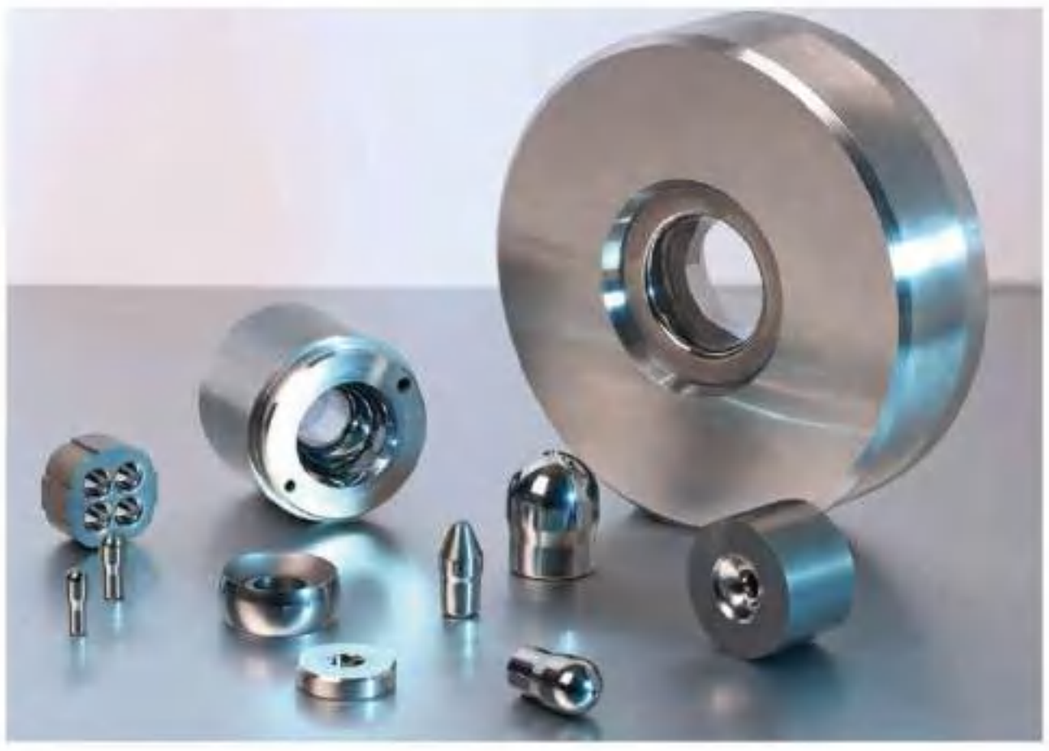
Optical molds
In order to meet customer request harsh environment (high temperature and high pressure during pressing glass lens, AN MI Tools developed new CBN grade series, which can avoid oxidation and fog during customer processing; at the same time, we offer complete set of high precision, tool fitting clearance molds.

DRAWING DIES

Mã đặt hàng: MB004
Order code

Khuôn tạo hình
Sử dụng rộng rãi cho gia công thép dạng ống,
cũng như phù hợp với gia công thép,
thép tấm có hình dạng đặc biệt.

Drawing Die
Drawing dies are widely used for
processing steel wire and tube,
pulling process and shrinking process,
as well as suitable for process
the special-shaped steel.



CAN TOOLING

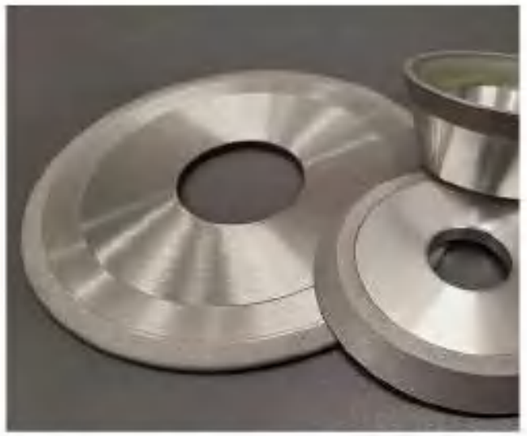
Mã đặt hàng: MB005
Order code

Khuôn đóng lon
Quy trình xử lý chuyện nghiệp với độ chính xác cao,
Tùy chỉnh kiểu dáng, kích thước theo nhu cầu khách hàng

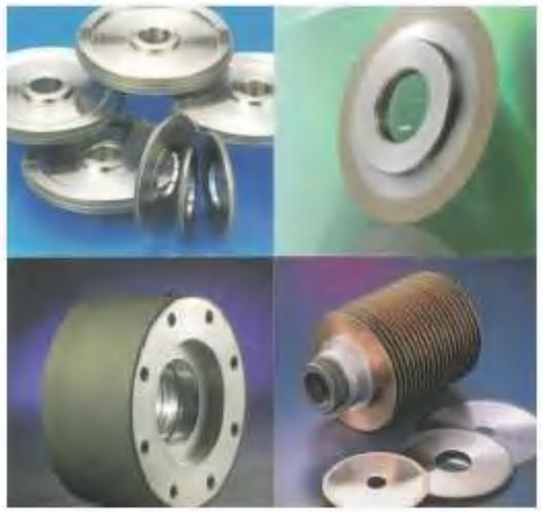
Can tooling
Professional processing with high precision,
Customize design and size according to customer needs

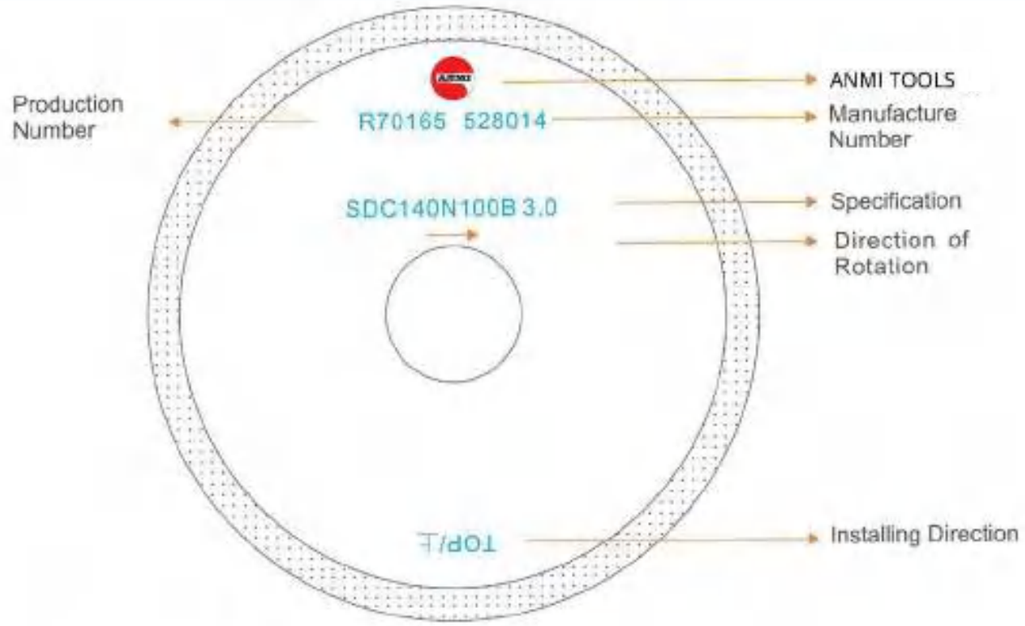
Mài chính xác với độ bóng bề mặt cao là 1 bước rất quan trọng trong quá trình chế tạo và hoàn thiện sản phẩm. Công việc này cần có kiến thức và kinh nghiệm tư vấn chuyên sâu của chuyên gia kỹ thuật trong lĩnh vực này. An Mi với ưu thế vượt trội là có kinh nghiệm 15 năm cung cấp dịch vụ mài và chế tạo dụng cụ chính xác bằng việc sử dụng đá mài PCD,CBN nên chúng tôi hiểu rất rõ việc sử dụng đá mài để đạt hiệu quả cao nhất cho khách hàng.

Diamond & CBN Wheels



Precision grinding with a high surface finish is a crucial step in the manufacturing and finishing of products. This process requires indepth knowledge and expertise from technical specialists in the field. An Mi, with over 15 years of experience in providing grinding services and manufacturing precision tools using PCD and CBN grinding wheels, understands how to utilize these tools effectively to achieve optimal results for our customers.





JIS B4130(DIA & CBN mesh size regulation)

Interpretation of the markings

Abrasive Type	Mesh Size	Hardness of Bond	Concentration	Bond Type	Depth of Super Abrasive Section
D: Natural Diamond	16 100 400	J Softer	25 Lower	B:Resin	1.5mm
SD: Synthetic Diamond	18 120 600	L ⇧	50		
	20 140 800		75 ⇧	V:Vitrified	2.0mm
SDC: Metal Coated Diamond	30 170 1000	N Medium	100		
BN: Cubic Boron Nitride*	40 200 1500		125	M:Metal	3.0mm
BNC: Metal Coated Cubic Boron Nitride*	50 230 2000	P ⇩	150 ⇩		
	60 270 2500		175		
(*Also can be described B.)	80 325 3000	R Harder	200Higher	P:Electr-oplated	5.0mm

INDICATION & SURFACE ROUGHNESS

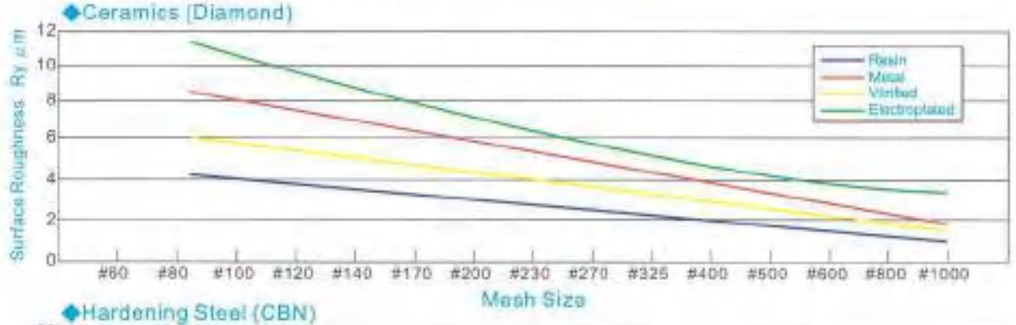
(1)Abrasive Indication

Mesh Size	Average Diameter(μm)	JIS	U.S.A.	B.S.S.	FEPA
50	297	50/60	50/60	50/60	D301
60	250	60/85	60/85	60/85	D252
80	177	85/100	85/100	85/100	D181
100	149	100/120	100/120	100/120	D151
120	125	120/140	120/140	120/150	D126
140	105	140/170	140/170	150/170	D107
170	88	170/200	170/200	170/200	D91
200	74	200/230	200/230	200/240	D76
230	62	230/270	230/270		D64
270	53	270/325	270/325	240/300	D54
325	44	325/400	325/400		D46
400	37		36-54μ		M40
600	28		22-36μ	27-40μ	M25
1000	15		12-22μ	12-18μ	M16
1500	10		8-12μ	8-12μ	M10
2000	8		5-12μ		
2500	6		4-8μ	4-8μ	M8.3
3000	5		2-6μ	2-6μ	

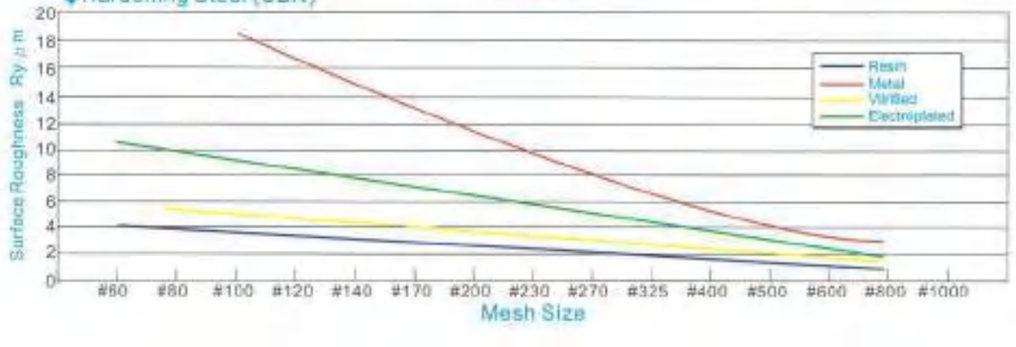
*Average diameter slightly vary due to each regulation.Also some grit sizes are not available.

(2)Mesh Size and Surface Roughness(Reference date)

◆Ceramics (Diamond)

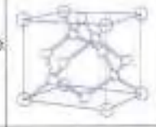


◆Hardening Steel (CBN)

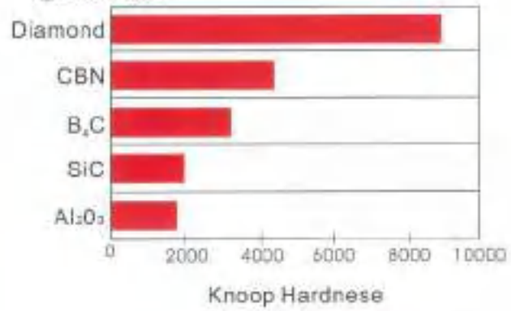


CHARACTERISTICS OF ABRASIVE

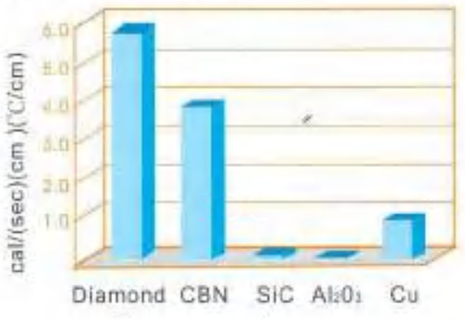
❶Comparison of Crystal Structures

	Diamond	CBN
Crystal Structure (Cubic Crystal)		
Molecular Formula	C	BN
Lattice ConstantA	3.567	3.615
Density g/cm3	3.514	3.480

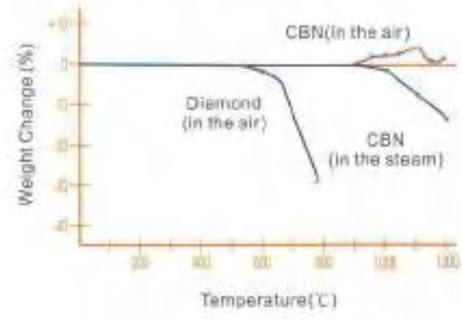
❷Hardnese



❸Thermal Conductivity



❹Thermal Stability

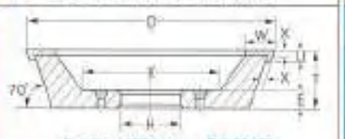


(2)Materials To Be Ground

STANDARD SHAPE OF WHEEL TYPE

Fullering Cup Wheel(L-Angled)

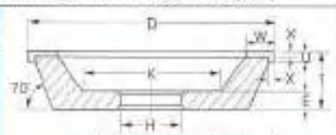
AD-7A
GWAD-7A
11EE9



Applied Wheels: B/M/V/P

Fullering Cup Wheel(L-Shaped)

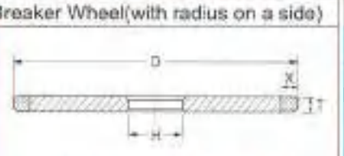
AD-7B
GWAD-7B
11C9



Applied Wheels: B/M/V/P

Chip Breaker Wheel(with radius on a side)

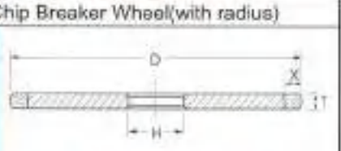
AD-8A
GWAD-8A
1Q1



Applied Wheels: B/M/V/P

Chip Breaker Wheel(with radius)

AD-8B
GWAD-8B
1L1



Applied Wheels: B/M/V/P

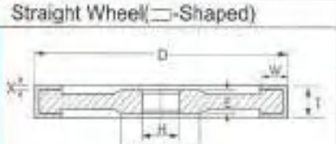
Double Sides Cup Wheel

AD-9
GWAD-9
9A3

Applied Wheels: B/M/V/P

Straight Wheel(▭-Shaped)

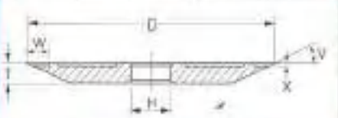
AD-10
GWAD-10
9U1



Applied Wheels: B/M/V/P

V-Face Wheel(Right-Angle on Side)

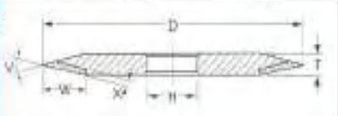
AD-11A
GWAD-11A
4B2



Applied Wheels: B/M/V/P

V-Face Wheel(Angled on Side)

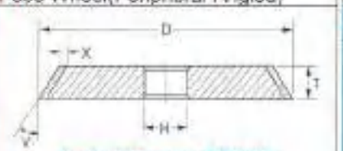
AD-11B
GWAD-11B
1B5



Applied Wheels: B/M/V/P

V-Face Wheel(Peripheral-Angled)

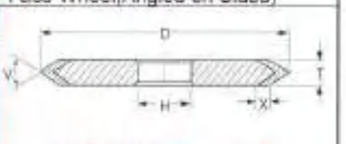
AD-11C
GWAD-11C
1V1



Applied Wheels: B/M/V/P

V-Face Wheel(Angled on Sides)

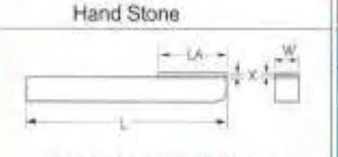
AD-11D
GWAD-11D
1EE1



Applied Wheels: B/M/V/P

Hand Stone

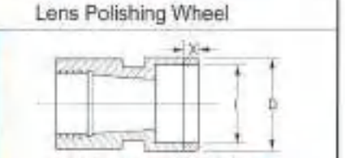
AD-12
GWAD-12
HH1



Applied Wheels: B/M/V/P

Lens Polishing Wheel

AD-13
GWAD-13
2FF2



Applied Wheels: B/M/V/P

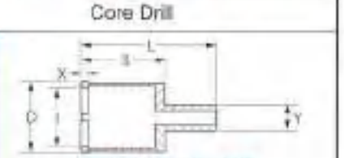
Stemmed Drill

AD-14A
GWAD-14A
UW

Applied Wheel: P

Core Drill

AD-14
GWAD-14
6F2

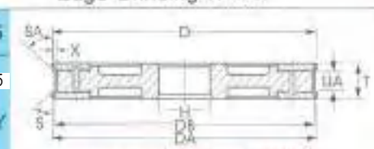


Applied Wheels: M/P

STANDARD SHAPE OF WHEEL TYPE

Edge Grinding Wheel

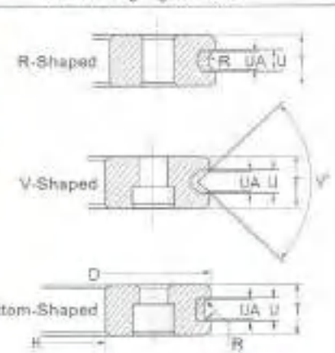
AD-15
GWAD-15
1DD6Y



Applied Wheels: B/M/V/P

Pencil-Edging Wheel

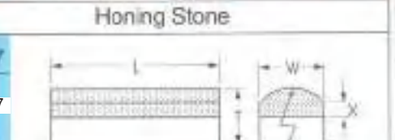
AD-16
GWAD-16
1FF6Y
1EE6Y
1LL6Y



Applied Wheels: B/M/V/P

Honing Stone

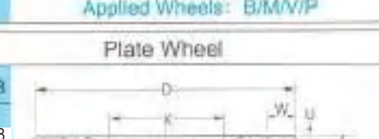
AD-17
GWAD-17
HMF



Applied Wheels: B/M/V/P

Plate Wheel

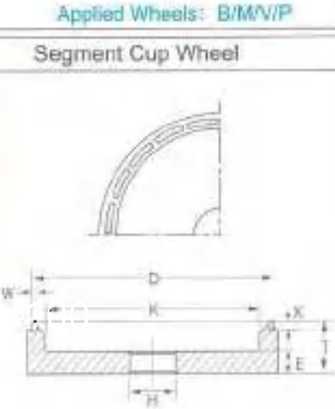
AD-18
GWAD-18
4M1



Applied Wheels: B/M/V/P

Segment Cup Wheel

AD-19
GWAD-19
6A2S



Applied Wheels: B/M/V

Grinding Dish for Polishing Lens(⌒-Shaped)

AD-20A
GWAD-20A
6P5

Applied Wheels: B/M

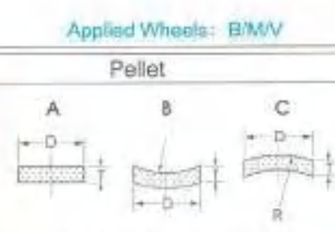
Grinding Dish for Polishing Lens(⌴-Shaped)

AD-20B
GWAD-20B
6P4

Applied Wheels: B/M

Pellet

AD-21
GWAD-21



Applied Wheels: B/M/V

Machine File

AD-24K
GWAD-27K

Applied Wheels: P

Hand File

AD-25
GWAD-25

Applied Wheel: P

REGRINDING

Mã đặt hàng/*Ordercode:* **SG001**

Sẵn sàng sử dụng
Ready to use

Mài lại (AN MI)
Regrinding

Dụng cụ cũ (Khách hàng)
Old tools (Customers)

Tại AN MI Tools, chúng tôi hiểu rằng việc duy trì hiệu suất của các dụng cụ cắt là rất quan trọng để đảm bảo sản xuất chất lượng cao và hiệu quả. Đó là lý do chúng tôi cung cấp dịch vụ mài sắc dụng cụ toàn diện nhằm giúp tiết kiệm chi phí và tối ưu hóa quy trình làm việc.

At AN MI Tools, we understand that maintaining the performance of your cutting tools is crucial for ensuring high-quality and efficient production. That's why we offer a comprehensive tools sharpening service to help you save costs and optimize your workflow.

PVD COATING

AN MI Tools chuyên cung cấp dịch vụ phủ, phủ lại PVD hàng đầu cho dụng cụ cắt, khuôn mẫu và linh kiện cơ khí. Với kỹ thuật và công nghệ phủ tiên tiến của chúng tôi, giúp nâng cao độ bền và hiệu suất cho dụng cụ cắt và sản phẩm của bạn, bảo vệ khỏi bị mài mòn và kéo dài tuổi thọ của chúng.

AN MI Tools specialize in providing top-notch coating and re-coating services for cutting tools, molds, and mechanical components. Our advanced coating techniques enhance the durability and performance of your tools, protecting them from wear and extending their lifespan.

7 Lớp phủ công nghệ PVD

7 Layers of PVD technology coating

Lớp phủ: **TiN**
Màu sắc: Gold
Độ dày: 2 - 3µm
Ứng dụng:
Phủ mũi khoan, mũi doa, taro, dao phay ngón,...

Coating: **TiN**
Color: Gold
Thickness: 2 - 3µm
Application:
Coating drill, reamer, endmill, threading tap,...

Lớp phủ: **TiSiN**
Màu sắc: Vàng đồng
Độ dày: 2 - 3µm
Ứng dụng:
Phủ mũi khoan, mũi khoan, dao phay ngón,...

Coating: **TiSiN**
Color: Gold copper
Thickness: 2 - 3µm
Application:
Coating insert, drill, endmill,...

Lớp phủ: **AlTiN**
Màu sắc: Ánh sáng
Độ dày: 2 - 2.5µm
Ứng dụng:
Phủ mành dao, mũi khoan, chuốt, chi tiết máy,...

Coating: **AlTiN**
Color: Light black
Thickness: 2 - 2.5µm
Application:
Coating insert cutter, drill, endmill, punch, machine parts,...

Lớp phủ: **AlTiSiN**
Màu sắc: Ánh xanh
Độ dày: 2 - 3µm
Ứng dụng:
Phủ mũi khoan, mũi doa, taro, dao phay ngón,...

Coating: **AlTiSiN**
Color: Light blue
Thickness: 2 - 3µm
Application:
Coating drill, reamer, endmill, threading tap,...

Lớp phủ: **CrN**
Màu sắc: Bạc
Độ dày: 1 - 4µm
Ứng dụng:
Phủ khuôn ép nhựa

Coating: **CrN**
Color: Bạc
Thickness: 1 - 4µm
Application:
Coating mold for plastic

Lớp phủ: **AlCrBN**
Màu sắc: Light grey
Độ dày: 4 - 5µm
Ứng dụng:
Phủ dao phay răng, khuôn, chày dập,...

Coating: **AlCrBN**
Color: Light grey
Thickness: 4 - 5µm
Application:
Coating HOB cutter, mold, punch,...

Lớp phủ: **ZrN**
Màu sắc: Vàng
Độ dày: 1 - 1.5µm
Ứng dụng:
Phủ mũi khoan, dao phay ngón (thẻ), chày dập,...

Coating: **ZrN**
Color: Light old
Thickness: 1 - 1.5µm
Application:
Coating drill, endmill, pin, punch,...

PVD COATING

Phủ dụng cụ cắt
Tools coating
Mã/*code*: **SS001**

Phủ khuôn, đồ gá
Molds, jig coating
Mã/*code*: **SS002**

Phủ linh kiện
Accessary coating
Mã/*code*: **SS003**

Mã đặt hàng: Mã hàng + Lớp phủ
Order code: Code + coating name

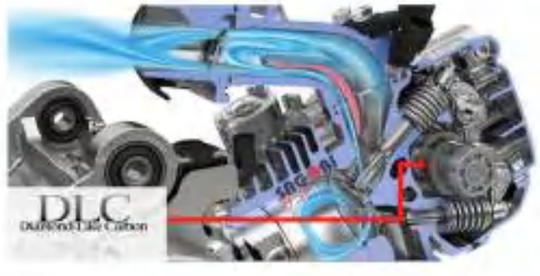
DLC COATING

Mã đặt hàng/*Order code*: **SS004**

DLC "Diamond like Carbon Coating, nghĩa là lớp phủ Carbon như kim cương và là lớp phủ Nanocomposite có tính chất độc đáo của kim cương tự nhiên như: độ ma sát thấp, độ cứng cao và khả năng chống ăn mòn cao. Lớp phủ DLC thường được ứng dụng phủ trong các lĩnh vực dụng cụ cắt gọt, công nghiệp ô tô, thiết bị điện tử, hàng không vũ trụ,...

DLC "Diamond like Carbon Coating", meaning Carbon coating like diamond and Nanocomposite coating with unique properties of natural diamond such as: low friction, high hardness and high corrosion resistance. DLC coatings are often applied in the fields of cutting tools, automotive industry, electronics, aerospace,...

- Độ cứng & khả năng chống mài mòn cao
  High hardness and wear resistance
- Độ ma sát thấp
  Low friction
- Phù hợp với nhiều loại vật liệu
  Suitable for various materials
- Tương thích ở môi trường ăn mòn cao
  Suitable for high-corrosion environments
- Có khả năng chống bám bẩn
  Stain-resistant
- Có khả năng truyền hồng ngoại
  Infrared transmission capability



Một số ứng dụng công nghệ phủ DLC
Some applications of DLC coating technology

NITROCARBURIZING
BLACK OXIDE COATING

- Độ cứng cao/*High Hardness*
- Chống mài mòn/*Wear Resistance*
- Chống ăn mòn/*Corrosion Resistance*
- Hiệu suất tốt/*Good Performance*

Mã đặt hàng/*Order code*: **SS005**

Thấm Nito/*Nitrocarburizing*

Mã đặt hàng/*Order code*: **SS006**

Nhuộm đen/*Black oxide coating*

SS

MACHINARY MAINTAINANCE

Mã đặt hàng/*Order code*: **SM001**

SM

INFORMATION

Table of Cutting Speeds

Vc																	
m/Min		5	8	10	15	20	25	30	40	50	60	70	80	90	100	110	150
Feet/Min		16	26	32	50	66	82	98	130	165	197	230	262	296	330	362	495
Ø		RPM															
mm	inch																
1,00		1592	2546	3183	4775	6366	7958	9549	12732	15916	19099	22282	25465	28648	31831	35014	47747
1,50		1061	1698	2122	3183	4244	5305	6366	8488	10610	12732	14854	16977	19099	21221	23343	31831
2,00		796	1273	1592	2387	3183	3979	4775	6366	7958	9549	11141	12732	14324	15916	17507	23873
2,50		637	1019	1273	1910	2546	3183	3820	5093	6366	7639	8913	10186	11459	12732	14006	19099
3,00		531	849	1061	1592	2122	2653	3183	4244	5305	6366	7427	8488	9549	10610	11671	15916
3,18	1/8	500	801	1001	1501	2002	2502	3003	4004	5005	6006	7007	8008	9009	10010	11011	15015
3,50		455	728	909	1364	1819	2274	2728	3638	4547	5457	6366	7276	8185	9095	10004	13642
4,00		398	637	796	1194	1592	1989	2387	3183	3979	4775	5570	6366	7162	7958	8754	11937
4,50		354	566	707	1061	1415	1768	2122	2829	3537	4244	4951	5659	6366	7074	7781	10610
4,76	3/16	334	535	669	1003	1337	1672	2006	2675	3344	4012	4681	5350	6018	6687	7356	10031
5,00		318	509	637	955	1273	1592	1910	2546	3183	3820	4456	5093	5730	6366	7003	9549
6,00		265	424	531	796	1061	1326	1592	2122	2653	3183	3714	4244	4775	5305	5836	7958
6,35	1/4	251	401	501	752	1003	1253	1504	2005	2506	3008	3509	4010	4511	5013	5514	7519
7,00		227	364	455	682	909	1137	1364	1819	2274	2728	3183	3638	4093	4547	5002	6821
7,94	5/16	200	321	401	601	802	1002	1203	1604	2004	2405	2806	3207	3608	4009	4410	6013
8,00		199	318	398	597	796	995	1194	1592	1989	2387	2785	3183	3581	3979	4377	5968
9,00		177	283	354	531	707	884	1061	1415	1768	2122	2476	2829	3183	3537	3890	5305
9,53	3/8	167	267	334	501	668	835	1002	1336	1670	2004	2338	2672	3006	3340	3674	5010
10,00		159	255	318	477	637	796	955	1273	1592	1910	2228	2546	2865	3183	3501	4775
11,11	7/16	143	229	287	430	573	716	860	1146	1433	1719	2006	2292	2579	2865	3152	4298
12,00		133	212	265	398	531	663	796	1061	1326	1592	1857	2122	2387	2653	2918	3979
12,70	1/2	125	201	251	376	501	627	752	1003	1253	1504	1754	2005	2256	2506	2757	3760
14,00		114	182	227	341	455	568	682	909	1137	1364	1592	1819	2046	2274	2501	3410
14,29	9/16	111	178	223	334	446	557	668	891	1114	1337	1559	1782	2005	2228	2450	3341
15,00		106	170	212	318	424	531	637	849	1061	1273	1485	1698	1910	2122	2334	3183
15,88	5/8	100	160	200	301	401	501	601	802	1002	1203	1403	1604	1804	2004	2205	3007
16,00		99	159	199	298	398	497	597	796	995	1194	1393	1592	1790	1989	2188	2984
17,46	11/16	91	146	182	273	365	456	547	729	912	1094	1276	1458	1641	1823	2005	2735
18,00		88	141	177	265	354	442	531	707	884	1061	1238	1415	1592	1768	1945	2653
19,05	3/4	84	134	167	251	334	418	501	668	835	1003	1170	1337	1504	1671	1838	2506
20,00		80	127	159	239	318	398	477	637	796	955	1114	1273	1432	1592	1751	2387
24,00		66	106	133	199	265	332	398	531	663	796	928	1061	1194	1326	1459	1989
25,00		64	102	127	191	255	318	382	509	637	764	891	1019	1146	1273	1401	1910
27,00		59	94	118	177	236	295	354	472	589	707	825	943	1061	1179	1297	1768
30,00		53	85	106	159	212	265	318	424	531	637	743	849	955	1061	1167	1592
32,00		50	80	99	149	199	249	298	398	497	597	696	796	895	995	1094	1492
36,00		44	71	88	133	177	221	265	354	442	531	619	707	796	884	973	1326
40,00		40	64	80	119	159	199	239	318	398	477	557	637	716	796	875	1194
50,00		32	51	64	95	127	159	191	255	318	382	446	509	573	637	700	955

Hardness and Tensile Strength

HV Vickers	HRC Rockwell	HB Brinell	N/ mm²	Tons/ sq. in.
940	68			
900	67			
864	66			
829	65			
800	64			
773	63			
745	62			
720	61			
698	60			
675	59			
655	58		2200	142
650		618	2180	141
640		608	2145	139
639	57	607	2140	138
630		599	2105	136
620		589	2070	134
615	56	584	2050	133
610		580	2030	131
600		570	1995	129
596	55	567	1980	128
590		561	1955	126
580		551	1920	124
578	54	549	1910	124
570		542	1880	122
560	53	532	1845	119
550		523	1810	117
544	52	517	1790	116
540		513	1775	115
530		504	1740	113
527	51	501	1730	112
520		494	1700	110
514	50	488	1680	109
510		485	1665	108
500		475	1630	105
497	49	472	1620	105
490		466	1595	103
484	48	460	1570	102
480		456	1555	101
473	47	449	1530	99
470		447	1520	98
460		437	1485	96
458	46	435	1480	96
450		428	1455	94
446	45	424	1440	93
440		416	1420	92

HV Vickers	HRC Rockwell	HB Brinell	N/ mm²	Tons/ sq. in.
434	44	413	1400	91
423	43	402	1360	88
413	42	393	1330	86
403	41	383	1300	84
392	40	372	1260	82
382	39	363	1230	80
373	38	354	1200	78
364	37	346	1170	76
355	36	337	1140	74
350		333	1125	73
345	35	328	1110	72
340		323	1095	71
336	34	319	1080	70
330		314	1060	69
327	33	311	1050	68
320		304	1030	67
317	32	301	1020	66
310	31	295	995	64
302	30	287	970	63
300		285	965	62
295		280	950	61
293	29	278	940	61
290		276	930	60
287	28	273	920	60
285		271	915	59
280	27	266	900	58
275		261	880	57
272	26	258	870	56
270		257	865	56
268	25	255	850	56
265		252	850	55
260	24	247	835	54
255	23	242	820	53
250	22	238	800	52
245		233	785	51
243	21	231	780	50
240		228	770	50
235		223	755	49
230		219	740	48
225		214	720	47
220		209	705	46
215		204	690	45
210		199	675	44
205		195	660	43
200		190	640	41

Tolerances

1µm = 0.001mm

	Ø mm							
	> 1 ≤ 3	> 3 ≤ 6	> 6 ≤ 10	> 10 ≤ 18	> 18 ≤ 30	> 30 ≤ 50	> 50 ≤ 80	> 80 ≤ 120
Tol	µm							
e8	-14 / -28	-20 / -38	-25 / -47	-32 / -59	-40 / -73	-50 / -89	-60 / -106	-72 / -126
f6	-6 / -12	-10 / -18	-13 / -22	-16 / -27	-20 / -33	-25 / -41	-30 / -49	- 36 / -58
f7	-6 / -16	-10 / -22	-13 / -28	-16 / -34	-20 / -41	-25 / -50	-30 / -60	-36 / -71
h6	0 / -6	0 / -8	0 / -9	0 / -11	0 / -13	0 / -16	0 / -19	0 / -22
h7	0 / -10	0 / -12	0 / -15	0 / -18	0 / -21	0 / -25	0 / -30	0 / -35
h8	0 / -14	0 / -18	0 / -22	0 / -27	0 / -33	0 / -39	0 / -46	0 / -54
h9	0 / -25	0 / -30	0 / -36	0 / -43	0 / -52	0 / -62	0 / -74	0 / -87
h10	0 / -40	0 / -48	0 / -58	0 / -70	0 / -84	0 / -100	0 / -120	0 / -140
h11	0 / -60	0 / -75	0 / -90	0 / -110	0 / -130	0 / -160	0 / -190	0 / -220
h12	0 / -100	0 / -120	0 / -150	0 / -180	0 / -210	0 / -250	0 / -300	0 / -350
k10	+40 / 0	+48 / 0	+58 / 0	+70 / 0	+84 / 0	+100 / 0	+120 / 0	+140 / 0
k12	+100 / 0	+120 / 0	+150 / 0	+180 / 0	+210 / 0	+250 / 0	+300 / 0	+350 / 0
m7	+2 / +12	+4 / +16	+6 / +21	+7 / +25	+8 / +29	+9 / +34	+11 / +41	+13 / +48
js14	+/- 125	+/- 150	+/- 180	+/- 215	+/- 260	+/- 310	+/- 370	+/- 435
js16	+/- 300	+/- 375	+/- 450	+/- 550	+/- 650	+/- 800	+/- 950	+/- 1100
H7	+10 / 0	+12 / 0	+15 / 0	+18 / 0	+21 / 0	+25 / 0	+30 / 0	+35 / 0
H8	+14 / 0	+18 / 0	+22 / 0	+27 / 0	+ 33 / 0	+39 / 0	+46 / 0	+54 / 0

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