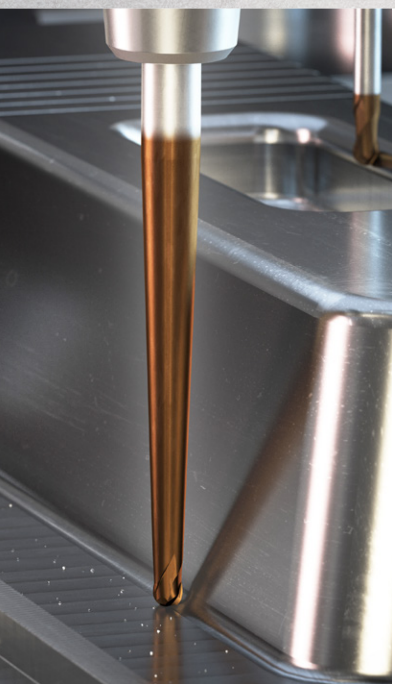
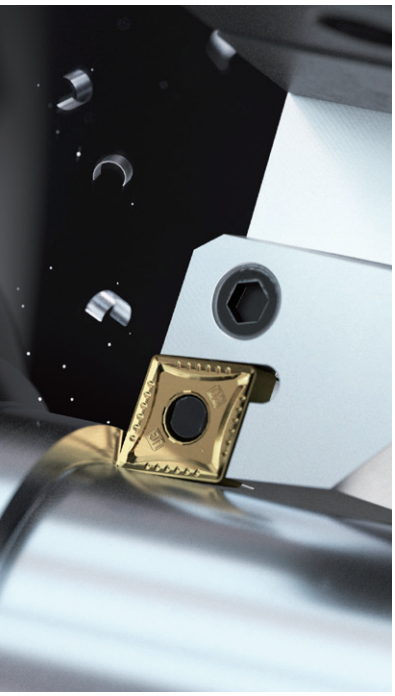
QUICK-SEARCH
YG-1 PRODUCTS!!
www.yg1.kr

BEST OF SELECTION

HIGH PERFORMANCE PRODUCTS 2023-2024

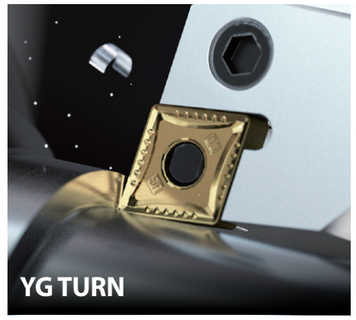






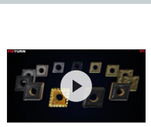

YG-1 CO., LTD.

BEST OF SELECTION
HIGH PERFORMANCE PRODUCTS



CONTENTS

YGTURN Grades



Scan this QR code to see our **Turning Grades** at work.

P Steel

Hard ↕ Tough

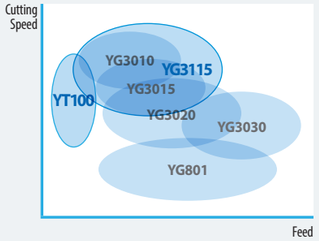
YG3010 First choice for Finishing Steel

YG3015 Balanced Productivity for Continuous cut

NEW **YG3115** First choice garde for high cutting speed in Steels

YG3020 First Choice Grade for General Steel Application

YG3030 Interrupted Cutting of Steel



P Steel

NEW **YT100** First choice for Finishing Steel

M Stainless Steel

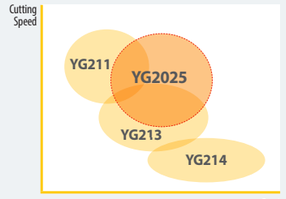
Hard ↕ Tough

YG211 High wear resistance Grade for Stainless steel

NEW **YG2025** CVD Grade for Interrupted Cutting of Stainless steel

YG213 First Choice Grade on Low Cutting Speed of Stainless steel

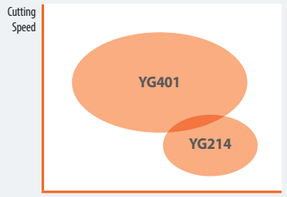
YG214 Heavy Interrupted cut for Stainless steel



S Super Alloy

ISO S10-S20

YG401 PVD Turning Grade for Heat-resistant Super alloy



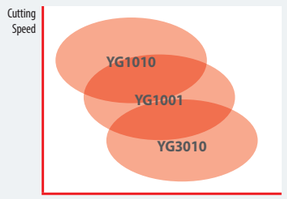
K Cast Iron

ISO K05-K15

YG1010 First Choice for Cast Iron

ISO K15-K35

YG3010 First choice for Ductile Cast Iron



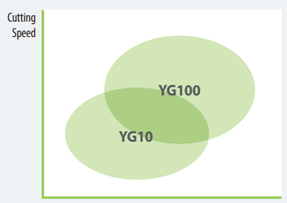
N Non-ferrous Metals

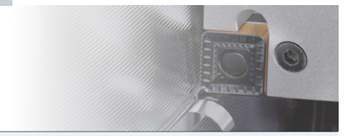
DLC

YG100 First Choice Grade for Aluminum with DLC Coating

Uncoated

YG10 Uncoated Grade for General Aluminum





YGTURN Chip breakers

Chip breakers for Steel

Finishing ↕ Roughing

-UF For Finishing

-UL Semi-Finishing and Sticky Materials

-UM Medium (for Unstable Condition)

-UG Medium (for Stable Condition)

-PWM Wiper-Medium

-UC Medium Roughing

-UR Roughing and Heavy Interrupted Cut

Chip breakers for Stainless steel

Finishing ↕ Roughing

-MF Finishing

-MM Medium

-MG General

-MR Roughing

Chip breakers for Superalloys

Finishing ↕ Roughing

-SF Finishing

-SM Medium

-SR Roughing

Chip breakers for heavy Turning

Medium ↕ Roughing

NEW **-UH** Medium heavy

NEW **-UT** Heavy roughing

Chip breakers for Non-ferrous Metals

-AL from Roughing to Finishing

Chip breakers for Cast iron

Stable ↕ Unstable

-UC Medium Roughing

-UR Roughing and Heavy Interrupted Cut

..MA Cast Iron Heavy Roughing (Flat type)

-KR Cast Iron heavy Roughing (Big K-land)

Chip breakers for Cermet

Finishing ↕ Medium

NEW **-PSF** Cermet Finishing

NEW **-C** Cermet Medium

Finishing ↕ Medium

NEW **-PF** Cermet Finishing

NEW **-PM** Cermet Medium

YG MiLL

Scan this QR code to see our **YG FM10 Mill** at work.

Milling Grades		P Steel					M Stainless steel				K Cast iron				N Non-ferrous				S Superalloys				H Hardened Steel			
		P05	P15	P25	P35	P45	M05	M15	M25	M35	K05	K15	K25	K35	N05	N15	N25	N35	S05	S15	S25	S35	H05	H15	H25	H35
PVD	YG012		012																							
PVD	YG712		712																							
PVD	YG713		713																							
PVD	YG612			612					612												612					
PVD	YG602			602					602				602							602						
PVD	YG613				613				613																	
PVD	YG501											501														
CVD	YG5020											5020														
Uncoated	YG50															50										

YG602 P20 - P35 M20 - M40 K20 - K40 S15 - S25
Universal grade for General Milling Application

YG613 P30 - P50 M30 - M40
Milling Grade for Stainless Steel Application

YG012 P10 - P30 H10 - H30
Optimized Milling Grade for Pre-Hardened & Hardened steel

YG501 K05- K25
Hard Milling grade for Cast Iron

YG712 P10 - P30
Milling Grade for Medium of Steel Application

YG5020 K01-K30
CVD grade for Cast Iron

NEW **YG612** P20 - P40 M20 - M40 S20 - S40
Specialized Multi-Nano Coated Grade with high wear resistance and chipping resistance

YG50 N05 – N20
Uncoated Milling Grade for Aluminium

–AL		• For Aluminum • Very Sharp Geometry
–ST		• For Stainless Steel, Super Alloy • Sharp Geometry
General Inserts (GN)		• First Choice for General Application
–TR		• For Hardened Steels • Reinforced Geometry
...W / ...N		• For Hardened Material and Cast Irons

YG HF4 MiLL

Scan this QR code to see our **YG HF4 Mill** at work.

Application

High feed milling, profiling, face milling, ramping, plunging, helical interpolation

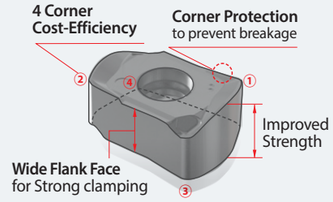
Features

- Cutter Diameter range : 16~125mm (.625"~6")
- Double-sided insert with 4 corners
- Wide flank face with reinforced insert shape
- Positive rake angle & Small entering angle

ENMX General
Carbon Steel
Low Alloy Steel
Alloy Steel

ENMX -TR
Reinforced Edge
High Alloy Steel
Hardened Steel
Cast Iron

ENMX -ST
Sharp Geometry
Stainless Steel
Sticky Material
Super Alloy

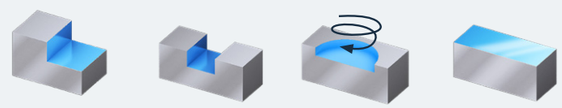


YG SM3 MiLL NEW

Features

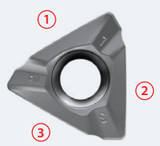
- 3 Cutting Edges for Shoulder Milling
- High Positive Helical Cutting edge
- Higher Cost Efficiency than 2 Cutting edges
- Wide selection and Optimal Machining
- with Various Cutters and Inserts

Application



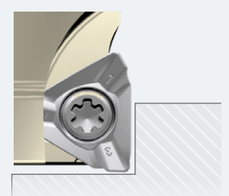
Side Cutting | Slotting | Helical Interpolation | Face Milling

Key Technology



3 Cutting Edge

High Helix



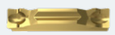
True 90 degree

YG TURN Parting & Groove

YG602 — P20 - P35 | M20 - M40 | K20 - K40 | S15 - S25

Universal grade for Parting & Groove Turn
- TiAlN PVD Coating for General Applicatiion

YG603 — M30 - M50



PVD Parting & Grooving Grade for Stainless Steel
- First Choice for stainless steel

YG602G — P20 - P35 | M20 - M40 | K20 - K40 | S15 - S25

Universal grade for Parting & Groove Turn
- TiAlN / TiN PVD Coating with Good wear resistance

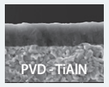
Parting & Grooving	-P		• For External Parting off & Grooving • For medium feed rate
	-N		• For External Parting off & Grooving • For low feed rate
Turning & Grooving	-Y		• For External Turning & Grooving • For medium feed rate
	NEW GL		• For External, Internal turning and grooving • Face grooving and Face turning • For low feed rate
	GM		• For External, Internal turning and grooving • Face grooving and Face turning • For medium feed rate
	RG		• For External, Internal turning and grooving • Face grooving and Face turning • Full radius Insert for profiling

※ width : 2, 3, 4 mm

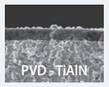
YG DRILL

Scan this QR code to see our **X-Drill** at work.

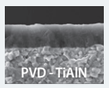
Optimized Drilling Insert Grade for Various Kinds of Material

YG602 — P20 - P35 | M20 - M40 | K20 - K40 | S15 - S25
Multi-Purpose Grade

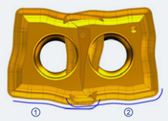
YG713 — P15 - P25
Drilling Grade for General Steel Application

YG613 — P30 - P50 | M30 - M50
Drilling Grade for Stainless Steel Application

Features
- Economic square type 4 cutting edge insert
- One kind of insert in outer and inner pocket
- Twisted coolant channel and enlarged chip gullet for better chip evacuation
- Highly durable drill body due to high hardness and optimized material
- Polished flute enables to improved chip evacuation in deeper machining

Key Technology
- Only 1 Chip formation per flute
- Full usage of all 4 corners



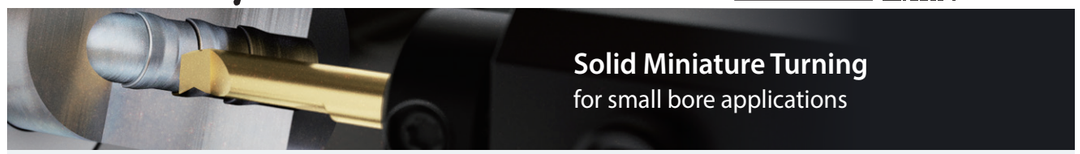
WCMX Series
Popular 3 corner drill insert
WCMX 03/04/05/06/08
Diameter Ø 16mm ~ Ø 60mm

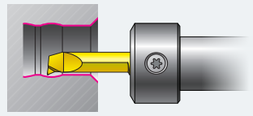
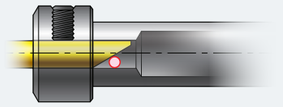
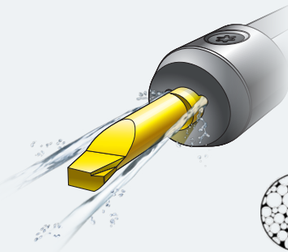
SPMX Series
Economic 4 corner drill insert
SPMX 05/06/07/09/11/14
Diameter Ø 13mm ~ Ø 50mm

SYMX Series
True 4 corner drill insert
SYMX 05, 06, 07, 08
Diameter Ø 14mm ~ Ø28mm

YG NanoCut

Scan this QR code to see our **Nanocut** at work.



Application
- Turning of Small Bore Components
- Internal Turning(Boring), Grooving and Threading

Features
- Minimum Diameter(Boring & Profiling series) : Ø 1 mm (.039")
- Internal Coolant for Longer Tool life and Enhanced Chip Evacuation
- Secure Connection Design: Pin + Slant Positioning
- 9 Geometries for Various Applications

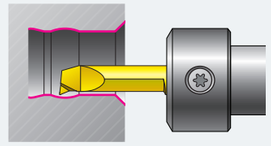
Advantages
- High Repeatability
- Longer Tool Life

Benefits
- Reduced Machine Down Time
- Lower Machining Cost

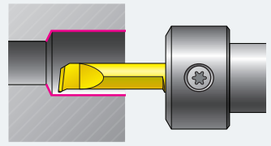
YG812 - Micro Grain Carbide Grade
P10 - P20 | M20 - M30 | K20 - K30 | S10 - S25
Submicron Grade Carbide Substrate Material for high toughness and wear resistance realizes high precision machining

NANOCUT INSERT SERIES

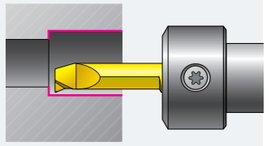
BP - Boring & Profiling



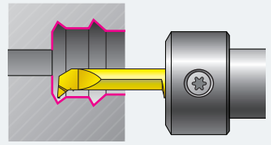
BO - Boring with Chipbreaker



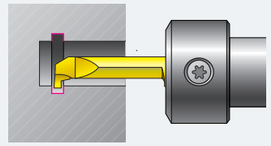
BF - 90˚Boring



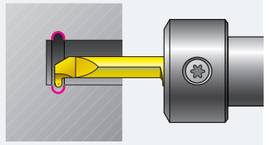
PR - Profiling



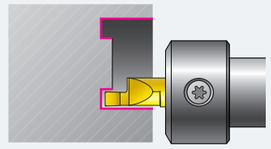
GS - Grooving Square



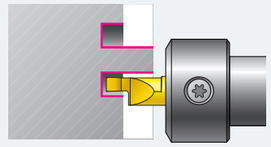
GR - Grooving Round



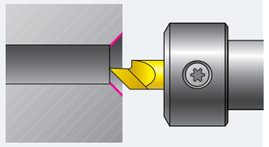
FI - Face Grooving Internal



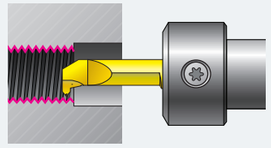
FE - Face Grooving External



CH - Chamfering



TH - Threading

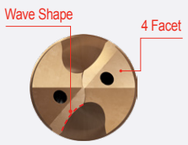


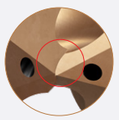
DREAM DRILLS -PRO

Scan this QR code to see our **Dream Drills Pro** at work.

FASTER CUTTING SPEED (HRc30 to HRc50)

Extremely high hardness and heat resistance due to YG-1 special Z-Coating technology





Helical Thinning
- Low Thrust
- Stable Torque
- Good Chip Breakage

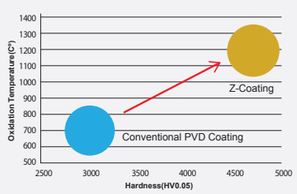
Optimized wide flute design
The unique flute structure provides good surface finish, longer tool life and requires less cutting force

FEATURES & BENEFITS

- Drilling for Carbon Steels, Alloy Steels (HB225-325), Pre-hardened Steels (HRc30~50), Cast Iron
- Wave shape cutting edge to improve chip formation for low cutting force
- Helical thinning for low thrust, stable torque and good chip breakage
- Extremely high hardness and heat resistance due to YG-1 special Z-Coating technology

RANGE

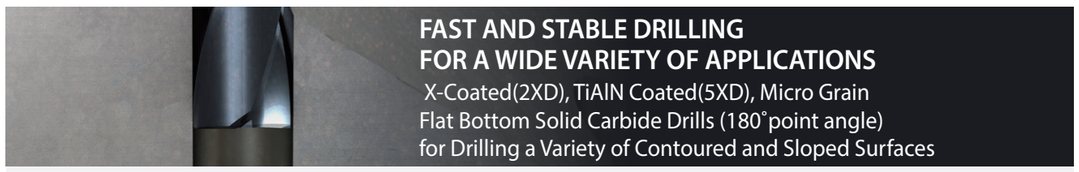
- Ø 1mm - Ø 20mm (.0393"-.7874")
- Drill Depth: 3xD, 5xD



Higher & Improved cutting conditions due to YG-1 Special Z-Coating Technology
(YG-1's Unique Silicon Based Coating: Nano-Layer Coating)
- Extremely High Hardness and Heat Resistance

DREAM DRILLS -FLAT BOTTOM

Scan this QR code to see our **Dream Drills Flat Bottom** at work.



FAST AND STABLE DRILLING FOR A WIDE VARIETY OF APPLICATIONS

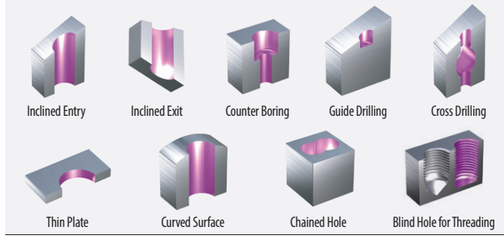
X-Coated(2XD), TiAlN Coated(5XD), Micro Grain Flat Bottom Solid Carbide Drills (180˚point angle) for Drilling a Variety of Contoured and Sloped Surfaces

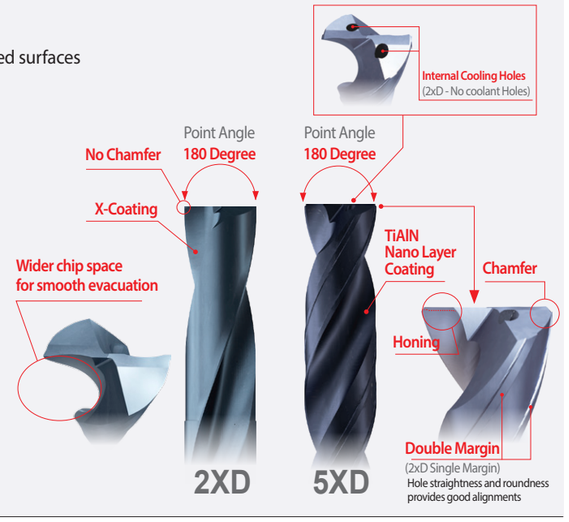
FEATURES & BENEFITS

- 180 degree point angle enables drilling of horizontal and sloped surfaces
- Excellent chip evacuation by optimized flute shape
- High strength cutting edge to improve tool life
- Can be used in a variety of drilling applications

RANGE

- Ø 3mm - Ø 20mm (.1181"-.7874")
- Drill Depth: 2XD, 5XD





DREAM DRILLS -HIGH FEED

Scan this QR code to see our **Dream Drills High Feed** at work.

INCREASE YOUR PRODUCTIVITY UP TO 2 TIMES HIGHER

H- Coated 3 Flute Solid Carbide Drills with Coolant Holes for Faster Drilling on Steels and Cast Iron

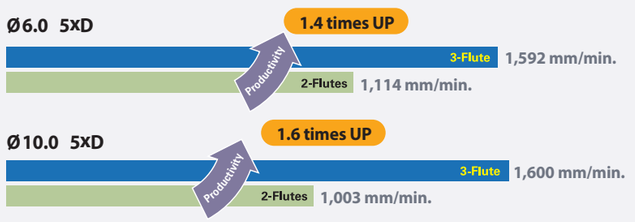
FEATURES & BENEFITS

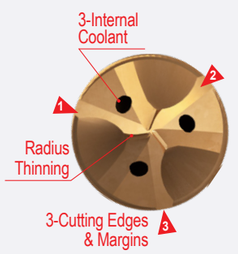
- For Carbon Steels, Alloy Steels (-HRc35), Cast Iron
- Increases productivity due to 1.5 to 2 times faster feeding speed than 2 flute drills
- Multi-layered coating delivers outstanding productivity and reliability

RANGE

- Ø 5mm - Ø 20mm (.1969"-.7874")
- Drill Depth: 3xD, 5xD

Productivity (Carbon Steel)



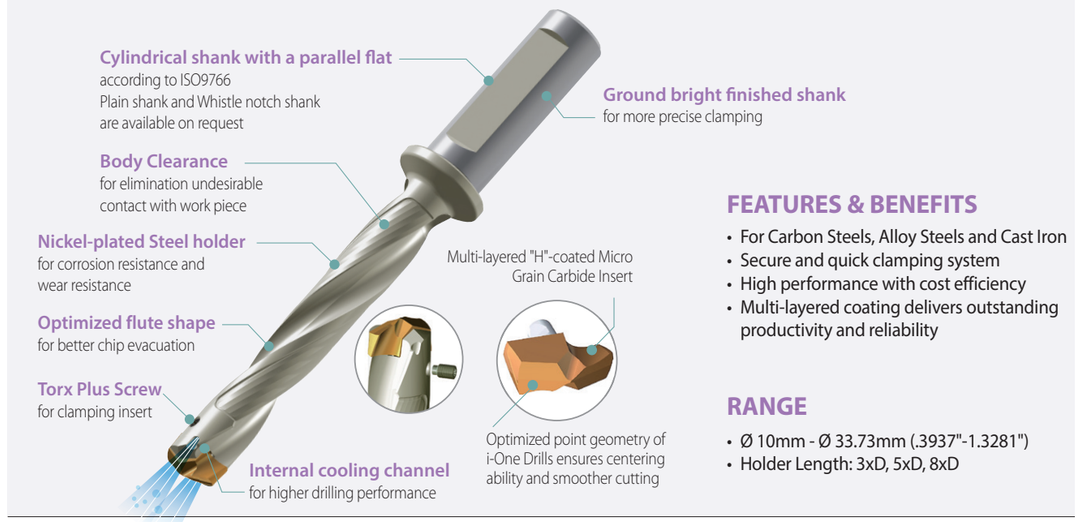


i-ONE DRILL

Scan this QR code to see our **i-One Drills** at work.

COST EFFICIENT HIGH PERFORMANCE EXCHANGEABLE DRILLING TOOLS

H- Coated Carbide Inserts and Premium Steel Holders



FEATURES & BENEFITS

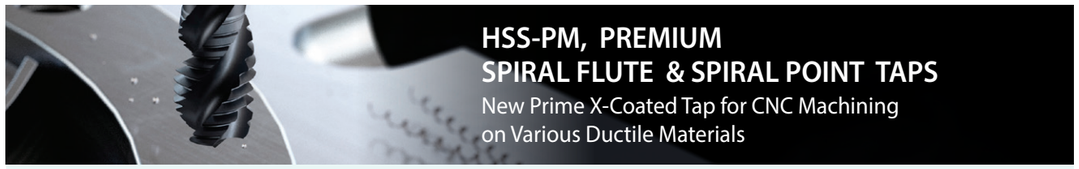
- For Carbon Steels, Alloy Steels and Cast Iron
- Secure and quick clamping system
- High performance with cost efficiency
- Multi-layered coating delivers outstanding productivity and reliability

RANGE

- Ø 10mm - Ø 33.73mm (.3937"-1.3281")
- Holder Length: 3xD, 5xD, 8xD

PRIME TAP

Scan this QR code to see our **Prime Tap** at work.



HSS-PM, PREMIUM SPIRAL FLUTE & SPIRAL POINT TAPS

New Prime X-Coated Tap for CNC Machining on Various Ductile Materials

Special grinding process provides an unique geometry on spiral flute and spiral point taps to help control chip evacuation, preventing nest formation and enhance flute space.

FEATURES & BENEFITS

YG-1 Special Thread Structure

- **Reduction in torque, wear, and the risk of over feeding** as compared to conventional taps

Extra Short Threaded Body and Recess

- **Minimize bird nesting, reduced chipping, improved thread finish**

Spiral Flute

Spiral Point

Optimized Edge Preparation

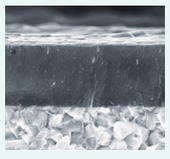
- **Consistent performance and process stability** to Prevent chipping

Optimized Flutes Geometry for Excellent Chip Flow

- **Increased tool life as a result of an optimum combination of material, geometry,** and coating which gives Unrestricted chip flow

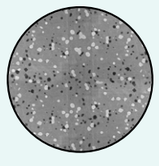
RANGE

Spiral Flute	M	M2 - M30
	MF	M4 - M30
	UNC	#4 - 1-1/2"
	UNF	#4 - 1-1/2"
Spiral Point	M	M2 - M24
	MF	M4 - M24
	UNC	#2 - 1"
	UNF	#2 - 1"



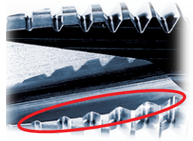
YG-1's X-Coating

YG-1's High Performance Coating for high heat and wear resistance



HSS-PM(Powder Metallurgy) Premium Taps

Powdered Metal Technology for tough-chipping resistance cutting for long tool life and reliable thread finish



Premium Cutting Edge Strength

- More controlled structure with high wear resistance
- Consistent performance and process stability with chipping resistance
- High bend strength for the tool life

Synchro TAP

Scan this QR code to see our **Synchro Tap** at work.

3 TIMES FASTER THAN CONVENTIONAL TAPS

TiCN, TiN-Coated HSS-PM Taps for High-Speed Synchronous Tapping

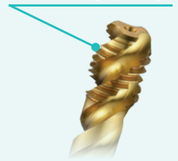
FEATURES & BENEFITS

- High productivity by high-speed machining
- Shorten thread length and higher thread reliefs
- Close tolerance concentricity eliminating oversized threads

RANGE

Spiral Flute	M/MF	M3 - M20
	UNC/UNF	#4 - 3/4"
Spiral Point	M/MF	M3 - M20
	UNC/UNF	#4 - 3/4"
Straight Flute	M/MF	M3 - M20
	UNC/UNF	#4 - 3/4"
Cold Forming	M/MF	M3 - M20
	UNC/UNF	#4 - 3/4"

Prevents chip packing by applying short thread length and high spiral angle



Tight shank tolerance for consistent thread gauging

SYNCHRO TAP with Internal Coolant

- For extreme spindle speeds
- Axial and Radial coolant for reduced heat and longer tool life at higher spindle speeds
- Better chip flow for improved thread finish

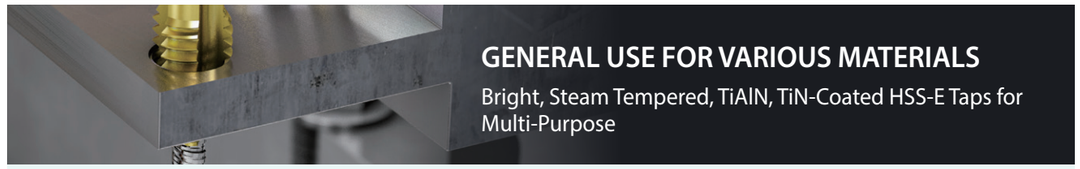
Sychro Tapping Chuck

HSK
SK
BT
CAT
MAS
STRAIGHT-K

- To compensate for synchronization errors to extend tap life and improve thread quality
- To compensate for lead tolerances of taps
- For machines with synchronized tapping cycles

Combo TAP

Scan this QR code to see our **Combo Tap** at work.



GENERAL USE FOR VARIOUS MATERIALS

Bright, Steam Tempered, TiAlN, TiN-Coated HSS-E Taps for Multi-Purpose

Combo Tap's geometry provides enough flute space resulting in smooth chip evacuation and therefore a continuous production process. Guarantee a high level of process reliability even under unfavorable conditions.

FEATURES & BENEFITS

- For Steels, Stainless steels, Cast iron and Non- ferrous materials
- Prevent over & under feeding by its optimized flank geometry
- Constant threading quality preventing oversized threading

RANGE

Spiral Flute	M	M2 - M52
	MF	M4 - M52
	UNC	#4 - 1-1/2"
	UNF	#4 - 1-1/2"
Spiral Point	M	M2 - M52
	MF	M4 - M52
	UNC	#4 - 1-1/2"
	UNF	#4 - 1-1/2"

X1-EH NEW

PREMIUM X1-EH

Exceptionally Highly Accurate Micro Tooling
New C-coated Nano Grain Solid Carbide End Mills

FEATURES & BENEFITS

- >800 different variants allow Length-to-Diameter and Stick-out optimization of Fine-Finishing applications without compromises
- Total High Accuracy setup including not only ball accuracy but shank, neck and conical transition accuracy

2 Flute Ball Nose | **2 Flute** Ball Nose with Neck | **2 Flute** Ball Nose Taper Neck | **2 Flute** Corner Radius with Neck | **2 Flute** Square with Neck

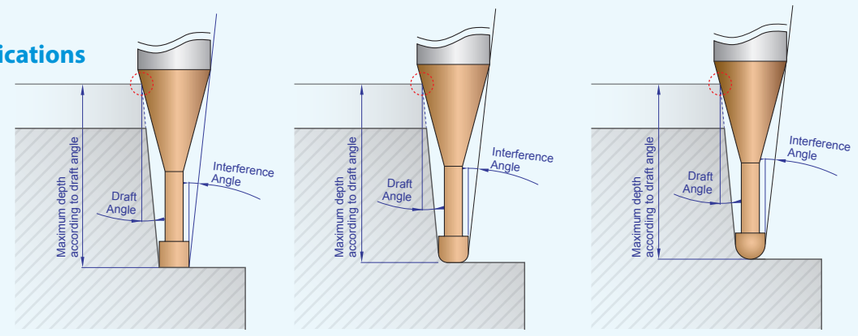
New C-Coating

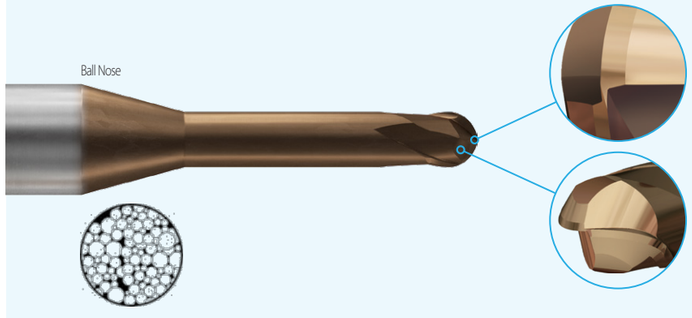
- Next Performance Level within ISO H machining
- Excellent Wear and Heat resistance beyond typical Si-based coatings

RANGE

- Square Ø 0.1mm - Ø 6mm
- Corner Radius Ø 0.2mm - Ø 3mm
- Ball Nose Ø 0.1mm - Ø 20mm

Applications





Ball Nose Gash Transition

Optimized transition from end mill center to flute for improved chip flow.

Reinforced Back Relief

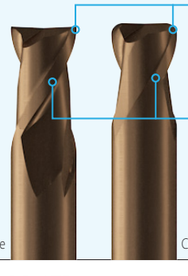
Strengthened cutting edge design for greater stability while not interfering with chip flow.

Raw Material

Newly developed fine-grain nanostructure substrate for improved thermal shock stability and higher hardness.

Special High Technology Coating

Excellent wear and heat resistance with improved thermal shock stability.
The nanolayer structure prevents the propagation of microcracks and coating elasticity promotes increased tool life.



Corner Geometries

YG-1's High performance corner geometries, including corner radius, for longer tool life in high-hardness machining.

Edge Preparation

Optimal edge preparation applied to prevent chipping and achieve excellent surface finishes with longer tool life in high speed machining.

V7 Plus

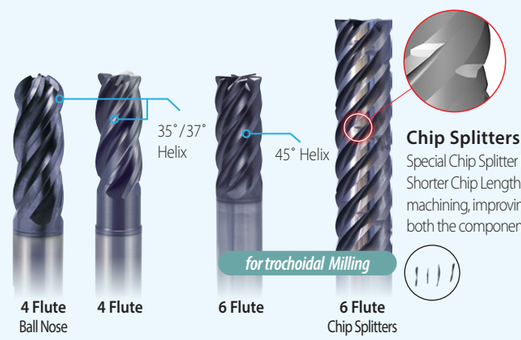
Scan this QR code to see our **V7Plus Chip Splitters** at work.

HEAVY CUTTING APPLICATIONS (-HRc40)

Y-Coated Solid Carbide End Mills for Heavy Cutting

FEATURES & BENEFITS

- High volume cutting with excellent surface finish (heavy cutting)
- Excellent on Stainless Steels, Mild Steels and Cast Iron
- Unique flute and corner design for chip formation and longer tool life
- Optimized coating for wear reduction and heat resistance
- Great performance with trochoidal machining

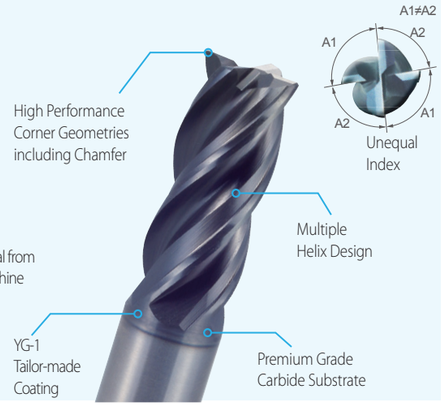


4 Flute Ball Nose | **4 Flute** | **6 Flute** | **6 Flute** Chip Splitters

Chip Splitters
Special Chip Splitter Design
Shorter Chip Length at high axial machining, improving chip removal from both the component and the machine

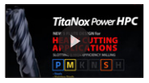
RANGE

- Square Ø 3mm - Ø 25mm (1/8 - 1")
- Corner Radius Ø 3mm - Ø 25mm (1/8 - 1")
- Ball Nose Ø 3mm - Ø 25mm (1/8 - 1")



TitaNox Power

Scan this QR code to see our **TitaNox Power** at work.



Scan this QR code to see our **TitaNox Power HPC** at work.

HIGH-SPEED MACHINING for EXOTIC MATERIALS

Y-Coated Solid Carbide End Mills for Titanium and other Exotic Materials

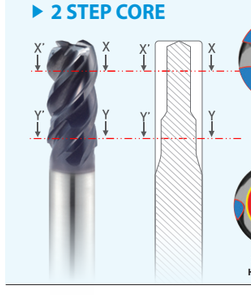
Address all your slotting, shoulder milling and ramping applications with the necked 4 flute corner radii series.
The extensive 5 fluter offering with corner chamfer and radii is optimized for side milling and trimming

FEATURES & BENEFITS

- For Titanium, Stainless Steels and also excellent for Steels
- For high-speed machining and heavy cutting
- Dual stepped-core on 4 flute, 5 flute with multiple helix

4 Flute Double Core End Mills With Corner Radius

▶ **2 STEP CORE**



SECTION X-X' Excellent chip evacuation

SECTION Y-Y' Higher rigidity

Large Chip Pocket
- Excellent Chip Evacuation.
- Minimizes Chips from Clogging
- Good Performance for Slotting Applications

Thick Core
- Higher Rigidity
- Better Stability Preventing Tool bending
- Good Performance for Shouldering Applications

RANGE

- Square Ø 6mm - Ø 25mm (1/8 - 1-1/4")
- Corner Radius Ø 6mm - Ø 25mm (1/8 - 1-1/4")
- Roughing Ø 6mm - Ø 25mm

TitaNox-Power-HPC NEW

NEW 5 FLUTE DESIGN for **HEAVY CUTTING**

- New design enhances chip space in heavy cuts, while still maintaining rigidity in peel milling
- Full eccentric relief for edge strength
- Unequal index design for Chatter-Free cutting

RANGE

- Square Ø 6mm - Ø 25mm (1/4 - 1")
- Corner Radius Ø 6mm - Ø 25mm (1/4 - 1")

Unequal Index

YG-1's High Performance Core Design

4G MILLS

Scan this QR code to see our **4G Mills** at work.

THE FIRST CHOICE for PRE-HARDENED STEELS (-HRc55)

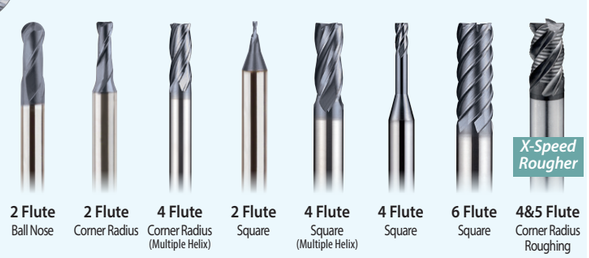
Y-Coated Solid Carbide End Mills
for Die & Mold Industries

FEATURES & BENEFITS

- Large product line with various sizes & shapes
- Edge preparation preventing chipping, achieving excellent finish, and longer tool life in high-speed cutting
- Unequal index & multiple helix exclusively designed to reduce vibration and also to achieve excellent chip evacuation

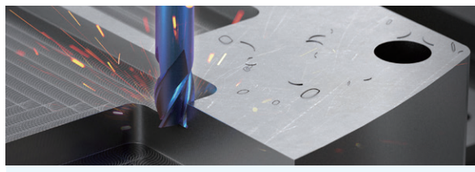
RANGE

• Square	Ø 0.1mm - Ø 25mm (.004 - 1")
• Corner Radius	Ø 0.2mm - Ø 20mm (.008 - 3/4")
• Ball Nose	Ø 0.1mm - Ø 25mm (.004 - 3/4")
• X-Speed Rougher	Ø 6mm - Ø 20mm (1/4 - 1")



X5070

Scan this QR code to see our **X5070** at work.



for HIGH-HARDENED STEELS (HRc50-70)

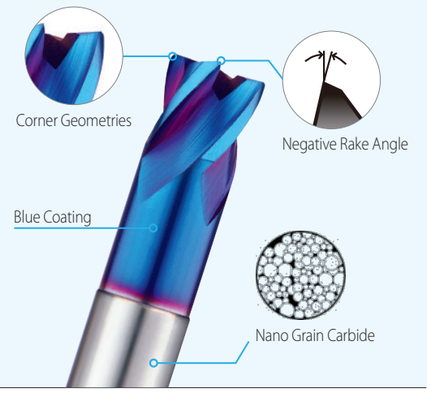
BLUE- Coated Solid Carbide End Mills
for High-Hardened Steels

FEATURES & BENEFITS

- Made from premium grade carbide material for oil mist / high-speed machining
- YG-1's customized coating, along with negative rake angles
- Excellent finished surface

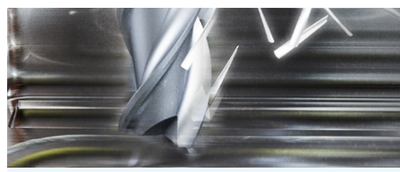
RANGE

• Square	Ø 0.1mm - Ø 25mm (.004 - 1")
• Corner Radius	Ø 0.5mm - Ø 20mm (1/16 - 1")
• Ball Nose	Ø 0.1mm - Ø 25mm (1/32 - 1/4")



ALU-POWER HPC

Scan this QR code to see our **Alu-Power HPC** at work.



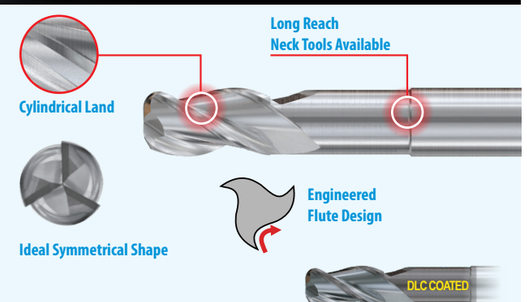
HIGH PERFORMANCE END MILLS FOR ALUMINUM

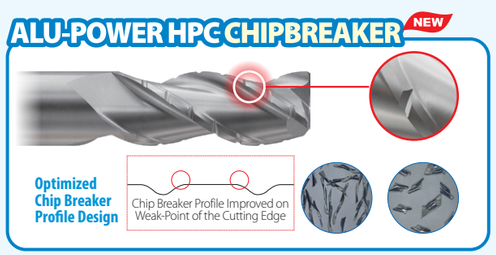
HIGH FEED, HIGH RPM and HIGH CHIP REMOVAL

DLC-Coated & Non-Coated Solid Carbide End Mills
for Aluminum Alloy, Non-Ferrous & Non-Metallic Materials

FEATURES & BENEFITS

- Designed for Aluminum Alloys used in Aerospace industries
- Special geometries applied to control weight balance for quality performance on higher RPM making an excellent surface finish through stable machining
- High corner protection made from special shape and rake angle inside the radius
- Excellent performance with high feed, high RPM, high chip removal(heavy cutting)





RANGE

※ Available in Non-coated & DLC coated items

TYPE(SERIES)	SIZE RANGE	
	METRIC	INCH
3 Flute Square	Ø3~25mm	Ø1/8~1
3 Flute Square with Neck	Ø6~20mm	Ø1/4~1
3 Flute Corner Radius	Ø6~20mm (R0.3~4mm)	Ø1/8~1(R.010~.250)
3 Flute Corner Radius with Neck	Ø6~20mm (R0.3~4mm)	Ø1/4~1(R.010~.250)
3 Flute Square with Chip Breakers	Ø6~20mm (R0.25~4mm)	Ø1/2~3/4 (R0.10~.60)
3 Flute Corner Radius with Chip Breakers	Ø6~20mm (R0.25~4mm)	Ø1/8~1 (R0.10~.60)

i-Xmill

Scan this QR code to see our **i-Xmill** at work.

HIGH PRECISION CUTTING WITH COST EFFICIENCY

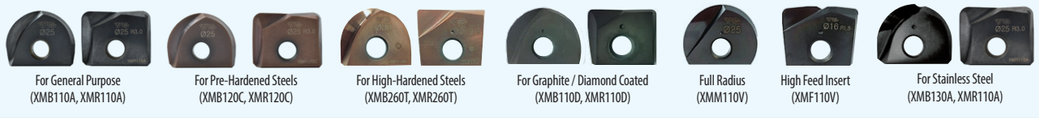
Coated Exchangeable Carbide Inserts
with both Carbide & Steel Holders for Various Materials

FEATURES & BENEFITS

- Re-generation(holder) service
- For General Purpose, Pre-Hardened Steels, High-Hardened Steels, Stainless Steels and Graphite
- Ball Nose, Corner Radius, Full Radius and also high feed types available
- Holders available in both Carbide & Steel
- Long tool life with high wear resistance
- Increased precision by tightening the tolerance and grinding the internal Screw hole of holders and Inserts

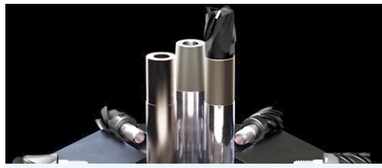
RANGE

• Ball	Ø 8mm - Ø 33mm (5/16 - 1-1/4")
• Corner Radius	Ø 8mm - Ø 33mm (5/16 - 1-1/4")



i-SMART

Scan this QR code to see our **i-SMART** at work.



EXCELLENT FLEXIBILITY by USING COPY MILLING COUPLING

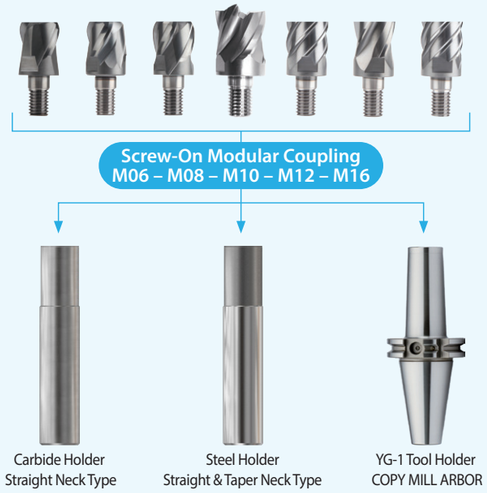
Modular Type, Y-Coated Exchangeable Carbide Milling Heads for machining Pre-Hardened Steels

FEATURES & BENEFITS

- Avoids expensive investments by using existing Copy Milling adaptor technology
- Proven performance transferred to cost effective modular system
- Optimal solution for large size or long reach Die & Mold applications

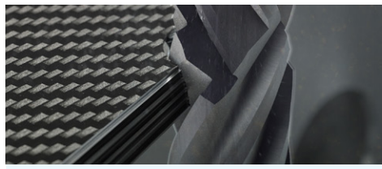
RANGE

• Square	Ø 10mm - Ø 32mm (3/8 - 1-1/4")
• Corner Radius	Ø 10mm - Ø 32mm (3/8 - 1-1/4")
• Ball Nose	Ø 10mm - Ø 32mm (3/8 - 1-1/4")



COMPOSITE MATERIALS

Scan this QR code to see our **Compression Routers** at work.



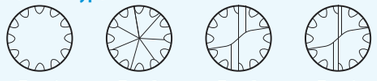
HIGH PERFORMANCE MACHINING TOOL FOR COMPOSITE MATERIAL

Specifically designed & optimized for high efficiency milling & drilling.

Diamond Coated Chip Breaker Routers

- The unique flute structure provides good surface finish, longer tool life and requires less cutting force
- Reduce delamination and uncut fibers
- Roughing and finishing processes
- Multiple flute
- Diamond coating with excellent abrasion resistance
- Fine nick type

End Teeth Type



Diamond Coated Compression Routers

- The unique flute structure provides good surface finish, longer tool life and requires less cutting force
- Reduce delamination and fibers pullout
- Roughing and finishing processes
- Diamond coating with excellent abrasion resistance

Scan QR Code
to See More Tools for COMPOSITE METERIALS

Solid Carbide Drills

A combination of perfect carbide choice with innovative design and adapted CVD coating make YG-1 CFRP drills a good choice for Composite drilling

YG TOOLING SYSTEM

Scan this QR code to see our **Power E-Hydro** at work.

HYDRAULIC CHUCK - Power E Hydro

- **Superb T.I.R. Accuracy & Repeatability**
  ≤ 0.003mm (Direct Clamping)
- **Clamping Force**
  - ID 12mm : 110 Nm
  - ID 20mm : 520 Nm
  - ID 32mm : 900 Nm
- **Basic G2.5 25,000 RPM Balanced**
- **Various Size of Reduction Sleeve**
  Ø 3mm - Ø 25mm
- **Advantage**
  - Covering up to milling(roughing & finishing)
  - No slippage or pull out of tool
  - Rigid body design to withstand side thrust
  - Avoid tool bending during machining.

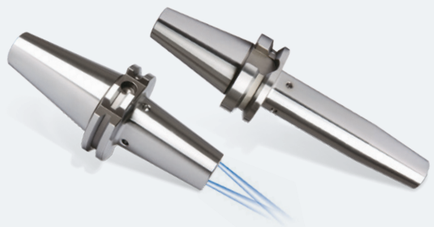
Strong Torque Power

Hydraulic Chuck I.D(mm)	Tool Shank O.D(mm)	Applicable RPM	Minimum Clamping Depth (mm)		Min. Torque Power (Nm)	
			Slim	Power E Hydro	Slim	Power E Hydro
6	6	40,000	27		16	
8	8	40,000	27		23	
10	10	40,000	32		45	
12	12	40,000	27	**41**	90	**110**
14	14	40,000	37		110	
16	16	40,000	42		185	
18	18	40,000	42		240	
20	20	40,000	42	**48**	330	**520**
25	25	25,000	48		400	
32	32	25,000	55	**57**	650	**900**

• Tool holder I.D tolerance : H6

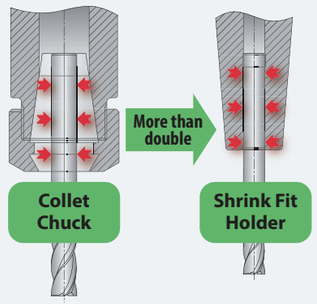
Vacuum Filling System → Removing air and gas from hydraulic oil → **Filling 100% pure hydraulic oil** → **Maintaining strong and stable torque power**

SHRINK FIT HOLDER



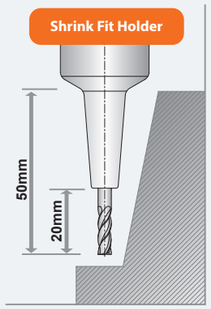
- **Superb T.I.R Accuracy**
  ≤ 0.003mm
- **Strong Torque Power**
  Min. 18Nm ~ 550Nm
- **Basic Balancing Grade**
  Min. G2.5/25,000rpm
- **Standard and Slim Design**
  - Standard 4.5°
  - Extra Slim 3.0°

Strong and Consistent Torque Power



• Achieving strong torque power by integration of chuck and tool

Deep hole Machining



MEMO

HIGH QUALITY PRODUCTS and ON TIME DELIVERY for WORLD-WIDE CUSTOMERS

Since 1982, YG-1 has been committed to quality, innovation and the unique customer experience.
Our performance and experience have granted YG-1 the global impression of one of the leading manufacturers of high quality cutting tool solutions. This global footprint expands over 75 countries, with international logistic centers, pledging to our customers to give the best service available today - and tomorrow.

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* For the more information on sales network, please contact the head office as below;

HEAD OFFICE
13-40, Songdogwahak-ro 16beon-gil, Yeonsu-gu, Incheon 21984, South Korea
Phone: +82-32-526-0909
https://www.yg1.kr
E-mail: yg1@yg1.kr

YG-1 CO., LTD.

HEAD OFFICE

13-40, Songdogwahak-ro 16beon-gil, Yeonsu-gu, Incheon 21984, South Korea

Notice YG-1 Global head office is relocated from December 2020 to a new address as above;

Phone: +82-32-526-0909

https://www.yg1.kr E-mail: yg1@yg1.kr

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