



# PRODUCT LINES 2023/24



# **HOLEMAKING TOOLS**



Cutting tools for making holes in Molds & Die, Machine Tool, Automobile and Electronic industries.

YG-1 produces Solid Carbide Dream Drills, HSS Drills(S.S. Drills & T.S. Drills), HSS-PM Multi-1 Drills, Indexable Drills and Spade Drills etc.

#### **SOLID CARBIDE DRILLS**

ITEM	TOOL MATERIAL	SIZE	WORK MATERIAL	CHARACTERISTIC
DREAM DRILLS - PRO	CARBIDE	Metric: Ø1mm - Ø20mm Inch: Ø1/8 - Ø3/4	P M K H	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.
DREAM DRILLS - GENERAL	CARBIDE	Metric: Ø1mm - Ø20mm Inch: Ø1/16 - Ø3/4	P M K H	Self-centering and chip breaking by R-thinning. Wave shape cutting edge will allow low thrust, stable torque and long tool life. Negative land on the cutting edge for reliable tool life. Optimized flute shape for strength of drill and smooth chip evacuation.
DREAM DRILLS - HIGH FEED	CARBIDE	Metric: Ø5mm - Ø20mm Inch: Ø13/64 - Ø3/4	PK	1.5-2 times faster in drilling compared to two flute carbide drills.     Self-centering and chip breaking by R-thinning and coolant holes.     Longer tool life than two flute drills due to more cutting edges.
DREAM DRILLS - FLAT BOTTOM	CARBIDE	Metric: Ø3mm - Ø20mm Inch: Ø1/8 - Ø3/4	P M K N	180 degree point angle enables drilling of horizontal surface and sloped surface.  Excellent chip evacuation by optimized flute shape. High strength cutting edge to improve tool life and versatility of drilling. Variety of drilling applications.
DREAM DRILLS - SOFT	CARBIDE	Metric: Ø0.3mm - Ø20mm	P M K	Excellent chip evacuation due to good surface treatment. Achieves excellent surface finish of work materials and long tool life.
DREAM DRILLS - INOX	CARBIDE	Metric: Ø1mm - Ø20mm Inch: Ø1/16 - Ø3/4	P M N S	The special flute shape and geometry for suitable machining of Stainless Steels. Excellent chip evacuation due to better surface treatment.  Point R-thinning makes superior centering and chip curling. Applied TiAIN coating achieves the better surface finish of materials to be cut and the longer tool life.
DREAM DRILLS - ALU	CARBIDE	Metric: Ø3mm - Ø20mm Inch: Ø1/8 - Ø3/4	N	Better finish & built-up edge preventive. Suitable for fast, efficient drilling in Aluminum and Aluminum Alloys. Optimized thinning for Aluminum & Aluminum Alloys to prevent any clogging caused by chip welding.
DREAM DRILLS - MQL TYPE	CARBIDE	Metric: Ø3mm - Ø14mm Inch: Ø1/8 - Ø1/2	PK	For deep hole drilling (10xD - 40xD). 4-Facet point for good centering capability.  Optimized special flutes are ideal for removing chips and for productive drilling.  Enhanced chip evacuation by polished flute upgraded TiAIN nano layer full coating.  MQL system compatible (Minimum Quantity Lubrication).
DREAM DRILLS - HIGH HARDENED STEEL	CARBIDE	Metric: Ø1mm - Ø20mm Inch: Ø1/8 - Ø3/4	P H	Excellent chip evacuation and finish surface of work materials. Extremely shorten work time and production cost than EDM machines. Drilling for High Hardened Steels; Quenched Steels, Tempered Steels (Under HRc70). Special geometry design for Hardened Steels. Minimum of cutting load through special thinning.
DREAM DRILLS - TITANIUM	CARBIDE	Special Item	S	YG-1 tailored surface treatment after coating for reducing frictions and excellent chip flow. Special Wave shape of Cutting Edges improve chip formations and low cutting forces. Special Thinning for chip breaking, low thrust, stable torque and long tool life. Optimized wide flute shape for smooth chip evacuation.
DREAM DRILLS - SUPER ALLOY	CARBIDE	(Metric: Ø3mm - Ø20mm)	S	Convex Cutting Edge Cam Relief Type for Reducing Cutting Load. Radius Gashing Type for Reduces Heat Generation. Edge Preparation for Increases Reliable Tool Life.
GENERAL CARBIDE DRILLS	CARBIDE	Metric: Ø1mm - Ø13mm Inch: Ø#56(.0465") - Ø1/2	P M K N	Longer tool life, suitable for drilling soft, thin and general work materials.
NC-SPOTTING DRILLS	CARBIDE	Metric: Ø3mm - Ø20mm Inch: Ø1/8 - Ø3/4	P M K N S	90°, 120° and 142° point available. For centering and chamfering.
CENTER DRILLS	CARBIDE	Metric: Ø1mm - Ø6.3mm Inch: Ø3/64 - Ø5/16	P M K	For making internal centers of work material.  Excellent performance under general working conditions.

#### **CARBIDE INSERT & HOLDER**

ITEM	TOOL MATERIAL	SIZE, TYPE	WORK MATERIAL	CHARACTERISTIC
i-ONE DRILLS	CARBIDE	Metric: Ø10mm - Ø33.73mm Inch: Ø.3937" - Ø1.3281"	P K	Micro Grain Carbide Inserts and Premium Tool Steel Holders. Secure and quick clamping system. High performance with cost efficiency. Good chip removal, high rigidity, excellent performance with high speed and feed for a higher level productivity and also precise drilling. Inserts: Multi-layered coating delivers outstanding productivity and reliability. Holders: Innovative surface treatment that improves wear resistance and reduces corrosion. High performance flute design allowing maximum chip evacuation and minimum interference. Secure and accurate seating resulting an accurate repeatability and concentricity.
i-DREAM DRILLS	CARBIDE	Metric: Ø12mm - Ø31.75mm Inch: Ø.4724" - Ø1.2500"	P M K N	Inserts: Excellent chip removal, high rigidity and excellent performance with high speed and feed for higher productivity and very precise drilling.  Holders: Innovative surface treatment that improves wear resistance and reduces corrosion. High performance flute design allowing maximum chip evacuation and minimum interference. Secure and accurate seating resulting in an accurate repeatability and concentricity.
YG X-Drill SYMX	CARBIDE	Metric: Ø17mm - Ø20mm Inch: Ø.6890"- Ø.8130"	P M K	Economic square type 4 cutting edge insert. Able to use true 4 cutting edges.  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
YG DRILL	CARBIDE	2 Series, 37 Inserts for both Metric and Inch	P M K N S	Handles multi-purpose applications and extremely efficient in covering materials as Steels, Stainless Steels and Cast Iron. (3 Grade, 2 Chipbreakers, 2 Series)

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#### **HSS DRILLS**

ITEM	TOOL MATERIAL	SIZE	WORK MATERIAL	CHARACTERISTIC
MULTI-1 DRILLS	HSS-PM	Metric: Ø1mm - Ø13mm Inch: Ø#45(.0820") - Ø1/2	P M K N S	Point shape to maximize self-centering. Flute design for the best chip evacuation. Premium HSS-PM(Powder Metallurgy) with excellent toughness.
HPD DRILLS	HSSCo8 HSS-E	Metric: Ø2mm - Ø32mm Inch: Ø#46(.0810") - Ø21/32	P M K N	High precise drilling.
GOLD-P DRILLS	HSS HSS-E HSSC08	Metric: Ø1mm - Ø14mm Inch: Ø#60(.0400") - Ø3/4	P M K N S	Competitive price but holds the same performance as Full TiN coated drills. Covers various standards of DIN, ANSI and JIS.
SUPER-GP DRILLS	SUPER-HSS	Metric: Ø1mm - Ø13mm	P M K N S	All applications regardless of machining conditions: good or poor
WORM PATTERN STRAIGHT SHANK DRILLS (PARABOLIC FLUTE)	HSS-E	Metric: Ø2mm - Ø20mm Inch: Ø5/64 - Ø1/2	P M K S	Designed for drilling deep holes, and particularly suitable for drilling deep holes without chip pecking cycle.
WORM PATTERN TAPER SHANK DRILLS (PARABOLIC FLUTE)		Metric: Ø13mm - Ø30mm		
STRAIGHT SHANK DRILLS	HSS HSS-E HSSCo8	Metric: Ø0.2mm - Ø31mm Inch: Ø1/64 - Ø1"	P M K N S	For a variety of working conditions, excellent performance.
TAPER SHANK DRILLS	HSS HSS-E HSSCo8	Metric: Ø5mm - Ø76mm Inch: Ø13/64 - Ø3-1/2	P M K N S	Enables stable work with excellent gripping power for drilling large diameters.
NC-SPOTTING DRILLS	HSS HSSCo8	Metric: Ø3mm - Ø20mm Inch: Ø1/8 - Ø1"	P M K N S	90°, 120° and 142° point available. For centering and chamfering.
CENTER DRILLS	HSS HSS-E	Metric: Ø0.5mm - Ø10mm Inch: Ø3/64 - Ø7/32	P M K N	For making internal centers of work materials, excellent performance under general working conditions.

#### **SPADE DRILLS**

ITEM	TOOL MATERIAL	SIZE	WORK MATERIAL	CHARACTERISTIC	
CDADE DDII I C	CARBIDE	Metric: Ø9.5mm - Ø47.63mm Inch: Ø.3740" - Ø1.8750"	- <b>P M K N S H</b>	Standard point and neutral rake angle for stable cutting self-centering. Chip breaking rigidity on center.	
SPADE DRILLS	SPADE DRILLS HSS-PM	Metric: Ø9.5mm - Ø114.3mm Inch: Ø.3740" - Ø4.5000"	P M K N S N	Set up time can be reduced due to changing inserts easily on the machine.	

#### **OTHER TOOLS**

ITEM	TOOL MATERIAL	SIZE	WORK MATERIAL	CHARACTERISTIC
REAMERS	HSS HSS-E	Metric: Ø2mm - Ø60mm Inch: Ø.0135" - Ø.7500"		
(STRAIGHT FLUTE, SPIRAL FLUTE)	HT FLUTE, Metric: Ø2mm - Ø20mm _ FLUTE) up to Ø12: Solid Carbide	up to Ø12: Solid Carbide over Ø12: Carbide Head Brazed	P M K N	For reaming holes after drilling.
COUNTERSINKS	HSS HSSCo8	Metric: Ø4.3mm - Ø50mm	P M K N	For deburring, chamfering and countersinking.
COUNTERBORES	HSS-E	Metric: Ø2.5mm - Ø14mm (Pilot Diameter)	PN	Counterbores with solid pilot are designed for machining screw head seats such as fillister screw caps, socket head screw caps or ejector caps in molds.

# **THREADING TOOLS**



Taps and Thread Mills for machining precision threads for all industries. Continuous expansion of high performance threading tools through rigorous development processes is at the heart of Threading products such as Synchro Tap, Prime Tap, Combo Tap, YG Tap Forming, Thread Mills, and more.

#### **SOLID CARBIDE THREAD MILLS**

ITEM	TOOL MATERIAL	SIZE	WORK MATERIAL	CHARACTERISTIC
CARBIDE THREAD MILLS	CARBIDE	Metric: M1 - M24 Inch: #1 - 1-1/4 BSP(G): G1/16-G1 NPT/NPTF:1/16 - 2-1/2	P M K N S H	The ultimate in threading versatility capable of running in a wide range of materials, in through and blind holes, left and right hand threads.  Produce full threads to the bottom the hole in various hole sizes with lower cutting forces than tapping. All with the same tool.

#### **HSS TAPS**

ITEM	TOOL MATERIAL	SIZE	WORK MATERIAL	CHARACTERISTIC
SYNCHRO TAPS	HSS-PM	Metric: M3 - M20 Inch: #4 - 3/4	PMKN	TiN, TiCN coated HSS-PM taps for high speed tapping in synchronous CNC machines. Increased thread relief allows up to 3X faster spindle speeds than conventional taps. Shorter thread lengths reduces chip evacuation issues with long chipping materials. Pair with Synchro Chuck for optimal performance yielding longer tool life and improved thread finish.
PRIME TAPS	HSS-PM	Metric: M2 - M24 Inch: #4 - 1"	P M K N	X-coated Prime tap for CNC machining on various materials.  Special grinding process provides an unique geometry to help control chip evacuation, preventing nest formation & enough flute space.
COMBO TAPS	HSS-E	Metric: M2 - M52 Inch: #2 - 1-1/2	P M K N	Effective on a very wide range of work materials. Optimized flank geometry to prevent over & underfeeding. Compensation of cutting force, which reduces tap wear and extends tool life. Enables smoother tapping with better chip evacuation.
YG TAP GENERAL	HSS HSS-E	<machine tap=""> Metric: M1.6 - M36 Inch: #0 - 1-1/8 BSW: W1/8 - W1-1/8 <hand tap=""> Metric: M1.6 - M36 Inch: #0 - 2" BSW: W3/32 - W2</hand></machine>	P M K N	General purpose taps engineered for excellent chip evacuation. Includes spiral point, spiral flute, and straight flute Hand taps.
YG TAP STEEL	HSS-E HSS-PM	Metric: M2 - M30 Inch: #2 - 2-1/2	P M S	For carbon and alloy steels. Select from different tap finishes and base materials to address the hardness and tensile strength of the workpiece.
YG TAP HARDENED	CARBIDE HSS-E HSS-PM	Metric: M2 - M30 Inch: #2 - 3/4	P M N H	Wear resistant base materials with surface treatments and coatings to handle high cutting forces associated with difficult to machine materials.  Excellent for Die & Mold, Transmissions shafts, and Gear Box Housings.
YG TAP INOX	HSS-E HSS-PM	Metric: M2 - M30 Inch: #2 - 1-1/8	P M N S	Designed with a geometry to reduce cutting forces while minimizing the effects of irregular chip formation. Choose from a range of finishes from low cost solutions to high performance anti-galling PVD coatings.
YG TAP CAST IRON	CARBIDE HSS-E HSS-PM	Metric: M2 - M30 Inch: #4 - 1-1/8 BSW: W1/8 - W1	K N H	Wear resistant geometry for abrasive cast materials. Choose maximum performance and long tool life with carbide taps or cost-effect HSS-E taps with PVD coating and surface treatment options to fit your price point.
YG TAP ALU	CARBIDE HSS-E	Metric: M2 - M30 Inch: #4 - 1-1/8 BSW: W1/8 - W1/2	P N	Large flute volume and smooth surface finish to avoid chip clogging associated with tapping wrought aluminum. Case hardened surface treatment for wear resistance needed for tapping cast aluminum.
YG TAP Ti Ni	HSS-PM	Metric: M2 - M30 Inch: #2 - 3/4	P S H	Engineered cutting edge rake angles and thread reliefs needed for the challenges of tapping nickel and titanium alloys.
YG TAP FORMING	HSS HSS-E HSS-PM	Metric: M2 - M20 Inch: #00 - 3/4	P M N	The strongest threads with greater pull strength, increased productivity, reduced breakage, longer tool life, and superior thread finish with roll form taps. Roll formed threads are created using a deformation process during the tapping cycle moving metal grains into position versus cutting.
NUT TAPS	HSS-E	Metric: M4 - M20	PKN	Continuous forward tapping cycle for high volume production of threaded nuts.
SCREW THREAD INSERT TAPS	HSS HSS-E	Metric: M2.5 - M24 Inch: #2 - 1"	PN	Tapping STI Threads for soft materials.
PIPE TAPS	HSS HSS-E	G1/16 – G1-1/2 NPT 1/16 - NPT 1 NPTF 1/16 - NPTF 2 NPS 1/8 - NPS 1 NPSF 1/8 - NPSF 1 PT 1/16 - PT 2 PF 1/8 - PF 1 PS 1/8 - PS 2	P M K N	Geometry options for tapping G(BSP) straight Whitworth pipe threads in a variety of materials.

# **MILLING TOOLS**



Cutting tools for machining Mold & Die, typically in high precision used for Automobile, Electronic, Aerospace and Medical industries. Representative products are Solid Carbide X1 END MILLS: EH, Solid Carbide X5070, Solid Carbide 4G MILLS, Solid Carbide X-POWER PRO, Solid Carbide TitaNox-POWER and Only One Coated PM60 End Mills etc.

#### **SOLID CARBIDE END MILLS**

ITEM	TOOL MATERIAL	SIZE	WORK MATERIAL	CHARACTERISTIC
X1 END MILLS: EH	CARBIDE	Metric: Ø0.1mm - Ø20mm	P H	X1 is the Premium Brand of YG-1 and EH is high precision end mill for High Hardened Steels. Extremly wide range of Shapes and Sizes. New Coating technology for highest tool life. Exceptional high accurate Micro Tooling plus h4 Shank. Improved Wear Resistance Carbide.
X5070 END MILLS	CARBIDE	Metric: Ø0.1mm - Ø25mm Inch: Ø1/32 - Ø1"	P H	Suitable for oil mist cutting and high speed cutting. Nano grain carbide.
4G MILLS	CARBIDE	Metric: Ø0.1mm - Ø25mm Inch: Ø.004" - Ø1"	P M K H	Suitable for a wide range of work materials, specifically for increasing tool life on machining the Pre-Hardened Materials, Low Hardness Materials and Cast Iron etc. High Speed Cutting for Pre-Hardened Steels up to HRc55, dry and wet cut are both recommended.  Ultra micro grain & nano grain carbide.
X-POWER PRO END MILLS	CARBIDE	Metric: Ø0.4mm - Ø25mm Inch: Ø1/32 - Ø1"	P M K H	High performance in high speed cutting or dry cutting. (For cutting materials up to HRc55)
YG5X END MILLS	CARBIDE	Special Item	P M K S	Designed for 5-asix CNC machines. Optimized to gain a larger cutting surface to machine an extensive width compared to conventional ball nose End mills.
TitaNox-POWER END MILLS	CARBIDE	Metric: Ø6mm - Ø25mm Inch: Ø1/8 - Ø1-1/4	P M K S	Excellent tools for Aerospace Industries, Energy & Power generations. Roughing and Semi finishing for universal use, also for finishing difficult-to-machine materials.  *TitaNox-POWER HPC(Metric: Ø6 - Ø25, Inch Ø1/8 - Ø1") New design enhances chip space in heavy cuts, while still maintaining rigidity in peel milling. Full eccentric relief for edge strength. YG-1 advanced coating for better wear resistance. Unequal index design for Chatter-Free cutting.
JET-POWER END MILLS	CARBIDE	Metric: Ø1mm - Ø25mm Inch: Ø1/8 - Ø1-1/2	P M S H	High performance on cutting difficult-to-cut materials, and also good surface finish on working surface.
V7 PLUS (A) END MILLS	CARBIDE	Metric: Ø3mm - Ø25mm Inch: Ø1/8 - Ø1"	P M K S	Special geometry reducing vibration and noise. Smooth finish at high speed and deep cut, also reduced chatter and harmonics for improved stability and better finishing.
ALU-POWER END MILLS	CARBIDE	Metric: Ø2mm - Ø25mm Inch: Ø1/16 - Ø2"	PKN	Excellent surface finish and superior chip removal with mirror face. Specially designed geometry with high rigidity cutting edge.
ALU-POWER HPC END MILLS	CARBIDE	Metric: Ø3mm - Ø25mm Inch: Ø1/8 - Ø1"	N	Effective chip evacuation at high feed rates with lower cutting forces than competitive products. Unique flute design and superior corner protection for tool life and risk mitigation in high feed applications.
CRX S END MILLS (DLC COATED)	CARBIDE	Metric: Ø0.5mm - Ø12mm	N	For machining Copper & Copper Alloys. Extremely hard material coated on carbide tools. Needs high cutting velocity(about 2-3 times more than uncoate carbide's velocity) for optimum tool life and the best finish.
D-POWER GRAPHITE END MILLS (DIAMOND COATED)	CARBIDE	Metric: Ø0.2mm - Ø12mm Inch: Ø1/64 - Ø1/2	N	Higher hardness and superior wear-resistance extremely increasing the tool life.
K-2 END MILLS	CARBIDE	Metric: Ø0.4mm - Ø25mm	P M K N S H	For general milling operations such as slotting, side cutting and machining dicavity. Suitable for most materials.

#### **% ISO WORK MATERIAL GUIDE**

P	M	K	N	S	Н
STEELS	STAINLESS STEELS	CAST IRON	NON-FERROUS	TITANIUM INCONEL NICKEL	HIGH HARDENED STEEL

# **MILLING TOOLS**



Cutting tools for machining Mold & Die, typically in high precision used for Automobile, Electronic, Aerospace and Medical industries. Representative products are Solid Carbide X1 END MILLS: EH, Solid Carbide X5070, Solid Carbide 4G MILLS, Solid Carbide X-POWER PRO, Solid Carbide TitaNox-POWER and Only One Coated PM60 End Mills etc.

#### **CBN END MILLS**

ITEM	TOOL MATERIAL	SIZE	WORK MATERIAL	CHARACTERISTIC
CBN END MILLS (CUBIC BORON NITRIDE)	CBN	Metric: Ø0.4mm - Ø3mm	н	Mirror Finish, tight radius tolerance(±0.005mm), high accuracy and long tool life.

#### **PCD END MILLS**

ITEM	TOOL MATERIAL	SIZE	WORK MATERIAL	CHARACTERISTIC
PCD END MILLS (POLY CRYSTALLINE DIAMOND)	PCD	Metric: Ø0.98mm - Ø40mm	N CFRP, GFRP	High productivity due to excellent wear resistance.

#### **CARBIDE INSERT & HOLDER**

ITEM	TOOL MATERIAL	SIZE, TYPE	WORK MATERIAL	CHARACTERISTIC
i-Xmill	CARBIDE	Metric: Ø8mm - Ø33mm Inch: Ø5/16 - Ø1-1/4	P M K N H	Various application type of inserts are available : for Steels, Pre-Hardened Steels, High Hardened Steels up to HRc65, Stainless Steels and Graphite.  Special geometry and coating for excellent performance.
i-SMART Modular Type	CARBIDE	Metric: Ø10mm - Ø32mm Inch: Ø3/8 - Ø1-1/4	P M K	Combining High Performance 4G Mill Geometries with well proven market standard Copy Milling screw-in coupling avoiding additional investments. Carbide and Steel holders available.
YG MILL	CARBIDE	25 Series, 188 Inserts for both Metric and Inch	P M K N S H	Inserts: Multi-purpose application and extremely efficient in covering materials including Steels, Stainless Steels and Cast Iron. (8 Grades, 5 Chipbreakers, 25 Series)  Cutters: Innovative surface treatment that improves wear resistance and reduces corrosion. Secure and accurate seating result in an accurate repeatability and concentricity.
YG HF4 Mill ENMX (High Feed)	CARBIDE	Metric: Ø16mm - Ø125mm Inch: Ø0.625" - Ø6"	P M K S H	High Feed application with Small cutter diameter Double-sided (4 Corners) Thick and Reinforced Design Wide flank for Strong clamping
YG FM10 Mill PNMU (Face Milling)	CARBIDE	Metric: Ø50mm - Ø125mm Inch: Ø2"- Ø6"	P K H	36° Entry angle face milling insert with 10 corners Double-sided (10 Corners) Curved cutting edge improving cutting force Wiper for excellent surface roughness
YG SM3 Mill TPKT (Shoulder Milling)	CARBIDE	Metric: Ø20mm - Ø200mm Inch: Ø1"- Ø6"	P M K S H	High helix cutting edge for smooth cutting and low cutting force High positive rake angle chip breaker for optimized chip curl and minimized burr Wide wiper edge for excellent surface finish Curved cutting edge for minimized mismatch

#### **HSS END MILLS**

ITEM	TOOL MATERIAL	SIZE	WORK MATERIAL	CHARACTERISTIC	
ONLY ONE COATED PM60	PM60	Metric: Ø1mm - Ø25mm Inch: Ø5/16 - Ø1-1/4	P M K N H	The ONLY ONE performs better without causing chipping than normal coated carbide end mills under the same carbide cutting conditions.	
TANK-POWER END MILLS	HSS-PM	Metric: Ø1mm - Ø25mm Inch: Ø1/8 - Ø1-1/4	P M K N	YG-1 Powered material HSS end mills hold a long tool life and better performance due to increased tool toughness and red hardness compared to normal HSS tools.	
GENERAL HSS END MILLS	HSS-E HSSC08 HSS-PM	Metric: Ø1mm - Ø50mm Inch: Ø1/32 - Ø2"	PN	Slotting, side cutting and profiling etc. Non-coated or any other coatings available.	
MILLING CUTTERS	HSS-E HSSCo8	Metric: Ø8mm - Ø200mm	PN	Various tools available for milling applications.	

# **TURNING & OTHERS**



Cutting tools for various metal working. YG-1 offers special products such as Counter Bores and Reamers etc. Customers can easily find unique products to meet full satisfaction.

#### **CARBIDE TURNING INSERT & HOLDER**

ITEM	TOOL MATERIAL	PRODUCT RANGE	APPLICATION	CHARACTERISTIC
YG TURN	Insert : Carbide Holder : Steel / Carbide	13 Grades 18 Chipbreakers with Turning Holders	General ISO Turn	Inserts: Optimized grade & geometry with extremely efficient in covering materials including Steels, Stainless Steels, Cast Iron and Super Alloy (13 Grades, 18 Chipbreakers, 30 Series)

#### **CARBIDE INSERT PARTING & GROOVING TOOLS**

ITEM	TOOL MATERIAL	PRODUCT RANGE	APPLICATION	CHARACTERISTIC
YG PARTING & GROOVE TURN	Insert : Carbide Holder : Steel	3 Grades 3 Chipbreakers with Parting & Grooving Holders	Grooving Groove Turn Parting Off	Inserts: Optimized grade & geometry with extremely efficient in covering materials including Steels, Stainless Steels and Cast Iron (3 Grades, 3 Chipbreakers, 1 Series)

#### **SPECIAL TOOLS**

STEP DRILLS (HSS & CARBIDE, MULTI-DIAMETER DRILLS)	ACME THREAD TAPS & TRAPEZOIDAL THREAD TAPS		
HSS SUB-LAND (STEP) DRILLS	CARBIDE STEP REAMERS		
NAS DRILLS	AIRCRAFT DRILLS		
CARBIDE BURNISHING DRILLS	BROACHES		
HSS DRILL TAPS	BRAZING TOOLS		
	GRINDING WHEEL		

#### **CFRP TOOLS**



## Scan QR code to see YG-1 CFRP Tools





## **TOOL HOLDERS**







CHUCK



POWER MILLING SYNCHRO TAPPING

### TOOL HOLDERS POWER E HYDRO

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ITEM		SHANK STANDARD	CLAMPING RANGE	APPLICATION	CHARACTERISTIC
	POWER E- HYDRO		Metric: Ø12, Ø20, Ø32mm Inch: 1/2, 3/4, 1-1/4	Milling (High volume, Finishing) / Drilling / Reaming / Tapping for Electronic, Mold Automobile & Aerospace products	Rigid body design Simple & Fast tool change Torque up to 900 Nm with dia. 32mm Flexible clamping range with reduction sleeves
HYDRAULIC CHUCKS	SLIM (STANDARD, LONG), MOLD & DIE, TOOL LENGTH PRE-SETTING TYPE		Metric: Ø6 - Ø32mm Inch: Ø1/4 - Ø1-1/4	Fine Finishing for Electronics, Mold Automobile & Aerospace products	Suitable for higher precision machining. Easy to clamp tool. Vibration damping.
	ULTRA SHORT		Metric: Ø20, Ø32mm Inch: Ø3/4, Ø1-1/4		
	GRINDING		Metric: Ø6 - Ø32mm	For grinding machine	
	STANDARD		Metric: Ø3 - Ø25mm Inch: Ø1/8 - Ø1-1/4	Fine Finishing for Electronics, Mold Automobile & Aerospace products	Strong clamping power. To use carbide tool. Need heating & cooling equipment.
SHRINK FIT	REINFORCED		Metric: Ø6 - Ø20mm Inch: Ø1/4 - Ø3/4		Rigid body design
HOLDER	CURVED		Metric: Ø4 - Ø12mm Inch: Ø1/8 - Ø1/2		Steep & deep area maching Rigidity in neck of flange
	EXTRA SLIM		Metric: Ø3 - Ø12mm		Steep & deep area maching
ER COLLET CHUCK	STANDARD		Metric: Ø0.5 - Ø34mm Inch: Ø0.019" - Ø1.180"	Heavy cutting and rough/fine finishing for Machinery, Electronic & Automobile products	To cover wide range of machining. To use various size of tool by use of collet.
END MILL HOLDER &	STANDARD	DIN 69871	Metric: Ø6 - Ø50mm Inch: Ø1/8 - Ø2"	Roughing finishing for Machinery, Mold	Suitable rough finishing.
SIDE LOCK SHORT TYPE		(SK) DIN 69893 (HSK) DIN 2080	Metric: Ø16, 20, 25, 32mm Inch: Ø1/2, 5/8, 3/4, 1.0", 1.25"	& Automobile products	Need to select proper tool by tool shank type.
SHELL MILL ARBOR & COMBI SHELL MILL ARBOR			Metric: Ø16, 22, 27, 32, 40 mm Inch: Ø1/2, 3/4, 1.0", 1.25", 1.5", 2.0"	Heavy cutting and rough finishing for Mold and side cutting	To use with milling cutter.
MILLING CHUCK	POWER MILLING, HIGH SPEED MILLING	(ISO) DIN228 (MT)	Metric: Ø20, 25, 32, 42 mm Inch: Ø3/4, 1.0", 1.25"	Heavy cutting and rough finishing for Machinery, Mold & Automobile products	To cover wide range of machining. To use various size of tool with the collet.
MORSE TA	MORSE TAPER ARBOR		MT 1/2/3/4	Holemaking for Machinery, Mold and Automobile products	Two kinds of type, MTA and MTB.
SK SLI	M CHUCK	(BT) ASME B5.50	Metric: Ø2mm - Ø25mm Inch: Ø0.036" - Ø1"	Rough/Fine finishing for Machinery, Electronic & Automobile products	High precision collet chuck.
SYNCHRO TAPPING CHUCK	ER COLLET TYPE	BT/CAT Dual Contact	M3 - M33	Tapping for Electronic, Machinery, Automobile & Aerospace products	High precision tapping by minimizing synchronous error with axial compensation. ER collet type
	QUICK CHANGE TYPE		Metric: Ø3mm - Ø25mm Inch: Ø1/8 - Ø1"		High precision tapping by minimizing synchronous error with axial compensation.  Tap adaptor type
	ONE STEP TAPPING		M3 - M36	Tapping for Electronic, Machinery, Automobile & Aerospace products For the chucking of inserts for threading taps	Shorter Gauge Line Compression plus tap removal at one step Better accuracy than conventional chuck
TAPPING CHUCK	ER COLLET TYPE		Metric: M3 - M27 Inch: Ø1/8 - Ø1"	Tapping for Electronic, Machinery, Automobile & Aerospace products	To use same collet for ER collet chuck and have tension and compression function.
	QUICK CHANGE TYPE		Metric: M3 - M38mm Inch: #0-80UNF - 1-3/8		To use same tap adaptor and have tension and compression function.
FACE MILL ARBOR			Metric: Ø25.4mm - Ø50.8mm Inch: Ø1" - Ø2"	Rough finishing for machinery products	To use with face milling cutter.
NC DRILL CHUCK	HEX KEY TYPE		Metric: Ø0.3mm - Ø13mm Inch: Ø0.012" - Ø0.512"	Drilling for Machinery and Electronic products	Hex. Key drill chuck. Clamping/unclamping by hex. Wrench
NO DIVILL OHOUR	KEY LESS TYPE		Metric: Ø0.3mm - Ø13mm Inch: Ø0.012" - Ø0.512"		Key-less NPU drill chuck. Clamping/unclamping by spanner
BORING SYSTEM			-	Boring for Automobile, Aerospace and Ship-building products	Modular construction. To use ISO standard insert
				Assemble screw-in milling cutters with	Simple & Fast tool change



**COPY MILL ARBOR** 

INDEXABLE DRILL HOLDER

Simple & Fast tool change

High performance with cost efficiency

Secure and quick clamping
High performance with cost efficiency

Able to use with YG-1 ONE DRILLS

Assemble screw-in milling cutters with

thread. Roughing, Finishing

For carbon steels, alloy steels

and cast iron

#### **HEAD OFFICE**

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

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

M5 - M16

Metric: Ø20, 25, 32, 40mm

 $<sup>\</sup>hbox{\rm * For the more information on sales network, please contact the head office as below;}\\$