



# **PRODUCT LINES** 2022/23





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	PMKH	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	PK	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	PMK	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	Ν	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	PH	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	PMKN	Longer tool life, suitable for drilling soft, thin and general work materials.
NC-SPOTTING DRILLS	CARBIDE	Metric: Ø3mm - Ø20mm Inch: Ø1/8 - Ø3/4	PMKNS	90°, 120° and 142° point available. For centering and chamfering.
CENTER DRILLS	CARBIDE	Metric: Ø1mm - Ø6.3mm Inch: Ø3/64 - Ø5/16	PMK	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 DRILL	CARBIDE	2 Series, 37 Inserts for both Metric and Inch	PMKNS	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 HSSCo8	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	PMKS	Designed for drilling deep holes, and particularly suitable for drilling deep
WORM PATTERN TAPER SHANK DRILLS (PARABOLIC FLUTE)	-	Metric: Ø13mm - Ø30mm		holes without chip pecking cycle.
STRAIGHT SHANK DRILLS	HSS HSS-E HSSCo8	Metric: Ø0.2mm - Ø31mm Inch: Ø1/64 - Ø1"	PMKNS	For a variety of working conditions, excellent performance.
TAPER SHANK DRILLS	HSS HSS-E HSSCo8	Metric: Ø5mm - Ø76mm Inch: Ø13/64 - Ø3-1/2	PMKNS	Enables stable work with excellent gripping power for drilling large diameters.
NC-SPOTTING DRILLS	HSS HSSCo8	Metric: Ø3mm - Ø20mm Inch: Ø1/8 - Ø1"	PMKNS	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	
	CARBIDE	Metric: Ø9.5mm - Ø47.63mm Inch: Ø.3740" - Ø1.8750"	P M K N S H	Standard point and neutral rake angle for stable cutting self-centering. Chip breaking rigidity on center.	
SPADE DRILLS	HSS-PM	Metric: Ø9.5mm - Ø114.3mm Inch: Ø.3740" - Ø4.5000"		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)	CARBIDE	Metric: Ø2mm - Ø20mm up to Ø12: Solid Carbide over Ø12: Carbide Head Brazed Inch: Ø.0280" - Ø.6299"	P M K N	For reaming holes after drilling.
COUNTERSINKS	HSS HSSCo8	Metric: Ø4.3mm - Ø50mm	PMKN	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.



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	PMKNSH	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	P M K N	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.
<b>PRIME TAPS</b>	HSS-PM	Metric: M2 - M24 Inch: #4 - 1"	PMKN	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	PMKN	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	<pre><machinetap> Metric: M1.6 - M36 Inch: #0 - 1-1/8 BSW: W1/8 - W1-1/8 <handtap> Metric: M1.6 - M36 Inch: #0 - 2" BSW: W3/32 - W2</handtap></machinetap></pre>	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	PMS	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	PMNS	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	KNH	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	P K N	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"	P N	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.



Cutting tools for machining Mold & Die, typically in high precision used for Automobile, Electronic, Aerospace and Medical industries. Representative products are 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
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"	РМКН	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(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 - Ø32mm 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 uncoated 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 die cavity. Suitable for most materials.

#### **\* ISO WORK MATERIAL GUIDE**

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

## **MILLING TOOLS**



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#### **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	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.
<b>YG HF4 Mill ENMX</b> (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
<b>YG FM10 Mill PNMU</b> (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

#### **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 HSSCo8 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
YGTURN	Insert : Carbide Holder : Steel / Carbide	13 Grades 18 Chipbreakers with Turning Holders	General ISOTurn	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 GrooveTurn 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**

**TOOL HOLDERS** 



POWER E HYDRO SHRINK FIT HOLDER POWER MILLING SYNCHRO TAPPING CHUCK CHUCK

#### SHANK STANDARD ITEM **CLAMPING RANGE** APPLICATION CHARACTERISTIC Milling (High volume, Finishing) / Rigid body design POWER Metric: Ø12, Ø20, Ø32mm Drilling / Reaming / Tapping for Simple & Fast tool change Electronic, Mold Automobile & Torque up to 900 Nm with dia. 32mm E- HYDRO Inch: 1/2, 3/4, 1-1/4 Aerospace products Flexible clamping range with reduction sleeves SLIM (STANDARD, LONG), HYDRAULIC Metric: Ø6 - Ø32mm MOLD & DIE, CHUCKS Inch: Ø1/4 - Ø1-1/4 Fine Finishing for Electronics, Mold Suitable for higher precision machining. TOOL LENGTH Automobile & Aerospace products Easy to clamp tool. Vibration damping. PRE-SETTING TYPE Metric: Ø20, Ø32mm ULTRA SHORT Inch: Ø3/4, Ø1-1/4 GRINDING Metric: Ø6 - Ø32mm For grinding machine Metric: Ø3 - Ø25mm Strong clamping power. To use carbide tool. **STANDARD** Need heating & cooling equipment. Inch: Ø1/8 - Ø1-1/4 Metric: Ø6 - Ø20mm REINFORCED Riaid body design SHRINK FIT Fine Finishing for Electronics, Mold Inch: Ø1/4 - Ø3/4 CHUCK Automobile & Aerospace products Metric: Ø4 - Ø12mm Steep & deep area maching MONO CURVED Inch: Ø1/8 - Ø1/2 Rigidity in neck of flange **EXTRA SLIM** Metric: Ø3 - Ø12mm Steep & deep area maching Heavy cutting and rough/fine **ER COLLET** Metric: Ø0.5 - Ø34mm To cover wide range of machining. **STANDARD** finishing for Machinery, Electronic CHUCK Inch: Ø0.019" - Ø1.180" To use various size of tool by use of collet. & Automobile products Metric: Ø6 - Ø50mm **END MILL HOLDER** STANDARD DIN 69871 Inch: Ø1/8 - Ø2" Roughing finishing for Machinery, Suitable rough finishing. (SK) Mold & Automobile products Need to select proper tool by tool shank type. Metric: Ø16, 20, 25, 32mm SIDE LOCK ARBORS SHORT TYPE Inch: Ø1/2, 5/8, 3/4, 1.0", 1.25 DIN 69893 Metric: Ø16, 22, 27, 32, 40 mm (HSK) **SHELL MILL ARBOR &** Heavy cutting and rough finishing Inch: Ø1/2, 3/4, 1.0", To use with milling cutter. COMBI SHELL MILL ARBOR for Mold and side cutting DIN 2080 1.25", 1.5", 2.0" (ISO) POWER MILLING Heavy cutting and rough finishing MILLING Metric: Ø20, 25, 32, 42 mm To cover wide range of machining. CHUCK, HIGH SPEED **DIN228** for Machinery, Mold & Automobile products CHUCK Inch: Ø3/4, 1.0", 1.25 To use various size of tool with the collet. MILLING CHUCK (MT) Holemaking for Machinery, JIS B6339 MORSE TAPER ARBOR MT 1/2/3/4 Two kinds of type, MTA and MTB. Mold and Automobile products (BT) Metric: Ø2mm - Ø25mm Rough/Fine finishing for Machinery, SK SLIM CHUCK High precision collet chuck. ASME B5.50 Inch: Ø0.036" - Ø1" Electronic & Automobile products (CAT) High precision tapping by minimizing ER COLLET TYPE M3 - M33 synchronous error with axial compensation. BT/CAT ER collet type Tapping for Electronic, Machinery, Dual Contact Automobile & Aerospace products High precision tapping by minimizing **SYNCHRO** Metric: Ø3mm - Ø25mm QUICK CHANGE TYPE synchronous error with axial compensation. TAPPING Inch: Ø1/8 - Ø1' Tap adaptor type CHUCK Tapping for Electronic, Machinery, Shorter Gauge Line Automobile & Aerospace products **ONE STEP TAPPING** M3 - M36 Compression plus tap removal at one step For the chucking of inserts for Better accuracy than conventional chuck threading taps **ER COLLET** To use same collet for ER collet chuck and Metric: M3 - M27 Ø1/8 - Ø1" Inch: TAPPING TYPE have tension and compression function. Tapping for Electronic, Machinery, Automobile & Aerospace products CHUCK QUICK CHANGE Metric: M3 - M38mm Inch: #0-80UNF - 1-3/8 To use same tap adaptor and have tension and compression function. TYPE Rough finishing for machinery Metric: Ø25.4mm - Ø50.8mm FACE MILL ARBOR To use with face milling cutter. Inch: Ø1" - Ø2' products Metric: Ø0.3mm - Ø13mm Hex. Key drill chuck. HEX KEY TYPE Inch: Ø0.012" - Ø0.512" Clamping/unclamping by hex. Wrench Drilling for Machinery NC DRILL CHUCK Metric: Ø0.3mm - Ø13mm and Electronic products Key-less NPU drill chuck. **KEY LESS TYPE** Inch: Ø0.012" - Ø0.512" Clamping/unclamping by spanner Boring for Automobile, Aerospace Modular construction. **BORING SYSTEM** and Ship-building products To use ISO standard insert Assemble screw-in milling cutters Simple & Fast tool change COPY MILL ARBOR M5 - M16 High performance with cost efficiency with thread. Roughing, Finishing Able to use with YG-1 ONE DRILLS For carbon steels, alloy steels INDEXABLE DRILL HOLDER Metric: Ø20, 25, 32, 40mm Secure and guick clamping and cast iron High performance with cost efficiency



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

#### **HEAD OFFICE**

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