

YU-XP19 INCH / METRIC



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X-POWER **PRO**

PERFORMANCE UPGRADE
Y-COATED SOLID CARBIDE END MILLS
for Pre-Hardened Steels up to HRC55
for Mold & Die
for Dry & Wet Cutting





X-POWER ^{PRO}

Performance Upgrade

- Achieved from several tests to apply the most optimal technology
- New coating, raw material, honing technology

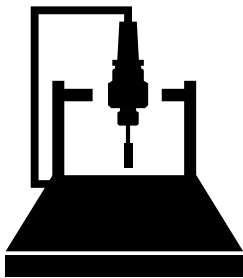
Work Material

- Pre-Hardened Steels up to HRc 55, and Cast Iron



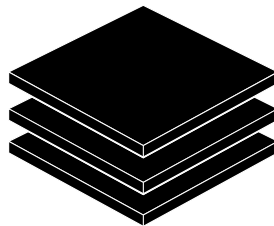
For Mold & Die Industries

- Plastic injection, die casting, military parts, automotive parts, electronic parts, etc.



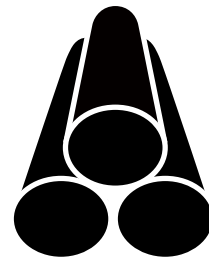
Honing

Advanced honing technology system made from YG-1



Coating

The optimal coating applied, chosen by several tests of different coating technologies



Raw Material

Made from high performance raw material with better quality

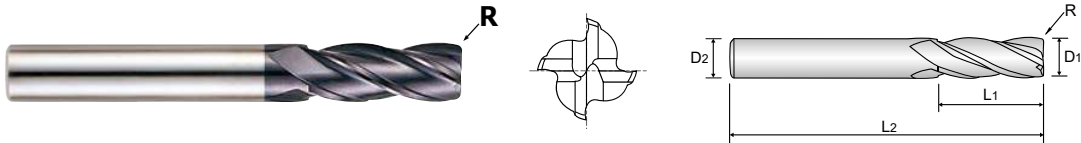


Y-COATED SOLID CARBIDE END MILLS

4 FLUTE REGULAR LENGTH CORNER RADIUS RADIUS

GM649 PLAIN SHANK

- Designed to machine tool steel, alloy steel, mold steel and other high hardened materials.
- Superior workpiece finishes.
- Increased feed rate.



Mill Dia. Tolerance(inch)	Shank Dia. Tolerance
0 ~ -.0012	0 ~ -.0003

INCH

Unit : inch

EDP No.	Corner Radius R (±.001)	Mill Diameter D1	Shank Diameter D2	Length of Cut L1	Overall Length L2
GM649004	R.008	1/16	1/4	3/16	2-1/4
GM649008	R.01	1/8	1/4	1/2	2-1/4
GM649901	R.02	1/8	1/4	1/2	2-1/4
GM649012	R.01	3/16	1/4	5/8	2-1/2
GM649903	R.02	3/16	1/4	5/8	2-1/2
GM649904	R.03	3/16	1/4	5/8	2-1/2
GM649016	R.01	1/4	1/4	3/4	3
GM649905	R.02	1/4	1/4	3/4	3
GM649906	R.03	1/4	1/4	3/4	3
GM649020	R.02	5/16	5/16	13/16	3
GM649907	R.03	5/16	5/16	13/16	3
GM649908	R.06	5/16	5/16	13/16	3
GM649024	R.02	3/8	3/8	1	3
GM649910	R.03	3/8	3/8	1	3
GM649911	R.06	3/8	3/8	1	3
GM649912	R.09	3/8	3/8	1	3
GM649028	R.02	7/16	7/16	1	4
GM649916	R.03	7/16	7/16	1	4
GM649917	R.06	7/16	7/16	1	4
GM649032	R.02	1/2	1/2	1	4
GM649913	R.03	1/2	1/2	1	4
GM649914	R.06	1/2	1/2	1	4
GM649915	R.09	1/2	1/2	1	4

P				H	M	K	N			S	
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels	High Hardened Steels	Stainless Steels	Cast Iron	Copper	Graphite	Aluminum	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45 HRc45~55	HRc55~70							
○	◎	◎	◎	○	○	○					

◎ : Excellent ○ : Good



GM639, GM649, GM212

Y-COATED SOLID CARBIDE END MILLS

4 FLUTE CORNER RADIUS - **SIDE CUTTING**

RPM = rev./min.

FEED = inch/min.

MATERIAL	P					
	"CARBON STEELS ALLOY STEELS CAST IRON"		"ALLOY STEELS TOOL STEELS"		HARDENED STEELS	
HARDNESS	~ HRc30		HRc30 ~ HRc50		HRc50 ~ HRc55	
STRENGTH	~ 1000N/mm²		1000 ~ 1750N/mm²		1750 ~ 2000N/mm²	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED
1/4	2890	9.4	2310	7.8	1510	3.6
5/16	2200	9.9	1740	7.8	1160	3.6
3/8	1850	9.9	1510	7.8	920	3.6
1/2	1510	7.8	1280	6.9	770	3.1
	