



CARBIDE

Being the best through innovation



X5070 END MILLS

- High Hardened Steels HRc45 to HRc70, High Speed Machining, Dry Cutting

CARBIDE, 6&8 FLUTE 45° HELIX CORNER RADIUS

- ▶ Designed to machine high hardened materials.
- ▶ Suitable for dry cutting, high speed cutting due to newly developed raw-material and new coating.
- ▶ Excellent workpiece finish.
- ▶ Deep slotting is possible by reduced neck.
- ▶ Corner radius for preventing the chipping in high speed machining.
- ▶ Higher wear-resistance.

CBN END MILLS

i-Xmill END MILLS

i-SMART MODULAR TYPE END MILLS

X5070 END MILLS

4G MILL END MILLS

X-POWER END MILLS

JET-POWER END MILLS

TiTaNox -POWER END MILLS

V7 PLUS A END MILLS

V7 MILL INOX END MILLS

ALU-POWER HPC END MILLS

ALU-POWER END MILLS

D-POWER GRAPHITE END MILLS

D-POWER CFRP END MILLS

ROUTERS CFRP

STANDARD CARBIDE END MILLS

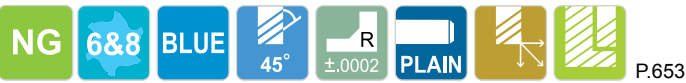
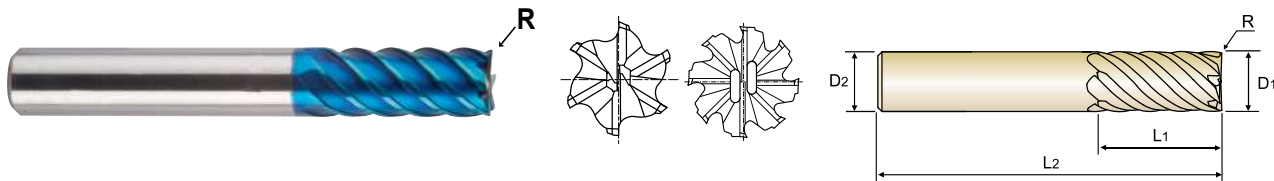
ONLY ONE COATED PM60 END MILLS

SINE -POWER END MILLS

TANK-POWER END MILLS

STANDARD COBALT & HSS END MILLS

TECHNICAL DATA



◆ U.S.A Stock

Unit : Inch

EDP No.	Corner Radius	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
	R	D1	D2	L1	L2	
G85116	R.02	1/4	1/4	1/2	2-1/4	6
G85120	R.02	5/16	5/16	3/4	2-1/2	6
G85125	R.03	3/8	3/8	7/8	2-7/8	6
G85133	R.03	1/2	1/2	1	3-1/4	6
G85140	R.03	5/8	5/8	1-1/4	3-5/8	6
G85141	R.06	5/8	5/8	1-1/4	3-5/8	6
G85148	R.03	3/4	3/4	1-1/2	4-1/8	8
G85149	R.06	3/4	3/4	1-1/2	4-1/8	8
G85164	R.03	1	1	1-3/4	4-1/4	8
G85165	R.06	1	1	1-3/4	4-1/4	8
G85167	R.03	1	1	4-1/8	7	8
G85168	R.06	1	1	4-1/8	7	8

The original bright blue color may discolor during use, however, the performance will not be negatively affected

Size	Corner Radius Tolerance (Inch)	Mill Dia. Tolerance (Inch)	Shank Dia. Tolerance
up to Ø1/4	±.0002	0~- .0005	h6
over Ø1/4	±.0004	0~- .0006	

◎ : Excellent ○ : Good

P				H	M	K	N					S	
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels	High Hardened Steels	Stainless Steels	Cast Iron	Copper	Graphite	Aluminum	Acrylic	CFRP	Titanium	High Temperature Alloy
~HRC20	HRC20~30	HRC30~40	HRc40~45 HRc45~55	HRc55~70									
		○	○	◎	◎								



RECOMMENDED CUTTING CONDITIONS

HSS

CARBIDE, 4 FLUTE STUB LENGTH CORNER RADIUS

CBN
END MILLS

i-Xmill
END MILLS

i-SMART
MODULAR
TYPE END MILLS

X5070
END MILLS

4G MILL
END MILLS

X-POWER
END MILLS

JET-POWER
END MILLS

TitaNox
-POWER
END MILLS

V7 PLUS A
END MILLS

V7 MILL INOX
END MILLS

ALU-POWER
HPC
END MILLS

ALU-POWER
END MILLS

D-POWER
GRAPHITE
END MILLS

D-POWER
CFRP
END MILLS

ROUTERS
CFRP

STANDARD
CARBIDE
END MILLS

ONLY ONE
COATED PM60
END MILLS

SINE -POWER
END MILLS

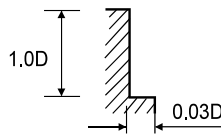
TANK-POWER
END MILLS

STANDARD
COBALT & HSS
END MILLS

TECHNICAL
DATA

G850 SERIES

MATERIAL	P						H					
	ALLOY STEELS HEAT RESISTANT STEELS		HARDENED STEELS				HIGH HARDENED STEELS					
	HRC30 ~ HRC40		HRC40 ~ HRC50		HRC50 ~ HRC55		HRC55 ~ HRC60		HRC60 ~ HRC65		HRC65 ~ HRC70	
HARDNESS DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1/16	41950	69.4	32750	49.6	22050	33.3	18250	20.6	13850	12.7	11950	9.1
1/8	20600	52.1	16350	37.2	10850	25.0	9000	15.5	7100	9.5	6050	6.9
3/16	16500	66.2	13100	49.5	8700	33.0	6700	19.1	5350	12.2	4650	8.9
1/4	12400	58.1	9800	41.8	6500	28.2	5000	16.6	3950	10.4	3500	7.8
5/16	9950	59.6	7850	42.8	5250	28.6	4050	16.6	3250	10.6	2800	7.6
3/8	8200	57.9	6450	41.6	4300	27.8	3350	15.8	2700	10.3	2300	7.2
1/2	6300	52.2	4950	37.4	3300	24.9	2500	14.3	2000	9.0	1750	6.5
5/8	4950	47.7	3950	35.1	2600	23.0	2000	13.2	1600	8.5	1400	6.3
3/4	4100	43.0	3250	32.0	2150	21.5	1700	12.7	1350	8.2	1150	5.9

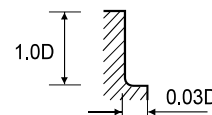
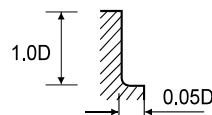


RPM = rev./min.
FEED = inch/min.

CARBIDE, 6&8 FLUTE 45° HELIX CORNER RADIUS

G851 SERIES

MATERIAL	P						H					
	ALLOY STEELS HEAT RESISTANT STEELS		HARDENED STEELS				HIGH HARDENED STEELS					
	HRC30 ~ HRC40		HRC40 ~ HRC50		HRC50 ~ HRC55		HRC55 ~ HRC60		HRC60 ~ HRC65		HRC65 ~ HRC70	
HARDNESS DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1/4	23450	199.2	22200	182.2	15100	182.1	12750	122.7	9900	78.0	7550	53.9
5/16	20650	191.3	19600	174.8	13200	171.8	11150	115.3	8700	73.3	6600	51.2
3/8	17900	183.4	17000	167.3	11350	161.6	9500	108.0	7450	68.7	5700	48.5
1/2	12300	167.6	11800	152.4	7550	141.2	6250	93.2	5000	59.4	3800	43.0
5/8	10100	159.1	9800	147.2	6050	135.0	5050	91.5	4050	49.8	3000	34.3
3/4	8850	140.7	8600	133.3	5300	123.2	4400	82.7	3550	43.7	2650	30.0
1	6300	103.9	6150	105.5	3800	99.7	3150	65.1	2500	31.4	1900	21.5



※ The Feed, in long & extra long types, should be reduced by around 50%.

RPM = rev./min.
FEED = inch/min.