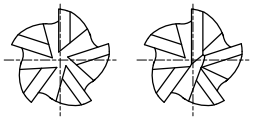
CARBIDE END MILLS

E5066 SERIES PLAIN SHANK

CARBIDE, 5 FLUTE 45° HELIX STUB LENGTH

- Designed to machine stainless steels, inconels and other alloys.
- The new design of stub length allows cutting at maximum speeds and feeds with minimum deflection
- 5 Flute and 45° medium helix allow harmonic balance and smooth cutting.



up to Ø3/16 over Ø3/16

MG 5 45° PLAIN P.1162

Unit : Inch

EDP No.					Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	TiN COATED	TiCN COATED	YG:TYLON F	YG:TYLON E				
85558	85558TN	85558TC	85558TF	85558TE	1/8	1/8	1/4	1-1/2
85561	85561TN	85561TC	85561TF	85561TE	5/32	3/16	5/16	2
85565	85565TN	85565TC	85565TF	85565TE	3/16	3/16	5/16	2
85570	85570TN	85570TC	85570TF	85570TE	7/32	1/4	3/8	2
85573	85573TN	85573TC	85573TF	85573TE	1/4	1/4	3/8	2
85579	85579TN	85579TC	85579TF	85579TE	5/16	5/16	7/16	2
85584	85584TN	85584TC	85584TF	85584TE	3/8	3/8	1/2	2
85588	85588TN	85588TC	85588TF	85588TE	7/16	7/16	9/16	2-1/2
85593	85593TN	85593TC	85593TF	85593TE	1/2	1/2	5/8	2-1/2
85595	85595TN	85595TC	85595TF	85595TE	5/8	5/8	3/4	3
85598	85598TN	85598TC	85598TF	85598TE	3/4	3/4	1	3
85600	85600TN	85600TC	85600TF	85600TE	1	1	1-1/4	3

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

◎ : 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									
◎	◎	◎	○			◎	○	○					○	○

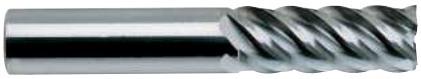
CBN END MILLS
i-Xmill END MILLS
i-SMART MODULAR TYPE END MILLS
X5070 END MILLS
4G MILL END MILLS
X-POWER END MILLS
JET-POWER END MILLS
TitaNox -POWER END MILLS
V7 PLUS A END MILLS
V7 MILL INOX END MILLS
ALU-POWER HPC END MILLS
ALU-POWER END MILLS
D-POWER GRAPHITE END MILLS
D-POWER CFRP END MILLS
ROUTERS 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

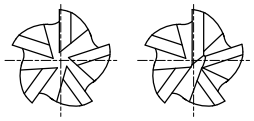
CARBIDE END MILLS

E5067 SERIES PLAIN SHANK

CARBIDE, 5 FLUTE 45° HELIX REGULAR LENGTH

- Designed to machine stainless steels, inconels and other alloys.
- The new design of stub length allows cutting at maximum speeds and feeds with minimum deflection
- 5 Flute and 45° medium helix allow harmonic balance and smooth cutting.





up to Ø3/16 over Ø3/16

MG 5 45° PLAIN P.1162

Unit : Inch

EDP No.					Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	TiN COATED	TiCN COATED	YG:TYLON F	YG:TYLON E				
86558	86558TN	86558TC	86558TF	86558TE	1/8	1/8	1/2	1-1/2
86561	86561TN	86561TC	86561TF	86561TE	5/32	3/16	9/16	2
86565	86565TN	86565TC	86565TF	86565TE	3/16	3/16	9/16	2
86570	86570TN	86570TC	86570TF	86570TE	7/32	1/4	3/4	2-1/2
86573	86573TN	86573TC	86573TF	86573TE	1/4	1/4	3/4	2-1/2
86579	86579TN	86579TC	86579TF	86579TE	5/16	5/16	13/16	2-1/2
86584	86584TN	86584TC	86584TF	86584TE	3/8	3/8	1	2-1/2
86588	86588TN	86588TC	86588TF	86588TE	7/16	7/16	1	2-3/4
86593	86593TN	86593TC	86593TF	86593TE	1/2	1/2	1-1/4	3
86595	86595TN	86595TC	86595TF	86595TE	5/8	5/8	1-5/8	3-1/2
86598	86598TN	86598TC	86598TF	86598TE	3/4	3/4	1-5/8	4
86599	86599TN	86599TC	86599TF	86599TE	7/8	7/8	2	4
86600	86600TN	86600TC	86600TF	86600TE	1	1	2	4

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

◎ : Excellent ○ : Good

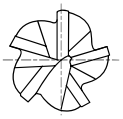
P					H	M	K	N					S	
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Stainless Steels	Cast Iron	Copper	Graphite	Aluminum	Acrylic	CFRP	Titanium	High Temperature Alloy
~HRc20	HRc20~30	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
◎	◎	◎	○			◎	○	○					○	○

CARBIDE END MILLS

E5068 SERIES PLAIN SHANK

CARBIDE, 5 FLUTE 45° HELIX MEDIUM & LONG LENGTH

- Designed to machine stainless steel, inconels and other alloys.
- The new design of stub length allows cutting at maximum speeds and feeds with minimum deflection
- 5 Flute and 45° medium helix allow harmonic balance and smooth cutting.



MG 5 45° PLAIN P.1162

Unit : Inch

EDP No.					Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	TiN COATED	TiCN COATED	YG:TYLON F	YG:TYLON E				
58573	58573TN	58573TC	58573TF	58573TE	1/4	1/4	1-1/4	4
58579	58579TN	58579TC	58579TF	58579TE	5/16	5/16	1-1/4	4
58584	58584TN	58584TC	58584TF	58584TE	3/8	3/8	1-1/2	4
58588	58588TN	58588TC	58588TF	58588TE	7/16	7/16	2	4
58593	58593TN	58593TC	58593TF	58593TE	1/2	1/2	2	4
58595	58595TN	58595TC	58595TF	58595TE	5/8	5/8	2-1/2	5
58598	58598TN	58598TC	58598TF	58598TE	3/4	3/4	3-1/4	6
58901	58901TN	58901TC	58901TF	58901TE	3/4	3/4	2-1/4	5
58600	58600TN	58600TC	58600TF	58600TE	1	1	3-1/4	6
58902	58902TN	58902TC	58902TF	58902TE	1	1	2-5/8	6

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

◎ : Excellent ○ : Good

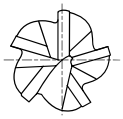
P					H	M	K	N					S	
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Stainless Steels	Cast Iron	Copper	Graphite	Aluminum	Acrylic	CFRP	Titanium	High Temperature Alloy
~HRc20	HRc20~30	HRc30~40	HRc40~45	HRc45~55	HRc55~70									
◎	◎	◎	○			◎	○	○					○	○

CARBIDE END MILLS

E5073 SERIES PLAIN SHANK

CARBIDE, 5 FLUTE 45° HELIX EXTRA LONG LENGTH

- ▶ Designed to machine stainless steel, inconels and other alloys.
- ▶ The new design of stub length allows cutting at maximum speeds and feeds with minimum deflection
- ▶ 5 Flute and 45° medium helix allow harmonic balance and smooth cutting.



MG 5 45° PLAIN P.1162

Unit : Inch

EDP No.					Mill Diameter	Shank Diameter	Length of Cut	Overall Length
UNCOATED	TiN COATED	TiCN COATED	YG:TYLON F	YG:TYLON E				
59579	59579TN	59579TC	59579TF	59579TE	5/16	5/16	2-1/8	4
59584	59584TN	59584TC	59584TF	59584TE	3/8	3/8	2-1/2	6
59593	59593TN	59593TC	59593TF	59593TE	1/2	1/2	3-1/8	6
59595	59595TN	59595TC	59595TF	59595TE	5/8	5/8	4	6
59598	59598TN	59598TC	59598TF	59598TE	3/4	3/4	4	6
59600	59600TN	59600TC	59600TF	59600TE	1	1	4-1/8	7

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

◎ : 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									
◎	◎	◎	○			◎	○	○					○	○

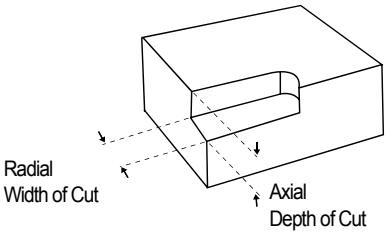
CARBIDE END MILLS

RECOMMENDED CUTTING CONDITIONS

SPEED & FEED RECOMMENDATIONS

Material	Speed	Chip Load per Tooth by End Mill Diameter			Recommended Coating
		Up to 1/4"	Up to 1/2"	Up to 1"	
Carbon + Alloy Steel <45Rc	100-700	.0002-.002	.001-.003	.003-.007	TF
Carbon + Alloy Steel >45Rc	50-400	.0002-.001	.0005-.0015	.001-.003	TE
Stainless Steels Non-Hardenable 200-300 Series	150-500	.0002-.001	.001-.002	.002-.006	TF
Stainless Steels Hardenable 400 Series Martensitic and PH Series	100-450	.0002-.0005	.0005-.001	.001-.005	TF
Cast+Ductile Iron	100-800	.0002-.0015	.002-.003	.003-.008	TF or TE
Nickel+Cobalt Based Alloys	20-200	.0003-.0008	.0008-.001	.001-.002	TE
Titanium	30-200	.0002-.0008	.0008-.002	.002-.004	TE
Aluminum	600-2000	.0002-.002	.002-.004	.004-.008	TiCN
Copper	300-1000	.0005-.002	.002-.003	.003-.006	CrN
Brass+ Bronze Alloys Graphite	600-1000 600-1000	.0005-.002 .0005-.005	.002-.003 .001-.008	.003-.006 .002-.010	TiCN D
Plastic	600-1200	.0006-.003	.003-.006	.006-.012	TF

TF = YG:TYLON F
TE = YG:TYLON E
D = DIAMOND
CrN = CROME NITRIDE



SPEED & FEED DETERMINANTS

1. MATERIAL HARDNESS
2. MACHINE RIGIDITY
3. TYPE OF COATING
4. TOOL GEOMETRY
5. FINISH REQUIREMENTS
6. DEPTH & WIDTH OF CUT