

益詮切削刀具

ECHAINTOOL Cutting Tools



ECHAIN®

鎢鋼端銑刀系列

CARBIDE END MILL SERIES



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Branch offices are located at Guangdong, Tainjin, Chongqing and Wuhan.

材質銑削推薦表

Recommend Cutting List

◎第一推薦 First recommend

○第二推薦 Second recommend

塗層材質分類 Coating Material Classification	適用領域建議 Suit Filed Suggestion			P	M	K	X	N	H	S			
	高精度 High Precision	輕切削 Light Cutting	重切削 Roughing Cutting	一般鋼 Steel	合金鋼 Alloy Steel	碳鋼 Carbon Steel	不鏽鋼 Stainless Steel	鑄鐵 Cast Iron	銅 Copper	鋁合金 Aluminum	複合材質 Composites	高硬度材 High Hardness Material	難切削材 Hard to Cut Material
平刀塗層 Square End Mill Coating (PVD)	High Speed Processing 高速加工 (vf) Standard Processing 一般加工	MUH-IGM			◎	◎	○	◎	◎			○	
		MUH-IEM			◎	◎	◎	○	◎			○	
		MUH-IYM											
		MUH-IPM・MUH-FPM・ MMH-LPM			◎	◎	◎	○	◎				○
		MUH-IMM・MUH-IMM-DIN・ MMH-LMM・LUH-IMM			◎	◎	○	◎	◎				
		MUH-GMM・MUH-FMM			◎	◎	○	◎	◎				
		EPM・GPM・OGM			◎	◎	◎	○	◎				○
		MU2-GPM・MU-GPM			◎	◎	◎	○	◎				○
		MU-GMM・MU-EMM			◎	◎	○	◎	◎				
		EMM・GMM			◎	◎	○	◎	◎				
圓鼻刀塗層 Corner Radius Type Coating (PVD)	High Speed Processing 高速加工 (vf) Standard Processing 一般加工	SUH-FYR				○	◎						
		SUH-FMR			◎	◎	◎	○	◎				
		PH-FPR・PH-FPC			◎	◎	◎	○	◎				
		DPR・GPR・PH-FER・PH-FMR			◎	◎	◎	○	◎			○	
		DMR			◎	◎	○	◎	◎				
球頭刀塗層 Ball Nose Type Coating (PVD)	High Speed Processing 高速加工 (vf) Standard Processing 一般加工	PA-DPB			○	○	◎	◎	○			○	
		EEB			◎	◎	◎	○	◎				
		EPB・DPB			○	○	◎	◎					
		EMB			◎	◎	○	◎	◎			○	
		DMB			◎	◎	◎	○	◎			○	
		EWB・DWB							○	◎			

材質銑削推薦表

Recommend Cutting List

◎第一推薦 First recommend

○第二推薦 Second recommend



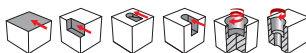
材質銑削推薦表 Recommend Cutting List



適用領域建議 Suit Filed Suggestion		P M K X N H S												
		高精度 High Precision 輕切削 Light Cutting 重切削 Roughing Cutting			一般鋼 Steel	合金鋼 Alloy Steel	碳鋼 Carbon Steel	不鏽鋼 Stainless Steel	鑄鐵 Cast Iron	銅 Copper	鋁合金 Aluminum	複合材質 Composites	高硬度材 High Hardness Material	難切削材 Hard to Cut Material
塗層材質分類 Coating Material Classification														
內R角刀塗層 Inner Radius Type Coating (PVD)		EPU			◎	◎	◎	○	◎	○				○
外R倒角刀塗層 Outer Radius Countersink Type Coating (PVD)		AMI			◎	◎	◎	◎	○	○				
T型槽刀塗層 T-Type Slot Coating (PVD)		AMT			◎	◎	◎	◎	○	○				
倒角刀塗層 Countersink Coating (PVD)	 High Speed Processing Standard Processing	DC-DWC								○	◎			
		DC-DPC、DCC-AMC-DIN、DCM-EPC、DCH-YMC			◎	◎	◎	◎	◎					○
		DC-DMC、DR-DMC、DT-DMC、DC-DMM			◎	◎	○	◎	◎					
		CC-AMC、CR-AMC			◎	◎	○	◎	◎					
粗、精銑刀塗層 Roughing vs. Finishing Cutter Coating (PVD)	 High Speed Processing Standard Processing	CFM-CWM								○	○	◎		
		FM-CMM、RM-CMM			◎	◎	○	◎	◎	○				
鋁用銑刀 (無塗層) Aluminum Carbide End Mill Without Coating	 High Speed Processing Standard Processing	MU3-JMA								○	◎			
		MU2-GMA、LU2-GMA MU2-HMA								○	◎			
		GMA								○	◎			
		HMA								○	◎			
		E180-AWA E030-AWC								○	◎			

微小徑鎢鋼端銑刀系列

Micro Diameter Carbide End Mill Series



適用材質 Material

鋼
Steel不鏽鋼
Stainless steel鑄鐵
Cast iron

適用於專業醫療設備、電子、化學及工業等精密細小零件之製造加工

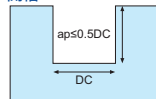
- 獨特鎢鋼刀體結構設計，有效抑制加工震動，提升銑刀加工壽命。
- 採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性，加強排屑效率。
- 微小徑設計有助於狹小孔徑與有限空間工件的加工需求，提升加工精度和良好的表面光潔度。

切削參數 Diameter cutting

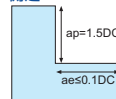
直徑 (mm) Shank	4	6
轉速 n (min)	4800	3100
進給速度 Vf (mm/min)		
開槽 Slotted	135	120
側邊 Side	475	375

切削深度 Cutting depth

開槽 Slotted

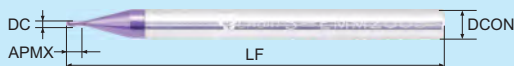


側邊 Side



ap: 軸向切削深度 Axial depth of cutting
 ae: 徑向切削深度 Radial depth of cutting
 DC: 刃徑 Diameter of cutting

S-EMM 2000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
S-EMM2002	0.2	0.4	4	50
S-EMM2003	0.3	0.6	4	50
S-EMM2004	0.4	0.8	4	50
S-EMM2005	0.5	1	4	50
S-EMM2006	0.6	1.2	4	50
S-EMM2007	0.7	1.4	4	50
S-EMM2008	0.8	1.6	4	50
S-EMM2009	0.9	1.8	4	50

微小徑長頸短刃 2 刃鎢鋼立銑刀

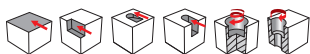
Micro Diameter Long Neck Short Flute 2 Flutes Carbide End Mill

S-EMML 2000L2



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	可使用長度 Effective Length LU	標準全長 Full Length LF
S-EMML2004L202	0.4	0.6	4	2	50
S-EMML2004L204	0.4	0.6	4	4	50
S-EMML2005L202	0.5	0.75	4	2	50
S-EMML2005L204	0.5	0.75	4	4	50
S-EMML2005L206	0.5	0.75	4	6	50
S-EMML2006L202	0.6	0.9	4	2	50
S-EMML2006L204	0.6	0.9	4	4	50
S-EMML2006L206	0.6	0.9	4	6	50
S-EMML2006L208	0.6	0.9	4	8	50
S-EMML2007L203	0.7	1.05	4	3	50
S-EMML2008L203	0.8	1.2	4	3	50
S-EMML2008L204	0.8	1.2	4	4	50
S-EMML2008L206	0.8	1.2	4	6	50
S-EMML2008L208	0.8	1.2	4	8	50
S-EMML2008L210	0.8	1.2	4	10	50
S-EMML2010L204	1	1.5	4	4	50

※ 請接下頁。 ※ Continued on next page.



適用材質 Material



Apply on manufacturing and processing of precision small parts such as professional medical equipment, electronics, chemicals and industry.

- Adopts a full carbide cutter body unique edge structure design to effectively suppress the processing vibration.
- Ultra-fine particle cemented carbide AlTiN coating for increased tool wearability and improve the chip removal.
- The design of small diameters is beneficial for machining requirements of narrow apertures and workpieces with limited space, enhancing machining accuracy and achieving a good surface finish.

產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	可使用長度 Effective Length LU	標準全長 Full Length LF
S-EMML2010L206	1	1.5	4	6	50
S-EMML2010L208	1	1.5	4	8	50
S-EMML2010L210	1	1.5	4	10	50
S-EMML2010L212	1	1.5	4	12	50
S-EMML2015L204	1.5	2.25	4	4	50
S-EMML2015L206	1.5	2.25	4	6	50
S-EMML2015L208	1.5	2.25	4	8	50

全新OGM材質 高耐磨 高韌性，可加工高硬度HRC50°~60°

New P500 series, with high abrasion resistance, high ductility material, capable of machining high hardness HRC 55°~60°.

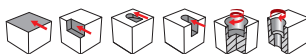
S-OGM 2000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
S-OGM2003	0.3	1.2	4	50
S-OGM2004	0.4	1.6	4	50
S-OGM2005	0.5	2	4	50
S-OGM2006	0.6	2.4	4	50
S-OGM2007	0.7	2.8	4	50
S-OGM2008	0.8	3.2	4	50
S-OGM2009	0.9	3.6	4	50
S-OGM2010	1	4	4	50
S-OGM2011	1.1	4.4	4	50
S-OGM2012	1.2	4.8	4	50
S-OGM2013	1.3	5.2	4	50
S-OGM2014	1.4	5.6	4	50
S-OGM2015	1.5	6	4	50
S-OGM2016	1.6	6.4	4	50
S-OGM2017	1.7	6.8	4	50
S-OGM2018	1.8	7.2	4	50
S-OGM2019	1.9	7.6	4	50
S-OGM2020	2	8	4	50
S-OGM2021	2.1	8.4	4	50
S-OGM2022	2.2	8.8	4	50
S-OGM2023	2.3	9.2	4	50
S-OGM2024	2.4	9.6	4	50
S-OGM2025	2.5	10	4	50
S-OGM2026	2.6	10.4	4	50
S-OGM2027	2.7	10.8	4	50
S-OGM2028	2.8	11.2	4	50
S-OGM2029	2.9	11.6	4	50
S-OGM2030D6	3	12	6	50

2 刃鎢鋼端銑刀系列

2 Flute Carbide End Mill Series



適用材質 Material

鋼
Steel不銹鋼
Stainless steel鑄鐵
Cast iron

全新鎢鋼刀刃體結構設計，降低加工震動，提升刀具使用壽命，加強排屑效率

• EMM系列採用螺旋角35°設計，可側銑、可開槽。

切削參數 Diameter cutting

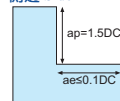
直徑 (mm) Shank	4	5	6	8	10	12	14	16	20
轉速 n (min)	4800	3800	3100	2300	1900	1600	1300	1200	950
進給速度 (mm/min) V _f									
開槽 Slotted	135	120	120	120	120	120	135	135	135
側邊 Side	475	325	325	375	375	275	200	200	165

切削深度 Cutting depth

開槽 Slotted



側邊 Side



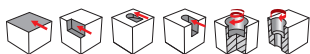
ap: 軸向切削深度 Axial depth of cutting
 ae: 徑向切削深度 Radial depth of cutting
 DC: 刃徑 Diameter of cutting

EMM 2000



產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
EMM2010	1	2.5	4	50
EMM2010D6	1	2.5	6	50
EMM2015	1.5	3.75	4	50
EMM2020	2	5	4	50
EMM2020D6	2	5	6	50
EMM2025	2.5	6.25	4	50
EMM2025D6	2.5	6.25	6	50
EMM2030	3	7.5	4	50
EMM2030D6	3	7.5	6	50
EMM2030E1	3	7.5	4	75
EMM2035	3.5	8.75	4	50
EMM2035D6	3.5	8.75	6	50
EMM2036	3.6	9	4	50
EMM2038	3.8	9.5	4	50
EMM2040	4	10	4	50
EMM2040D6	4	10	6	50
EMM2040E1	4	10	4	75
EMM2040H	4	10	4	100
EMM2045	4.5	11.25	6	50
EMM2047	4.7	11.75	6	50
EMM2050	5	12.5	6	50
EMM2050D5	5	12.5	5	50
EMM2050E1	5	12.5	6	75
EMM2050H	5	12.5	6	100
EMM2055	5.5	13.75	6	50
EMM2057	5.7	14.25	6	50
EMM2060	6	15	6	50
EMM2060E1	6	15	6	75
EMM2060H	6	15	6	100
EMM2064	6.4	16	8	60
EMM2068	6.8	17	8	60
EMM2070	7	17.5	8	60
EMM2071	7.1	17.75	8	60
EMM2073	7.3	18.25	8	60
EMM2075	7.5	18.75	8	60
EMM2080	8	20	8	60

※ 請接下頁。 ※ Continued on next page.



適用材質 Material

鋼
Steel

不鏽鋼
Stainless steel

鑄鐵
Cast Iron

Newest carbide unique blade structure design, reduce the vibration generated during processing, improve tool life enhance the effect of remove chip.

- EMM series helix angle 35° design, can be side milling and slot.

產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EMM2080E1	8	20	8	75
EMM2080H	8	20	8	100
EMM2080M	8	20	8	150
EMM2090	9	22.5	10	75
EMM2100	10	25	10	75
EMM2100H	10	25	10	100
EMM2100M	10	25	10	150
EMM2110	11	27.5	12	75
EMM2120	12	30	12	75
EMM2120H	12	30	12	100
EMM2120M	12	30	12	150
EMM2125D14	12.5	31.25	14	100
EMM2140	14	35	16	100
EMM2160	16	48	16	100
EMM2160M	16	48	16	150
EMM2160R	16	48	16	200
EMM2180	18	45	20	100
EMM2200	20	50	20	100
EMM2200M	20	50	20	150
EMM2200R	20	50	20	200

2 刃 3 倍刃長 鎢鋼端銑刀 2 Flutes With Triple Flute Length Carbide End Mill

EMML 2000L1



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EMM2010L103	1	3	4	50
EMM2011L1033	1.1	3.3	4	50
EMM2012L1036	1.2	3.6	4	50
EMM2013L1039	1.3	3.9	4	50
EMM2014L1042	1.4	4.2	4	50
EMM2015L1045	1.5	4.5	4	50
EMM2016L1048	1.6	4.8	4	50
EMM2017L1051	1.7	5.1	4	50
EMM2018L1054	1.8	5.4	4	50
EMM2019L1057	1.9	5.7	4	50
EMM2020L106	2	6	4	50
EMM2020L106D6	2	6	6	50
EMM2021L1063	2.1	6.3	4	50
EMM2022L1066	2.2	6.6	4	50
EMM2023L1069	2.3	6.9	4	50
EMM2024L1072	2.4	7.2	4	50
EMM2025L1075	2.5	7.5	4	50
EMM2026L1078	2.6	7.8	4	50
EMM2027L1081	2.7	8.1	4	50

※ 請接下頁。 ※ Continued on next page.



2刃3倍刃長鎢鋼端銑刀系列

2 Flutes With Triple Flute Length Carbide End Mill Series

適用材質 Material

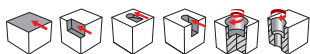
鋼
Steel

不銹鋼
Stainless steel

鑄鐵
Cast iron

產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
EMM2028L1084	2.8	8.4	4	50
EMM2029L1087	2.9	8.7	4	50
EMM2030L109	3	9	4	50
EMM2030L109D3	3	9	3	50
EMM2030L109D6	3	9	6	50
EMM2031L1093	3.1	9.3	4	50
EMM2032L1096	3.2	9.6	4	50
EMM2032L1096D6	3.2	9.6	6	50
EMM2033L1099	3.3	9.9	4	50
EMM2034L1102	3.4	10.2	4	50
EMM2035L1105	3.5	10.5	4	50
EMM2036L1108	3.6	10.8	4	50
EMM2037L1111	3.7	11.1	4	50
EMM2038L1114	3.8	11.4	4	50
EMM2039L1117	3.9	11.7	4	50
EMM2040L112	4	12	4	50
EMM2040L112D6	4	12	6	50
EMM2041L1123	4.1	12.3	6	50
EMM2042L1126	4.2	12.6	6	50
EMM2043L1129	4.3	12.9	6	50
EMM2044L1132	4.4	13.2	6	50
EMM2045L1135	4.5	13.5	6	50
EMM2046L1138	4.6	13.8	6	50
EMM2047L1141	4.7	14.1	6	50
EMM2048L1144	4.8	14.4	6	50
EMM2049L1147	4.9	14.7	6	50
EMM2050L115	5	15	6	50
EMM2051L1153	5.1	15.3	6	50
EMM2052L1156	5.2	15.6	6	50
EMM2053L1159	5.3	15.9	6	50
EMM2054L1162	5.4	16.2	6	50
EMM2055L1165	5.5	16.5	6	50
EMM2056L1168	5.6	16.8	6	50
EMM2057L1171	5.7	17.1	6	50
EMM2058L1174	5.8	17.4	6	50
EMM2059L1177	5.9	17.7	6	50
EMM2060L118	6	18	6	50
EMM2061L1183	6.1	18.3	8	60
EMM2062L1186	6.2	18.6	8	60
EMM2063L1189	6.3	18.9	8	60
EMM2064L1192	6.4	19.2	8	60
EMM2065L1195	6.5	19.5	8	60
EMM2066L1198	6.6	19.8	8	60
EMM2067L1201	6.7	20.1	8	60
EMM2068L1204	6.8	20.4	8	60
EMM2069L1207	6.9	20.7	8	60
EMM2070L121	7	21	8	60
EMM2071L1213	7.1	21.3	8	60
EMM2072L1216	7.2	21.6	8	60
EMM2073L1219	7.3	21.9	8	60

※ 請接下頁。 ※ Continued on next page.



適用材質 Material

鋼

Steel

不鏽鋼

Stainless steel

鑄鐵

Cast Iron

產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
EMM2074L1222	7.4	22.2	8	60
EMM2075L1225	7.5	22.5	8	60
EMM2076L1228	7.6	22.8	8	60
EMM2077L1231	7.7	23.1	8	60
EMM2078L1234	7.8	23.4	8	60
EMM2079L1237	7.9	23.7	8	60
EMM2080L124	8	24	8	60
EMM2080L124H	8	24	8	100
EMM2080L140M	8	40	8	150
EMM2081L1243	8.1	24.3	10	75
EMM2082L1246	8.2	24.6	10	75
EMM2083L1249	8.3	24.9	10	75
EMM2084L1252	8.4	25.2	10	75
EMM2085L1255	8.5	25.5	10	75
EMM2086L1258	8.6	25.8	10	75
EMM2087L1261	8.7	26.1	10	75
EMM2088L1264	8.8	26.4	10	75
EMM2089L1267	8.9	26.7	10	75
EMM2090L127	9	27	10	75
EMM2091L1273	9.1	27.3	10	75
EMM2092L1276	9.2	27.6	10	75
EMM2093L1279	9.3	27.9	10	75
EMM2094L1282	9.4	28.2	10	75
EMM2095L1285	9.5	28.5	10	75
EMM2096L1288	9.6	28.8	10	75
EMM2097L1291	9.7	29.1	10	75
EMM2098L1294	9.8	29.4	10	75
EMM2099L1297	9.9	29.7	10	75
EMM2100L130	10	30	10	75
EMM2101L1303	10.1	30.3	12	75
EMM2102L1306	10.2	30.6	12	75
EMM2103L1309	10.3	30.9	12	75
EMM2104L1312	10.4	31.2	12	75
EMM2105L1315	10.5	31.5	12	75
EMM2106L1318	10.6	31.8	12	75
EMM2107L1321	10.7	32.1	12	75
EMM2108L1324	10.8	32.4	12	75
EMM2109L1327	10.9	32.7	12	75
EMM2110L133	11	33	12	75
EMM2111L1333	11.1	33.3	12	75
EMM2112L1336	11.2	33.6	12	75
EMM2113L1339	11.3	33.9	12	75
EMM2114L1342	11.4	34.2	12	75
EMM2115L1345	11.5	34.5	12	75
EMM2116L1348	11.6	34.8	12	75
EMM2117L1351	11.7	35.1	12	75
EMM2118L1354	11.8	35.4	12	75
EMM2119L1357	11.9	35.7	12	75
EMM2120L136	12	36	12	75

斜度鎢鋼端銑刀 / 3 刃鎢鋼端銑刀系列

Tapered Carbide End Mill / 3 Flutes Carbide End Mill Series

適用材質 Material

鋼

Steel

不銹鋼

Stainless steel

鑄鐵

Cast iron

全新鎢鋼刀刃體結構設計，降低加工震動，提升刀具使用壽命，加強排屑效率

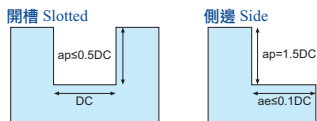
Newest carbide unique blade structure design, reduce the vibration generated during processing, improve tool life enhance the effect of remove chip.

- EMM系列採用螺旋角35°設計，可側銑、可開槽。
- EMM series helix angle 35° design, can be side milling and slot.

切削參數 Diameter cutting

直徑 (mm) Shank		4	6	8	10
轉速 n (min)		4800	3100	2300	1900
進給速度 Vf (mm/min)	開槽 Slotted	135	120	120	120
	側邊 Side	475	375	375	375

切削深度 Cutting depth

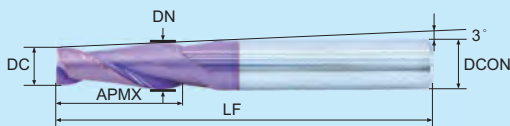


ap: 軸向切削深度 Axial depth of cutting
ae: 徑向切削深度 Radial depth of cutting
DC: 刃徑 Diameter of cutting

EMM 2000T00



斜度3°設計 Tapered 3° Design.



產品型號 Model No	切削直徑 Diameter of Cutting		切刃長度 Flute Length		柄部直徑 Shank		標準全長 Full Length		頸徑 Neck Shank	
	DC		APMX		DCON		LF		DN	
EMM2025T030	2.5		8		4		50		3.34	
EMM2040T030D6	4		15		6		50		5.57	
EMM2060T030D8	6		18		8		60		7.59	
EMM2060T030D10	6		18		10		75		8.1	
EMM2080T030	8		25		8		75		10.62	

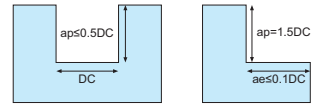
切削參數 Diameter cutting

切削深度 Cutting depth

開槽 Slotted

側邊 Side

直徑 (mm) Shank	4	6	8	10	12	16
轉速 n (min)	4800	3100	2300	1900	1600	1200
進給速度 Vf (mm/min)	開槽 Slotted	180	180	180	180	180
	側邊 Side	500	500	500	580	580



ap: 軸向切削深度 Axial depth of cutting
ae: 徑向切削深度 Radial depth of cutting
DC: 刃徑 Diameter of cutting

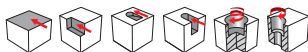
EMM 3000



產品型號 Model No	切削直徑 Diameter of Cutting		切刃長度 Flute Length		柄部直徑 Shank		標準全長 Full Length	
	DC		APMX		DCON		LF	
EMM3040	4		10		4		50	
EMM3050	5		12.5		6		50	
EMM3058	5.8		14.5		6		50	
EMM3060	6		15		6		50	
EMM3078	7.8		19.5		8		60	
EMM3080	8		20		8		60	
EMM3100	10		25		10		75	
EMM3100L130	10		30		10		75	
EMM3120L136	12		36		12		75	
EMM3120L157H	12		57		12		100	
EMM3160	16		48		16		100	

4 刃鎢鋼端銑刀系列

4 Flute Carbide End Mill Series



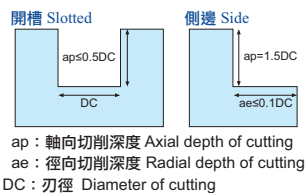
適用材質 Material



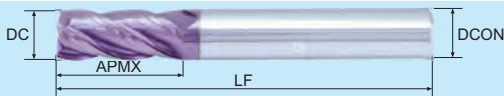
切削參數 Dimameter cutting

直徑 (mm) Shank	4	6	8	10	12	16	18	20
轉速 n (min)	4800	3100	2300	1900	1600	1200	1240	1060
進給速度 V _f (mm/min)								
開槽 Slotted	200	180	180	180	180	200	225	300
側邊 Side	700	500	500	580	410	300	450	240

切削深度 Cutting depth



EMM 4000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EMM4010	1	2.5	4	50
EMM4010D6	1	2.5	6	50
EMM4015	1.5	3.75	4	50
EMM4015D6	1.5	3.75	6	50
EMM4020	2	5	4	50
EMM4020D6	2	5	6	50
EMM4025	2.5	6.25	4	50
EMM4025D6	2.5	6.25	6	50
EMM4030	3	7.5	4	50
EMM4030D6	3	7.5	6	50
EMM4030E1	3	7.5	4	75
EMM4035	3.5	8.75	4	50
EMM4035D6	3.5	8.75	6	50
EMM4040	4	10	4	50
EMM4040D6	4	10	6	50
EMM4040E1	4	10	4	75
EMM4040H	4	10	4	100
EMM4045	4.5	11.25	6	50
EMM4050	5	12.5	6	50
EMM4050E1	5	12.5	6	75
EMM4050H	5	12.5	6	100
EMM4055	5.5	13.75	6	50
EMM4060	6	15	6	50
EMM4060E1	6	15	6	75
EMM4060H	6	15	6	100
EMM4060M	6	15	6	150
EMM4065	6.5	16.25	8	60
EMM4070	7	17.5	8	60
EMM4075	7.5	18.75	8	60
EMM4080	8	20	8	60
EMM4080E1	8	20	8	75
EMM4080H	8	20	8	100
EMM4080M	8	20	8	150
EMM4100	10	25	10	75
EMM4100H	10	25	10	100
EMM4100M	10	25	10	150
EMM4120	12	30	12	75
EMM4120H	12	30	12	100

※ 請接下頁。 ※ Continued on next page.

4 刃鎢鋼端銑刀系列 / 4 刃長刃型鎢鋼端銑刀系列

4 Flute Carbide End Mill Series / 4 Flutes Long Flute Carbide End Mill Series

適用材質 Material

鋼
Steel不銹鋼
Stainless steel鑄鐵
Cast iron

產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
EMM4120M	12	30	12	150
EMM4140	14	35	16	100
EMM4160	16	48	16	100
EMM4160M	16	48	16	150
EMM4160R	16	48	16	200
EMM4180M	18	45	20	150
EMM4200	20	50	20	100
EMM4200M	20	50	20	150
EMM4200R	20	50	20	200

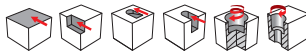
EMM 4000L1



產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
EMM4010L103	1	3	4	50
EMM4015L1045	1.5	4.5	4	50
EMM4020L106	2	6	4	50
EMM4025L1075	2.5	7.5	4	50
EMM4025L1075D6	2.5	7.5	6	50
EMM4030L109	3	9	4	50
EMM4030L109D6	3	9	6	50
EMM4030L113D6	3	13	6	50
EMM4032L1064D6	3.2	6.4	6	50
EMM4040L112	4	12	4	50
EMM4040L114D6	4	14	6	50
EMM4040L120E1	4	20	4	75
EMM4050L115	5	15	6	50
EMM4050L125E1	5	25	6	75
EMM4060L118	6	18	6	50
EMM4060L125E1	6	25	6	75
EMM4060L130E1	6	30	6	75
EMM4060L130H	6	30	6	100
EMM4080L124	8	24	8	60
EMM4080L130E1	8	30	8	75
EMM4080L135H	8	35	8	100
EMM4080L140M	8	40	8	150
EMM4100L130	10	30	10	75
EMM4100L140H	10	40	10	100
EMM4100L145H	10	45	10	100
EMM4100L150M	10	50	10	150
EMM4100L155H	10	55	10	100
EMM4120L136	12	36	12	75
EMM4120L145H	12	45	12	100
EMM4120L150M	12	50	12	150
EMM4120L155H	12	55	12	100
EMM4130L139D16	13	39	16	100
EMM4140L142	14	42	16	100
EMM4140L142D14	14	42	14	100
EMM4160L170M	16	70	16	150
EMM4200L180M	20	80	20	150

抗震鎢鋼端銑刀系列

Seismic Performance Carbide End Milling Series



專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel

全新P500高耐磨、高韌性材質 可加工高硬度HRC55°~60°

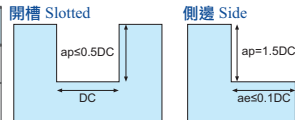
New P500 material with high wear resistance and toughness, capable of machining high hardness HRC55°~60°.

- 獨特刀體結構設計，降低加工震動提升刀具使用壽命，加強排屑效率。
- 全新材質抗震性佳，耐震高、抗磨損。
- EMM系列採用螺旋角35°設計，可側銑、可開槽。
- Unique cutting edge structure reduces machining vibration, enhances tool life and improves chip evacuation efficiency.
- Excellent vibration resistance, high durability wear resistance with the new material.
- EMM series helix angle 35° design, can be side milling and slot.

切削參數 Dimameter cutting

直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	4800	3100	2300	1900	1600	1200	950
進給速度 (mm/min) Vf	開槽 Slotted	135	120	120	120	135	135
	側邊 Side	475	325	375	375	200	165

切削深度 Cutting depth



ap: 軸向切削深度 Axial depth of cutting
ae: 徑向切削深度 Radial depth of cutting
DC: 刃徑 Diameter of cutting

EPM 2000



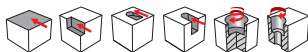
產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
EPM2010L103	1	3	4	50
EPM2020	2	5	4	50
EPM2020L106	2	6	4	50
EPM2020L106D6	2	6	6	50
EPM2030L109	3	9	4	50
EPM2030L109D6	3	9	6	50
EPM2040	4	10	4	50
EPM2040L112	4	12	4	50
EPM2040L112D6	4	12	6	50
EPM2050L115	5	15	6	50
EPM2060	6	15	6	50
EPM2060E1	6	15	6	75
EPM2060L118	6	18	6	50
EPM2070L121	7	21	8	60
EPM2080L124	8	24	8	60
EPM2080L124H	8	24	8	100
EPM2090L127	9	27	10	75
EPM2100L130	10	30	10	75
EPM2100H	10	25	10	100
EPM2100M	10	25	10	150
EPM2110L133	11	33	12	75
EPM2120L136	12	36	12	75
EPM2120L150H	12	50	12	100
EPM2120L150M	12	50	12	150

SQUARE
CHAIN®
EPM 2000

SQUARE
CHAIN®

抗震鎢鋼端銑刀系列

Seismic Performance Carbide End Milling Series



專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

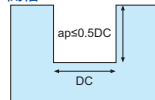
碳鋼
Carbon Steel

切削參數
Diameter cutting

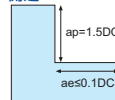
直徑 (mm) Shank		6	8	10
轉速 n (min)		3100	2300	1900
進給速度 V _f (mm/min)	開槽 Slotted	180	180	180
	側邊 Side	600	580	580

切削深度 Cutting depth

開槽 Slotted



側邊 Side



ap : 軸向切削深度

Axial depth of cutting

ae : 徑向切削深度

Radial depth of cutting

DC : 刃徑 Diameter of cutting

EPM 3000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EPM3040L112E1D6	4	12	6	75
EPM3050	5	12.5	6	50
EPM3050L115	5	15	6	50
EPM3055L1165	5.5	16.5	6	50
EPM3060	6	15	6	50
EPM3070L121	7	21	8	60
EPM3080	8	20	8	60
EPM3100	10	25	10	75
EPM3100L130	10	30	10	75

切削參數
Diameter cutting

直徑 (mm) Shank	4	6	8	10	12	16
轉速 n (min)	4800	3100	2300	1900	1600	1200
進給速度 (mm/min) V _f	開槽 Slotted	270	240	240	240	270
	側邊 Side	950	650	750	750	400

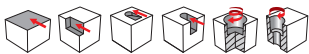
EPM 4000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EPM4010	1	2.5	4	50
EPM4010L103	1	3	4	50
EPM4015	1.5	3.75	4	50
EPM4015L104	1.5	4	4	50
EPM4020	2	5	4	50
EPM4020L106	2	6	4	50
EPM4030	3	7.5	4	50
EPM4040	4	10	4	50
EPM4040L112	4	12	4	50
EPM4050	5	12.5	6	50
EPM4060	6	15	6	60
EPM4060L118	6	18	6	50
EPM4060E1	6	15	6	75
EPM4080	8	20	8	60
EPM4100	10	25	10	75
EPM4100L130	10	30	10	75
EPM4120	12	30	12	75
EPM4160	16	48	16	100

3 刃鎢鋼端銑刀系列

3 Flute Carbide End Mill Series



適用材質 Material

鋼
Steel

不銹鋼
Stainless steel

鑄鐵
Cast iron

獨特刀體結構設計，有效抑制加工震動，提升加工壽命、加強排屑效率

採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性

• GMM系列採用螺旋角45°設計，可側銑、可開槽。

切削參數 Diameter cutting

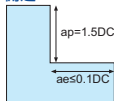
直徑 (mm) Shank		4	6	8	10	12
轉速 n (min)		4800	3100	2300	1900	1600
(mm/min) V _f 進給速度	開槽 Slotted	280	180	180	180	135
	側邊 Side	1100	600	580	580	450

切削深度 Cutting depth

開槽 Slotted



側邊 Side



ap : 軸向切削深度 Axial depth of cutting

ae : 徑向切削深度 Radial depth of cutting

DC : 刃徑 Diameter of cutting

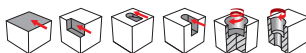
GMM 3000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
GMM3030	3	7.5	4	50
GMM3040	4	10	4	50
GMM3050	5	12.5	6	50
GMM3060	6	15	6	50
GMM3060E1	6	15	6	75
GMM3080	8	20	8	60
GMM3100	10	25	10	75
GMM3120	12	30	12	75

4 刃鎢鋼端銑刀系列

4 Flute Carbide End Mill Series



適用材質 Material



Special flute structure design, with vibration reduction during processing, high effectiveness chip removal and with longer life for tools, ultra-fine particle cemented carbide AlTiN coating increases tool wearability.

• GMM series helix angle 45° design, high ductility material HRC 50°~55°, can be side milling and slot.

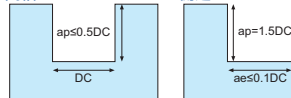
切削參數 Dimameter cutting

切削深度 Cutting depth

開槽 Slotted

側邊 Side

直徑 (mm) Shank	4	6	8	10	12	16	20	25
轉速 n (min)	4800	3100	2300	1900	1600	1200	1060	800
進給速度 V _f (mm/min)								
開槽 Slotted	270	240	240	240	240	270	250	230
側邊 Side	950	650	750	750	550	400	400	320



ap : 軸向切削深度 Axial depth of cutting
ae : 徑向切削深度 Radial depth of cutting
DC : 刃徑 Diameter of cutting

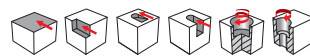
GMM 4000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
GMM4010	1	2.5	4	50
GMM4010L103	1	3	4	50
GMM4015	1.5	3.75	4	50
GMM4015L103	1.5	3	4	50
GMM4015L104	1.5	4	4	50
GMM4020	2	5	4	50
GMM4020L106	2	6	4	50
GMM4020L106D6	2	6	6	50
GMM4025	2.5	6.25	4	50
GMM4025L106	2.5	6	4	50
GMM4025L107	2.5	7	4	50
GMM4025L1075	2.5	7.5	4	50
GMM4030	3	7.5	4	50
GMM4030L108	3	8	4	50
GMM4030L109	3	9	4	50
GMM4030L112D6	3	12	6	50
GMM4035	3.5	8.75	4	50
GMM4035L1105	3.5	10.5	4	50
GMM4040	4	10	4	50
GMM4040L112	4	12	4	50
GMM4045	4.5	11.25	6	50
GMM4050	5	12.5	6	50
GMM4050L115	5	15	6	50
GMM4055	5.5	13.75	6	50
GMM4060	6	15	6	50
GMM4065	6.5	16.25	8	60
GMM4070	7	17.5	8	60
GMM4075	7.5	18.75	8	60
GMM4080	8	20	8	60
GMM4085	8.5	21.25	10	75
GMM4090	9	22.5	10	75
GMM4095	9.5	23.75	10	75
GMM4100	10	25	10	75

高精度加工專用銑刀系列

High Precision Machining Special Tool Series



高穩定性可有效降低加工震動、提升刀具使用壽命

High stability with vibration reducible during processing effectively, tool life increased.

• 有效控制排屑效率穩定，適用於側銑及插槽，GMM系列採用螺旋角45°設計。

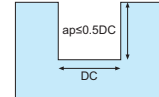
• Effective control of chip removal efficiency and stability, suitable for side milling and slotted, GMM series helix angle 45° design.

切削參數 Dimameter cutting

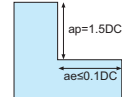
直徑 (mm) Shank	4	6	8	10	12	16	20	25
轉速 n (min)	4800	3100	2300	1900	1600	1200	1060	800
進給速度 (mm/min)	405	300	360	360	360	405	405	350
開槽 Slotted	405	300	360	360	360	405	405	350
側邊 Side	1450	1000	1150	1150	850	600	480	480

切削深度 Cutting depth

開槽 Slotted



側邊 Side



ap: 軸向切削深度 Axial depth of cutting

ae: 徑向切削深度 Radial depth of cutting

DC: 刃徑 Diameter of cutting

GMM 6000



適用材質 Material

合金鋼 Alloy Steel

不銹鋼 Stainless steel

鑄鐵 Cast Iron



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
GMM6040	4	10	4	50
GMM6045	4.5	11.25	6	50
GMM6050	5	12.5	6	50
GMM6060	6	15	6	50
GMM6060L118	6	18	6	50
GMM6080	8	20	8	60
GMM6100	10	25	10	75
GMM6100L130	10	30	10	75
GMM6120	12	30	12	75
GMM6160	16	48	16	100
GMM6200	20	50	20	100
GMM6250	25	62.5	25	100

全新P500高耐磨、高韌性材質 可加工高硬度HRC55°~60°

New P500 material with high wear resistance and toughness, capable of machining high hardness HRC55°~60°.

GPM 6000



專用特殊塗層 Special Coating For

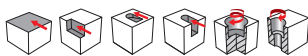
合金鋼 Alloy Steel

碳鋼 Carbon Steel



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
GPM6040	4	10	4	50
GPM6045	4.5	11.25	6	50
GPM6050	5	12.5	6	50
GPM6060	6	15	6	50
GPM6060L118	6	18	6	50
GPM6080	8	20	8	60
GPM6100	10	25	10	75
GPM6100L130	10	30	10	75
GPM6120	12	30	12	75
GPM6160	16	48	16	100
GPM6200	20	50	20	100
GPM6250	25	62.5	25	100

4 刃圓溝鎢鋼端銑刀

4 Flute **Rounded Land** Carbide End Mill

適用材質 Material

合金鋼
Alloy Steel不鏽鋼
Stainless steel鑄鐵
Cast iron

特殊U型圓溝刃設計，有利排屑順暢，適用於高速進給粗精銑削加工

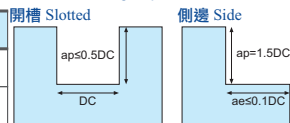
Special design for U type rounded land and it can process on high-speed roughing, finishing cutting, enhanced hardness of edge.

- 刃口強度提升，優化加工切削排屑流暢，增加穩定度。
- EMM系列採用螺旋角35°設計、GMM系列採用螺旋角45°設計。
- Enhanced chip removal effect and increase the stability.
- EMM series helix angle 35° design、GMM series helix angle 45° design.

切削參數 Diameter cutting

直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	4800	3100	2300	1900	1600	1200	1060
進給速度 (mm/min) Vf							
開槽 Slotted	270	240	240	240	240	270	250
側邊 Side	950	650	750	750	550	400	400

切削深度 Cutting depth



ap：軸向切削深度 Axial depth of cutting

ae：徑向切削深度 Radial depth of cutting

DC：刃徑 Diameter of cutting

MU-EMM 4000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MU-EMM4030	3	7.5	4	50
MU-EMM4030D6	3	7.5	6	50
MU-EMM4030L109D6	3	9	6	50
MU-EMM4040	4	10	4	50
MU-EMM4040D6	4	10	6	50
MU-EMM4040L112	4	12	4	50
MU-EMM4040L112D6	4	12	6	50
MU-EMM4050	5	12.5	6	50
MU-EMM4050L115	5	15	6	50
MU-EMM4060	6	15	6	50
MU-EMM4060L118	6	18	6	50
MU-EMM4060E1	6	15	6	75
MU-EMM4070	7	17.5	8	60
MU-EMM4070L121	7	21	8	60
MU-EMM4080	8	20	8	60
MU-EMM4080L124	8	24	8	60
MU-EMM4090	9	22.5	10	75
MU-EMM4090L127	9	27	10	75
MU-EMM4100	10	25	10	75
MU-EMM4100L130	10	30	10	75
MU-EMM4110H	11	27.5	12	100
MU-EMM4120	12	30	12	75
MU-EMM4120L136	12	36	12	75
MU-EMM4140	14	35	16	100
MU-EMM4160	16	48	16	100
MU-EMM4160L160M	16	60	16	150
MU-EMM4200	20	50	20	100

4 刃圓溝鎢鋼端銑刀

4 Flute **Rounded Land** Carbide End Mill

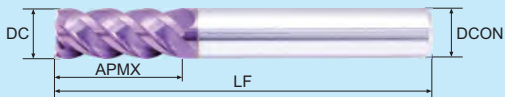
適用材質 Material

合金鋼
Alloy Steel

不銹鋼
Stainless steel

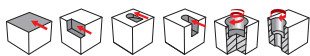
鑄鐵
Cast Iron

MU-GMM 4000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MU-GMM4010	1	2.5	4	50
MU-GMM4015	1.5	3.75	4	50
MU-GMM4020	2	5	4	50
MU-GMM4030	3	7.5	4	50
MU-GMM4030L109	3	9	4	50
MU-GMM4030D6	3	7.5	6	50
MU-GMM4031L1093	3.1	9.3	4	50
MU-GMM4032L1096	3.2	9.6	4	50
MU-GMM4033L1099	3.3	9.9	4	50
MU-GMM4034L1102	3.4	10.2	4	50
MU-GMM4035	3.5	8.75	4	50
MU-GMM4035D6	3.5	8.75	6	50
MU-GMM4035L1105	3.5	10.5	4	50
MU-GMM4036L1108	3.6	10.8	4	50
MU-GMM4037L1111	3.7	11.1	4	50
MU-GMM4038L1114	3.8	11.4	4	50
MU-GMM4039L1117	3.9	11.7	4	50
MU-GMM4040	4	10	4	50
MU-GMM4040D6	4	10	6	50
MU-GMM4040L112	4	12	4	50
MU-GMM4040L112D6	4	12	6	50
MU-GMM4040E1	4	12.5	4	75
MU-GMM4041L1123	4.1	12.3	6	50
MU-GMM4042L1126	4.2	12.6	6	50
MU-GMM4043L1129	4.3	12.9	6	50
MU-GMM4044L1132	4.4	13.2	6	50
MU-GMM4045L1135	4.5	13.5	6	50
MU-GMM4046L1138	4.6	13.8	6	50
MU-GMM4047L1141	4.7	14.1	6	50
MU-GMM4048L1144	4.8	14.4	6	50
MU-GMM4049L1147	4.9	14.7	6	50
MU-GMM4050	5	12.5	6	50
MU-GMM4050L115	5	15	6	50
MU-GMM4050E1	5	12.5	6	75
MU-GMM4050H	5	12.5	6	100
MU-GMM4050L120H	5	20	6	100
MU-GMM4051L1153	5.1	15.3	6	50
MU-GMM4052L1156	5.2	15.6	6	50
MU-GMM4053L1159	5.3	15.9	6	50
MU-GMM4054L1162	5.4	16.2	6	50
MU-GMM4055	5.5	13.75	6	50
MU-GMM4055L1165	5.5	16.5	6	50
MU-GMM4056L1168	5.6	16.8	6	50
MU-GMM4057L1171	5.7	17.1	6	50

※ 請接下頁。 ※ Continued on next page.



適用材質 Material

合金鋼
Alloy Steel

不鏽鋼
Stainless steel

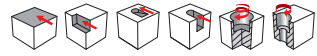
鑄鐵
Cast Iron

產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MU-GMM4058L1174	5.8	17.4	6	50
MU-GMM4059L1177	5.9	17.7	6	50
MU-GMM4060	6	15	6	50
MU-GMM4060L118	6	18	6	50
MU-GMM4060D	6	15	6	60
MU-GMM4060E1	6	15	6	75
MU-GMM4060H	6	15	6	100
MU-GMM4061L1183	6.1	18.3	8	60
MU-GMM4062L1186	6.2	18.6	8	60
MU-GMM4063L1189	6.3	18.9	8	60
MU-GMM4064L1191	6.4	19.1	8	60
MU-GMM4064L1192	6.4	19.2	8	60
MU-GMM4065	6.5	16.25	8	60
MU-GMM4065L1195	6.5	19.5	8	60
MU-GMM4066L1198	6.6	19.8	8	60
MU-GMM4067L1201	6.7	20.1	8	60
MU-GMM4068L1204	6.8	20.4	8	60
MU-GMM4069L1207	6.9	20.7	8	60
MU-GMM4070	7	17.5	8	60
MU-GMM4070L121	7	21.0	8	60
MU-GMM4071L1213	7.1	21.3	8	60
MU-GMM4072L1216	7.2	21.6	8	60
MU-GMM4073L1219	7.3	21.9	8	60
MU-GMM4074L1222	7.4	22.2	8	60
MU-GMM4075	7.5	18.75	8	60
MU-GMM4075L1225	7.5	22.5	8	60
MU-GMM4076L1228	7.6	22.8	8	60
MU-GMM4077L1231	7.7	23.1	8	60
MU-GMM4078L1234	7.8	23.4	8	60
MU-GMM4079L1237	7.9	23.7	8	60
MU-GMM4080	8	20	8	60
MU-GMM4080L124	8	24	8	60
MU-GMM4080E1	8	20	8	75
MU-GMM4080H	8	20	8	100
MU-GMM4080M	8	20	8	150
MU-GMM4081L1243	8.1	24.3	10	75
MU-GMM4082L1246	8.2	24.6	10	75
MU-GMM4083L1249	8.3	24.9	10	75
MU-GMM4084L1252	8.4	25.2	10	75
MU-GMM4085L1255	8.5	25.5	10	75
MU-GMM4086L1258	8.6	25.8	10	75
MU-GMM4087L1261	8.7	26.1	10	75
MU-GMM4088L1264	8.8	26.4	10	75
MU-GMM4089L1267	8.9	26.7	10	75
MU-GMM4090	9	22.5	10	75
MU-GMM4090L127	9	27	10	75
MU-GMM4091L1273	9.1	27.3	10	75
MU-GMM4092L1276	9.2	27.6	10	75
MU-GMM4093L1279	9.3	27.9	10	75
MU-GMM4094L130	9.4	30	10	75

※ 請接下頁。 ※ Continued on next page.

4 刃圓溝鎢鋼端銑刀

4 Flute **Rounded Land** Carbide End Mill



SQUARE



CHAIN®

MU-GMM 4000

產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
MU-GMM4094L1282	9.4	28.2	10	75
MU-GMM4095L1285	9.5	28.5	10	75
MU-GMM4096L1288	9.6	28.8	10	75
MU-GMM4097L1291	9.7	29.1	10	75
MU-GMM4098L1294	9.8	29.4	10	75
MU-GMM4099L1297	9.9	29.7	10	75
MU-GMM4100	10	25	10	75
MU-GMM4100L130	10	30	10	75
MU-GMM4100H	10	25	10	100
MU-GMM4100L130H	10	30	10	100
MU-GMM4100M	10	25	10	150
MU-GMM4110	11	27.5	12	75
MU-GMM4120	12	30	12	75
MU-GMM4120L136	12	36	12	75
MU-GMM4120H	12	30	12	100
MU-GMM4120L155H	12	55	12	100
MU-GMM4120M	12	30	12	150
MU-GMM4120L155M	12	55	12	150
MU-GMM4140	14	35	16	100
MU-GMM4142	14.2	35.5	16	100
MU-GMM4160	16	48	16	100
MU-GMM4160M	16	48	16	150
MU-GMM4180	18	45	20	100
MU-GMM4200	20	50	20	100

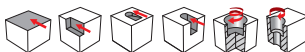


CHAIN®

SQUARE

4 刃圓溝鎢鋼端銑刀

4 Flutes **Rounded Land** Carbide End Mill



專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel

全新P500高耐磨、高韌性材質 可加工高硬度HRC55°~60°

New P500 material with high wear resistance and toughness, capable of machining high hardness HRC55°~60°.

特殊U型圓溝刃設計，有利排屑順暢，適用於高速進給粗精銑削加工

Special design for U type rounded land and it can process on high-speed roughing, finishing cutting, enhanced hardness of edge.

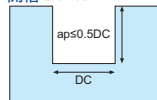
- 刃口強度提升，優化加工切削排屑流暢，增加穩定度。
- GPM系列採用螺旋角45°設計。
- Enhanced chip removal effect and increase the stability.
- GPM series helix angle 45° design.

切削參數 Diameter cutting

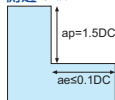
直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	4800	3100	2300	1900	1600	1200	1060
(mm) V _f 進給速度	開槽 Slotted	270	240	240	240	240	250
	側邊 Side	950	650	750	750	550	400

切削深度 Cutting depth

開槽 Slotted

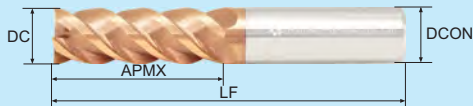


側邊 Side



ap : 軸向切削深度 Axial depth of cutting
ae : 徑向切削深度 Radial depth of cutting
DC : 刃徑 Diameter of cutting

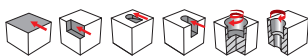
MU-GPM 4000



產品型號 Model No	切削直徑 Diameter of Cutting		切刃長度 Flute Length		柄部直徑 Shank		標準全長 Full Length	
	DC		APMX		DCON		LF	
MU-GPM4020	2		5		4		50	
MU-GPM4040	4		10		4		50	
MU-GPM4050	5		12.5		6		50	
MU-GPM4060	6		15		6		50	
MU-GPM4060L118	6		18		6		50	
MU-GPM4080	8		20		8		60	
MU-GPM4090	9		22.5		10		75	
MU-GPM4100	10		25		10		75	
MU-GPM4100L130	10		30		10		75	
MU-GPM4120	12		30		12		75	
MU-GPM4120L136	12		36		12		75	
MU-GPM4160	16		48		16		100	

4 刃圓溝雙離隙鎢鋼端銑刀

4 Flutes **Rounded Land Double Edge** Carbide End Mill



專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel

全新P500高耐磨、高韌性材質 可加工高硬度HRC55°~60°

New P500 material with high wear resistance and toughness, capable of machining high hardness HRC55°~60°.

- 刃口採雙離隙研磨，減少因阻抗而產生的震動，提升切削能力。
- GPM系列採用螺旋角45°設計。
- Cutting edge adopts double relief grinding to reduce the resistance caused by vibration, improve the cutting ability.
- GPM series helix angle 45° design.

切削參數 Diameter cutting

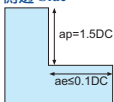
直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	6000	4000	2900	2400	1900	1500	1200
進給速度 (mm/min) Vf	開槽 Slotted						
	420	420	420	420	420	420	420
側邊 Side	側邊 Side						
	1100	800	950	750	500	480	400

切削深度 Cutting depth

開槽 Slotted



側邊 Side

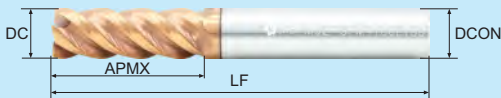


ap : 軸向切削深度 Axial depth of cutting

ae : 徑向切削深度 Radial depth of cutting

DC : 刃徑 Diameter of cutting

MU2-GPM 4000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MU2-GPM4040	4	10	4	50
MU2-GPM4040L112D6	4	12	6	50
MU2-GPM4050	5	12.5	6	50
MU2-GPM4050L115	5	15	6	50
MU2-GPM4060	6	15	6	50
MU2-GPM4060L118	6	18	6	50
MU2-GPM4070L121	7	21	8	60
MU2-GPM4080	8	20	8	60
MU2-GPM4080L124	8	24	8	60
MU2-GPM4100	10	25	10	75
MU2-GPM4100L130	10	30	10	75
MU2-GPM4105	10.5	26.25	12	75
MU2-GPM4110	11	27.5	12	75
MU2-GPM4120	12	30	12	75
MU2-GPM4120L136	12	36	12	75
MU2-GPM4160	16	48	16	100
MU2-GPM4200	20	50	20	100



4 刃圓溝不等分割鎢鋼端銑刀

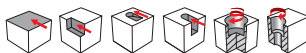
4 Flutes **Rounded Land Unequal Division** Carbide End Mill

適用材質 Material

鋼

不鏽鋼

鑄鐵



「不等分割」利於高速進給加工抗震性

Unequal division to improve seismic resistance for high speed feed machining.

- 透過刀刀的分割比例，有效控制削屑排出頻率，加強抑制加工中的細微振動，增加加工表面光滑度。
- 特殊U型溝槽設計，利於插銑加工時排屑優良，減少工件產生端口毛刺。
- GMM系列採用螺旋角45°設計。
- By blades split evenly ratio, it can control chip removal with excellent effect, strengthen the suppression of fine vibration when carbide end mill is processing, improving the processing smoothly.
- Special U shaped groove design is conducive to excellent chip removal effect during the plunge milling process, reducing port burrs generated on workpiece.
- GMM series unequal spiral 45° design.

切削參數 Dimameter cutting

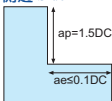
直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	6000	4000	2900	2400	1900	1500	1200
(mm/min) 進給速度	開槽 Slotted	420	420	420	420	420	420
	側邊 Side	1100	800	950	750	500	400

切削深度 Cutting depth

開槽 Slotted



側邊 Side

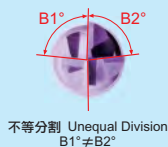


ap：軸向切削深度 Axial depth of cutting

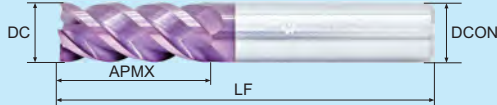
ae：徑向切削深度 Radial depth of cutting

DC：刃徑 Diameter of cutting

MUH-GMM 4000



不等分割 Unequal Division
B1° ≠ B2°



產品型號 Model No	切削直徑 Diameter of Cutting		切刃長度 Flute Length		柄部直徑 Shank		標準全長 Full Length	
	DC		APMX		DCON		LF	
MUH-GMM4030	3		7.5		4		50	
MUH-GMM4040	4		10		4		50	
MUH-GMM4040L112	4		12		4		50	
MUH-GMM4050	5		12.5		6		50	
MUH-GMM4060	6		15		6		50	
MUH-GMM4070	7		17.5		8		60	
MUH-GMM4080	8		20		8		60	
MUH-GMM4080L124	8		24		8		60	
MUH-GMM4100	10		25		10		75	
MUH-GMM4100L130	10		30		10		75	
MUH-GMM4100H	10		25		10		100	
MUH-GMM4120	12		30		12		75	
MUH-GMM4120L136	12		36		12		75	
MUH-GMM4160	16		48		16		100	
MUH-GMM4200	20		50		20		100	

4 刃圓溝不等分割、不等螺旋鎢鋼端銑刀系列

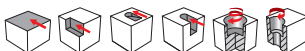
4 Flutes Rounded Land Unequal Division Unequal Spiral Carbide End Mill Series

適用材質 Material

合金鋼 Alloy Steel

不銹鋼 Stainless steel

鑄鐵 Cast Iron



「不等分割」利於高速進給加工抗震性，「不等螺旋」利於高速加工抗崩裂性

Unequal division to improve seismic resistance for high speed feed machining, Unequal spiral to improve high speed processing resistance to chipping.

- 改變每刃進給量使每銑削波形不再相同，可有效降低或避免刀具進行側時的切削震動紋路，有利於獲得高質量的加工表面和提高刀具壽命。
- 特殊U型溝槽設計，利於插銑加工時排屑優良，減少工件產生端口毛刺。
- FMM系列採用螺旋角35°/38°設計
- Changes the feed per blade, makes the milling waveform of each edge is no longer the same, effectively reduce or avoid the vibration pattern generated during side milling, is also conducive to high quality machining surfaces and improving tool life.
- Special U shaped groove design is conducive to excellent chip removal effect during the plunge milling process, reducing port burrs generated on workpiece.
- FMM series unequal spiral 35°/38° design.

切削參數 Diameter cutting

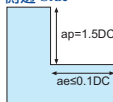
直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	6000	4000	2900	2400	1900	1500	1200
進給速度 Vf (mm/min)	開槽 Slotted	420	420	420	420	420	420
	側邊 Side	1100	800	950	750	500	400

切削深度 Cutting depth

開槽 Slotted



側邊 Side

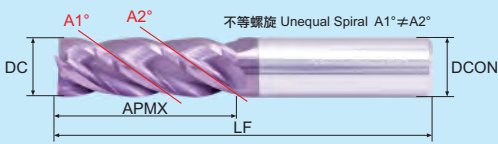


ap: 軸向切削深度 Axial depth of cutting
ae: 徑向切削深度 Radial depth of cutting
DC: 刃徑 Diameter of cutting

MUH-FMM 4000



不等分割 Unequal Division
 $B1^\circ \neq B2^\circ$



不等螺旋 Unequal Spiral $A1^\circ \neq A2^\circ$

產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MUH-FMM4020L106	2	6	4	50
MUH-FMM4030L109	3	9	4	50
MUH-FMM4040L112	4	12	4	50
MUH-FMM4050L115	5	15	6	50
MUH-FMM4060	6	15	6	50
MUH-FMM4060L118	6	18	6	50
MUH-FMM4080	8	20	8	60
MUH-FMM4080L124	8	24	8	60
MUH-FMM4100	10	25	10	75
MUH-FMM4100L130	10	30	10	75
MUH-FMM4120	12	30	12	75
MUH-FMM4120L136	12	36	12	75
MUH-FMM4160	16	48	16	100
MUH-FMM4200	20	50	20	100

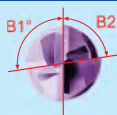
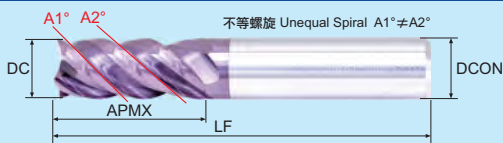
4 刃圓溝不等分割、不等螺旋鎢鋼端銑刀系列

4 Flutes Rounded Land Unequal Division Unequal Spiral Carbide End Mill Series

適用材質 Material

合金鋼
Alloy Steel不銹鋼
Stainless steel鑄鐵
Cast Iron

MUH-IMM 4000

不等分割 Unequal Division
 $B1^\circ \neq B2^\circ$ 不等螺旋 Unequal Spiral $A1^\circ \neq A2^\circ$

產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MUH-IMM4030L109	3	9	4	50
MUH-IMM4035L109	3.5	9	4	50
MUH-IMM4040	4	10	4	50
MUH-IMM4040L112	4	12	4	50
MUH-IMM4040L112D6	4	12	6	50
MUH-IMM4050	5	12.5	6	50
MUH-IMM4050L112	5	12	6	50
MUH-IMM4050L115	5	15	6	50
MUH-IMM4055L113	5.5	13	6	50
MUH-IMM4060	6	15	6	50
MUH-IMM4060L118	6	18	6	50
MUH-IMM4070	7	17.5	8	60
MUH-IMM4070L121	7	21	8	60
MUH-IMM4070L130E1	7	30	8	75
MUH-IMM4073L1219	7.3	21.9	8	60
MUH-IMM4075	7.5	18.75	8	60
MUH-IMM4080	8	20	8	60
MUH-IMM4080L124	8	24	8	60
MUH-IMM4085L1255	8.5	25.5	10	75
MUH-IMM4090	9	22.5	10	75
MUH-IMM4095	9.5	23.75	10	75
MUH-IMM4100	10	25	10	75
MUH-IMM4100L130	10	30	10	75
MUH-IMM4120	12	30	12	75
MUH-IMM4120L136	12	36	12	75
MUH-IMM4120L138	12	38	12	75
MUH-IMM4120L140	12	40	12	75
MUH-IMM4120H	12	30	12	100
MUH-IMM4120L142H	12	42	12	100
MUH-IMM4120L145H	12	45	12	100
MUH-IMM4120L153H	12	53	12	100
MUH-IMM4120L155H	12	55	12	100
MUH-IMM4140	14	35	16	100
MUH-IMM4150	15	37.5	16	100
MUH-IMM4160L122E1	16	22	16	75
MUH-IMM4160	16	48	16	100
MUH-IMM4160L140	16	40	16	100
MUH-IMM4160L155	16	55	16	100
MUH-IMM4180	18	45	20	100
MUH-IMM4190	19	47.5	20	100
MUH-IMM4200	20	50	20	100
MUH-IMM4200L160M	20	60	20	150
MUH-IMM4200L170M	20	70	20	150
MUH-IMM4200L175M	20	75	20	150
MUH-IMM4200L1130R	20	130	20	200

固定平面、降低振動 DIN 歐規設計

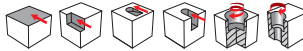
Fixed Surface for Reducing Vibration—DIN Specification for Europe Market Design

適用材質 Material

合金鋼
Alloy Steel

不鏽鋼
Stainless steel

鑄鐵
Cast Iron

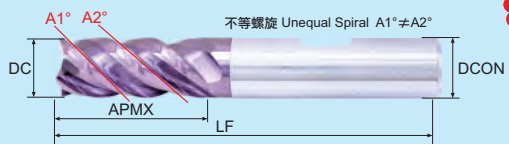


「不等分割」利於高速進給加工抗震性，「不等螺旋」利於高速加工抗崩裂性

Unequal division to improve seismic resistance for high speed feed machining, Unequal spiral to improve high speed processing resistance to chipping.

- 改變每刀進給量使每銑削波形不再相同，可有效降低或避免刀具進行側時的切削震動紋路，有利於獲得高質量的加工表面和提高刀具壽命。
- 特殊U型溝槽設計，利於插銑加工時排屑優良，減少工件產生端口毛刺。
- IMM系列採用螺旋角 $42^\circ/45^\circ$ 設計。
- Changes the feed per blade, makes the milling waveform of each edge is no longer the same, effectively reduce or avoid the vibration pattern generated during side milling, is also conducive to high quality machining surfaces and improving tool life.
- Special U shaped groove design is conducive to excellent chip removal effect during the plunge milling process, reducing port burrs generated on workpiece.
- IMM series unequal spiral $42^\circ/45^\circ$ design.

MUH-IMM 4000-DIN

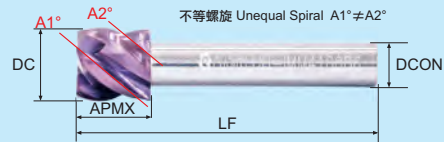


產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MUH-IMM4040-DIN	4	10	4	50
MUH-IMM4040D6-DIN	4	10	6	50
MUH-IMM4060-DIN	6	15	6	50
MUH-IMM4080-DIN	8	20	8	60
MUH-IMM4100-DIN	10	25	10	75
MUH-IMM4120-DIN	12	30	12	75
MUH-IMM4160-DIN	16	48	16	100
MUH-IMM4200-DIN	20	50	20	100

車銑複合機用鎢鋼銑刀

Turning And Milling Center Carbide End Mill

LUH-IMM 4000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
LUH-IMM4080	8	8	8	40
LUH-IMM4080D6	8	8	6	40
LUH-IMM4100D6	10	10	6	40
LUH-IMM4120D10	12	12	10	40
LUH-IMM4160D10	16	16	10	40

3 刃圓溝不等分割不等螺旋抗震鎢鋼端銑刀

3 Flute Round Land Unequal Spiral Unequal Division **Seismic Performance** Carbide End Mill

專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel

「不等分割」利於高速進給加工抗震性，「不等螺旋」利於高速加工抗崩裂性

Unequal division to improve seismic resistance for high speed feed machining, Unequal spiral to improve high speed processing resistance to chipping.

全新P500高耐磨、高韌性材質 可加工高硬度HRC55°~60°

New P500 material with high wear resistance and toughness, capable of machining high hardness HRC55°~60°.

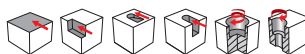
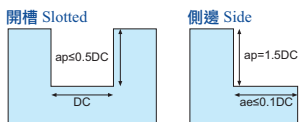
加大容屑槽於銑削加工時排屑更優良 Enlarged chip pocket for excellent chip removal during plunge milling.

- 改變每刃進給量使每銑削波形不再相同，可有效降低或避免刀具進行側時的切削震動紋路，有利於獲得高質量的加工表面和提高刀具壽命。
- 特殊U型溝槽設計，利於插銑加工時排屑優良，減少工件產生端口毛刺。
- IPM系列採取螺旋角42° / 45°設計。
- Changes the feed per blade, makes the milling waveform of each edge is no longer the same, effectively reduce or avoid the vibration pattern generated during side milling, is also conducive to high quality machining surfaces and improving tool life.
- Special U shaped groove design is conducive to excellent chip removal effect during the plunge milling process, reducing port burrs generated on workpiece.
- IPM series unequal spiral 42° / 45° design.

切削參數 Dimameter cutting

直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	6000	4000	2900	2400	1900	1500	1200
進給速度 (mm/min) V _f							
開槽 Slotted	360	360	300	300	280	230	230
側邊 Side	540	480	480	480	400	400	400

切削深度 Cutting depth

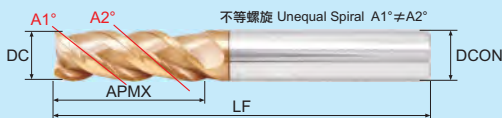


ap：軸向切削深度 Axial depth of cutting
ae：徑向切削深度 Radial depth of cutting
DC：刃徑 Diameter of cutting

MUH-IPM 3000L1



不等分割 Unequal Division
B1° ≠ B2° ≠ B3°



產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
MUH-IPM3040L112	4	12	4	50
MUH-IPM3040L112D6	4	12	6	50
MUH-IPM3050L115	5	15	6	50
MUH-IPM3060L118	6	18	6	50
MUH-IPM3080L124	8	24	8	60
MUH-IPM3100L130	10	30	10	75
MUH-IPM3120L136	12	36	12	75
MUH-IPM3160L148	16	48	16	100

圓溝不等分割不等螺旋難削材鎢鋼端銑刀

Rounded Unequal Spiral Unequal Division for Hard Materials Carbide End Mill

適用於特殊材質 Special Material For

鈦合金
Titanium

鎳合金
Nickel Alloy

特殊鍍鈦塗層，適用於難切削材、航太零部件

Special titanium coating (TSY) is suitable for machining of Hard Materials or aerospace components.

提升耐高溫、耐磨耗度，表面不易沾黏金屬，可切削硬度達HRC55~60°

Enhances high temperature resistance and wear resistance, preventing metal adhesion on the surface capable of cutting hardness HRC 55°~60°.

加大容屑槽於銑削加工時排屑更優良 Enlarged chip pocket for excellent chip removal during plunge milling.

• IYM系列採用螺旋角42°/45°設計。

• IYM series unequal spiral 42°/45° design.

專用特殊塗層

Special Coating For

鈦合金
Titanium

切削參數 Dimameter cutting

直徑 (mm) Shank	4	6	8	10	12	16
轉速 n (min)	4000	2600	2000	1600	1300	1000
(mm/min) Vf 進給速度	開槽 Slotted	320	210	240	190	210
	側邊 Side	800	520	400	380	240

專用特殊塗層

Special Coating For

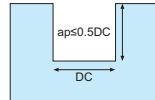
鎳合金
Nickel Alloy

切削參數 Dimameter cutting

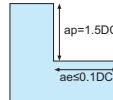
直徑 (mm) Shank	4	6	8	10	12	16
轉速 n (min)	2000	1300	1000	800	700	500
(mm/min) Vf 進給速度	開槽 Slotted	160	105	120	95	100
	側邊 Side	400	260	200	190	120

切削深度 Cutting depth

開槽 Slotted



側邊 Side



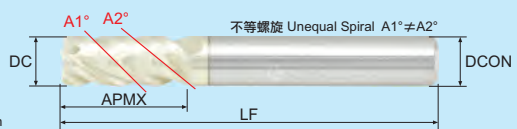
ap : 軸向切削深度 Axial depth of cutting
ae : 徑向切削深度 Radial depth of cutting
DC : 刃徑 Diameter of cutting

MUH-IYM 4000

MG HM CO HRC Y 42 45 TSY



不等分割 Unequal Division
B1° ≠ B2°



不等螺旋 Unequal Spiral A1° ≠ A2°

產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MUH-IYM4040	4	10	4	50
MUH-IYM4060	6	15	6	50
MUH-IYM4080	8	20	8	60
MUH-IYM4080L124	8	24	8	60
MUH-IYM4100	10	25	10	75
MUH-IYM4100L130	10	30	10	75
MUH-IYM4120	12	30	12	75
MUH-IYM4160	16	48	16	100

圓溝不等分割不等螺旋高耐磨、高韌性鎢鋼端銑刀

Round Land Unequal Spiral Unequal Division High Abrasion Resistance · High Toughness Carbide End Mill

全新高耐磨、高韌性材質，可加工高硬度HRC55°~HRC60°

Brand new series, with high abrasion resistance、high toughness material HRC55°~HRC60°

不等角分割利於高速進給加工抗震性，不等螺旋角利於高速加工抗崩裂性

Unequal division is conducive to seismic resistance for high-speed feed machining, unequal helix angle is to improve chipping resistance for high-speed processing

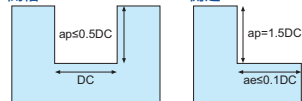
切削參數 Dimameter cutting

直徑 (mm) Shank	4	6	8	10	12
轉速 n (min)	6000	4000	2900	2400	1900
進給速度 (mm/min) V _f	420	420	420	420	420
開槽 Slotted	420	420	420	420	420
側邊 Side	1100	800	950	750	500

切削深度 Cutting depth

開槽 Slotted

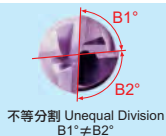
側邊 Side



ap : 軸向切削深度 Axial depth of cutting
ae : 徑向切削深度 Radial depth of cutting
DC : 刃徑 Diameter of cutting

MUH-IGM 4000

MG, ALN, CO, HRC, G, 42, Altin



產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
MUH-IGM4040	4	10	4	50
MUH-IGM4040L112	4	12	4	50
MUH-IGM4050	5	12.5	6	50
MUH-IGM4060	6	15	6	50
MUH-IGM4060L118	6	18	6	50
MUH-IGM4080	8	20	8	60
MUH-IGM4080L124	8	24	8	60
MUH-IGM4100	10	25	10	75
MUH-IGM4100L130	10	30	10	75
MUH-IGM4120	12	30	12	75
MUH-IGM4120L136	12	36	12	75

MUH-IEM 4000

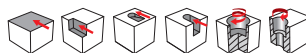
MG, ALN, CO, HRC, G, 42, TiSiN



產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
MUH-IEM4035L109D6	3.5	9	6	50
MUH-IEM4040	4	10	4	50
MUH-IEM4040L112	4	12	4	50
MUH-IEM4040L112D6	4	12	6	50
MUH-IEM4050L115	5	15	6	50
MUH-IEM4060	6	15	6	50
MUH-IEM4060L118	6	18	6	50
MUH-IEM4070L121	7	21	8	60
MUH-IEM4080	8	20	8	60
MUH-IEM4080L124	8	24	8	60
MUH-IEM4100	10	25	10	75
MUH-IEM4100L130	10	30	10	75
MUH-IEM4120	12	30	12	75
MUH-IEM4120L136	12	36	12	75

平溝不等分割、不等螺旋 4 刃鎢鋼端銑刀

Flat Unequal Spiral Unequal Division 4 Flutes Carbide End Mill



- 改變每刀進給量使每銑削波形不再相同，可有效降低或避免刀具進行側時的切削震動紋路，有利於獲得高質量的加工表面和提高刀具壽命，LMM系列、LPM系列皆採用螺旋角 $39^\circ/41^\circ$ 設計。
- Changes the feed per blade, makes the milling waveform of each edge is no longer the same, effectively reduce or avoid the vibration pattern generated during side milling, is also conducive to high quality machining surfaces and improving tool life, LMM series vs. LPM series unequal spiral $39^\circ/41^\circ$ design.

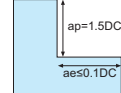
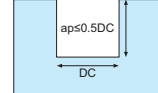
切削參數 Dimameter cutting

切削深度 Cutting depth

開槽 Slotted

側邊 Side

直徑 (mm) Shank	4	6	8	10	12	16
轉速 n (min)	6000	4000	2900	2400	1900	1500
進給速度 (mm/min)	420	420	420	420	420	420
開槽 Slotted	420	420	420	420	420	420
側邊 Side	1100	800	950	500	500	480

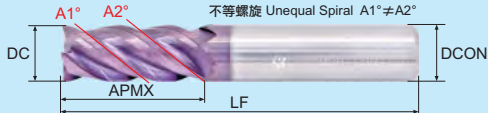


ap: 軸向切削深度 Axial depth of cutting
ae: 徑向切削深度 Radial depth of cutting
DC: 刃徑 Diameter of cutting

MMH-LMM 4000



適用材質 Material



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MMH-LMM4040	4	10	4	50
MMH-LMM4060	6	15	6	50
MMH-LMM4080	8	20	8	60
MMH-LMM4100	10	25	10	75
MMH-LMM4100L140H	10	40	10	100
MMH-LMM4120	12	30	12	75
MMH-LMM4120L136	12	36	12	75
MMH-LMM4160L155	16	55	16	100
MMH-LMM4160M	16	48	16	150

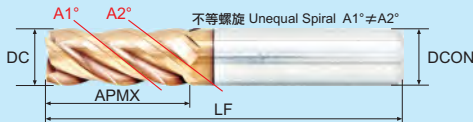
全新P500高耐磨、高韌性材質 可加工高硬度HRC55°~60°

New P500 material with high wear resistance and toughness, capable of machining high hardness HRC55°~60°.

MMH-LPM 4000



專用特殊塗層 Special Coating For



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MMH-LPM4040	4	10	4	50
MMH-LPM4055L1165	5.5	16.5	6	50
MMH-LPM4060	6	15	6	50
MMH-LPM4080	8	20	8	60
MMH-LPM4080L124	8	24	8	60
MMH-LPM4100	10	25	10	75
MMH-LPM4120	12	30	12	75
MMH-LPM4120L136	12	36	12	75
MMH-LPM4160	16	48	16	100

產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
RM-CMM4050	5	12.5	6	50
RM-CMM4060	6	15	6	50
RM-CMM4070	7	17.5	8	60
RM-CMM4080	8	20	8	60
RM-CMM4100	10	25	10	75
RM-CMM4120	12	30	12	75
RM-CMM4120L136	12	36	12	75
RM-CMM4150	15	37.5	16	100
RM-CMM4160	16	48	16	100



特殊切碎幾何刀刃設計，適合複合材料精加工，可減少磨損提升刀具加工壽命

Special shredding geometric flutes design, is conducive to finishing of composite, can reduce wear and improve tool processing life.

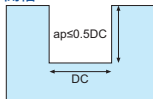
- CWM系列採用螺旋角30°設計，有利於切削複合材料精加工，實現高質量的加工表面。
- CWM series helix angle 30° design, is conducive to finishing of composite, to achieve high quality processing surfaces.

切削參數 Dimameter cutting

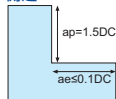
直徑 (mm) Shank	4	5	6	8	10	12
轉速 n (min)	6370	5100	4250	3190	2550	2130
進給速度 (mm/min) Vf	開槽 Slotted	510	550	470	450	410
	側邊 Side	1020	1160	940	900	820

切削深度 Cutting depth

開槽 Slotted



側邊 Side



ap : 軸向切削深度 Axial depth of cutting
ae : 徑向切削深度 Radial depth of cutting
DC : 刃徑 Diameter of cutting

CFM-CWM



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF	刃數 Flute CICT
CFM-CWM8040	4	12	4	50	8
CFM-CWM12050	5	15	6	50	12
CFM-CWM12060	6	18	6	50	12
CFM-CWM11060L124	6	24	6	50	11
CFM-CWM14080L125	8	25	8	60	14
CFM-CWM16100	10	30	10	75	16
CFM-CWM17120L132	12	32	12	100	17

微小徑球頭鎢鋼端銑刀

Micro Diameter Ball Nose Carbide End Mill

適用材質 Material

鋼

不鏽鋼
stainless s

鑄鐵
Cast Iron

採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性，加強排屑效率，加工工件硬度HRC55°以下
Ultra-fine particle cemented carbide AlTiN coating for increased tool wearability and improve the chip removal.
it can process on hardness up to 55HRC.

適用於專業醫療設備、電子、化學及工業等精密細小零件之製造加工

Apply on manufacturing and processing of precision small parts such as professional medical equipment, electronics, chemicals and industry.

- 微小徑設計有利於狹小孔徑空間工件加工需求，提供精確的加工精準度和良好表面光潔度。
- 採用圓形刀帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- Micro-diameter design is beneficial to the processing requirements of cutting, specially in processing in small space. It provides precise accuracy of machining and excellent surface finish.
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.

S-EMB 2000



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
S-EMB2003	0.15	0.3	0.6	4	50
S-EMB2004	0.2	0.4	0.8	4	50
S-EMB2005	0.25	0.5	1	4	50
S-EMB2006	0.3	0.6	1.2	4	50
S-EMB2007	0.35	0.7	1.4	4	50
S-EMB2008	0.4	0.8	1.6	4	50
S-EMB2009	0.45	0.9	1.8	4	50

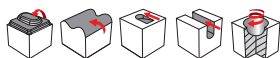
微小徑長頸短刃球頭設計鎢鋼端銑刀

Micro Diameter Long Neck Short Flute Ball Nose Design Carbide End Mill

S-EMB 2000L2



產品型號 Model No	刃 角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切削長度 Flute Length APMX	柄部直徑 Shank DCON	頸 徑 Neck Shank DN	可使用長度 Effective Length LU	標準全長 Full Length LF
S-EMB2004L202	0.2	0.4	0.32	4	0.37	2	50
S-EMB2004L204	0.2	0.4	0.32	4	0.37	4	50
S-EMB2005L202	0.25	0.5	0.4	4	0.46	2	50
S-EMB2005L204	0.25	0.5	0.4	4	0.46	4	50
S-EMB2005L206	0.25	0.5	0.4	4	0.46	6	50
S-EMB2006L202	0.3	0.6	0.48	4	0.56	2	50
S-EMB2006L204	0.3	0.6	0.48	4	0.56	4	50
S-EMB2006L206	0.3	0.6	0.48	4	0.56	6	50
S-EMB2006L208	0.3	0.6	0.48	4	0.56	8	50
S-EMB2008L203	0.4	0.8	0.64	4	0.76	3	50
S-EMB2008L204	0.4	0.8	0.64	4	0.76	4	50
S-EMB2008L206	0.4	0.8	0.64	4	0.76	6	50
S-EMB2008L208	0.4	0.8	0.64	4	0.76	8	50
S-EMB2008L210	0.4	0.8	0.64	4	0.76	10	50



專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel

全新P500材質 高耐磨 高韌性，可加工高硬度HRC50°~60°

New P500 series, with high abrasion resistance, high ductility material, capable of machining high hardness HRC 55° ~60°.

適用於專業醫療設備、電子、化學及工業等精密細小零件之製造加工

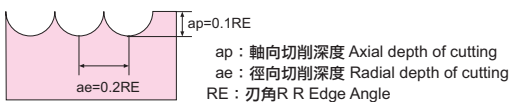
Apply on manufacturing and processing of precision small parts such as professional medical equipment, electronics, chemicals and industry.

- 獨特鎢鋼刀體結構設計，有效抑制加工震動，提升銑刀加工壽命。
- 採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性，加強排屑效率。
- 微小徑設計有利於狹小孔徑空間工件加工需求，提供精確的加工精準度和良好表面光潔度。
- 採用圓形刃帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- Adopts a full carbide cutter body unique edge structure design to effectively suppress the processing vibration.
- Ultra-fine particle cemented carbide AlTiN coating for increased tool wearability and improve the chip removal.
- Micro-diameter design is beneficial to the processing requirements of cutting, specially in processing in small space. It provides precise accuracy of machining and excellent surface finish.
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.

切削參數 Diameter cutting

直徑 (mm) Shank	4
轉速 n (min)	6400
進給速度Vf (mm/min)	235

切削深度 Cutting depth



S-EPB 2000



產品型號 Model No	刃角 R Edge Angle	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	RE	DC	APMX	DCON	LF
S-EPB2003	0.15	0.3	0.6	4	50
S-EPB2004	0.2	0.4	0.8	4	50
S-EPB2005	0.25	0.5	1	4	50
S-EPB2006	0.3	0.6	1.2	4	50
S-EPB2007	0.35	0.7	1.4	4	50
S-EPB2008	0.4	0.8	1.6	4	50
S-EPB2009	0.45	0.9	1.8	4	50

2 刃球頭鎢鋼端銑刀

2 Flutes Ball Nose Carbide End Mill Series

適用材質 Material

鋼
Steel

不銹鋼
Stainless steel

鑄鐵
Cast iron

採用全新進口棒材，加工工件硬度HRC55°以下，採用國際公差標準h5，公差範圍控制在 μ 級精度

Using the latest import carbide rod, it can process on hardness up to 55HRC.

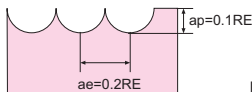
International tolerance standard h5, tolerance range control at μ level accuracy.

- 獨特鎢鋼刀體結構設計，有效抑制加工震動，提升銑刀加工壽命。
- 採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性，加強排屑效率。
- 採用圓形刀帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- EMB series helix angle 35° design, adopts a full carbide cutter body unique edge structure design to effectively suppress the processing vibration.
- Ultra-fine particle cemented carbide AlTiN coating for increased tool wearability and improve the chip removal.
- Micro-diameter design is beneficial to the processing requirements of cutting, specially in processing in small space. It provides precise accuracy of machining and excellent surface finish.
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.

切削參數 Diameter cutting

直徑 (mm) Shank	3	4	6	8	10	12	16	20
轉速 n (min)	8400	6400	4300	3200	2600	2200	1600	1300
進給速度Vf (mm/min)	150	235	245	275	275	255	230	205

切削深度 Cutting depth

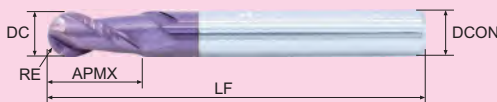


ap：軸向切削深度 Axial depth of cutting

ae：徑向切削深度 Radial depth of cutting

RE：刃角R R Edge Angle

EMB 2000



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EMB2010	0.5	1	2	4	50
EMB2010D6	0.5	1	2	6	50
EMB2010E1D6	0.5	1	2	6	75
EMB2015	0.75	1.5	3	4	50
EMB2015D6	0.75	1.5	3	6	50
EMB2015E1D6	0.75	1.5	3	6	75
EMB2020	1	2	4	4	50
EMB2020L112D6	1	2	12	6	50
EMB2020D6	1	2	4	6	50
EMB2020E1D6	1	2	4	6	75
EMB2025	1.25	2.5	5	4	50
EMB2025D6	1.25	2.5	5	6	50
EMB2030	1.5	3	6	4	50
EMB2030D3	1.5	3	6	3	50
EMB2030D6	1.5	3	6	6	50
EMB2030E1D6	1.5	3	6	6	75
EMB2032	1.6	3.2	6.4	4	50
EMB2035	1.75	3.5	7	4	50

※ 請接下頁。 ※ Continued on next page.



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EMB2035D6	1.75	3.5	7	6	50
EMB2035E1	1.75	3.5	7	4	75
EMB2035E1D6	1.75	3.5	7	6	75
EMB2040	2	4	8	4	50
EMB2040D6	2	4	8	6	50
EMB2040E1	2	4	8	4	75
EMB2040E1D6	2	4	8	6	75
EMB2040H	2	4	8	4	100
EMB2040HD6	2	4	8	6	100
EMB2042	2.1	4.2	8.4	6	50
EMB2049	2.45	4.9	9.8	6	50
EMB2050	2.5	5	10	6	50
EMB2050E1	2.5	5	10	6	75
EMB2050H	2.5	5	10	6	100
EMB2056	2.8	5.6	11.2	6	50
EMB2060	3	6	12	6	50
EMB2060E1	3	6	12	6	75
EMB2060H	3	6	12	6	100
EMB2060M	3	6	12	6	150
EMB2065	3.25	6.5	13	8	60
EMB2069	3.45	6.9	13.8	8	60
EMB2070	3.5	7	14	8	60
EMB2080	4	8	16	8	60
EMB2080E1	4	8	16	8	75
EMB2080H	4	8	16	8	100
EMB2080M	4	8	16	8	150
EMB2080R	4	8	16	8	200
EMB2090	4.5	9	18	10	75
EMB2100	5	10	20	10	75
EMB2100H	5	10	20	10	100
EMB2100M	5	10	20	10	150
EMB2100R	5	10	20	10	200
EMB2120	6	12	24	12	75
EMB2120H	6	12	24	12	100
EMB2120M	6	12	24	12	150
EMB2120R	6	12	24	12	200
EMB2160	8	16	32	16	100
EMB2160M	8	16	32	16	150
EMB2160R	8	16	32	16	200
EMB2200	10	20	40	20	100
EMB2200M	10	20	40	20	150
EMB2200R	10	20	40	20	200

2 刃長頸球頭鎢鋼端銑刀

2 Flutes Long Neck Short Flute Ball Nose Carbide End Mill

適用材質 Material

鋼

不鏽鋼

鑄鐵

採用全新進口棒材，加工工件硬度HRC55°以下，採用國際公差標準h5，公差範圍控制在μ級精度

• 獨特鎢鋼刀體結構設計，有效抑制加工震動，提升銑刀加工壽命。

• 採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性，加強排屑效率。

• 採用圓形刀帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。

切削參數 Dimameter cutting

直徑 (mm) Shank	4	6	8
轉速 n (min)	6400	4300	3200
進給速度 Vf (mm/min)	235	245	275

切削深度 Cutting depth



ap=0.1RE

ap: 軸向切削深度

Axial depth of cutting

ae: 徑向切削深度

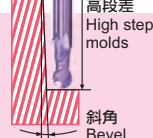
Radial depth of cutting

RE: 刃角 R Edge Angle

長頸型鎢鋼球刀，適用於高段差模具或曲面仿型加工，尺寸穩定、精度高

Long necked ball nose end mill is suitable for high step molds or workpiece surface profiling.

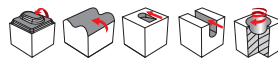
EMB 2000L2



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切削長度 Flute Length APMX	柄部直徑 Shank Diameter DCON	頸徑 Neck Shank DN	可使用長度 Effective Length LU	標準全長 Full Length LF
EMB2010L204	0.5	1	0.8	4	0.95	4	50
EMB2010L206	0.5	1	0.8	4	0.95	6	50
EMB2010L208	0.5	1	0.8	4	0.95	8	50
EMB2010L210	0.5	1	0.8	4	0.95	10	50
EMB2010L212	0.5	1	0.8	4	0.95	12	50
EMB2015L204	0.75	1.5	1.2	4	1.45	4	50
EMB2015L206	0.75	1.5	1.2	4	1.45	6	50
EMB2015L208	0.75	1.5	1.2	4	1.45	8	50
EMB2015L210	0.75	1.5	1.2	4	1.45	10	50
EMB2015L212	0.75	1.5	1.2	4	1.45	12	50
EMB2020L206	1	2	1.6	4	1.94	6	50
EMB2020L208	1	2	1.6	4	1.94	8	50
EMB2020L210	1	2	1.6	4	1.94	10	50
EMB2020L212	1	2	1.6	4	1.94	12	50
EMB2020L212E1	1	2	1.6	4	1.94	12	75
EMB2020L214	1	2	1.6	4	1.94	14	50
EMB2020L216	1	2	1.6	4	1.94	16	50
EMB2020L216E1	1	2	1.6	4	1.94	16	75
EMB2030L208	1.5	3	2.4	4	2.85	8	50
EMB2030L210	1.5	3	2.4	4	2.85	10	50
EMB2030L212	1.5	3	2.4	4	2.85	12	50
EMB2030L214	1.5	3	2.4	4	2.85	14	50
EMB2030L216	1.5	3	2.4	4	2.85	16	50
EMB2030L220	1.5	3	2.4	4	2.85	20	50
EMB2040L212	2	4	3.2	4	3.8	12	50
EMB2040L214	2	4	3.2	4	3.8	14	50
EMB2040L216	2	4	3.2	4	3.8	16	50
EMB2040L220	2	4	3.2	4	3.8	20	50
EMB2040L225	2	4	3.2	4	3.8	25	50
EMB2060L220	3	6	4.8	6	5.9	20	50
EMB2060L235HD8	3	6	12	8	5.9	35	100
EMB2060L240MD8	3	6	12	8	5.9	40	150

4 刃球頭鎢鋼端銑刀

4 Flutes Ball Nose Carbide End Mill



Using the latest import carbide rod, it can process on hardness up to 55HRC.
International tolerance standard h5, tolerance range control at μ level accuracy.

- EMB series helix angle 35° design, adopts a full carbide cutter body unique edge structure design to effectively suppress the processing vibration.
- Ultra-fine particle cemented carbide AlTiN coating for increased tool wearability and improve the chip removal.
- Micro-diameter design is beneficial to the processing requirements of cutting, specially in processing in small space. It provides precise accuracy of machining and excellent surface finish.
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.

切削參數 Dimameter cutting

直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	6400	4300	3200	2600	2200	1600	1300
進給速度 Vf (mm/min)	470	490	550	550	510	450	410

切削深度 Cutting depth



ap : 軸向切削深度 Axial depth of cutting
ae : 徑向切削深度 Radial depth of cutting
RE : 刃角 R R Edge Angle

EMB 4000



產品型號 Model No	刃角 R Edge Angle	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	RE	DC	APMX	DCON	LF
EMB4010	0.5	1	2	4	50
EMB4015	0.75	1.5	3	4	50
EMB4020	1	2	4	4	50
EMB4030	1.5	3	6	4	50
EMB4035	1.75	3.5	7	4	50
EMB4035D6	1.75	3.5	7	6	50
EMB4040	2	4	8	4	50
EMB4040D6	2	4	8	6	50
EMB4040E1	2	4	8	4	75
EMB4040H	2	4	8	4	100
EMB4045	2.25	4.5	9	6	50
EMB4050	2.5	5	10	6	50
EMB4060	3	6	12	6	50
EMB4060E1	3	6	12	6	75
EMB4060H	3	6	12	6	100
EMB4070L1175	3.5	7	17.5	8	60
EMB4080	4	8	16	8	60
EMB4080E1	4	8	16	8	75
EMB4080H	4	8	16	8	100
EMB4080M	4	8	16	8	150
EMB4100	5	10	20	10	75
EMB4100H	5	10	20	10	100
EMB4100M	5	10	20	10	150
EMB4120	6	12	24	12	75
EMB4120H	6	12	24	12	100
EMB4120M	6	12	24	12	150
EMB4160	8	16	32	16	100
EMB4160M	8	16	32	16	150
EMB4200	10	20	40	20	100

鋁合金專用 2 刃球頭鎢鋼端銑刀

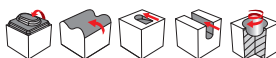
For Aluminum Alloy 2 Flute Ball Nose Carbide End Mill

適用材質 Material

鋁合金
Aluminum

銅
Copper

塑膠
Plastic



採用國際公差標準h5，公差範圍控制在 μ 級精度

International tolerance standard h5, tolerance range control at μ level accuracy.

採用圓形刃帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。

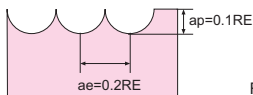
Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.

- 獨特鎢鋼刀體結構設計，有效抑制加工震動，提升銑刀加工壽命。
- EWB系列採用螺旋角35°設計。
- Adopts a full carbide cutter body unique edge structure design to effectively suppress the processing vibration.
- EWB series helix angle 35° design.

切削參數 Diameter cutting

直徑 (mm) Shank	3	4	6	8	10	12	16	20
轉速 n (min)	8400	6400	4300	3200	2600	2200	1600	1300
進給速度 Vf (mm/min)	150	235	245	275	275	255	230	205

切削深度 Cutting depth



ap：軸向切削深度 Axial depth of cutting
ae：徑向切削深度 Radial depth of cutting
RE：刃角 R R Edge Angle

EWB 2000



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EWB2010	0.5	1	2	4	50
EWB2015	0.75	1.5	3	4	50
EWB2020	1	2	4	4	50
EWB2030	1.5	3	6	4	50
EWB2040	2	4	8	4	50
EWB2050	2.5	5	10	6	50
EWB2060	3	6	12	6	50
EWB2060E1	3	6	12	6	75
EWB2080	4	8	16	8	60
EWB2100	5	10	20	10	75
EWB2100H	5	10	20	10	100
EWB2120	6	12	24	12	75

2 刃球頭抗震鎢鋼端銑刀

2 Flute Ball Nose Seismic Performance Carbide End Mill

專用特殊塗層 Special Coating For

合金鋼
Alloy Steel碳鋼
Carbon Steel

全新P500材質 高耐磨 高韌性，可加工高硬度HRC50°~60°

New P500 series, with high abrasion resistance, high ductility material, capable of machining high hardness HRC 55° ~60°.

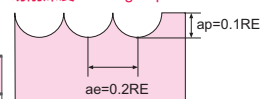
採用國際公差標準h5，公差範圍控制在 μ 級精度International tolerance standard h5, tolerance range control at μ level accuracy.

- 獨特鎢鋼刀體結構設計，有效抑制加工震動，提升銑刀加工壽命。
- 採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性，加強排屑效率。
- 採用圓形刀帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- EPB系列採用螺旋角35°設計。
- Adopts a unique carbide cutter body unique edge structure design to effectively suppress the processing vibration.
- Ultra-fine particle cemented carbide AlTiN coating for increased tool wearability and improve the chip removal.
- Micro-diameter design is beneficial to the processing requirements of cutting, specially in processing in small space. It provides precise accuracy of machining and excellent surface finish.
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.
- EPB series helix angle 35° design.

切削參數 Diameter cutting

直徑 (mm) Shank	3	4	6	8	10	12	16	20
轉速 n (min)	8400	6400	4300	3200	2600	2200	1600	1300
進給速度 Vf (mm/min)	150	235	245	275	275	255	230	205

切削深度 Cutting depth



ap：軸向切削深度 Axial depth of cutting

ae：徑向切削深度 Radial depth of cutting

RE：刃角 R Edge Angle

EPB 2000

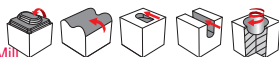


產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EPB2010	0.5	1	2	4	50
EPB2015	0.75	1.5	3	4	50
EPB2020	1	2	4	4	50
EPB2030	1.5	3	6	4	50
EPB2030D3	1.5	3	6	3	50
EPB2030D6	1.5	3	6	6	50
EPB2040	2	4	8	4	50
EPB2050	2.5	5	10	6	50
EPB2060	3	6	12	6	50
EPB2060E1	3	6	12	6	75
EPB2060H	3	6	12	6	100
EPB2070	3.5	7	14	8	60
EPB2080	4	8	16	8	60
EPB2080E1	4	8	16	8	75
EPB2100	5	10	20	10	75
EPB2100H	5	10	20	10	100
EPB2100M	5	10	20	10	150
EPB2120	6	12	24	12	75
EPB2120L150M	6	12	50	12	150
EPB2160	8	16	32	16	100
EPB2200	10	20	40	20	100



2 刃球頭抗震鎢鋼端銑刀

2 Flute Ball Nose Seismic Performance Carbide End Mill



專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel

全新E300材質 高耐磨 高韌性，可加工高硬度HRC50°~60°

New E300 series, with high abrasion resistance, high ductility material, capable of machining high hardness HRC 55° ~60°.

採用全新進口棒材，加工工件硬度HRC55°以下，採用國際公差標準h5，公差範圍控制在 μ 級精度

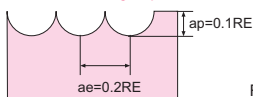
Using the latest import carbide rod, it can process on hardness up to 55HRC, international tolerance standard h5, tolerance range control at μ level accuracy.

- 獨特鎢鋼刀體結構設計，有效抑制加工震動，提升銑刀加工壽命。
- 採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性，加強排屑效率。
- 採用圓形刃帶，大幅提高了耐用性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- EEB系列採用螺旋角35°設計。
- Adopts a full carbide cutter body unique edge structure design to effectively suppress the processing vibration.
- Ultra-fine particle cemented carbide AlTiN coating for increased tool wearability and improve the chip removal.
- Micro-diameter design is beneficial to the processing requirements of cutting, specially in processing in small space. It provides precise accuracy of machining and excellent surface finish.
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.
- EEB series helix angle 35° design.

切削參數 Diameter cutting

直徑 (mm) Shank	3	4	6	8	10	12	16	20
轉速 n (min)	8400	6400	4300	3200	2600	2200	1600	1300
進給速度 Vf (mm/min)	150	235	245	275	275	255	230	205

切削深度 Cutting depth



ap：軸向切削深度 Axial depth of cutting

ae：徑向切削深度 Radial depth of cutting

RE：刃角 R R Edge Angle

EEB 2000

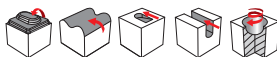


產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EEB2020	1	2	4	4	50
EEB2030	1.5	3	6	4	50
EEB2040	2	4	8	4	50
EEB2050	2.5	5	10	6	50
EEB2060	3	6	12	6	50
EEB2080	4	8	16	8	60
EEB2100	5	10	20	10	75
EEB2120	6	12	24	12	75



4 刃球頭抗震鎢鋼端銑刀

4 Flute Ball Nose Seismic Performance Carbide End Mill



專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel

全新P500材質 高耐磨 高韌性，可加工高硬度HRC50°~60°

New P500 series, with high abrasion resistance, high ductility material, capable of machining high hardness HRC 55° ~ 60°.

採用國際公差標準h5，公差範圍控制在 μ 級精度

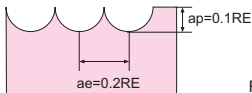
International tolerance standard h5, tolerance range control at μ level accuracy.

- 獨特鎢鋼刀體結構設計，有效抑制加工震動，提升銑刀加工壽命。
- 採用圓形刃帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- EPB系列採用螺旋角35°設計。
- Adopts a full carbide cutter body unique edge structure design to effectively suppress the processing vibration.
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.
- EPB series helix angle 35° design.

切削參數 Diameter cutting

直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	6400	4300	3200	2600	2200	1600	1300
進給速度 Vf (mm/min)	470	490	550	550	510	450	410

切削深度 Cutting depth



ap：軸向切削深度 Axial depth of cutting

ae：徑向切削深度 Radial depth of cutting

RE：刃角 R R Edge Angle

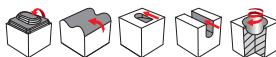
EPB 4000



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
EPB4020	1	2	4	4	50
EPB4030	1.5	3	6	4	50
EPB4040	2	4	8	4	50
EPB4050	2.5	5	10	6	50
EPB4055	2.75	5.5	11	6	50
EPB4060	3	6	12	6	50
EPB4065	3.25	6.5	13	8	60
EPB4070L1175	3.5	7	17.5	8	60
EPB4080	4	8	16	8	60
EPB4100	5	10	20	10	75
EPB4120	6	12	24	12	75
EPB4160	8	16	32	16	100
EPB4200	10	20	40	20	100

2 刃球頭鎢鋼端銑刀

2 Flutes Ball Nose Carbide End Mill Series



適用材質 Material



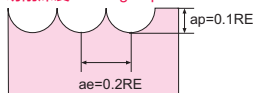
採用全新進口棒材，加工工件硬度HRC55'以下，採用國際公差標準h5，公差範圍控制在 μ 級精度
Using the latest import carbide rod, it can process on hardness up to 55HRC, international tolerance standard h5, tolerance range control at μ level accuracy.

- 獨特鎢鋼刀體結構設計，有效抑制加工震動，提升銑刀加工壽命。
- 採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性，加強排屑效率。
- 採用圓形刃帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- DMB系列採用螺旋角30°設計。
- Adopts a full carbide cutter body unique edge structure design to effectively suppress the processing vibration.
- Ultra-fine particle cemented carbide AlTiN coating for increased tool wearability and improve the chip removal.
- Micro-diameter design is beneficial to the processing requirements of cutting, specially in processing in small space. It provides precise accuracy of machining and excellent surface finish.
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.
- DMB series helix angle 30° design.

切削參數 Diameter cutting

直徑 (mm) Shank	4	6	8	10	12
轉速 n (min)	6400	4300	3200	2600	2200
進給速度 Vf (mm/min)	235	245	275	275	255

切削深度 Cutting depth



ap：軸向切削深度 Axial depth of cutting

ae：徑向切削深度 Radial depth of cutting

RE：刃角 R R Edge Angle

DMB 2000



全新進口棒材 圓形刃帶 耐震高、抗崩損

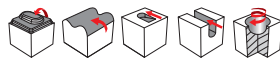
Latest Import Carbide Rod, Using Round Flute, Improve Shock Resistance, And Resistance To Collapse.



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DMB2030	1.5	3	6	4	50
DMB2030D6	1.5	3	6	6	50
DMB2040	2	4	8	4	50
DMB2045	2.25	4.5	9	6	50
DMB2050	2.5	5	10	6	50
DMB2060	3	6	12	6	50
DMB2070	3.5	7	14	8	60
DMB2080	4	8	16	8	60
DMB2090	4.5	9	18	10	75
DMB2100	5	10	20	10	75
DMB2120	6	12	24	12	75

鋁合金專用長頸型球鋤鋼端銑刀

For Aluminum Long Neck Ball Nose Carbide End Mill



長頸型鋤鋼球刀，適用於高段差模具或曲面仿型加工，尺寸穩定、精度高

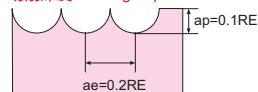
Long necked ball nose end mill is suitable for high step molds or workpiece surface profiling, with stable dimensions and high precision.

- 獨特鋤鋼刀體結構設計，有效抑制加工震動，提升銑刀加工壽命。
- 採用圓形刀帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- DWB系列、DPB系列皆採用螺旋角30°設計。
- Adopts a full carbide cutter body unique edge structure design to effectively suppress the processing vibration.
- Micro-diameter design is beneficial to the processing requirements of cutting, specially in processing in small space. It provides precise accuracy of machining and excellent surface finish.
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.
- DWB vs. DPB series helix angle 30° design.

切削參數 Diameter cutting

直徑 (mm) Shank	4	6	8	10	12
轉速 n (min)	6400	4300	3200	2600	2200
進給速度 Vf (mm/min)	235	245	275	275	255

切削深度 Cutting depth



ap: 軸向切削深度 Axial depth of cutting
ae: 徑向切削深度 Radial depth of cutting
RE: 刃角 R R Edge Angle

DWB 2000L2



適用材質 Material



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	頸徑 Neck DN	可使用長度 Effective Length LU	標準全長 Full Length LF
DWB2010L204	0.5	1	0.8	4	0.95	4	50
DWB2010L206	0.5	1	0.8	4	0.95	6	50
DWB2010L208	0.5	1	0.8	4	0.95	8	50

全新P500材質 高耐磨 高韌性，可加工高硬度HRC50°~60°

New P500 series, with high abrasion resistance, high ductility material, capable of machining high hardness HRC 55° ~60°.

DPB 2000



專用特殊塗層 Special Coating For



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DPB2060	3	6	12	6	50
DPB2060H	3	6	12	6	100
DPB2100H	5	10	20	10	100



Using the latest import carbide rod, it can process on hardness up to 55HRC, international tolerance standard h5, tolerance range control at μ level accuracy.

- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.
- DMR series helix angle 30° design.

產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DMR2060R10E1	1	6	15	6	75
DMR2060R10H	1	6	15	6	100
DMR2060R20	2	6	15	6	50
DMR2080R05	0.5	8	20	8	60
DMR2080R05E1	0.5	8	20	8	75
DMR2080R05H	0.5	8	20	8	100
DMR2080R10	1	8	20	8	60
DMR2080R10E1	1	8	20	8	75
DMR2080R10H	1	8	20	8	100
DMR2100R05	0.5	10	25	10	75
DMR2100R05H	0.5	10	25	10	100
DMR2100R10	1	10	25	10	75
DMR2100R10H	1	10	25	10	100
DMR2120R05	0.5	12	30	12	75
DMR2120R05H	0.5	12	30	12	100
DMR2120R10	1	12	30	12	75
DMR2120R10H	1	12	30	12	100

2 刃長頸型圓鼻鎢鋼端銑刀

2 Flutes Long Neck Corner Radius Carbide End Mill Series

適用材質 Material

鋼
Steel

不鏽鋼
Stainless steel

鑄鐵
Cast Iron



採用全新進口棒材，加工工件硬度HRC55°以下，採用國際公差標準h5，公差範圍控制在 μ 級精度

Using the latest import carbide rod, it can process on hardness up to 55HRC, international tolerance standard h5, tolerance range control at μ level accuracy.

- 採用圓形刀帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- DMR系列採用螺旋角30°設計。
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.
- DMR series helix angle 30° design.

切削參數 Diameter cutting

直徑 (mm) Shank	4	6	8	10	12
轉速 n (min)	6400	4300	3200	2600	2200
進給速度 Vf (mm/min)	260	280	285	270	270

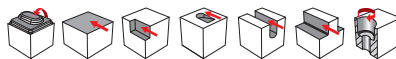
DMB 2000R00L2



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切削長度 Flute Length APMX	柄部直徑 Shank DCON	可使用長度 Effective Length LU	標準全長 Full Length LF
DMR2030R02L207	0.2	3	3	4	7.5	50
DMR2030R05L207	0.5	3	3	4	7.5	50
DMR2040R02L210	0.2	4	4	4	10	50
DMR2040R05L210	0.5	4	4	4	10	50
DMR2060R02L215	0.2	6	6	6	15	50
DMR2060R05L215	0.5	6	6	6	15	50
DMR2060R10L215	1	6	6	6	15	50
DMR2080R05L220	0.5	8	10	8	20	60
DMR2080R10L220	1	8	10	8	20	60
DMR2100R05L225	0.5	10	12	10	25	75
DMR2100R10L225	1	10	12	10	25	75
DMR2120R05L230	0.5	12	14	12	30	75
DMR2120R10L230	1	12	14	12	30	75

4 刃圓鼻鎢鋼端銑刀

4 Flutes Corner Radius Carbide End Mill



採用全新進口棒材，加工工件硬度HRC55°以下，採用國際公差標準h5，公差範圍控制在 μ 級精度

Using the latest import carbide rod, it can process on hardness up to 55HRC, international tolerance standard h5, tolerance range control at μ level accuracy.

- 採用圓形刀帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工，DMR系列採用螺旋角30°設計。
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing, DMR series helix angle 30° design.

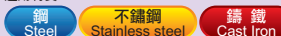
切削參數
Dimmeter cutting

直徑 (mm) Shank	3	4	6	8	10	12	16
轉速 n (min)	6300	6400	4300	3200	2600	2200	1600
進給速度 Vf (mm/min)	520	520	560	570	540	540	400

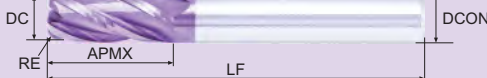
DMB 4000R00



適用材質 Material



特殊設計，可保護圓鼻刀尖
Special design for protecting end mill tip



產品型號 Model No	刃角 R Edge Angle	切削直徑 Diameter of Cutting		切刃長度 Flute Length		柄部直徑 Shank		標準全長 Full Length	
		RE	DC	APMX	DCON	LF	LF	LF	LF
DMR4010R02	0.2		1	2.5	4	50			
DMR4010R02L103	0.2		1	3	4	50			
DMR4015R02	0.2		1.5	3.75	4	50			
DMR4015R02L104	0.2		1.5	4	4	50			
DMR4015R05	0.5		1.5	3.75	4	50			
DMR4020R02	0.2		2	5	4	50			
DMR4020R02L106	0.2		2	6	4	50			
DMR4020R05	0.5		2	5	4	50			
DMR4020R05L106	0.5		2	6	4	50			
DMR4025R02	0.2		2.5	6.25	4	50			
DMR4030R02	0.2		3	7.5	4	50			
DMR4030R02L106	0.2		3	6	4	50			
DMR4030R02L108	0.2		3	8	4	50			
DMR4030R02E1	0.2		3	7.5	4	75			
DMR4030R05	0.5		3	7.5	4	50			
DMR4030R05L108	0.5		3	8	4	50			
DMR4030R05L112D6	0.5		3	12	6	50			
DMR4030R05D3	0.5		3	7.5	3	50			
DMR4030R05E1	0.5		3	7.5	4	75			
DMR4030R05E1D6	0.5		3	7.5	6	75			
DMR4030R10	1		3	7.5	4	50			
DMR4030R10L112D6	1		3	12	6	50			
DMR4030R10D6	1		3	7.5	6	50			
DMR4030R10E1	1		3	7.5	4	75			
DMR4040R02	0.2		4	10	4	50			
DMR4040R02E1	0.2		4	10	4	75			
DMR4040R02H	0.2		4	10	4	100			
DMR4040R05	0.5		4	10	4	50			
DMR4040R05D6	0.5		4	10	6	50			
DMR4040R05E1	0.5		4	10	4	75			

※ 請接下頁。 ※ Continued on next page.

產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DMR4040R05E1D6	0.5	4	10	6	75
DMR4040R05H	0.5	4	10	4	100
DMR4040R10	1	4	10	4	50
DMR4040R10E1	1	4	10	4	75
DMR4040R10H	1	4	10	4	100
DMR4040R15	1.5	4	10	4	50
DMR4050R05	0.5	5	12.5	6	50
DMR4050R10	1	5	12.5	6	50
DMR4060R02	0.2	6	15	6	50
DMR4060R02E1	0.2	6	15	6	75
DMR4060R02H	0.2	6	15	6	100
DMR4060R03	0.3	6	15	6	50
DMR4060R05	0.5	6	15	6	50
DMR4060R05E1	0.5	6	15	6	75
DMR4060R05L110E1	0.5	6	10	6	75
DMR4060R05H	0.5	6	15	6	100
DMR4060R10	1	6	15	6	50
DMR4060R10E1	1	6	15	6	75
DMR4060R10H	1	6	15	6	100
DMR4060R15	1.5	6	15	6	50
DMR4060R20	2	6	15	6	50
DMR4070R05	0.5	7	17.5	8	60
DMR4080R02	0.2	8	20	8	60
DMR4080R03	0.3	8	20	8	60
DMR4080R05	0.5	8	20	8	60
DMR4080R05E1	0.5	8	20	8	75
DMR4080R05H	0.5	8	20	8	100
DMR4080R10	1	8	20	8	60
DMR4080R10L124	1	8	24	8	60
DMR4080R10E1	1	8	20	8	75
DMR4080R10H	1	8	20	8	100
DMR4080R15	1.5	8	20	8	60
DMR4080R20	2	8	20	8	60
DMR4100R02	0.2	10	25	10	75
DMR4100R05	0.5	10	25	10	75
DMR4100R05H	0.5	10	25	10	100
DMR4100R10	1	10	25	10	75
DMR4100R10H	1	10	25	10	100
DMR4100R15	1.5	10	25	10	75
DMR4100R20	2	10	25	10	75
DMR4100R25	2.5	10	25	10	75
DMR4100R30	3	10	25	10	75
DMR4120R05	0.5	12	30	12	75
DMR4120R05H	0.5	12	30	12	100
DMR4120R10	1	12	30	12	75
DMR4120R10H	1	12	30	12	100
DMR4120R15	1.5	12	30	12	75
DMR4120R20	2	12	30	12	75
DMR4120R20H	2	12	30	12	100
DMR4120R25	2.5	12	30	12	75
DMR4160R10	1	16	40	16	100

4 刃圓鼻抗震鎢鋼端銑刀系列

4 Flutes Corner Radius **Seismic Performance** Carbide End Mill Series

專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel



全新P500高耐磨、高韌性材質 可加工高硬度HRC55°~60°

New P500 material with high wear resistance and toughness, capable of machining high hardness HRC55°~60°.

- 採用圓形刀帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- DMR系列採用螺旋角30°設計。
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.
- DMR series helix angle 30° design.

切削參數 Dimameter cutting

直徑 (mm) Shank	3	4	6	8	10	12	16
轉速 n (min)	8500	6400	4300	3200	2600	2200	1600
進給速度 Vf (mm/min)	680	520	560	570	540	540	400

DPR 4000R00



特殊設計，可保護圓鼻刀刀尖
Special design for
protecting end mill tip



產品型號 Model No	刃角 R Edge Angle	切削直徑 Diameter of Cutting		切刃長度 Flute Length		標準全長 Full Length	
		RE	DC	APMX	DCON	LF	
DPR4010R02	0.2		1	2.5	4	50	
DPR4015R02	0.2		1.5	3.75	4	50	
DPR4020R02	0.2		2	5	4	50	
DPR4020R03	0.3		2	5	4	50	
DPR4020R05	0.5		2	5	4	50	
DPR4030R02	0.2		3	7.5	4	50	
DPR4040R02	0.2		4	10	4	50	
DPR4030R03D3	0.3		3	7.5	3	50	
DPR4030R05	0.5		3	7.5	4	50	
DPR4030R10	1		3	7.5	4	50	
DPR4040R05	0.5		4	10	4	50	
DPR4040R10	1		4	10	4	50	
DPR4040R15	1.5		4	10	4	50	
DPR4080R02	0.2		8	20	8	60	

高精度加工 6 刃圓鼻鎢鋼端銑刀

High Precision Machining 6 Flutes Corner Radius Carbide End Mill

專用特殊塗層 Special Coating For

合金鋼
Alloy Steel碳鋼
Carbon Steel

全新P500高耐磨、高韌性材質 可加工高硬度HRC55°~60°

New P500 material with high wear resistance and toughness, capable of machining high hardness HRC55°~60°.

- 採用圓形刀帶，大幅提高了耐震性和耐崩損性，通過減少切削阻力，實現了高速高進給加工。
- GPR系列採用螺旋角45°設計。
- Using round flute, improve the shock resistance and resistance to collapse, by reducing cutting resistance to achieve high speed and feeding processing.
- GPR series helix angle 45° design.

切削參數 Diameter cutting

直徑 (mm) Shank	6	8	10	12	16	20
轉速 n (min)	4250	3200	2550	2200	1600	1300
進給速度Vf (mm/min)	510	580	610	660	580	580

GPR 6000R00



特殊設計，可保護圓鼻刀尖
Special design for
protecting end mill tip



產品型號 Model No	刃角 R Edge Angle	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	RE	DC	APMX	DCON	LF
GPR6060R02	0.2	6	15	6	50
GPR6060R05	0.5	6	15	6	50
GPR6060R10	1	6	15	6	50
GPR6080R05	0.5	8	20	8	60
GPR6080R10	1	8	20	8	60
GPR6100R05	0.5	10	25	10	75
GPR6100R10	1	10	25	10	75
GPR6120R05	0.5	12	30	12	75
GPR6120R10	1	12	30	12	75
GPR6160R05	0.5	16	40	16	100
GPR6160R10	1	16	40	16	100
GPR6160R20	2	16	40	16	100
GPR6200R05	0.5	20	50	20	100
GPR6200R10	1	20	50	20	100
GPR6200R20	2	20	50	20	100

4 刃非圓溝不等分割、不等螺旋圓鼻鎢鋼端銑刀系列

4 Flutes Non Rounded Land Unequal Division Unequal Spiral Corner Radius Carbide End Mill Series

適用材質 Material

鋼
Steel不銹鋼
Stainless steel鑄鐵
Cast Iron

「不等分割」利於高速進給加工抗震性，「不等螺旋」利於高速加工抗崩裂性

Unequal division to improve seismic resistance for high speed feed machining, Unequal spiral to improve high speed processing resistance to chipping.

特殊圓鼻刀刀尖，可有效抑制加工產生的震動，減少刀具因震動的崩損，擁有優良加工表面，提升刀具加工壽命
Special protecting end mill tip, can effectively suppress the vibration generated by processing, also reducing the damage of vibration, and with excellent surface and enhance the end mills life.

- FMR系列採用螺旋角 $35^\circ/38^\circ$ 設計
- 不等刀分割、不等螺旋圓鼻銑刀，可有效抑制加工所產生的震動，減少刀具因震動的崩損，更有優良的加工表面提升刀具使用時間壽命。
- FMR series helix angle $35^\circ/38^\circ$ design.
- Special design for protecting end mill tip, the design of unequal flute division end mill can improve vibration generated during processing, it also reduce the damage of vibration, the PH-FMR series corner radius end mills make the material with excellent surface also enhance the end mills life.

切削參數 Diameter cutting

直徑 (mm) Shank	3	4	6	8	10	12	16
轉速 n (min)	6300	6400	4300	3200	2600	2200	1600
進給速度 Vf (mm/min)	520	520	560	570	540	540	400

PH-FMR 4000R00

MG 0.5 12% <55 500 Altin

 不等分割 Unequal Division
 $B1^\circ \neq B2^\circ$

 特殊設計，可保護圓鼻刀刀尖
 Special design for protecting end mill tip


產品型號 Model No	刃角 R Edge Angle	切削直徑 Diameter of Cutting	刃切長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	RE	DC	APMX	DCON	LF
PH-FMR4040R05	0.5	4	10	4	50
PH-FMR4040R10	1	4	10	4	50
PH-FMR4040R10D6	1	4	10	6	50
PH-FMR4050R05	0.5	5	12.5	6	50
PH-FMR4060R05	0.5	6	15	6	50
PH-FMR4060R10	1	6	15	6	50
PH-FMR4080R05	0.5	8	20	8	60
PH-FMR4080R10	1	8	20	8	60
PH-FMR4080R30	3	8	20	8	60
PH-FMR4100R05	0.5	10	25	10	75
PH-FMR4100R05L130	0.5	10	30	10	75
PH-FMR4100R05H	0.5	10	25	10	100
PH-FMR4100R08	0.8	10	25	10	75
PH-FMR4100R10	1	10	25	10	75
PH-FMR4120R05	0.5	12	30	12	75
PH-FMR4120R08L136	0.8	12	36	12	75
PH-FMR4120R10	1	12	30	12	75
PH-FMR4120R30	3	12	30	12	75
PH-FMR4160R05	0.5	16	48	16	100

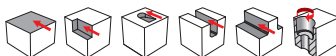
非圓溝不等分割、不等螺旋抗震圓鼻銼端銼刀

Non Rounded Land Unequal Division Unequal Spiral **Seismic Performance** Corner Radius Carbide End Mill

專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel



全新E300高耐磨、高韌性材質 可加工高硬度HRC55°~60°

New E300 material with high wear resistance and toughness, capable of machining high hardness HRC55°~60°.

特殊圓鼻刀刀尖，可有效抑制加工產生的震動，減少刀具因震動的崩損，擁有優良加工表面，提升刀具加工壽命
Special protecting end mill tip, can effectively suppress the vibration generated by processing, also reducing the damage of vibration, and with excellent surface and enhance the end mills life.

- FER系列採用螺旋角35°/38°設計。
- 不等刀分割、不等螺旋圓鼻銼刀，可有效抑制加工所產生的震動，減少刀具因震動的崩損，更有優良的加工表面提升刀具使用時間壽命。
- FER series helix angle 35°/38° design.
- Special design for protecting end mill tip, the design of unequal flute division end mill can improve vibration generated during processing, it also reduce the damage of vibration, the PH-FER series corner radius end mills make the material with excellent surface also enhance the end mills life.

PH-FER 4000R00



不等分割 Unequal Division
 $B1^\circ \neq B2^\circ$



特殊設計，可保護圓鼻刀刀尖
Special design for protecting end mill tip



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
PH-FER4040R05	0.5	4	10	4	50
PH-FER4040R10	1	4	10	4	50
PH-FER4060R05	0.5	6	15	6	50
PH-FER4060R10	1	6	15	6	50
PH-FER4060R15	1.5	6	15	6	50
PH-FER4080R05	0.5	8	20	8	60
PH-FER4080R10	1	8	20	8	60
PH-FER4080R15	1.5	8	20	8	60
PH-FER4080R20	2	8	20	8	60
PH-FER4080R30	3	8	20	8	60
PH-FER4100R05	0.5	10	25	10	75
PH-FER4100R10	1	10	25	10	75
PH-FER4100R15	1.5	10	25	10	75
PH-FER4100R20	2	10	25	10	75
PH-FER4120R05	0.5	12	30	12	75
PH-FER4120R10	1	12	30	12	75
PH-FER4120R30	3	12	30	12	75



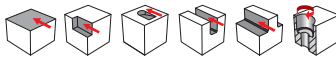
4 刃非圓溝不等分割、不等螺旋C角圓鼻鎢鋼端銑刀

4 Flutes Non Rounded Land Unequal Division Unequal Spiral C Corner Radius Carbide End Mill

專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel



滿足工件C角成形加工需求，有效抑制高速進給所產生的震動，抗震性佳

減少刀具因震動的崩損，擁有優良加工表面，提升刀具加工壽命

Meet the processing needs of workpiece C corner formed can effectively suppress the vibration caused by high speed feed, reducing tool breakage due to vibration, is conducive to high quality machining surfaces and improved tool life.

- FPC系列採用螺旋角 $35^\circ/38^\circ$ 設計。
- 不等刃分割、不等螺旋圓鼻銑刀，可有效抑制加工所產生的震動，減少刀具因震動的崩損，更有優良的加工表面提升刀具使用時間壽命。
- FPC series helix angle $35^\circ/38^\circ$ design.
- Special design for protecting end mill tip, the design of unequal flute division end mill can improve vibration generated during processing, it also reduce the damage of vibration.

PH-FPC 4000C00



不等分割 Unequal Division
 $B1^\circ \neq B2^\circ$



特殊設計，可保護C角刀刀尖

Special design it protecting the top of C corner tip.



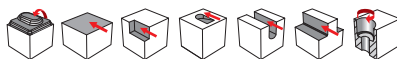
產品型號 Model No	倒角 Chamfer C	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
PH-FPC4030C01L108	0.1	3	8	3	50
PH-FPC4040C015	0.15	4	10	4	50
PH-FPC4060C02	0.2	6	15	6	50
PH-FPC4080C02	0.2	8	20	8	60
PH-FPC4080C02E1	0.2	8	20	8	75
PH-FPC4100C02	0.2	10	25	10	75
PH-FPC4100C03	0.3	10	25	10	75
PH-FPC4100C03L130	0.3	10	30	10	75
PH-FPC4100C03L136	0.3	10	36	10	75
PH-FPC4120C035	0.35	12	30	12	75
PH-FPC4160C05	0.5	16	48	16	75



圓溝不等分割、不等螺旋高進給 5 刃圓鼻粗精銑鋼端銑刀—DIN

Round Land Unequal Division Unequal Helix High Feed 5 Flutes Corner Radius Rough and Fine Carbide End Mill-DIN

適用材質 Material

鋼
Steel不鏽鋼
Stainless steel鑄鐵
Cast Iron

側平面固定抗振動DIN規格設計，使刀具加工壽命更長，提高工作加工質量

可進行高進給銑削，適用粗銑及精修加工，能進行較大的切深

不等分割利於高速進給加工抗震性，不等螺旋利於高速加工抗崩裂性

Fixed surface for reducing vibration-DIN design extend tool processing life and improve processing quality.

Can high feed milling, applicable for both rough milling and finishing, can adapt to larger cutting depths.

Unequal division to improve seismic resistance for high speed feed machining, unequal spiral to improve

high speed processing resistance to chipping.

• 特殊刀齒設計，能減少加工阻力增加斷屑效率。

• 可適用較大的切深，用於擺線加工表現效果佳。

• 加大容屑槽設計，提升排屑效率。

• FMR系列採用螺旋角 $35^\circ/38^\circ$ 設計。

• Special tooth design can reduce processing resistance and increase chip breaking efficiency.

• Exhibits excellent performance in cycloidal machining.

• Can adapt to larger cutting depths, enlarge the chip groove design, and improve chip removal efficiency.

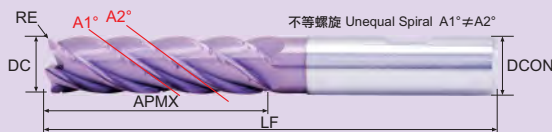
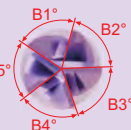
• FMR series helix angle 30° design.

切削參數 Diameter cutting

直徑 (mm) Shank	6	8	10	12	16	20
轉速 n (min)	4300	3200	2600	2200	1600	1300
進給速度Vf (mm/min)	560	570	560	540	520	520

SUH-FMR 5000R00L1-DIN

不等分割 Unequal Division
 $B1^\circ \neq B2^\circ \neq B3^\circ \neq B4^\circ \neq B5^\circ$

不等螺旋 Unequal Spiral $A1^\circ \neq A2^\circ$

產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	頸徑 Neck Shank DN	可使用長度 Effective Length LU	標準全長 Full Length LF
SUH-FMR5060R05L124D-DIN	0.5	6	24	6	5.8	29	60
SUH-FMR5080R05L132E1-DIN	0.5	8	32	8	7.7	38	75
SUH-FMR5100R05L140H-DIN	0.5	10	40	10	9.7	47	100
SUH-FMR5120R05L148H-DIN	0.5	12	48	12	11.6	55	100
SUH-FMR5160R05L164K-DIN	0.5	16	64	16	15.5	73	125
SUH-FMR5200R05L180M-DIN	0.5	20	80	20	19.5	91	150

圓溝不等分割、不等螺旋高進給 4 刃圓鼻難削材鎢鋼端銑刀

Round Land Unequal Division Unequal Helix High Feed 4 Flutes Corner Radius for Hard Materials Carbide End Mill

特殊鍍鈦，適用於難切削材、航鈦零部件，提升耐高溫、耐磨耗度

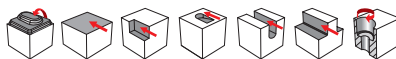
Special titanium coating, suitable for hard materials and aerospace parts, improved high temperature resistance and wear resistance, the surface is not easy to stick to metal.

可進行高進給銑削，能進行較大的切深，不等分割利於高速進給加工抗震性，不等螺旋利於高速加工抗崩裂性

Can be high feed milling, can adapt to larger cutting depths, excellent performance in trochoidal machining, unequal division to improve seismic resistance for high speed feed machining, unequal spiral to improve high speed processing resistance to chipping.

• 用於擺線加工表現效果佳，加大容屑槽設計，提升排屑效率，FMR系列採用螺旋角 $35^\circ/38^\circ$ 設計。• Exhibits excellent performance in cycloidal machining, enlarge the chip groove design, and improve chip removal efficiency, FYR series helix angle $35^\circ/38^\circ$ design.專用特殊塗層
Special Coating For鈦合金
Titanium

切削參數 Dimameter cutting



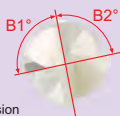
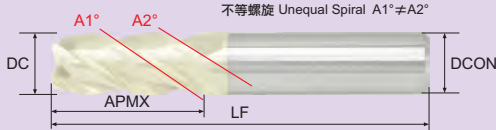
直徑 (mm) Shank	4	6	8	10	12	16
轉速 n (min)	3900	2600	2000	1600	1300	1000
進給速度 Vf (mm/min)	310	210	160	190	150	160

專用特殊塗層
Special Coating For鎳合金
Nickel Alloy

切削參數 Dimameter cutting

直徑 (mm) Shank	4	6	8	10	12	16
轉速 n (min)	1900	1300	1000	800	650	500
進給速度 Vf (mm/min)	150	100	80	90	80	80

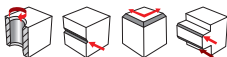
SUH-FYR 4000R00

不等分割 Unequal Division
 $B1^\circ \neq B2^\circ$ 不等螺旋 Unequal Spiral $A1^\circ \neq A2^\circ$ 

產品型號 Model No	刃角 R Edge Angle	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
RE	DC	APMX	DCON	LF	
SUH-FYR4030R05	0.5	3	7.5	4	50
SUH-FYR4040R05	0.5	4	10	4	50
SUH-FYR4040R10	1	4	10	4	50
SUH-FYR4060R05	0.5	6	15	6	50
SUH-FYR4060R10	1	6	15	6	50
SUH-FYR4060R15	1.5	6	15	6	50
SUH-FYR4080R05	0.5	8	20	8	60
SUH-FYR4080R10	1	8	20	8	60
SUH-FYR4080R05E1	0.5	8	20	8	75
SUH-FYR4080R10E1	1	8	20	8	75
SUH-FYR4080R15	1.5	8	20	8	60
SUH-FYR4080R20	2	8	20	8	60
SUH-FYR4100R05	0.5	10	25	10	75
SUH-FYR4100R05H	0.5	10	25	10	100
SUH-FYR4100R10	1	10	25	10	75
SUH-FYR4100R15	1.5	10	25	10	75
SUH-FYR4100R20	2	10	25	10	75
SUH-FYR4120R05	0.5	12	30	12	75
SUH-FYR4120R10	1	12	30	12	75
SUH-FYR4160R05	0.5	16	48	16	100

雙刃鳩尾特殊倒角加工刀具

Double Edged Dovetailed **Special Chamfering Tool**



適用材質 Material

鋼

Steel

不鏽鋼

Stainless steel

鑄鐵

Cast Iron

雙刃鳩尾設計，可滿足各種角度的倒角需求，有效減少加工時及刀架成本

Double edged dovetailed design, could meet chamfering needs for various angles, effectively saving machining time and tool holder costs.

- 採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性。
- 採用德國WALTER五軸機研磨生產，研磨尺寸精準且穩定。
- Produced with german WALTER five-axis machine, the dimension is accurate and stable.
- Using ultra-fine particle cemented carbide AlTiN coating increases tool wearability.

切削參數 Diameter cutting

直徑 (mm) Shank	6	8	10	12
轉速 n (min)	3700	2800	2200	1900
進給速度 Vf (mm/min)	400	500	650	650

CC-AMC

MG
AlTiN
CO
TiCN
HRC
65
M
500
AlTiN

DC系列夾角90°
DC series 90°



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	頸 徑 Neck Shank DN	可使用長度 Effective Length LU	刃 數 Flute CICT	標準全長 Full Length LF
CC-AMC4040L207DD6	4	1.9	6	2.4	7	60	4
CC-AMC4060L207D	6	2.8	6	3	7	60	4
CC-AMC4080L209	8	3.8	8	4	9	60	4
CC-AMC4080L220	8	3.8	8	4	20	60	4
CC-AMC6080L209	8	3.8	8	4	9	60	6
CC-AMC6100L211	10	4.8	10	5	11	75	6
CC-AMC6120L213	12	5.8	12	6	13	75	6

CR-AMC

MG
AlTiN
CO
TiCN
HRC
65
M
500
AlTiN

DR系列夾角90°
DR series 90°



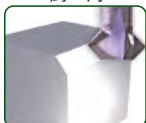
產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	頸 徑 Neck Shank DN	可使用長度 Effective Length LU	刃 數 Flute CICT	標準全長 Full Length LF
CR-AMC4060L206D	6	1.8	6	2.7	6	60	4
CR-AMC6080L208	8	2.4	8	3.6	8	60	6
CR-AMC6100L210	10	3.1	10	4.5	10	75	6
CR-AMC6120L212	12	3.7	12	5.4	12	75	6

圓孔倒角



Chamfer Of
Rounding Hole

倒 角



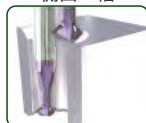
Chamfering

側面倒角



Side Chamfering

側面 V 槽



Side V
Groove Processing

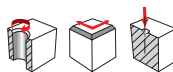
背面倒角



Back Chamfering

2 刃鎢鋼倒角定位鑽系列

2 Flutes Carbide Chamfering Positioning Drill Series



適用材質 Material

鋼
Steel

不鏽鋼
Stainless steel

鑄鐵
Cast iron

螺旋角採用 30° 設計，NC銑床專用定位鑽、鑽孔、倒角刀具，可進行圓孔倒角、倒角及孔倒角、定位加工。
Helix angle 30° design, positioning drill, drilling and chamfering tool for NC milling machine, suitable for positioning machining, hole chamfering and round hole chamfering.

- 採用超細粒子硬質合金AITIN塗層，增加刀具耐磨耗性。
- 採用德國WALTER五軸機研磨生產，研磨尺寸精準且穩定。
- Produced with german WALTER five-axis machine, the dimension is accurate and stable.
- Using ultra-fine particle cemented carbide AITIN coating increases tool wearability.

切削參數 Dimameter cutting

直徑 (mm) Shank	3	4	5	6	8	10	12	16	20
轉速 n (min)	7400	5500	4400	3700	2800	2300	1900	1400	1100
進給速度 Vf (mm/min)	300	220	180	150	120	90	80	60	45

DT-DMC 2000

MG 0.8 CO 12% HRC +55 M 500 30 AITIN

DT系列夾角 60°
DT series 60°



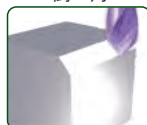
產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
DT-DMC2030	3	10	3	50
DT-DMC2040	4	12	4	50
DT-DMC2050	5	20	5	50
DT-DMC2060	6	20	6	50
DT-DMC2080	8	25	8	60
DT-DMC2100	10	25	10	75
DT-DMC2120	12	30	12	75
DT-DMC2160	16	35	16	100
DT-DMC2200	20	40	20	100

圓孔倒角



Chamfer Of Rounding Hole

倒角



Chamfering

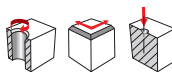
定位加工



Positioning processing

2 刃鎢鋼倒角定位鑽系列

2 Flutes Carbide Chamfering Positioning Drill Series



適用材質 Material

鋼

Steel

不銹鋼
Stainless steel

鑄鐵
Cast Iron

DC-DMC 2000



DC系列夾角90°
DC series 90°



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DC-DMC2030	3	10	3	50
DC-DMC2040	4	12	4	50
DC-DMC2040E1	4	12	4	75
DC-DMC2050	5	20	5	50
DC-DMC2050E1	5	20	5	75
DC-DMC2060	6	20	6	50
DC-DMC2060H	6	20	6	100
DC-DMC2080	8	25	8	60
DC-DMC2080H	8	25	8	100
DC-DMC2100	10	25	10	75
DC-DMC2100H	10	25	10	100
DC-DMC2120	12	30	12	75
DC-DMC2120H	12	30	12	100
DC-DMC2160	16	35	16	100
DC-DMC2160M	16	35	16	150
DC-DMC2200	20	40	20	100

DR-DMC 2000



DR系列夾角120°
DR series 120°



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DR-DMC2030	3	10	3	50
DR-DMC2040	4	12	4	50
DR-DMC2040E1	4	12	4	75
DR-DMC2050	5	20	5	50
DR-DMC2050E1	5	20	5	75
DR-DMC2060	6	20	6	50
DR-DMC2060H	6	20	6	100
DR-DMC2080	8	25	8	60
DR-DMC2080H	8	25	8	100
DR-DMC2100	10	25	10	75
DR-DMC2100H	10	25	10	100
DR-DMC2120	12	30	12	75
DR-DMC2120H	12	30	12	100
DR-DMC2160	16	35	16	100
DR-DMC2160M	16	35	16	150
DR-DMC2200	20	40	20	100

2 刃鎢鋼複合材料專用倒角定位鑽系列

2 Flutes **Composite** Carbide Chamfering Positioning Drill Series

適用材質 Material

鋁合金
Aluminum銅
Copper塑膠
Plastic

螺旋角採用30°設計，適用於複合材質加工專用

Helix angle 30° design, applicable for composite materials processing.

DC-DWC 2000

DC系列夾角90°
DC series 90°

產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DC-DWC2030	3	10	3	50
DC-DWC2040	4	12	4	50
DC-DWC2050	5	20	5	50
DC-DWC2060	6	20	6	50
DC-DWC2080	8	25	8	60
DC-DWC2100	10	25	10	75
DC-DWC2160	16	35	16	100

DR-DWC 2000

DR系列夾角120°
DR series 120°

產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DR-DWC2030	3	10	3	50
DR-DWC2040	4	12	4	50
DR-DWC2050	5	20	5	50
DR-DWC2060	6	20	6	50
DR-DWC2080	8	25	8	60
DR-DWC2100	10	25	10	75
DR-DWC2160	16	35	16	100

圓孔倒角



Chamfer Of Rounding Hole

倒角



Chamfering

定位加工



Positioning processing

2 Flutes Carbide Chamfering Positioning Drill Series

合金鋼
Alloy Steel

碳鋼
Carbon Steel

New P500 material with high wear resistance and toughness, capable of machining high hardness HRC55°~60°, helix angle 30° design.

MG μm 0.5 CO 12% HRC <60 P 500 30' TiSiN

DC系列夾角90°
DC series 90°



產品型號	Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
		DC	APMX	DCON	LF
DC-DPC2030		3	10	3	50
DC-DPC2040		4	12	4	50
DC-DPC2040E1		4	12	4	75
DC-DPC2050		5	20	5	50
DC-DPC2060		6	20	6	50
DC-DPC2080		8	25	8	60
DC-DPC2100		10	25	10	75
DC-DPC2120		12	30	12	75
DC-DPC2160		16	35	16	100
DC-DPC2200		20	40	20	100

圓孔倒角



Chamfer Of Rounding Hole

倒 角



Chamfering

定位加工



Positioning Processing

2 刃定位側銑鎢鋼鑽系列

2 Flutes Positioning Side Milling Carbide Drill Series



適用材質 Material

鋼
Steel不鏽鋼
Stainless steel鑄鐵
Cast iron

螺旋角30°設計，NC銑床專用定位鑽、鑽孔及側銑或圓孔倒角刀具

Helix angle 30° design, suitable for positioning machining, hole chamfering and side milling or round hole chamfering.

- 採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性，採用德國WALTER五軸機研磨生產，研磨尺寸精準且穩定
- Produced with german WALTER five-axis machine, the dimension is accurate and stable, using ultra-fine particle cemented carbide AlTiN coating increases tool wearability.

切削參數 Dimameter cutting

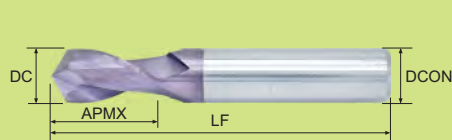
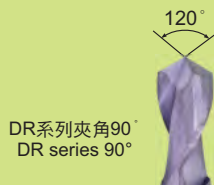
直徑 (mm) Shank	3	4	5	6	8	10	12	16	20
轉速 n (min)	7400	5500	4400	3700	2800	2300	1900	1400	1100
進給速度 Vf (mm/min)	300	220	180	150	120	90	80	60	45

DC-DMM 2000



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DC-DMM2040	4	8	4	50
DC-DMM2060	6	12	6	50
DC-DMM2080	8	16	8	60
DC-DMM2100	10	20	10	75
DC-DMM2120	12	24	12	75
DC-DMM2160	16	32	16	100
DC-DMM2200	20	40	20	100

DR-DMM 2000



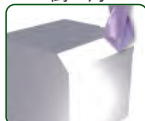
產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DR-DMM2060	6	12	6	50
DR-DMM2080	8	16	8	60
DR-DMM2100	10	20	10	75
DR-DMM2120	12	24	12	75
DR-DMM2160	16	32	16	100
DR-DMM2200	20	40	20	100

圓孔倒角



Chamfer Of Rounding Hole

倒角



Chamfering

定位加工



Positioning processing

斜面側銑



Incline Side Milling

精準倒角鎢鋼銑刀

Precise Chamfering Carbide End Mill



適用材質 Material

鋼
Steel

不鏽鋼
Stainless steel

鑄鐵
Cast iron

精準倒角、孔倒角加工最佳利器

側平面固定抗振動DIN規格設計，使刀具加工壽命更長，提高工作加工質量

Best tool for precise chamfering and hole chamfering.

Fixed surface for reducing vibration-DIN design extend tool processing life and improve processing quality.

- 採用超細粒子硬質合金AITIN塗層，增加刀具耐磨耗性。
- 採用德國WALTER五軸機研磨生產，研磨尺寸精準且穩定。
- Produced with german WALTER five-axis machine, the dimension is accurate and stable.
- Using ultra-fine particle cemented carbide AITIN coating increases tool wearability.

切削參數 Dimameter cutting

直徑 (mm) Shank	4	6	8	10	12
轉速 n (min)	5500	3700	2800	2300	1900
進給速度 Vf (mm/min)	660	740	560	690	570

DCC-DMC-DIN



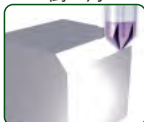
產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF	刃數 Flute CICT
DCC-AMC4040	4	2	4	50	4
DCC-AMC4060-DIN	6	3	6	50	4
DCC-AMC4080-DIN	8	4	8	60	4
DCC-AMC6100-DIN	10	5	10	75	6
DCC-AMC6120-DIN	12	6	12	75	6

圓孔倒角



Chamfer Of Rounding Hole

倒角



Chamfering

內倒角



Internal Chamfer

90°夾角尖端強化 2 刃鎢鋼倒角定位鑽

90° Angle Reinforced 2 Flade Carbide Chamfering Drill



適用材質 Material

鋼
Steel不鏽鋼
Stainless steel鑄鐵
Cast iron

90°夾角尖端處採用特殊強刀保護設計，減少切削應力、有效降低磨耗、使排屑表現優化

90° angle reinforced special protection design, reduces cutting stress and effectively lowers wear、optimize chip removal performance.

- 螺旋角12°設計，研磨尺寸精準且穩定，NC銑床專用定位鑽、孔倒角、倒角刀具。
- 採用超細粒子硬質合金AlTiN塗層，增加刀具耐磨耗性，延長刀具加工壽命，提高工作加工質量。
- Adopts a 12° helix angle design for precise and stable grinding dimensions, NC milling machine specialized positioning drill, hole chamfering, and chamfering tools.
- Using ultra-fine particle cemented carbide AlTiN coating increases tool wearability.

90°夾角強化 特殊保護設計
90° Angle Reinforced
Special Protection Design



切削參數 Diameter cutting

直徑 (mm) Shank	3	4	5	6	8	10	12	16	20
轉速 n (min)	7400	5500	4400	3700	2800	2300	1900	1400	1100
進給速度Vf (mm/min)	300	220	180	150	120	90	80	60	45

DCH-YMC 2000

MG HSS CO 12° AlTiN

DCH系列夾角90°
DCH series 90°

90°



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
DCH-YMC2030	3	9	3	50
DCH-YMC2040	4	10	4	50
DCH-YMC2050	5	12	5	50
DCH-YMC2060	6	13	6	50
DCH-YMC2080	8	23	8	60
DCH-YMC2100	10	24	10	75
DCH-YMC2120	12	28	12	75
DCH-YMC2160	16	32	16	100
DCH-YMC2200	20	35	20	100

圓孔倒角



Chamfer Of Rounding Hole

倒角



Chamfering

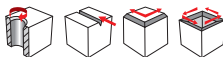
定位加工



Positioning processing

90°定位倒角 3 刃鎢鋼銑刀

90° Position Chamfering 3 Flutes Carbide Chamfering End Mill



專用特殊塗層 Special Coating For

合金鋼
Alloy Steel

碳鋼
Carbon Steel

全新P550塗層，高耐磨、高韌性、抗震、抗崩損，尖端角140°、頂角90°設計，螺旋角採35°設計
可定位鑽孔、倒角、孔倒角，擁有多功能切削加工功能的精密深孔倒角刀具

New P550 coating, high wear resistance, high toughness, earthquake resistance, 140° point angle, 90° included angle, and 35° helix angle design.

Collapse resistance, can position drilling, chamfering, hole chamfering, precision deep hole chamfering tool with multifunctional cutting functions.

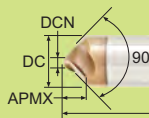
切削參數 Diameter cutting

直徑 (mm) Shank	3	4	6	8	10	12
轉速 n (min)	7400	5500	3700	2800	2300	1900
進給速度Vf (mm/min)	450	330	225	180	135	120

DCM-EPC 3000



DCC系列夾角140°
DCC series 140°



LF

DCON

產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length	最小切削直徑 Mini Cutting Diameter
DC	APMX	DCON	LF	DCN	
DCM-EPC3030	3	1.3	3	38	0.6
DCM-EPC3030E1	3	1.3	3	75	0.6
DCM-EPC3040	4	1.74	4	50	0.8
DCM-EPC3040E1	4	1.74	4	75	0.8
DCM-EPC3060	6	2.61	6	50	1.2
DCM-EPC3060E1	6	2.61	6	75	1.2
DCM-EPC3080	8	3.49	8	60	1.6
DCM-EPC3080H	8	3.49	8	100	1.6
DCM-EPC3100	10	4.36	10	75	2
DCM-EPC3100H	10	4.36	10	100	2
DCM-EPC3120	12	5.23	12	75	2.4
DCM-EPC3120H	12	5.23	12	100	2.4

圓孔倒角



Chamfer Of
Rounding Hole

倒角



Chamfering

背面倒角



Back Chamfering

V 型開槽



V Type Slotced

內倒角



Internal Chamfer



DCM-EPC 3000



CHAMFERING DRILL 99

拋物線弧形加工—鎢鋼酒桶端銑刀

Parabolic Arc Machining — Carbide Arc Ball End Mill



專用特殊塗層 Special Coating For

合金鋼
Alloy Steel碳鋼
Carbon Steel

採用進口五軸機加工研磨，鎢鋼弧型球刀，可進行加工刨除範圍更大，能進行加大切深的高效加工

Using imported five axis machine for grinding carbide arc ball tools, range of machining planing is larger, can efficiently process larger depth of cut.

模具、航鈦渦輪葉片及葉輪五軸加工最佳利器，依幾何不同刀刃設計，應用在高溫合金加工也有極優秀的表現
Best tool for molds, aerospace turbine blades and impeller on Five-axis machining, also has excellence performance in high temperature alloy based on different geometric blades design.

- 提供更多軸向、更加大的切深加工，使加工面積有效增加，有效提高加工效率、表面加工粗度及刀具加工壽命、節省加工成本。
- 特殊弧型容屑槽，排屑表現更加順暢，適合中、精度加工。
- Provide more axial depth cutting, and have processing area increased effectively, effectively enhancing processing efficiency, surface roughness and tool life, and saving processing costs, all having excellent performance.
- Special arc shaped chip flute, chip removal performance is smoother, suitable for medium and high-precision machining.

切削參數 Dimameter cutting

刀角 R R Angle	1	1.5	2	切削直徑 DC Diameter of Cutting	6	8	10	12
轉速 n (min)	9500	6400	4800	轉速 n (min)	9500	7200	5700	4800
進給速度 Vf (mm/min)	3000	2000	2300	進給速度 Vf (mm/min)	5200	3900	3100	2600

PA-DPB

MG

UM

CO

HRC

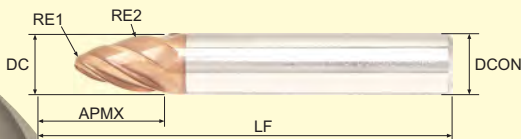
P

30

TiSiN

模具、航鈦渦輪葉片及葉輪五軸加工最佳利器

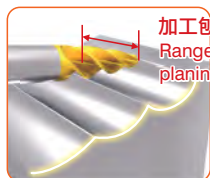
Ultimate Solution for Five Axis Machining of Molds, Aerospace Grade Titanium Turbine Blades and Impellers.



產品型號 Model No	刃角 1 R Edge Angle RE1	刃角 2 R Edge Angle RE2	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF	刃 數 Flute CICT
PA-DPB4060L1140R45	1	45	6	14	6	50	4
PA-DPB4060L1205R100	1	100	6	20.5	6	50	4
PA-DPB6060L1140R45	1	45	6	14	6	50	6
PA-DPB4080L1160R45	1.5	45	8	16	8	60	4
PA-DPB4080L1220R95	1.5	95	8	22	8	60	4
PA-DPB6080L1160R45	1.5	45	8	16	8	60	6
PA-DPB4100L1245R90	2	90	10	24.5	10	75	4
PA-DPB6100L1165R40	2	40	10	16.5	10	75	6
PA-DPB6100L1175R40	2	40	10	17.5	10	75	6
PA-DPB4120L1270R85	2	85	12	27	12	75	4
PA-DPB6120L1185R40	2	40	12	18.5	12	75	6

拋物線銑削加工面積範圍比較

Comparison of the machining area range of parabolic milling

加工刨除範圍更大
Range of machinin
planing is larger!!切削刨除的範圍受限
Range of machining planing is limited.可進行加大切深的高效加工
Can efficiently process larger depth of cut.

特殊R角加工—2刃外R角倒角鎢鋼銼刀

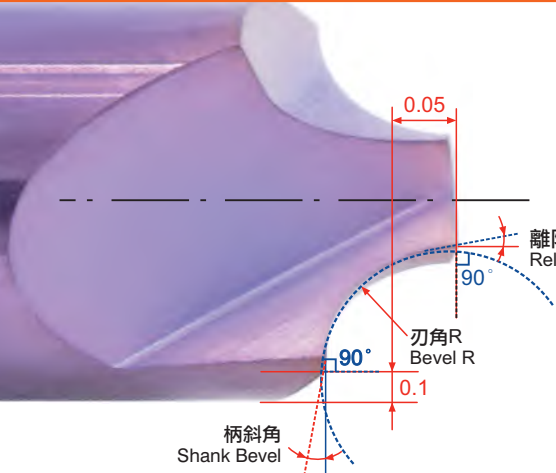
Special R Angle Machining — 2 Flute External R Chamfering Carbide End Mill



採用全新進口棒材，加工工件硬度HRC55°以下
Using the latest imported carbide rod, it can process on hardness up to HRC55.

R角精準研磨，加工準確、耐磨性好，加工工件邊緣外R圓弧倒角的最佳利器

R angle precision grinding, accurate processing, good wear resistance, the best tool for machining the outer edge of the workpiece with R arc.



圓孔外R倒角



Rounding Hole Outside R Chamfering

外R倒角



Outer R Chamfering

切削參數
Diameter
cutting

刃角 R Angle	0.5	0.75	1	1.25	1.5	1.75	2	2.5	3	4	5	6
轉速 n (min)	7800	6350	4700	4000	3100	2800	2600	2200	1900	1500	1300	1100
進給速度 Vf (mm/min)	310	250	190	240	190	170	160	180	150	180	210	180

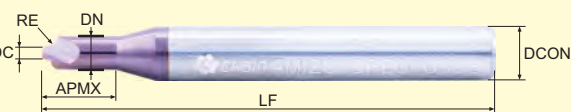
AMI 2000

MG 0.5 1.25 CO 1.25 HRC 55 M 500 Altin

加工工件邊緣外R圓弧倒角的最佳利器
Ultimate Solution for Outer Edge of Workpiece With R Arc Chamfering Machining.

適用材質 Material

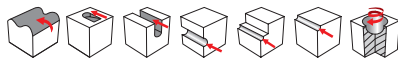
鋼 Steel 不鏽鋼 Stainless steel 鑄鐵 Cast Iron



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	頸徑 Neck Shank DN	標準全長 Full Length LF
AMI2015RE0050	0.5	1.5	5	4	2.7	50
AMI2015RE0075	0.75	1.5	5	4	3.2	50
AMI2015RE0100	1	1.5	8	4	3.7	50
AMI2015RE0100D6	1	1.5	8	6	3.7	50
AMI2015RE0125D6	1.25	1.5	8	6	4.2	50
AMI2015RE0150D6	1.5	1.5	8	6	4.7	50
AMI2015RE0175D6	1.75	1.5	8	6	5.2	50
AMI2015RE0200D6	2	1.5	10	6	5.7	50
AMI2015RE0250D8	2.5	1.5	10	8	6.7	60
AMI2015RE0300D8	3	1.5	12	8	7.7	60
AMI2020RE0400D12	4	2	12	12	10.2	75
AMI2020RE0500D12	5	2	—	12	—	75
AMI2030RE0150D6	1.5	3	—	6	—	50
AMI2030RE0500D16	5	3	15	16	13.2	100
AMI2030RE0500E1D16	5	3	15	16	13.2	75
AMI2030RE0600D16	6	3	15	16	15.2	100
AMI2030RE0125D6	1.25	3	9.5	6	—	50
AMI2040RE0100D6	1	4	—	6	—	50

特殊R角加工—260°內R角 4 刃鎢鋼端銑刀

Special R Angle Machining — 260° Inner Radius 4 Flutes Carbide End Mill



特殊鈦鈦塗層，全新進口棒材，耐震高、抗崩損，刀刃耗損低、有效提升刀具壽命，倒角表面光滑
Special titanium coating and new imported bar, high shock resistance and can resist edge breakage, effectively improve tool life, smooth surface of chamfer.

260°圓頭設計，適用各式特殊內R角加工成型

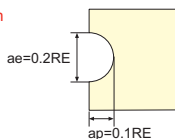
260° round head design, suitable for various, special processing and molding.

- EPU系列採用螺旋角35°設計，排屑槽設計理想，排屑效率高。
- Helix angle 35° design, smoother chips evacuation design, high chip removal efficiency and cutting edge wear low.

切削參數 Dimameter cutting

刃角 R R Angle	1	1.5	2	2.5	3	4	5	6	8
轉速 n (min)	12700	8500	6400	5100	4300	3200	2600	2200	1600
進給速度 Vf (mm/min)	450	450	470	470	490	500	550	510	450

切削深度 Cutting depth



ap：軸向切削深度 Axial depth of cutting
ae：徑向切削深度 Radial depth of cutting
RE：刃角R R Edge Angle

EPU 4000L1

可進行內R角側銑 / R角開槽 / 背面內R倒角
Internal R Corner Side Milling / R Corner Slotted /
Backside Inner R Chamfering.

專用特殊塗層
Special Coating For

合金鋼
Alloy Steel碳鋼
Carbon Steel

產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	頸徑 Neck Shank DN	可使用長度 Effective Length LU	標準全長 Full Length LF
EPU4020L1016L204	1	2	1.5	1.63	4	4	50
EPU4030L1024L206	1.5	3	2.3	2.46	4	6	50
EPU4040L1033L208	2	4	3	3.3	4	8	50
EPU4050L1041L210	2.5	5	3.65	4.1	6	10	50
EPU4060L1049L212	3	6	4.6	4.93	6	12	50
EPU4080L1065L216	4	8	5.9	6.58	8	16	60
EPU4100L1082L220	5	10	7.6	8.22	10	20	75
EPU4120L1098L224	6	12	9.2	9.86	12	24	75
EPU4120L1100L221	6	12	9.2	10	12	21	75
EPU4160L1133L232	8	16	12.2	13.37	16	32	100

T型槽加工—圓鼻鋤端銑刀

T-Slot Machining — Corner Radius Carbide End Mill

適用材質 Material

鋼

Steel

不鏽鋼

Stainless steel

鑄鐵

Cast iron

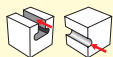
圓溝加工專用，高精度、高效率一體式圓溝開槽銑刀

Special for circular groove processing, high precision, high efficiency integrated circular groove slotting machining.

切削參數 Dimameter cutting

刃角 R Angle	6	8	10	12
轉速 n (min)	2100	1600	1300	1060
進給速度 Vf (mm/min)	250	380	310	320

AMT MC LUM 0.5 CO B2+ BURC 435 M 500 Altin



產品型號 Model No	刃角 R Edge Angle RE	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	頸徑 Neck Shank DN	可使用長度 Effective Length LU	標準全長 Full Length LF	刃數 Flute ClCT
AMT4040CW006R03D6	0.3	4	0.6	6	2	4.1	50	4
AMT4040CW010R05D6	0.5	4	1	6	2	4.5	50	4
AMT4040CW020R10D6	1	4	2	6	2	5.5	50	4
AMT4050CW006R03	0.3	5	0.6	6	2.2	4.1	50	4
AMT4050CW010R05	0.5	5	1	6	2.2	4.5	50	4
AMT4050CW020R10	1	5	2	6	2.2	5.5	50	4
AMT4060CW006R03	0.3	6	0.6	6	2.7	4.6	50	4
AMT4060CW010R05	0.5	6	1	6	2.7	5	50	4
AMT4060CW020R10	1	6	2	6	2.7	6	50	4
AMT8080CW006R03	0.3	8	0.6	8	3.6	5.6	60	8
AMT8080CW010R05	0.5	8	1	8	3.6	6	60	8
AMT8080CW020R10	1	8	2	8	3.6	7	60	8
AMT8100CW006R03	0.3	10	0.6	10	4.5	6.6	75	8
AMT8100CW010R05	0.5	10	1	10	4.5	7	75	8
AMT8100CW020R10	1	10	2	10	4.5	8	75	8
AMT8100CW030R15	1.5	10	3	10	4.5	9	75	8
AMT8100CW040R20	2	10	4	10	4.5	10	75	8
AMT10120CW006R03	0.3	12	0.6	12	5.5	6.6	75	10
AMT10120CW010R05	0.5	12	1	12	5.5	7	75	10
AMT10120CW020R10	1	12	2	12	5.5	8	75	10
AMT10120CW030R15	1.5	12	3	12	5.5	9	75	10
AMT10120CW040R20	2	12	4	12	5.5	10	75	10

R角T型槽銑



R Corner T Type Solt

內R開槽



Internal R Slotted



T型槽加工一圓鼻鎢鋼端銑刀

T-Slot Machining — Corner Radius Carbide End Mill

適用材質 Material

鋼
Steel

不鏽鋼
Stainless steel

鑄鐵
Cast iron

C扣環溝加工專用，一體式高精度、高效率開槽銑刀

Special for C buckle ring groove processing, high precision, high efficiency integrated circular slotting machining.

AMT MG

180° 平行雕刻鎢鋼端銑刀

180° Engraving Carbide End Mill



適用材質 Material

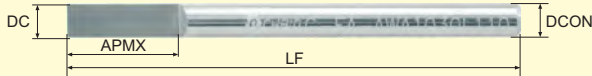


全新W500材質，適用多種材質進行雕刻加工，採用特殊刃長設計，可自行加工取得各種加工刃角度
New W500 material, Suitable for engraving various materials, featuring a special cutting edge length design that allows for self-processing to achieve different cutting angles.

切削參數 Diameter cutting

刃角 R R Angle	3	4	5	6	8	10	12
轉速 n (min)	4250	3200	2550	2150	1600	1300	1100
進給速度 Vf (mm/min)	85	70	50	45	35	30	25

E180-AWA 1000L1



產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
E180-AWA1030L105	3	5	3	40
E180-AWA1030L110	3	10	3	40
E180-AWA1040L106	4	6	4	50
E180-AWA1050L108	5	8	5	50
E180-AWA1060L109	6	9	6	60
E180-AWA1080L112	8	12	8	75
E180-AWA1100L115	10	15	10	75
E180-AWA1120L118	12	18	12	75

30° 精細雕刻鎢鋼端銑刀

30° Tungsten Steel Fine Engraving Carbide End Mill

全新W500材質，模具加工專用，雕刻銑削及特殊倒角加工刀具

New W500 material, mold processing engraving, engraving, milling and special chamfering processing tool.

適用多種材質進行雕刻加工，採用特殊刃長設計，

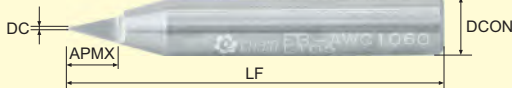
Suitable for engraving various materials, featuring a special cutting edge length design, can do Medium and finishing processing.

雕刻銑削



Carving Milling

E030-AWC 1000L1



產品型號 Model No	切削直徑 Diameter of Cutting	切刃長度 Flute Length	柄部直徑 Shank	標準全長 Full Length
	DC	APMX	DCON	LF
E030-AWC10012L105BD3	0.12	5	3	40
E030-AWC10012L106B	0.12	6	4	40
E030-AWC10012L108BD5	0.12	8	5	40
E030-AWC10012L109D6	0.12	9	6	50
E030-AWC10016L105-38D6	0.16	5	6	38

鋁合金專用鎢鋼端銑刀系列

For Aluminum Carbide End Mill Series

適用材質 Material

鋁合金
Aluminum銅
Copper

圓棒採用超微粒超硬合金材質，降低切削溫度、有利排屑流暢

Carbide round bar is made of ultra micron cemented carbide material, reduce cutting temperature and remove chip smoothly.

- 刀口拋光研磨設計，排屑流暢，有效降低摩擦力、提昇切削能力，擁有更良好的加工面粗糙度。
- GMA系列採用螺旋角45°設計，HMA系列採用螺旋角55°設計。
- Cutting edge with polishing treatment and grinding design, effectively reduce frictional force, enhance the cutting capacity.
- GMA series helix angle 45° design, HMA series helix angle 55° design.

切削參數 Diameter cutting

直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	15500	10500	8000	6400	5400	3900	3200
進給速度 (mm/min) Vf	開槽 Slotted	800	900	1000	1100	950	900
	側邊 Side	1200	1400	1600	1700	1500	1300

GMA 3000

MG

0.5

CO

12%

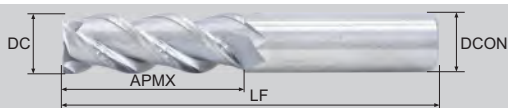
W

500

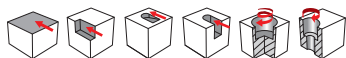
45

鋁合金 3 刃鎢鋼端銑刀

For Aluminum Alloy 3 Flutes Carbide End Mill



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
GMA3010	1	3	4	50
GMA3010D6	1	3	6	50
GMA3015	1.5	4.5	4	50
GMA3020	2	6	4	50
GMA3020D6	2	6	6	50
GMA3025	2.5	7.5	4	50
GMA3030	3	9	4	50
GMA3030D6	3	9	6	50
GMA3030H	3	9	4	100
GMA3040	4	12	4	50
GMA3040D6	4	12	6	50
GMA3040H	4	12	4	100
GMA3050	5	15	6	50
GMA3050H	5	15	6	100
GAM3060	6	18	6	50
GMA3060H	6	18	6	100
GMA3080	8	24	8	60
GMA3080L135E1	8	35	8	75
GMA3080H	8	24	8	100
GMA3080M	8	24	8	150
GMA3100	10	30	10	75
GMA3100L145H	10	45	10	100
GMA3100M	10	30	10	150
GMA3120	12	36	12	75
GMA3120H	12	36	12	100
GMA3120M	12	36	12	150
GMA3160	16	48	16	100
GMA3200	20	50	20	100
GMA3200L160	20	60	20	100

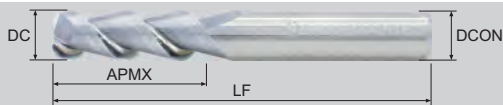


HMA 2000



鋁合金 2 刃鎢鋼端銑刀

For Aluminum Alloy 2 Flutes Carbide End Mill



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
HMA2010	1	3	4	50
HMA2015	1.5	4.5	4	50
HMA2020	2	6	4	50
HMA2025	2.5	7.5	4	50
HMA2030	3	9	4	50
HMA2030E1	3	9	4	75
HMA2030H	3	9	4	100
HMA2040	4	12	4	50
HMA2040E1	4	12	4	75
HMA2040H	4	12	4	100
HMA2050	5	15	6	50
HMA2050E1	5	15	6	75
HMA2050H	5	15	6	100
HMA2060	6	18	6	50
HMA2060E1	6	18	6	75
HMA2060H	6	18	6	100
HMA2070	7	21	8	60
HMA2080	8	24	8	60
HMA2080E1	8	24	8	75
HMA2080H	8	24	8	100
HMA2080M	8	24	8	150
HMA2090	9	27	10	75
HMA2095	9.5	28.5	10	75
HMA2100	10	30	10	75
HMA2100H	10	30	10	100
HMA2100M	10	30	10	150
HMA2110	11	33	12	75
HMA2120	12	36	12	75
HMA2120H	12	36	12	100
HMA2120M	12	36	12	150
HMA2160	16	48	16	100

鋁合金專用鎢鋼端銑刀系列

For Aluminum Carbide End Mill Series

適用材質 Material

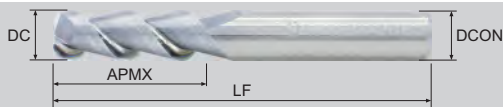
鋁合金
Aluminum銅
Copper

HMA 3000



鋁合金 3 刃鎢鋼端銑刀

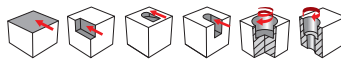
For Aluminum Alloy 3 Flutes Carbide End Mill



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
HMA3010	1	3	4	50
HMA3015	1.5	4.5	4	50
HMA3020	2	6	4	50
HMA3025	2.5	7.5	4	50
HMA3030	3	9	4	50
HMA3040	4	12	4	50
HMA3050	5	15	6	50
HMA3060	6	18	6	50
HMA3070	7	21	8	60
HMA3080	8	24	8	60
HMA3090	9	27	10	75
HMA3100	10	30	10	75
HMA3110	11	33	12	75
HMA3120	12	36	12	75
HMA3160	16	48	16	100
HMA3200	20	50	20	100
HMA3200L160	20	60	20	100

鋁合金專用—3刃圓溝2離隙鎢鋼端銑刀

For Aluminum 3 Flutes Rounded Land Double Edge Carbide End Mill



刃口採雙離隙研磨，提升切削能力，減少因阻抗而產生的震動，刃口拋光研磨設計，有效降低磨擦力，提升切削能力，獲得更良好的加工面粗糙度

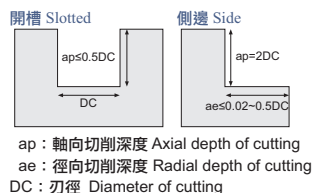
Cutting edge adopts double clearance grinding to enhance cutting performance and reduce vibration caused by resistance, the polished cutting edge design effectively lowers friction, improves cutting efficiency, and achieves better surface roughness.

- 圓棒採用超微粒子超硬合金材質，降低切削溫度有利排屑流暢。
- GMA系列採用螺旋角45°設計，HMA系列採用螺旋角55°設計。
- Carbide round bar is made of ultra micron cemented carbide material, reduce cutting temperature and remove chip smoothly.
- GMA series helix angle 45° design, HMA series helix angle 55° design.

切削參數 Diameter cutting

直徑 (mm) Shank	4	6	8	10	12	16	20
轉速 n (min)	15500	10500	8000	6400	5400	3900	3200
進給速度 (mm/min) V _f	開槽 Slotted	800	900	1000	1100	950	900
	側邊 Side	1200	1400	1600	1700	1500	1300

切削深度 Cutting depth



MU2-GMA 3000

刃口雙離隙研磨
Cutting edge double
clearance grinding.



產品型號 Model No	切削直徑 Diameter of Cutting DC	切刃長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MU2-GMA3040	4	12	4	50
MU2-GMA3040D6	4	12	6	50
MU2-GMA3045L114	4.5	14	6	50
MU2-GMA3050	5	15	6	50
MU2-GMA3060	6	18	6	50
MU2-GMA3080	8	24	8	60
MU2-GMA3080E1	8	24	8	75
MU2-GMA3080H	8	24	8	100
MU2-GMA3080M	8	24	8	150
MU2-GMA3090L124	9	24	10	75
MU2-GMA3095L124	9.5	24	10	75
MU2-GMA3100	10	30	10	75
MU2-GMA3100M	10	30	10	150
MU2-GMA3120	12	36	12	75
MU2-GMA3120H	12	36	12	100
MU2-GMA3120L150H	12	50	12	100
MU2-GMA3120L155H	12	55	12	100
MU2-GMA3120M	12	36	12	150
MU2-GMA3160	16	48	16	100
MU2-GMA3200	20	50	20	100

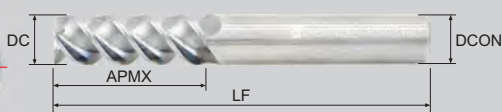
鋁合金專用—3刃圓溝2離隙鎢鋼端銑刀

For Aluminum 3 Flutes Rounded Land Double Edge Carbide End Mill

適用材質 Material

鋁合金
Aluminum銅
Copper

MU2-HMA 3000

刃口雙離隙研磨
Cutting edge double
clearance grinding.

產品型號 Model No	切削直徑 Diameter of Cutting DC	刃切長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MU2-HMA3040	4	12	4	50
MU2-HMA3050	5	15	6	50
MU2-HMA3060	6	18	6	50
MU2-HMA3070	7	21	8	60
MU2-HMA3080	8	24	8	60
MU2-HMA3090	9	27	10	75
MU2-HMA3100	10	30	10	75
MU2-HMA3120	12	36	12	75
MU2-HMA3160	16	48	16	100

鋁合金專用—3刃圓溝3離隙鎢鋼端銑刀

For Aluminum 3 Flutes Rounded Land Triple Edge Carbide End Mill

刃口採3離隙研磨，提升切削性能，有更良好的加工表面

Cutting edge with three relief grinding, cutting performance enhancement, also including superior processing surface.

圓溝全拋光處理，有效抑制加工產生熱能，使斷屑穩定、排屑穩定，延長加工壽命

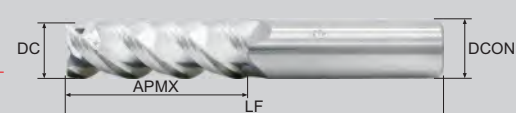
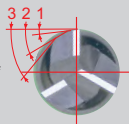
Rounded land with full polishing, effectively reducing heat energy from processing, chip removal smoothly, chip breaking stably, increasing cutting tools processing life.

- JMA系列採用螺旋角50°設計。
- JMA series helix angle 50° design.

MU3-JMA 3000



適用材質 Material

鋁合金
Aluminum銅
Copper徑向離隙角
O.D Radial Relief

產品型號 Model No	切削直徑 Diameter of Cutting DC	刃切長度 Flute Length APMX	柄部直徑 Shank DCON	標準全長 Full Length LF
MU3-JMA3040	4	12	4	50
MU3-JMA3050	5	15	6	50
MU3-JMA3050D5	5	15	5	50
MU3-JMA3060	6	18	6	50
MU3-JMA3060E1	6	18	6	75
MU3-JMA3080	8	24	8	60
MU3-JMA3080E1	8	24	8	75
MU3-JMA3100	10	30	10	75
MU3-JMA3100H	10	30	10	100
MU3-JMA3120	12	36	12	75
MU3-JMA3160	16	48	16	100
MU3-JMA3160L170M	16	70	16	150
MU3-JMA3160L180M	16	80	16	150
MU3-JMA3200	20	50	20	100
MU3-JMA3200L1110R	20	110	20	200
MU3-JMA3200L160R	20	60	20	200