

WG
1994

精密刀具製造

緯冠刀具

WEI GUAN CUTTING TOOLS

精密切削刀具・產品型錄

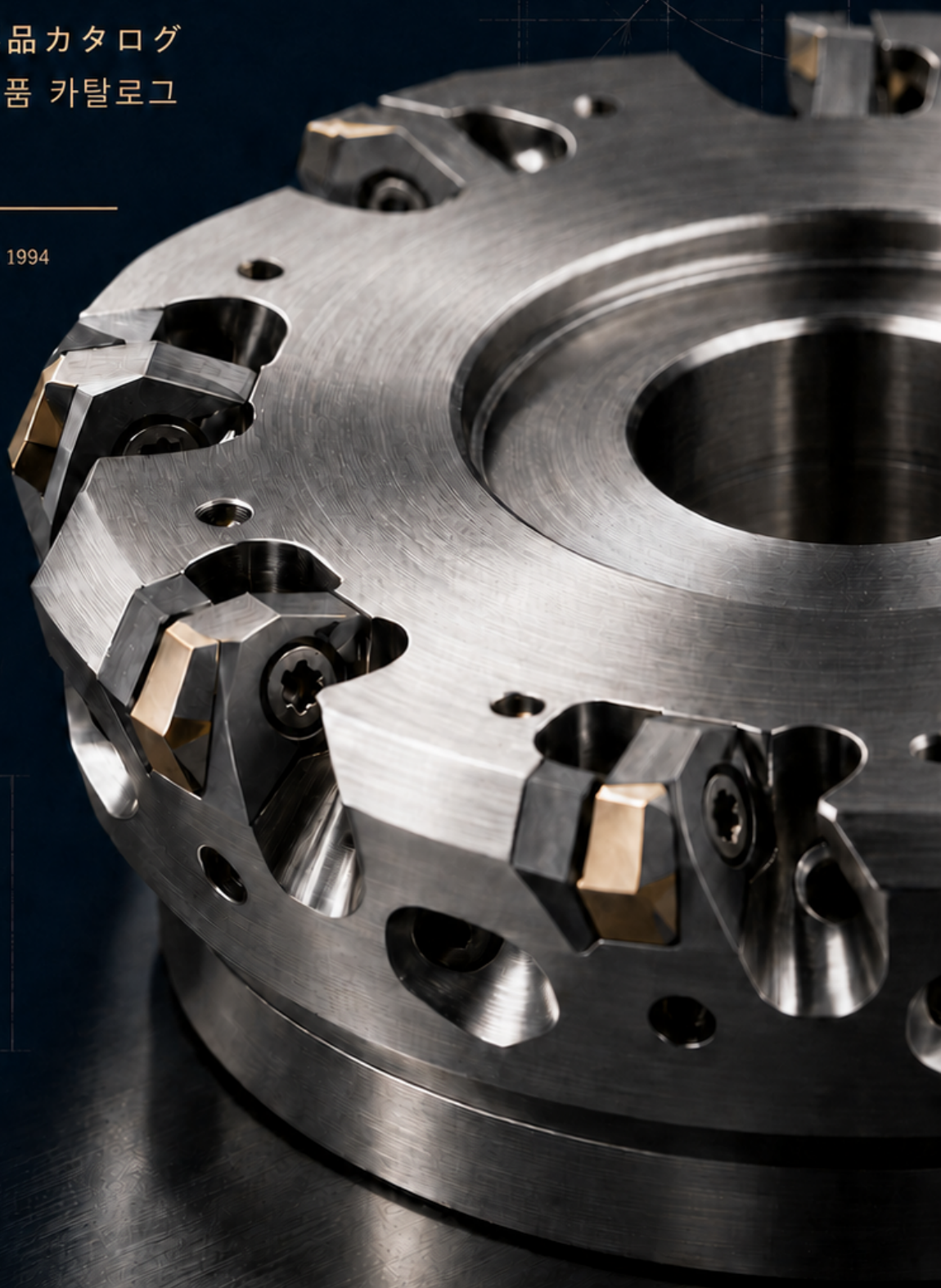
PRECISION CUTTING TOOLS CATALOG

精密切削工具・製品カタログ

정밀 절삭 공구・제품 카탈로그

PRECISION IN MOTION · SINCE 1994

01





精密刀具製造

緯冠刀具

WEI GUAN CUTTING TOOLS

02

讓精準， 開始轉動。

三十餘年切削技術，凝聚於每一刀。

PRECISION IN MOTION · SINCE 1994

精密さを、動かす。

정밀함이 움직임을 시작합니다.

專注捨棄式切削刀具製造

使い捨て式切削工具の製造に特化

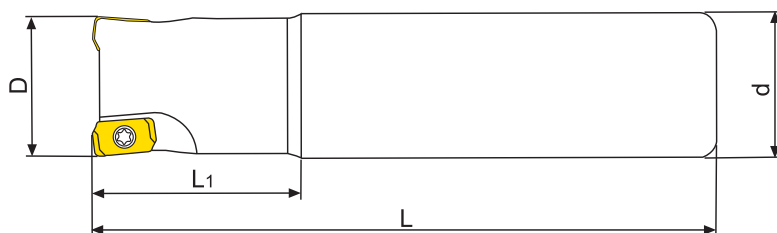
인덱서블 절삭 공구 제조 전문

PRECISION · STABILITY · EXPERTISE



TD4N 高速進給端銑刀

TD4N High-Speed End Mill Cutter



ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
TD4N-1613016-2	16	30	130	16	2	ENMU0603ER-B/C	M2.5 (S2503-15)	FT8
TD4N-1618016-2		50	180		2			
TD4N-1713016-2	17	25	130		2			
TD4N-1718016-2		25	180		2			
TD4N-1815016-2	18	25	150		2			
TD4N-2015020-3	20	50	150	20	3			
TD4N-2020020-3		80	200		3			
TD4N-2115020-3	21	30	150		3			
TD4N-2120020-3		30	200		3			
TD4N-2216020-3	22	30	160		3			
TD4N-2515025-4	25	60	150	25	4			
TD4N-2520025-4		100	200		4			
TD4N-2615025-4	26	35	150		4			
TD4N-2620025-4		35	200		4			
TD4N-2815025-4	28	35	150		4			
TD4N-2820025-4		35	200		4			
TD4N-3215032-5	32	70	150	32	5			
TD4N-3220032-5		120	200		5			
TD4N-3515032-5	35	40	150		5			
TD4N-3520032-5		40	200		5			
TD4N-4015032-6	40	45	150		6			
TD4N-4023032-6		45	230		6			

Inserts..» D41

Cutting Conditions..» D41

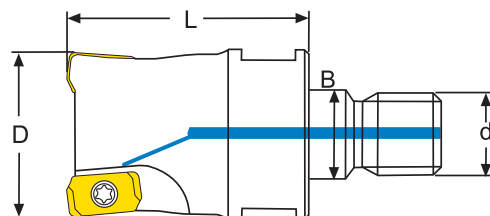


TD4NM 連接式刀頭

TD4NM Connection Multi-Functon Milling Tools



Vol.1
New Products



Non air hole	With air hole	D	L	d	B	T	Insert	Screw	Wrench
TD4NM-16-2	TD4NM-16-2+AG	16	25	M8x1.25	8.5	2	ENMU0603ER-B/C	M2.5 (S2503-15)	FT8
TD4NM-17-2	TD4NM-17-2+AG	17	25	M8x1.25	8.5	2			
TD4NM-18-2	TD4NM-18-2+AG	18	25	M8x1.25	8.5	2			
TD4NM-20-3	TD4NM-20-3+AG	20	30	M10x1.5	10.5	3			
TD4NM-21-3	TD4NM-21-3+AG	21	30	M10x1.5	10.5	3			
TD4NM-22-3	TD4NM-22-3+AG	22	30	M10x1.5	10.5	3			
TD4NM-25-4	TD4NM-25-4+AG	25	35	M12x1.75	12.5	4			
TD4NM-26-4	TD4NM-26-4+AG	26	35	M12x1.75	12.5	4			
TD4NM-28-4	TD4NM-28-4+AG	28	35	M12x1.75	12.5	4			
TD4NM-32-5	TD4NM-32-5+AG	32	40	M16x2.0	17.0	5			
TD4NM-35-5	TD4NM-35-5+AG	35	40	M16x2.0	17.0	5			
TD4NM-40-6	TD4NM-40-6+AG	40	40	M16x2.0	17.0	6			

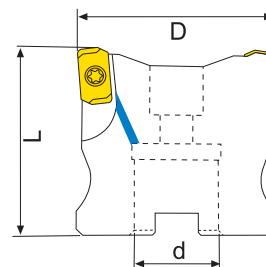
Inserts..» D41

Cutting Conditions..» D41



TD4N 高速角R殼型銑刀

TD4N Radius Surface Milling Cutter



With air hole	D	L	d	T	Insert	Screw	Wrench
TD4N-50-22.0-7+A	50	50	22.0	7	ENMU0603ER-B/C	M2.5 (S2503-15)	FT8
TD4N-50-22.225-7+A		50	22.225	7			
TD4N-52-22.0-7+A	52	50	22.0	7			
TD4N-52-22.225-7+A		50	22.225	7			
TD4N-63-22.0-7+A	63	50	22.0	7			
TD4N-63-22.225-7+A		50	22.225	7			

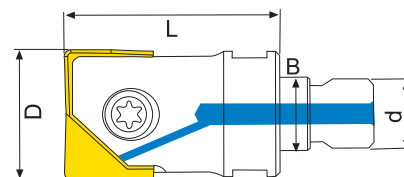
Inserts..» D41

Cutting Conditions..» D41



R N M M 連接式刀頭

RNMM Connection Multi-Function Milling Tools



Non air hole	With air hole	D	L	d	B	Insert	Screw	Wrench
RNMM-08	RNMM-08+A	08	26	M6*1.0	6.5	RNM-080 FRM-080	5008D	FT7
RNMM-10	RNMM-10+A	10	26	M6*1.0	6.5	RNM-100 FRM-100	5010D	FT8
RNMM-12	RNMM-12+A	12	26	M6*1.0	6.5	RNM-120 FRM-120	5012D	FT10
RNMM-16	RNMM-16+A	16	35	M8*1.25	8.5	RNM-160 FRM-160	5016D	FT15
RNMM-20	RNMM-20+A	20	35	M10*1.5	10.5	RNM-200 FRM-200	5020D	FT20
RNMM-25	RNMM-25+A	25	39	M12*1.75	12.5	RNM-250 FRM-250	5025D	LT25
RNMM-30	RNMM-30+A	30	43	M16*2.0	17.0	RNM-300 FRM-300	5030D	LT30

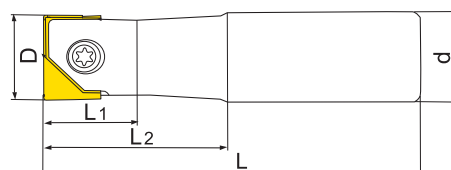
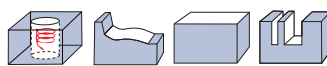
Inserts..» D42,D43 Cutting Conditions..» D44,D45

Vol.1
New Products



R N M 高精度圓弧銑刀

RNM Radius Precision Milling Cutter



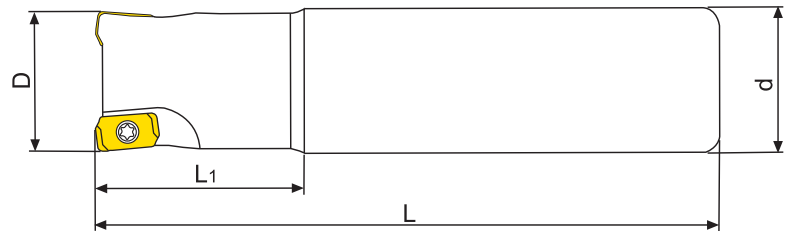
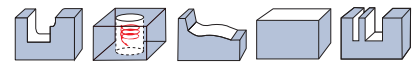
ITEM CODE	D	L	L ₁	L ₂	d	T	Insert	Screw	Wrench
RNM0811510	08	115	15	30	10	1	RNM-080 FRM-080	5008D	FT7
RNM0815012		150	15	30	12				
RNM1011510	10	115		30	10		RNM-100 FRM-100	5010D	FT8
RNM1015012		150	15	30	12				
RNM1215012	12	150		30	12		RNM-120 FRM-120	5012D	FT10
RNM1216016		160	20	50	16				
RNM1613016	16	130		40	16		RNM-160 FRM-160	5016D	FT15
RNM1616016		160		40					
RNM1620016		200		40					
RNM2015020	20	150		40	20		RNM-200 FRM-200	5020D	FT20
RNM2017020		170		40					
RNM2021020		210		40					
RNM2516025	25	160		50	25		RNM-250 FRM-250	5025D	LT25
RNM2520025		200		50					
RNM2525025		250		50					
RNM3015032	30	150		65	32		RNM-300 FRM-300	5030D	LT30
RNM3018032		180		100					
RNM3021032		210		130					
RNM3025032		250		170					
RNM3030032		300		100					

Inserts..» D42,D43 Cutting Conditions..» D44,D45



MFH03 mini 高速進給端銑刀

MFH03 mini High-Feed Milling Cutter



ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
MFH03-1615016-2	16	50	150	16	2	LOGU 030310ER-GM	M3.0 (S3001-2)	FT8
MFH03-1618016-2		60	180		2			
MFH03-1715016-2	17	30	150		2			
MFH03-1718016-2		30	180		2			
MFH03-1815016-2	18	30	150		2			
MFH03-2015020-3	20	60	150	20	3			
MFH03-2015020-4		60	150		4			
MFH03-2020020-3		80	200		3			
MFH03-2020020-4		80	200		4			
MFH03-2115020-3	21	40	150		3			
MFH03-2115020-4		40	150		4			
MFH03-2120020-3		40	200		3			
MFH03-2120020-4		40	200		4			
MFH03-2215020-3	22	40	150		3			
MFH03-2215020-4		40	150		4			
MFH03-2515025-4	25	70	150	25	4			
MFH03-2515025-5		70	150		5			
MFH03-2520025-4		100	200		4			
MFH03-2520025-5		100	200		5			
MFH03-2615025-4	26	45	150		4			
MFH03-2615025-5		45	150		5			
MFH03-2620025-4		45	200		4			
MFH03-2620025-5		45	200		5			
MFH03-2815025-4	28	45	150		4			
MFH03-2815025-5		45	150		5			
MFH03-3015032-4	30	70	150	32	4			
MFH03-3015032-5		70	150		5			
MFH03-3020032-4		120	200		4			
MFH03-3020032-5		120	200		5			
MFH03-3215032-5	32	70	150		5			
MFH03-3215032-6		70	150		6			
MFH03-3220032-5		120	200		5			
MFH03-3220032-6		120	200		6			
MFH03-3315032-5	33	50	150		5			
MFH03-3315032-6		50	150		6			
MFH03-3320032-5		50	200		5			
MFH03-3320032-6		50	200		6			
MFH03-3515032-5	35	50	150		5			
MFH03-3515032-6		50	150		6			
MFH03-3520032-5		50	200		5			
MFH03-3520032-6		50	200		6			

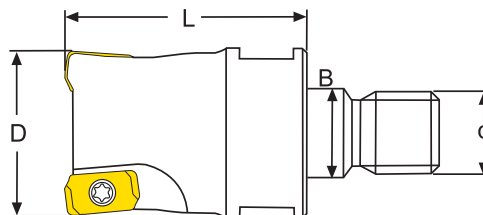
Inserts...»D30

Cutting Conditions...»D30



MFHM03mini 連接式刀頭

MFHM03 mini Connection Multi-Function Milling Tools



ITEM CODE	D	L	d	B	Insert	Screw	Wrench
MFHM03-16-2	16	25	M8x1.25	8.5	LOGU 030310ER-GM	M3.0 (S3001-2)	FT8
MFHM03-17-2	17	25	M8x1.25	8.5			
MFHM03-18-2	18	25	M8x1.25	8.5			
MFHM03-20-3	20	30	M10x1.5	10.5			
MFHM03-20-4		30	M10x1.5	10.5			
MFHM03-21-3	21	30	M10x1.5	10.5			
MFHM03-21-4		30	M10x1.5	10.5			
MFHM03-22-3	22	30	M10x1.5	10.5			
MFHM03-22-4		30	M10x1.5	10.5			
MFHM03-25-4	25	35	M12x1.75	12.5			
MFHM03-25-5		35	M12x1.75	12.5			
MFHM03-26-4	26	35	M12x1.75	12.5			
MFHM03-26-5		35	M12x1.75	12.5			
MFHM03-28-4	28	35	M12x1.75	12.5			
MFHM03-28-5		35	M12x1.75	12.5			
MFHM03-30-4	30	35	M12x1.75	12.5			
MFHM03-30-5		35	M12x1.75	12.5			
MFHM03-32-5	32	40	M16x2.0	17.0			
MFHM03-32-6		40	M16x2.0	17.0			
MFHM03-33-5	33	40	M16x2.0	17.0			
MFHM03-33-6		40	M16x2.0	17.0			
MFHM03-35-5	35	40	M16x2.0	17.0			
MFHM03-35-6		40	M16x2.0	17.0			

Inserts..» D30

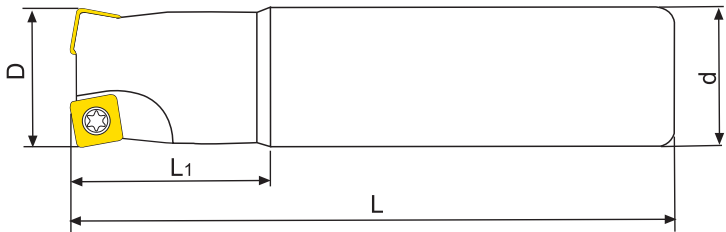
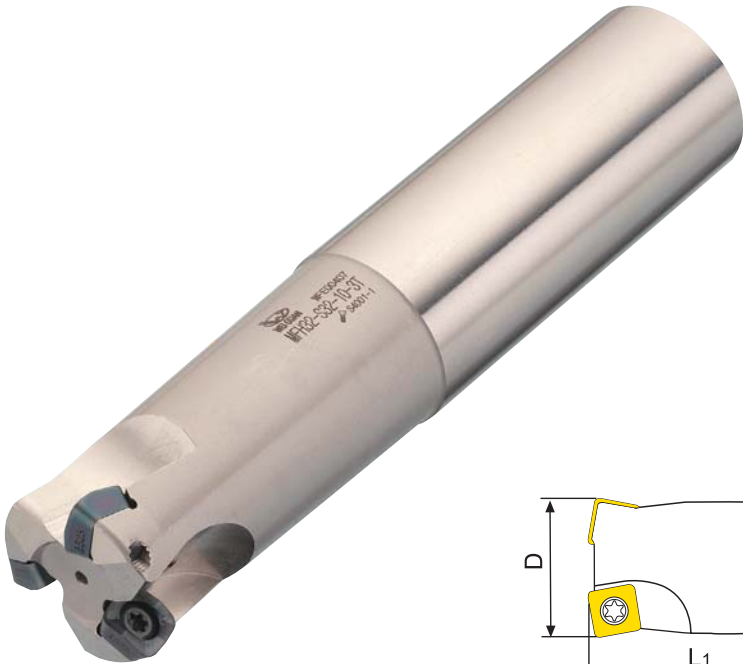
Cutting Conditions..» D30

Vol.1
New Products



MFH10 高速進給端銑刀

MFH10 High-Speed End Mill Cutter



ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
MFH10-2515025-2	25	60	150	25	2	SOMT100420ER- _ _	M4.0 (S4001-1)	FT15
MFH10-2520025-2		120	200		2			
MFH10-2615025-2	26	40	150		2			
MFH10-2620025-2		40	200		2			
MFH10-2815025-2	28	40	150		2			
MFH10-2820025-2		40	200		2			
MFH10-3215032-2	32	70	150	32	2			
MFH10-3220032-2		120	200		2			
MFH10-3215032-3	32	70	150		3			
MFH10-3220032-3		120	200		3			
MFH10-3315032-2	33	50	150		2			
MFH10-3320032-2		50	200		2			
MFH10-3315032-3	33	50	150		3			
MFH10-3320032-3		50	200		3			
MFH10-3515032-2	35	50	150		2			
MFH10-3520032-2		50	200		2			
MFH10-3515032-3	35	50	150		3			
MFH10-3520032-3		50	200		3			
MFH10-4015032-3	40	50	150		3			
MFH10-4015032-4		50	150		4			

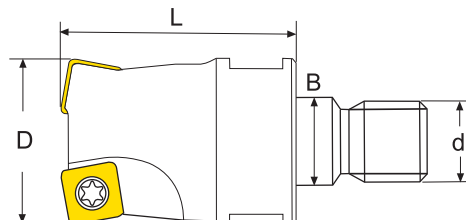
Inserts..» D31

Cutting Conditions..» D32,D33



MFHM10 連接式刀頭

MFHM10 Connection Multi-Function Milling Tools



ITEM CODE	D	L	d	B	Insert	Screw	Wrench
MFHM10-25-2	25	35	M12x1.75	12.5	SOMT 100420ER- _ _	M4.0 (S4001-1)	FT15
MFHM10-26-2	26	35	M12x1.75	12.5			
MFHM10-28-2	28	35	M12x1.75	12.5			
MFHM10-32-2	32	40	M16x2.0	17.0			
MFHM10-32-3		40	M16x2.0	17.0			
MFHM10-33-2	33	40	M16x2.0	17.0			
MFHM10-33-3		40	M16x2.0	17.0			
MFHM10-35-2	35	40	M16x2.0	17.0			
MFHM10-35-3		40	M16x2.0	17.0			
MFHM10-40-3	40	40	M16x2.0	17.0			
MFHM10-40-4		40	M16x2.0	17.0			

Inserts..» D31

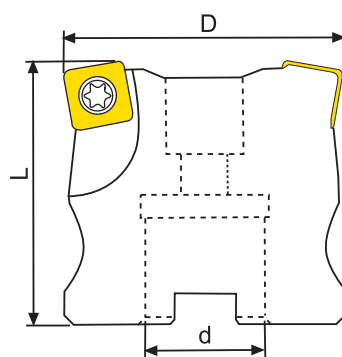
Cutting Conditions..» D32, D33

Vol.1
New Products



MFHB10 高速進給平面銑刀

MFHB10 High-Speed Surface Milling Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
MFHB10-50-22.0-4	50	50	22.0	4	SOMT 100420ER- _ _	M4.0 (S4001-1)	FT15
MFHB10-50-22.0-5		50	22.0	5			
MFHB10-63-22.0-5	63	50	22.0	5			
MFHB10-63-22.0-6		50	22.0	6			
MFHB10-63-25.4-5		50	25.4	5			
MFHB10-63-25.4-6		50	25.4	6			
MFHB10-80-31.75-7	80	63	31.75	7			
MFHB10-80-32.0-7		63	32.0	7			

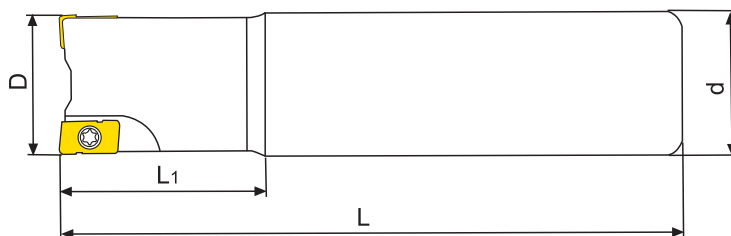
Inserts..» D31

Cutting Conditions..» D32, D33



ASP V 精 插 銑 刀

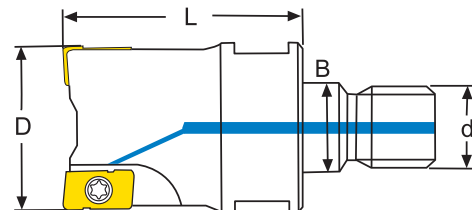
ASPV Vertical Type Polish Milling Cutter



ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
ASPV 1615016-2	16	35	150	16	2	MPHW0603_ _ZEL	M2.5 (S2502-1)	FT8
ASPV 1620016-2		35	200		2			
ASPV 1715016-2	17	30	150		2			
ASPV 1720016-2		30	200		2			
ASPV 1815016-2	18	30	150		2			
ASPV 2015020-3	20	40	150	20	3			
ASPV 2020020-3		40	200		3			
ASPV 2115020-3	21	35	150		3			
ASPV 2120020-3		35	200		3			
ASPV 2215020-3	22	35	150		3			
ASPV 2515025-4	25	50	150	25	4			
ASPV 2520025-4		50	200		4			
ASPV 2615025-4	26	45	150		4			
ASPV 2620025-4		45	200		4			
ASPV 2815025-4	28	45	150		4			
ASPV 3015032-4	30	70	150	32	4			
ASPV 3020032-4		120	200		4			
ASPV 3215032-5	32	70	150		5			
ASPV 3220032-5		120	200		5			
ASPV 3315032-5	33	50	150		5			
ASPV 3320032-5		50	200		5			
ASPV 3515032-5	35	50	150		5			
ASPV 3520032-5		50	200		5			
ASPV 4015032-6	40	50	150		6			
ASPV 4020032-6		50	200		6			

Inserts..» D34

Cutting Conditions..» D35,D35-1

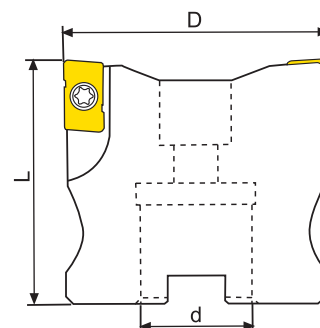


Non air hole	With air hole	D	L	d	B	T	Insert	Screw	Wrench
ASPVM-16-2	ASPVM-16-2+AG	16	25	M8x1.25	8.5	2	MPHW0603_ _ZEL	M2.5 (S2502-1)	FT8
ASPVM-17-2	ASPVM-17-2+AG	17	25	M8x1.25	8.5	2			
ASPVM-18-2	ASPVM-18-2+AG	18	25	M8x1.25	8.5	2			
ASPVM-20-3	ASPVM-20-3+AG	20	30	M10x1.5	10.5	3			
ASPVM-21-3	ASPVM-21-3+AG	21	30	M10x1.5	10.5	3			
ASPVM-22-3	ASPVM-22-3+AG	22	30	M10x1.5	10.5	3			
ASPVM-25-4	ASPVM-25-4+AG	25	35	M12x1.75	12.5	4			
ASPVM-26-4	ASPVM-26-4+AG	26	35	M12x1.75	12.5	4			
ASPVM-28-4	ASPVM-28-4+AG	28	35	M12x1.75	12.5	4			
ASPVM-30-4	ASPVM-30-4+AG	30	35	M12x1.75	12.5	4			
ASPVM-32-5	ASPVM-32-5+AG	32	40	M16x2.0	17.0	5			
ASPVM-33-5	ASPVM-33-5+AG	33	40	M16x2.0	17.0	5			
ASPVM-35-5	ASPVM-35-5+AG	35	40	M16x2.0	17.0	5			
ASPVM-40-6	ASPVM-40-6+AG	40	40	M16x2.0	17.0	6			

Inserts..» D34

Cutting Conditions..» D35,D35-1

ASPVB 軸向精插殼型銑刀
WEI GUAN ASPVB Vertical Type Polish Milling Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
ASPVB 50-22.0-7	50	50	22.0	7	MPHW0603_ _ZEL	M2.5 (S2502-1)	FT8
ASPVB 50-22.225-7		50	22.225	7			
ASPVB 63-22.0-8	63	50	22.0	8			
ASPVB 63-22.225-8		50	22.225	8			
ASPVB 63-25.4-8		50	25.4	8			

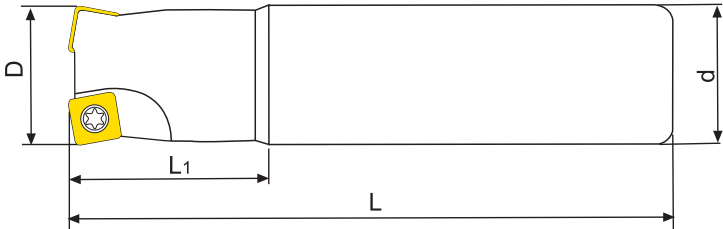
Inserts..» D34

Cutting Conditions..» D35,D35-1



ASRF30mini高速4刃R角端铣刀

ASRF30mini Four Corners Super Radius Milling Cutter



ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
ASRF30-2015020-2	20	50	150	20	2	SP_ _07T2_ _	M3.0 (S3003-3)	FT10
ASRF30-2020020-2		80	200		2			
ASRF30-2115020-2	21	35	150		2			
ASRF30-2120020-2		35	200		2			
ASRF30-2515025-3	25	60	150	25	3			
ASRF30-2520025-3		100	200		3			
ASRF30-2615025-3	26	40	150		3			
ASRF30-2620025-3		40	200		3			
ASRF30-3015025-3	30	40	150	32	3			
ASRF30-3020025-3		40	200		3			
ASRF30-3215032-4	32	70	150		4			
ASRF30-3220032-4		120	200		4			
ASRF30-3315032-4	33	45	150		4			
ASRF30-3320032-4		45	200		4			
ASRF30-3515032-4	35	45	150	32	4			
ASRF30-3520032-4		45	200		4			
ASRF30-4015032-5	40	45	150		5			
ASRF30-4020032-5		45	200		5			

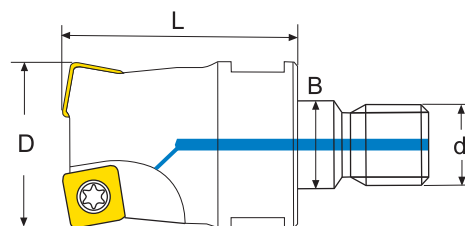
Inserts...»D36

Cutting Conditions...»D36



ASRFM 30mini 連接式刀頭

ASRFM 30mini Connection Multi-Function Milling Tools



Non air hole	With air hole	D	L	d	B	T	Insert	Screw	Wrench
ASRFM 30-20-2	ASRFM 30-20-2+AG	20	30	M10x1.5	10.5	2	SP__07T2__	M3.0 (S3003-3)	FT10
ASRFM 30-21-2	ASRFM 30-21-2+AG	21	30	M10x1.5	10.5	2			
ASRFM 30-25-3	ASRFM 30-25-3+AG	25	35	M12x1.75	12.5	3			
ASRFM 30-26-3	ASRFM 30-26-3+AG	26	35	M12x1.75	12.5	3			
ASRFM 30-30-3	ASRFM 30-30-3+AG	30	35	M12x1.75	12.5	3			
ASRFM 30-32-4	ASRFM 30-32-4+AG	32	40	M16x2.0	17.0	4			
ASRFM 30-33-4	ASRFM 30-33-4+AG	33	40	M16x2.0	17.0	4			
ASRFM 30-35-4	ASRFM 30-35-4+AG	35	40	M16x2.0	17.0	4			
ASRFM 30-40-5	ASRFM 30-40-5+AG	40	40	M16x2.0	17.0	5			

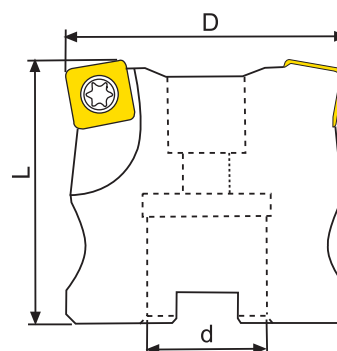
Inserts..» D36

Cutting Conditions..» D36



ASRFB30mini 高速4刃R角殼型銑刀

ASRFB30mini Four Corners Super Radius Milling Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
ASRFB 30-50-22.0-7	50	50	22.0	7	SP__07T2__	M3.0 (S3003-3)	FT10
ASRFB 30-50-22.225-7		50	22.225	7			
ASRFB 30-63-22.0-8	63	50	22.0	8			
ASRFB 30-63-22.225-8		50	22.225	8			
ASRFB 30-63-25.4-8		50	25.4	8			

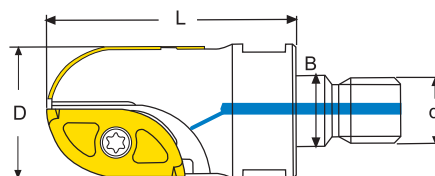
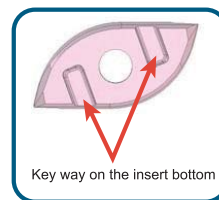
Inserts..» D36

Cutting Conditions..» D36



SWBXM,SWBKM 連接式刀頭

SWBXM,SWBKM Connection Multi-Functon Milling Tools



Non air hole	With air hole	D	L	d	B	Insert	Screw	Wrench
SWBXM-16-2	SWBXM-16-2+AG	16	30	M8x1.25	8.5	SWBX216MMW SWBX216MSW	M2.5 (S2503-15)	FT8
SWBXM-20-2	SWBXM-20-2+AG	20	38	M10x1.5	10.5	SWBX220MMW SWBX220MSW	M3.0 (S3001-9)	FT10
SWBXM-25-2	SWBXM-25-2+AG	25	40	M12x1.75	12.5	SWBX225MMW SWBX225MSW	M4.0 (S4001-13)	FT15
SWBKM-30-2	SWBKM-30-2+AG	30	45	M16x2.0	17.0	SWBX230MMW SWBX230MSW	M5.0 (S5002-5)	FT20

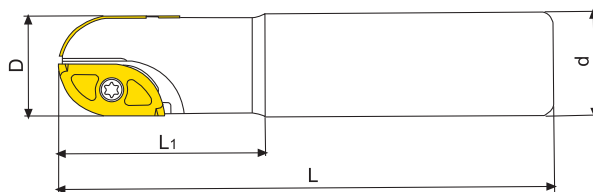
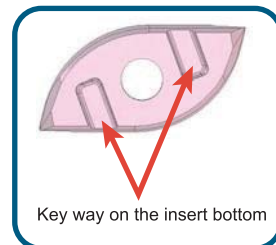
Inserts..» D37

Cutting Conditions..» D38



SWBX,SWBK 球 型 粗 銑 刀

SWBX,SWBK Ball Type Milling Cutter



ITEM CODE	D	L	L ₁	d	Master Insert	Slave Insert	Screw	Wrench
SWBX 1615016-2	16	150	60	16	SWBX216MMW	SWBX216MSW	M2.5 (S2503-15)	FT8
SWBX 1620016-2		200	80					
SWBX 2015020-2	20	150	60	20	SWBX220MMW	SWBX220MSW	M3.0 (S3001-9)	FT10
SWBX 2020020-2		200	80					
SWBX 2515025-2	25	150	70	25	SWBX225MMW	SWBX225MSW	M4.0 (S4001-13)	FT15
SWBX 2520025-2		200	100					
SWBX 2523025-2	30	230	120	32	SWBX230MMW	SWBX230MSW	M5.0 (S5002-5)	FT20
SWBK 3015032-2		150	70					
SWBK 3020032-2		200	120					
SWBK 3025032-2		250	170					
SWBK 3030032-2		300	200					

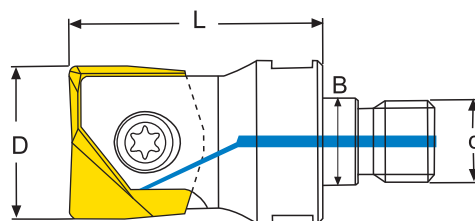
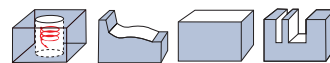
Inserts..» D37

Cutting Conditions..» D38



ARPFM 連接式刀頭

ARPFM Connection Multi-Function Milling Tools



Non air hole	With air hole	D	L	d	B	Insert	Screw	Wrench
ARPFM-16	ARPFM-16+A	16	32	M8x1.25	8.5	ZCFW 160-R_ _	5016F	FT20
ARPFM-20	ARPFM-20+A	20	38	M10x1.5	10.5	ZCFW 200-R_ _	5020F	LT25
ARPFM-25	ARPFM-25+A	25	40	M12x1.75	12.5	ZCFW 250-R_ _	5025F	LT30
ARPFM-30	ARPFM-30+A	30	45	M16x2.0	17.0	ZCFW 300-R_ _	5030F	LT30

Inserts..» D39

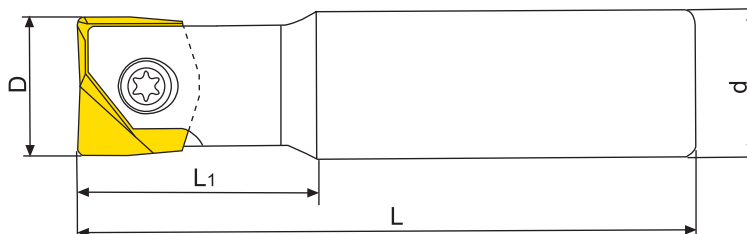
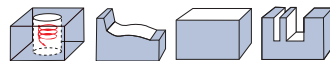
Cutting Conditions..» D40

Vol.1
New Products



ARPF 高精度圓弧銑刀

ARPF Radius Precision Milling Cutter



ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
ARPF 1613016	16	40	130	16	1	ZCFW 160-R_ _	5016F	FT20
ARPF 1616016		40	160					
ARPF 1620016		40	200					
ARPF 2014020	20	40	140	20		ZCFW 200-R_ _	5020F	LT25
ARPF 2017020		40	170					
ARPF 2021020		40	210					
ARPF 2515025	25	50	150	25		ZCFW 250-R_ _	5025F	LT30
ARPF 2518025		50	180					
ARPF 2523025		50	230					
ARPF 3015032	30	70	150	32		ZCFW 300-R_ _	5030F	LT30
ARPF 3018032		100	180					
ARPF 3021032		130	210					
ARPF 3025032		150	250					
ARPF 3030032		200	300					

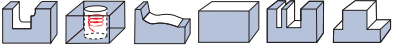
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AQXRM Connecting Multi-Function Milling Tools

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UEXM Connecting Multi-Function Milling Tools

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R390M.11 R390M.17 Connecting Multi-Function Milling Tools

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AHUM連接式刀頭

AHUM Connecting Multi-Function Milling Tools

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JTSM連接式刀頭

JTSM Connecting Multi-Function Milling Tools

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MECM.11T 連接式刀頭

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ABPFM Connecting Multi-Function Milling Tools

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RAHM連接式刀頭

RAHM Connecting Multi-Function Milling Tools

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GJU捨棄式鑽銑刀

GJU Throw Away End Mill Cutter

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MGAC連接式刀桿

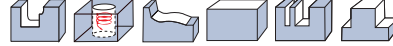
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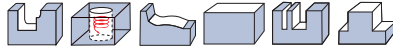
AQXR Throw Away End Mill Cutter

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ASJ旋風型捨棄式鑽銑刀

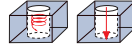
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ASB Ball Type Milling Cutter

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PE殼形平面銑刀

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AHUB高速進給平面銑刀

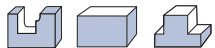
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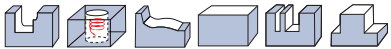
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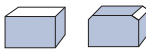
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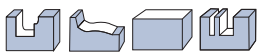
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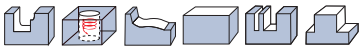
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ASR20多刃型殼型平面銑刀

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MSD捨棄式快速鑽頭 Dx2 Dx3 Dx4

MSD Disposable Rapid Drilling Tools

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SD捨棄式快速鑽頭 Dx2 Dx3

SD Disposable Rapid Drilling Tools

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ASF5 高速角R殼型銑刀

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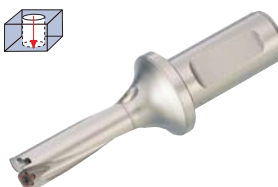


SD捨棄式快速鑽頭 Dx2 Dx3 Dx4

SD Disposable Rapid Drilling Tools

POINT SPECIFICATION

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SD Disposable Rapid Drilling Tools

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GSTW鎢鋼抗震刀柄

GSTW Solid Carbide Shank Boring Bars

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GTB雙刃粗搪刀

GTB Twin Edge Rough Boring Tools

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GEC精搪頭-刀柄套筒

GEC Reduction Sleeves

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GEWN-CK 轉換刀桿 & 延長桿

GEWN-CK Reduction&Extensions Holders

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GEB捨棄式搪頭

GEB Interchangeable Insert Holders

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GEWN精搪頭(小徑搪)

GEWN Fine Boring Head

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GEWN精搪頭

GEWN Fine Boring Head

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GST抗震刀柄

GST Steel Shank Boring Bars

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星形扳手 六角扳手

Wrench Stellar Wrench Hexagon

C2



星形扳手 六角扳手

Wrench Stellar Wrench Hexagon

C3~C4



GTF安全型立臥兩用鎖刀座

GTF Intrinsically Safety Type (Vertical & Horizontal Spindle) Tightening Fixture

C7



PP伸縮盒

C8



◆ 深孔鑽配件 (日式)

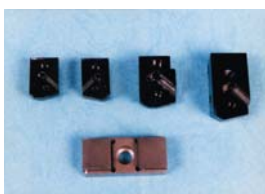
◆ 精銑刀座、粗銑刀座 (各類型)

◆ 刀頭導墊

◆ 深孔鑽配件 (歐式)

◆ 精銑刀座、粗銑刀座 (各類型)

◆ 刀頭導墊及螺絲



螺絲防卡劑 / 板手扭力對照表

Anti-Seizure Lubricant

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Umbrella Type Screw

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中心柱

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其他配件

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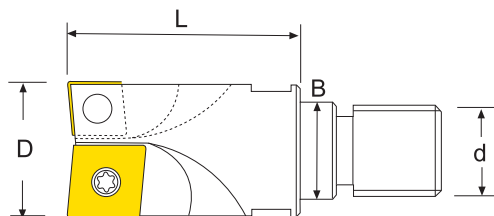
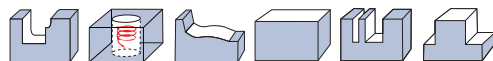
刀片規格 / 切削參數

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GJUM 連接式刀頭

WEI GUAN GJUM Connecting Multi-Function Milling Tools



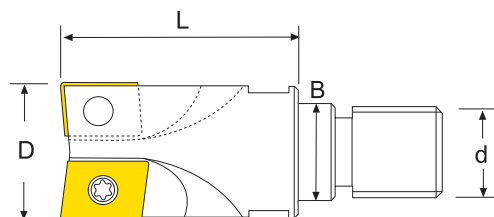
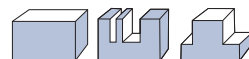
ITEM CODE	D	L	d	B	Insert		Screw	Wrench
GJUM-16	16	35	M8x1.25	8.5	CPMT080204Z	CCMT060204	M2.5 (S2502-1)	FT8
GJUM-17	17	35	M8x1.25	8.5				
GJUM-20	20	35	M10x1.5	10.5	CPMT090204Z	CCMT060204	M2.5 M3.5 (S2502-1) (S3501-1)	FT8 FT15
GJUM-21	21	35	M10x1.5	10.5				
GJUM-25	25	40	M12x1.75	12.5	CPMT120308Z	CPMT090308	M4.0 (S4001-3)	FT15
GJUM-32	32	40	M16x2.0	17.0	CPMT160408Z	CPMT120408	M5.0 (S5001-1)	FT20

Inserts..》D01

Cutting Conditions..》D06

UEXM 連接式刀頭

WEI GUAN UEXM Connecting Multi-Function Milling Tools



ITEM CODE	D	L	d	B	T	Insert	Screw	Wrench
UEXM-16-1	16	35	M8x1.25	8.5	1	AD_T16030_SR	M4.0 (S4001-3)	FT15
UEXM-17-1	17	35	M8x1.25	8.5	1			
UEXM-20-2	20	35	M10x1.5	10.5	2	AP_T12020_SR	M3.5 (S3501-1)	
UEXM-21-2	21	35	M10x1.5	10.5	2			
UEXM-25-2	25	40	M12x1.75	12.5	2	AD_T16030_SR	M4.0 (S4001-3)	
UEXM-26-2	26	40	M12x1.75	12.5	2			
UEXM-30-2-M12	30	40	M12x1.75	12.5	2			
UEXM-30-2-M16	30	40	M16x2.0	17.0	2			
UEXM-32-2	32	40	M16x2.0	17.0	2			
UEXM-33-2	33	40	M16x2.0	17.0	2			
UEXM-35-2	35	40	M16x2.0	17.0	2			
UEXM-40-3	40	40	M16x2.0	17.0	3			

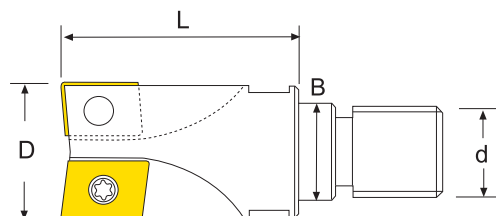
Inserts..》D01

Cutting Conditions..》D07



AHUM 連接式刀頭

AHUM Connecting Multi-Function Milling Tools



ITEM CODE	D	L	d	B	T	Insert	Screw	Wrench
AHUM -16-2	16	33	M8x1.25	8.5	2	JDMT100308R	M2.5 (S2503-3)	FT8
AHUM -17-2	17	33	M8x1.25	8.5	2			
AHUM -20-2	20	33	M10x1.5	10.5	2			
AHUM -21-2	21	33	M10x1.5	10.5	2			
AHUM -25-2	25	40	M12x1.75	12.5	2			
AHUM -26-2	26	40	M12x1.75	12.5	2	JDMT150508R	M4.0 (S4001-3)	FT15
AHUM -32-3	32	40	M16x2.0	17.0	3			
AHUM -33-3	33	40	M16x2.0	17.0	3			
AHUM -35-3	35	40	M16x2.0	17.0	3			
AHUM -40-4	40	40	M16x2.0	17.0	4			

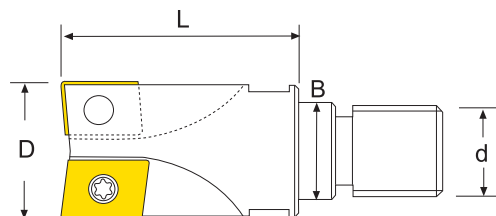
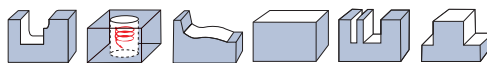
Inserts...» D14

Cutting Conditions...» D14



MECM.11T 連接式刀頭

MECM.11T Connecting Multi-Function Milling Tools



ITEM CODE	D	L	d	B	T	Insert	Screw	Wrench
MECM.11T-16-2	16	33	M8x1.25	8.5	2	BDMT11T3	M2.5 (S2503-3)	FT8
MECM.11T-17-2	17	33	M8x1.25	8.5	2			
MECM.11T-20-3	20	35	M10x1.5	10.5	3			
MECM.11T-21-3	21	35	M10x1.5	10.5	3			
MECM.11T-25-4	25	40	M12x1.75	12.5	4			
MECM.11T-26-4	26	40	M12x1.75	12.5	4			
MECM.11T-30-4	30	40	M12x1.75	12.5	4			
MECM.11T-32-5	32	45	M16x2.0	17.0	5			
MECM.11T-33-5	33	45	M16x2.0	17.0	5			
MECM.11T-35-5	35	45	M16x2.0	17.0	5			
MECM.11T-40-6	40	45	M16x2.0	17.0	6			

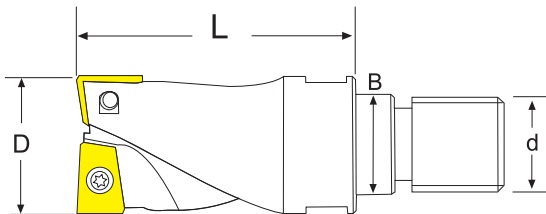
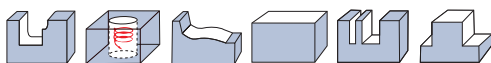
Inserts...» D15

Cutting Conditions...» D15

連接式刀頭 / 刀桿
Connecting Multi-Function
Milling Tools / Holders

A Q X R M 連接式刀頭 WEI GUAN AQXRM Connecting Multi-Function Milling Tools

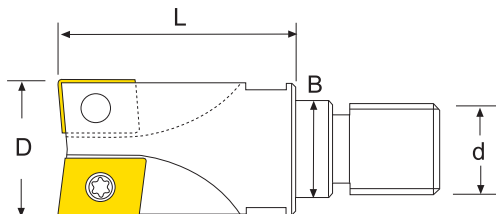
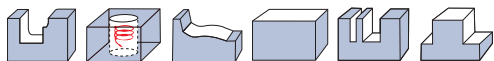
連接式刀頭 / 刀桿
 Connecting Multi-Function
 Milling Tools / Holders



ITEM CODE	D	L	d	B	T	Insert	Screw	Wrench
AQXRM-16-2	16	30	M8x1.25	8.5	2	QOGT0830R-G1	M2.2 (S2202-1)	FT6
AQXRM-17-2	17	30	M8x1.25	8.5	2	QOMT0830R-M2		
AQXRM-20-2	20	35	M10x1.5	10.5	2	QOGT1035R-G1	M2.5 (S2503-3)	FT8
AQXRM-21-2	21	35	M10x1.5	10.5	2	QOMT1035R-M2		
AQXRM-25-2	25	40	M12x1.75	12.5	2	QOGT1342R-G1	M3.0 (S3002-1)	FT8
AQXRM-26-2	26	40	M12x1.75	12.5	2	QOMT1342R-M2		
AQXRM-32-2	32	50	M16x2.0	17.0	2	QOGT1651R-G1	M4.0 (S4001-1)	FT15
AQXRM-33-2	33	50	M16x2.0	17.0	2	QOMT1651R-M2		
AQXRM-35-2	35	50	M16x2.0	17.0	2	QOGT1856R-G1 QOMT1856R-M2		

Inserts..» D02 Cutting Conditions..» D08

R390M.11 R390M.17 連接式刀頭 WEI GUAN R390M.11 R390M.17 Connecting Multi-Function Milling Tools



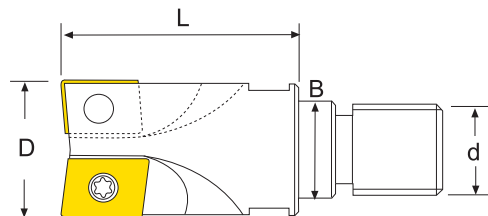
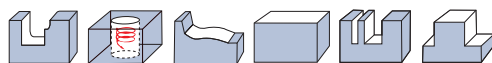
ITEM CODE	D	L	d	B	T	Insert	Screw	Wrench
R390M.11-16-2	16	33	M8x1.25	8.5	2	R390-11T304M-PM	M2.5 (S2503-3)	FT8
R390M.11-17-2	17	33	M8x1.25	8.5	2			
R390M.11-20-3	20	35	M10x1.5	10.5	3			
R390M.11-21-3	21	35	M10x1.5	10.5	3			
R390M.11-25-4	25	35	M12x1.75	12.5	4			
R390M.11-26-4	26	35	M12x1.75	12.5	4			
R390M.11-30-4	30	35	M12x1.75	12.5	4			
R390M.11-32-5	32	37	M16x2.0	17.0	5			
R390M.11-33-5	33	37	M16x2.0	17.0	5			
R390M.11-35-5	35	37	M16x2.0	17.0	5			
R390M.11-40-5	40	37	M16x2.0	17.0	5	R390-170408M-PM	M3.5 (S3501-9)	FT15
R390M.17-25-2	25	42	M12x1.75	12.5	2			
R390M.17-26-2	26	42	M12x1.75	12.5	2			
R390M.17-30-2	30	42	M12x1.75	12.5	2			
R390M.17-32-3	32	45	M16x2.0	17.0	3			
R390M.17-33-3	33	45	M16x2.0	17.0	3			
R390M.17-35-3	35	45	M16x2.0	17.0	3			
R390M.17-40-4	40	45	M16x2.0	17.0	4			

Inserts..» D24 Cutting Conditions..» D24



J T S M 連接式刀頭

JTSM Connecting Multi-Function Milling Tools



ITEM CODE	D	L	d	B	T	Insert	Screw	Wrench
JTSM-16-2	16	30	M8x1.25	8.5	2	APMT1135PDER	M2.5 (S2502-1)	FT8
JTSM-17-2	17	30	M8x1.25	8.5	2			
JTSM-20-2	20	32	M10x1.5	10.5	2			
JTSM-21-2	21	32	M10x1.5	10.5	2			
JTSM-25-2	25	40	M12x1.75	12.5	2			
JTSM-26-2	26	40	M12x1.75	12.5	2	APMT1604PDER	M4.0 (S4001-1)	FT15
JTSM-32-2	32	40	M16x2.0	17.0	2			
JTSM-33-2	33	40	M16x2.0	17.0	2			
JTSM-35-3	35	40	M16x2.0	17.0	3			
JTSM-40-3	40	40	M16x2.0	17.0	3			

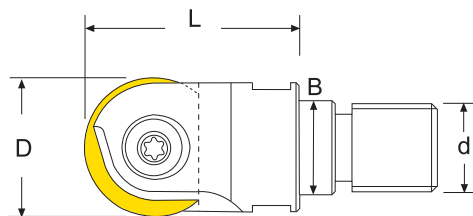
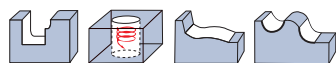
Inserts..» D01

Cutting Conditions..» D07



R G A M 連接式刀頭

RGAM Connecting Multi-Function Milling Tools



ITEM CODE	D	L	d	B	Insert	Screw	Wrench
RGAM-08	08	28	M6x1.0	6.5	WPR08N P320_08	M3.0 (5008)	FT8
RGAM-10	10	28	M6x1.0	6.5	WPR10N P320_10	M4.0 (5010)	FT15
RGAM-12	12	28	M6x1.0	6.5	WPR12N P320_12	M5.0 (5012)	FT20
RGAM-16	16	32	M8x1.25	8.5	WPR16N P320_16	M5.0 (5016)	FT20
RGAM-20	20	35	M10x1.5	10.5	WPR20N P320_20	M5.0 (5020)	FT20
RGAM-25	25	40	M12x1.75	12.5	WPR25N P320_25	M6.0 (5025)	LT30
RGAM-30	30	45	M16x2.0	17.0	WPR30N P320_30	M8.0 (5032)	LT30
RGAM-32	32	45	M16x2.0	17.0	WPR32N P320_32	M8.0 (5032)	LT30

Inserts..» D03

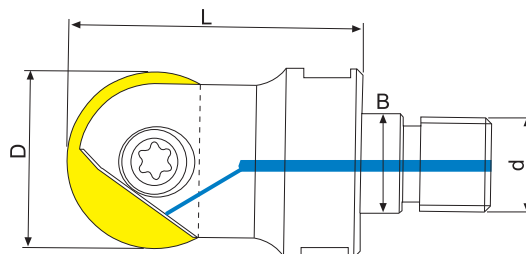
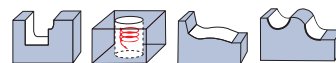
Cutting Conditions..» D09

連接式刀頭 / 刀桿
Connecting Multi-Function
Milling Tools / Holders



BNMM 連接式刀頭

BNMM Connecting Multi-Function Milling Tools



Non air hole	With air hole	D	L	d	B	Insert	Screw	Wrench
BNMM-08	BNMM-08+A	08	28	M6 x 1.0	6.5	BNM-080	5008D	FT7
BNMM-10-M5		10	28	M5 x 0.8	5.5	BNM-100	5010D	FT8
BNMM-10	BNMM-10+A	10	28	M6 x 1.0	6.5	BNM-100	5010D	FT8
BNMM-12	BNMM-12+A	12	28	M6 x 1.0	6.5	BNM-120	5012D	FT10
BNMM-16	BNMM-16+A	16	35	M8x1.25	8.5	BNM-160	5016D	FT15
BNMM-20	BNMM-20+A	20	35	M10x1.5	10.5	BNM-200	5020D	FT20
BNMM-25	BNMM-25+A	25	40	M12x1.75	12.5	BNM-250	5025D	LT25
BNMM-30	BNMM-30+A	30	45	M16x2.0	17.0	BNM-300	5030D	LT30

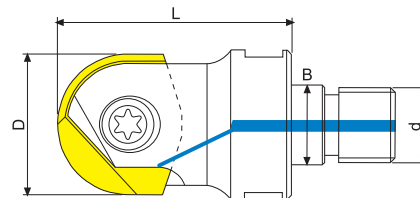
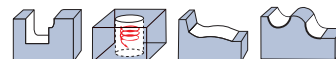
Inserts..»D16

Cutting Conditions..»D16



ABPFM 連接式刀頭

ABPFM Connecting Multi-Function Milling Tools



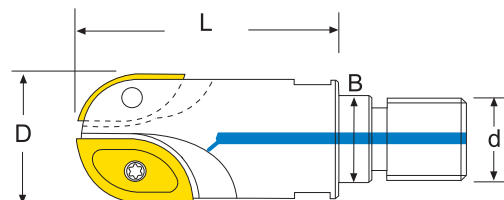
Non air hole	With air hole	D	L	d	B	Insert	Screw	Wrench
ABPFM-08	ABPFM-08+A	08	28	M6 x 1.0	6.5	ZPFG080	5008F	FT8
ABPFM-10-M5		10	28	M5 x 0.8	5.5	ZPFG100	5010F	FT10
ABPFM-10	ABPFM-10+A	10	28	M6 x 1.0	6.5	ZPFG100	5010F	FT10
ABPFM-12	ABPFM-12+A	12	28	M6 x 1.0	6.5	ZPFG120	5012F	FT20
ABPFM-16	ABPFM-16+A	16	34	M8x1.25	8.5	ZPFG160	5016F	FT20
ABPFM-20	ABPFM-20+A	20	35	M10x1.5	10.5	ZPFG200	5020F	LT25
ABPFM-25	ABPFM-25+A	25	40	M12x1.75	12.5	ZPFG250	5025F	LT30
ABPFM-30	ABPFM-30+A	30	44	M16x2.0	17.0	ZPFG300	5030F	LT30
ABPFM-32		32	44	M16x2.0	17.0	ZPFG320	5030F	LT30

Inserts..»D03

Cutting Conditions..»D10

RCFM 連接式刀頭

WEI GUAN RCFM Connecting Multi-Function Milling Tools



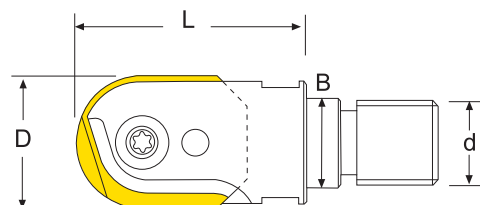
Non air hole	With air hole	D	L	d	B	Insert	Screw	Wrench
RCFM-16-2	RCFM-16-2+AG	16	30	M8x1.25	8.5	ZCET080CE ZCET080SE	M2.5 (S2501-3)	FT8
RCFM-20-2	RCFM-20-2+AG	20	40	M10x1.5	10.5	ZCEW100CE ZCEW100SE	M3.0 (S3003)	FT10
RCFM-25-2	RCFM-25-2+AG	25	40	M12x1.75	12.5	ZCEW125CE ZCEW125SE	M4.0 (S4005)	FT15
RCFM-30-2	RCFM-30-2+AG	30	43	M16x2.0	17.0	ZCEW150CE ZCEW150SE	M5.0 (S5001)	FT20

Inserts..» D04

Cutting Conditions..» D09

ABPM 連接式刀頭

WEI GUAN ABPM Connecting Multi-Function Milling Tools



ITEM CODE	D	L	d	B	Insert	Screw	Wrench
ABPM-16	16	35	M8x1.25	8.5	ZPFW160	M3.5 (S3501-1) M4.0 (S4006)	FT15
ABPM-20	20	40	M10x1.5	10.5	ZPFW200	M5.0 (S5003-2) M5.0 (S5007)	FT20
ABPM-25	25	43	M12x1.75	12.5	ZPFW250	M5.0 (S5003-2) M6.0 (S6025)	FT20 LT30
ABPM-30	30	48	M16x2.0	17.0	ZPFW300	M6.0 (S6004) M8.0 (S8032)	FT20 LT30

Inserts..» D03

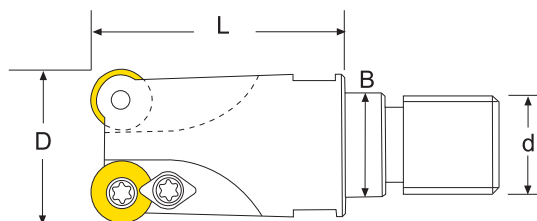
Cutting Conditions..» D09

連接式刀頭 / 刀桿
Connecting Multi-Function
Milling Tools / Holders



RAWM 連接式刀頭

RAWM Connecting Multi-Function Milling Tools



ITEM CODE	D	L	d	B	T	Insert	Screw	Clamp+ Screw	Wrench
RAWM-25-R6-2	25	40	M12x1.75	12.5	2	RP__ 1204	M4.0 (S4001-1)	YR-16 M4.5 (S4501-1)	FT15 FT20
RAWM-30-R6-2	30	40	M12x1.75	12.5	2				
RAWM-32-R6-2	32	45	M16x2.0	17.0	2				
RAWM-32-R6-3	32	45	M16x2.0	17.0	3				
RAWM-35-R6-3	35	45	M16x2.0	17.0	3				
RAWM-40-R6-3	40	45	M16x2.0	17.0	3				

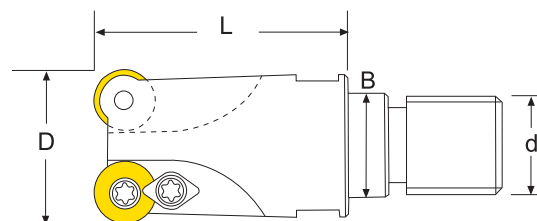
Inserts..» D04

Cutting Conditions..» D11



RAHM 連接式刀頭

RAHM Connecting Multi-Function Milling Tools



ITEM CODE	D	L	d	B	T	Insert	Screw	Clamp+ Screw	Wrench
RAHM-16-R4-2	16	33	M8x1.25	8.5	2	RDMT0802MOTN	M2.5 (S2502-1)	YR-04 M3.0 (S3002-1)	FT8
RAHM-17-R4-2	17	33	M8x1.25	8.5	2			YR-05 M3.0 (S3002-1)	FT8
RAHM-20-R4-2	20	35	M10x1.5	10.5	2				
RAHM-21-R4-2	21	35	M10x1.5	10.5	2	RDMT10T3MOTN	M4.0 (S4003-1)	YR-05 M3.5 (S3501-1)	FT15
RAHM-25-R5-2	25	40	M12x1.75	12.5	2				
RAHM-26-R5-2	26	40	M12x1.75	12.5	2				
RAHM-30-R5-2	30	40	M12x1.75	12.5	2	RDMT1204MOTN	M4.0 (S4003-6)	YR-06 M4.0 (S4008-6)	FT15
RAHM-35-R5-3	35	40	M16x2.0	17.0	3				
RAHM-25-R6-2	25	40	M12x1.75	12.5	2				
RAHM-26-R6-2	26	40	M12x1.75	12.5	2				
RAHM-30-R6-2	30	40	M12x1.75	12.5	2				
RAHM-32-R6-2	32	43	M16x2.0	17.0	2				
RAHM-35-R6-3	35	43	M16x2.0	17.0	3				
RAHM-40-R6-3	40	45	M16x2.0	17.0	3				

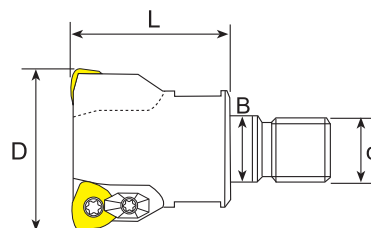
Inserts..» D04

Cutting Conditions..» D12



ASRTM 連接式刀頭

ASRTM Connection Multi-Function Milling Tools



ITEM CODE	D	L	d	B	T	Insert	Screw	Clamp+Screw	Wrench
ASRTM 30-25-2	25	35	M12x1.75	12.5	2	WDNW09T320	M3.5 (S3501-1)	YR-05 M3.5 (S3501-1)	FT15
ASRTM 30-28-2	28	35	M12x1.75	12.5	2				
ASRTM 30-30-2	30	40	M12x1.75	12.5	2				
ASRTM 30-32-3	32	40	M16x2.0	17.0	3				
ASRTM 40-32-2	32	40	M16x2.0	17.0	2	WDNW120420	M4.0 (S4003-6)	YR-06 M4.0 (S4008-6)	FT15
ASRTM 40-35-2	35	40	M16x2.0	17.0	2				
ASRTM 40-40-3	40	40	M16x2.0	17.0	3				

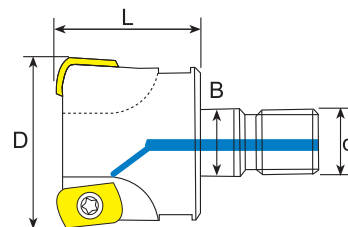
Inserts..» D20

Cutting Conditions..» D20-1



ASRM20 連接式刀頭

ASRM20 Connection Multi-Function Milling Tools



Non air hole	With air hole	D	L	d	B	T	Insert	Screw	Wrench
ASRM20-16-2	ASRM20-16-2+AG	16	25	M8x1.25	8.5	2	EPNW0603TN-8	M2.5 (S2503-3)	FT8
ASRM20-17-2	ASRM20-17-2+AG	17	25	M8x1.25	8.5	2			
ASRM20-18-2	ASRM20-18-2+AG	18	25	M8x1.25	8.5	2			
ASRM20-20-3	ASRM20-20-3+AG	20	30	M10x1.5	10.5	3			
ASRM20-21-3	ASRM20-21-3+AG	21	30	M10x1.5	10.5	3			
ASRM20-22-3	ASRM20-22-3+AG	22	30	M10x1.5	10.5	3			
ASRM20-25-4	ASRM20-25-4+AG	25	35	M12x1.75	12.5	4			
ASRM20-26-4	ASRM20-26-4+AG	26	35	M12x1.75	12.5	4			
ASRM20-28-4	ASRM20-28-4+AG	28	35	M12x1.75	12.5	4			
ASRM20-30-4	ASRM20-30-4+AG	30	40	M16x2.0	17.0	4			
ASRM20-32-5	ASRM20-32-5+AG	32	40	M16x2.0	17.0	5			
ASRM20-35-5	ASRM20-35-5+AG	35	40	M16x2.0	17.0	5			
ASRM20-40-6	ASRM20-40-6+AG	40	40	M16x2.0	17.0	6			

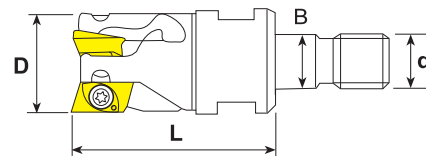
Inserts..» D 20

Cutting Conditions..» D 25



ASMM07小徑連接式刀頭

ASMM07 Connection Multi-Function Milling Tools



ITEM CODE	D	L	d	B	T	Insert	Screw	Wrench
ASMM07-10-2-M5	10	23	M5 x 0.8	5.5	2	JDMT0702_R EDMT070220R	M1.8 (S1801-3)	FT6
ASMM07-10-2	10	23	M6 x 1.0	6.5	2			
ASMM07-12-3	12	23	M6 x 1.0	6.5	3			
ASMM07-13-3	13	23	M6 x 1.0	6.5	3			
ASMM07-16-4	16	28	M8 x 1.25	8.5	4			
ASMM07-17-4	17	28	M8 x 1.25	8.5	4			
ASMM07-20-5	20	30	M10 x 1.5	10.5	5			
ASMM07-21-5	21	30	M10 x 1.5	10.5	5			
ASMM07-25-6	25	32	M12 x 1.75	12.5	6			
ASMM07-26-6	26	32	M12 x 1.75	12.5	6			
ASMM07-30-7	30	32	M12 x 1.75	12.5	7			
ASMM07-32-8	32	32	M16 x 2.0	17.0	8			
ASMM07-33-8	33	32	M16 x 2.0	17.0	8			

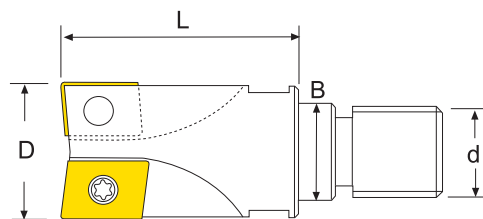
Inserts..» D 22

Cutting Conditions..» D 22



APX3000M連接式刀頭

APX3000M Connection Multi-Function Milling Tools



ITEM CODE	D	L	d	B	T	Insert	Screw	Wrench
APX3000M-16-2	16	30	M8 x 1.25	8.5	2	AO__1236__PEER	M2.5 (S2503-3)	FT8
APX3000M-17-2	17	30	M8 x 1.25	8.5	2			
APX3000M-18-2	18	30	M8 x 1.25	8.5	2			
APX3000M-20-3	20	30	M10 x 1.5	10.5	3			
APX3000M-21-3	21	30	M10 x 1.5	10.5	3			
APX3000M-22-3	22	30	M10 x 1.5	10.5	3			
APX3000M-24-3	24	35	M12 x 1.75	12.5	3			
APX3000M-25-4	25	35	M12 x 1.75	12.5	4			
APX3000M-26-4	26	35	M12 x 1.75	12.5	4			
APX3000M-28-4	28	35	M12 x 1.75	12.5	4			
APX3000M-30-4	30	35	M12 x 1.75	12.5	4			
APX3000M-32-5	32	40	M16 x 2.0	17.0	5			
APX3000M-33-5	33	40	M16 x 2.0	17.0	5			
APX3000M-35-5	35	40	M16 x 2.0	17.0	5			
APX3000M-40-6	40	40	M16 x 2.0	17.0	6			

Inserts..» D 27

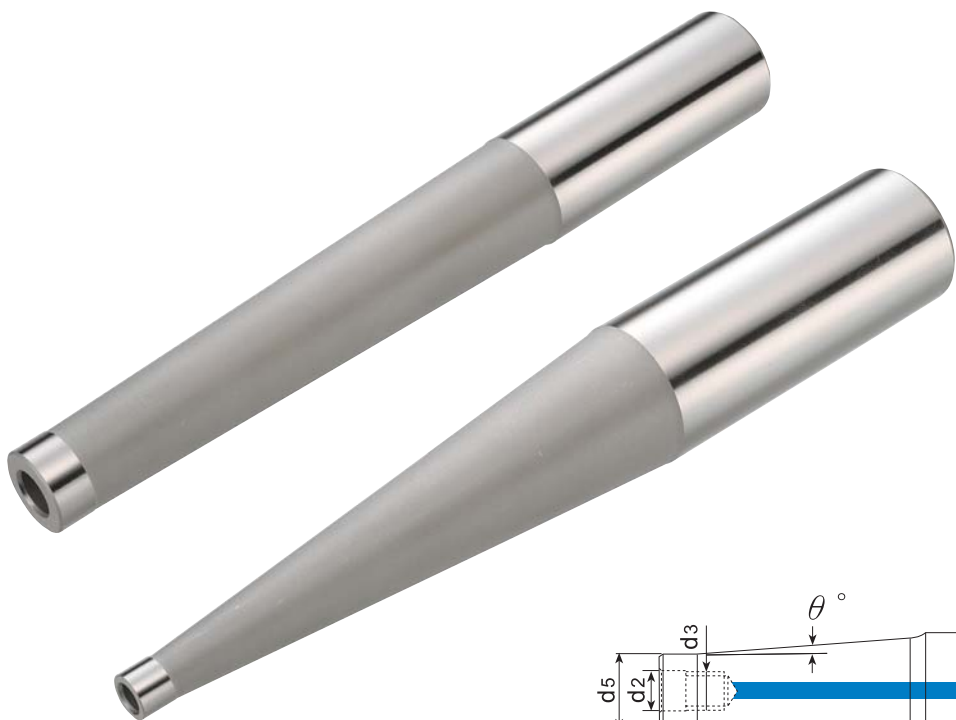
Cutting Conditions..» D 28



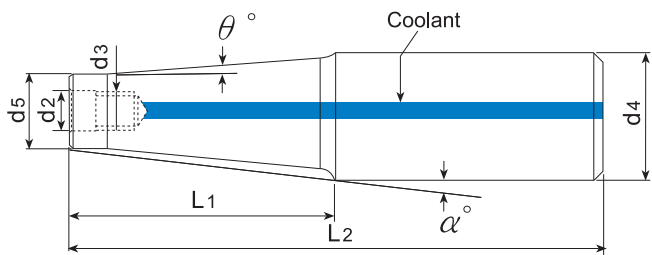
MGAC 連接式刀桿(斜頸規格 / Taper Neck)

MGAC Connecting Multi-Function Milling Holder

連接式刀頭 / 刀桿
Connecting Multi-Function
Milling Tools / Holders



- 特點：
- 刀桿本體附有內冷孔。
 - 刀桿本體採用高抗震材料，可增加切削時的安定性。
 - 連接式刀頭採用高級合金鋼，吸震能力強，耐磨性佳。



斜頸規格 / Taper Neck

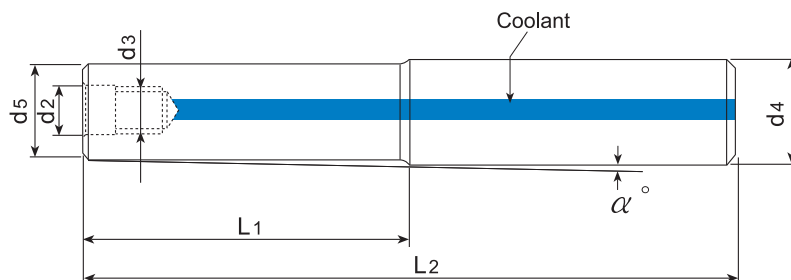
ITEM CODE	d3	d2	d5	θ°	α°	d4	L1	L2
MGAC0610075T	M6x1.0	6.5	10	8.7°	8.8°	16	20	75
MGAC0610098T				4.8°	4.1°	16	43	98
MGAC0610125T				4.6°	4.1°	20	70	125
MGAC0610156T				4.8°	4.5°	25	96	156
MGAC0610210T				5.1°	4.9°	32	130	210
MGAC0815100T	M8x1.25	8.5	15	3.9°	3.2°	20	45	100
MGAC0815156T				3.3°	3.0°	25	96	156
MGAC0815210T				4.0°	3.8°	32	130	210
MGAC0815260T				2.8°	2.7°	32	180	260
MGAC1019100T	M10x1.5	10.5	19	0.5°	0.6°	20	45	100
MGAC1019156T				1.9°	1.8°	25	96	156
MGAC1019210T				3.1°	2.9°	32	130	210
MGAC1019260T				2.2°	2.1°	32	180	260
MGAC1223135T	M12x1.75	12.5	23	0.7°	0.8°	25	75	135
MGAC1223185T				2.7°	2.5°	32	105	185
MGAC1223240T				1.7°	1.6°	32	160	240
MGAC1223300T				1.3°	1.2°	32	210	300
MGAC1223360T				1.0°	1.0°	32	270	360
MGAC1629135T	M16x2.0	17.0	29	1.9°	1.6°	32	55	135
MGAC1629185T				0.8°	0.8°	32	105	185
MGAC1629240T				0.5°	0.5°	32	160	240
MGAC1630310T				1.8°	1.7°	42	200	310
MGAC1630370T	M16x2.0	17.0	30	1.4°	1.3°	42	260	370



MGAC 連接式刀桿 (直頸規格 / Straight Neck)

MGAC Connecting Multi-Function Milling Holder

連接式刀頭 / 刀桿
Connecting Multi-Function
Milling Tools / Holders

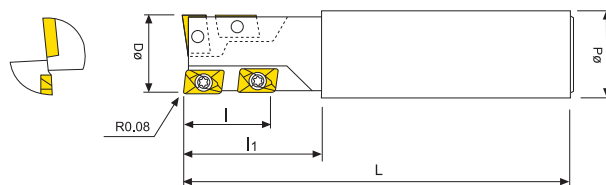


特點:

- 刀桿本體附有內冷孔。
- 刀桿本體採用高抗震材料，可增加切削時的安定性。
- 連接式刀頭採用高級合金鋼，吸震能力強，耐磨性佳。

直頸規格 / Straight Neck

ITEM CODE	d3	d2	d5	α°	d4	L1	L2
MGAC0815099S	M8x1.25	8.5	15	0.8 $^\circ$	16	39	99
MGAC0815150S				0.3 $^\circ$	16	90	150
MGAC0815200S				0.2 $^\circ$	16	130	200
MGAC1019130S	M10x1.5	10.5	19	0.5 $^\circ$	20	60	130
MGAC1019180S				0.3 $^\circ$	20	110	180
MGAC1019230S				0.2 $^\circ$	20	160	230
MGAC1019259S				0.2 $^\circ$	20	179	259
MGAC1224110S	M12x1.75	12.5	24	1.0 $^\circ$	25	35	110
MGAC1224160S				0.4 $^\circ$	25	80	160
MGAC1224210S				0.2 $^\circ$	25	130	210
MGAC1224260S				0.2 $^\circ$	25	170	260
MGAC1224310S				0.1 $^\circ$	25	220	310
MGAC1224360S				0.1 $^\circ$	25	270	360
MGAC1630110S	M16x2.0	17.0	30	1.7 $^\circ$	32	35	110
MGAC1630150S				1.0 $^\circ$	32	60	150
MGAC1630200S				0.5 $^\circ$	32	110	200
MGAC1630250S				0.4 $^\circ$	32	150	250
MGAC1630300S				0.3 $^\circ$	32	200	300
MGAC1630360S				0.2 $^\circ$	32	260	360



特點：

- 從盲孔直式鑽及橫式切削
- 底刃刀片角度較大，加工阻力輕
- 刀片為4刃，可做深粗銑加工

Feature:

- Drilling on the plate vertically or cutting horizontally.
- The end of cutting edge angle is bigger. processing drag light.
- With 4 pieces inserts, able to do deep and rough processing.

ITEM CODE	End	Periphery	øD	L	I	I ₁	ød	On End	On Periphery	Screw	Wrench	
ASJ2013020	1	3	20	130	20	35	20	ADMT100308L	ACMT100308R	M2.5 (S2502-1)	FT8	
ASJ2020020				200								
ASJ2022020				220								
ASJ2115020			21	150								
ASJ2120020				200								
ASJ2515025			25	150	25	40	25	ADMT12T308L	APMT12T308R	M3 (S3001-4)	FT10	
ASJ2520025				200								
ASJ2525025				250								
ASJ2530025				300								
ASJ2615025			26	150	25	40	25	ADMT12T308L	APMT12T308R	M3 (S3001-4)	FT10	
ASJ2620025				200								
ASJ2623025				230								
ASJ2630025				300								
ASJ3215032			3	32	150	32	50	32	APMT160408L	APMT150408R	M4 (S4001-3)	FT15
ASJ3223032					230							
ASJ3230032					300							
ASJ3240032					400							
ASJ3515032				35	150	35		32	APMT170408L			
ASJ3523032					230							
ASJ3530032					300							
ASJ3540032					400							
ASJ4016032				4	40	160	48	55	APMT190508L			
ASJ4025032						250						
ASJ4030032						300						
ASJ4040032						400						
ASJ4046042						460						

Inserts..» D01

Cutting Conditions..» D06

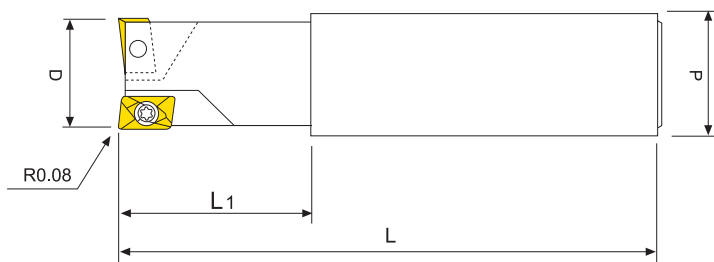


ASL 鑽銑共用型銑刀<短刃型>

WEI GUAN ASL Throw Away End Mill Cutter



鑽銑刀
End Mill Cutter



特點：

- 從盲孔直式鑽及橫式切削
- 底刃刀片角度較大，加工阻力輕

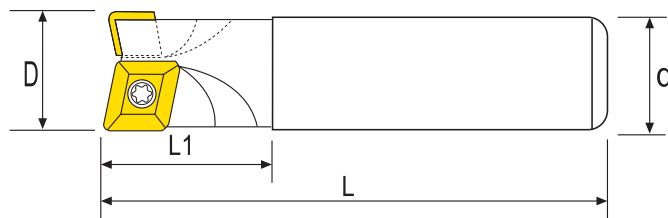
Feature:

- Drilling on the plate vertically or cutting horizontally.
- The end of cutting edge angle is bigger. processing drag light.

ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
ASL2013020	20	35	130	20	2	ACMT100308R ADMT100308L	M2.5 (S2502-1)	FT8
ASL2020020	20	35	200					
ASL2113020	21	35	130					
ASL2115020	21	35	150					
ASL2120020	21	35	200					
ASL2125020	21	35	250					
ASL2515025	25	40	150	25		APMT12T308R ADMT12T308L	M3 (S3001-4)	FT10
ASL2520025	25	40	200					
ASL2525025	25	50	250					
ASL2530025	25	50	300					
ASL2615025	26	40	150					
ASL2620025	26	40	200					
ASL2625025	26	50	250					
ASL2630025	26	50	300					
ASL3215032	32	50	150	32		APMT150408R ADMT160408L	M4 (S4001-3)	FT15
ASL3315032	33	50	150					
ASL3323032	33	50	230					
ASL3330032	33	70	300					
ASL3340032	33	70	400					

Inserts..» D01

Cutting Conditions..» D06



特點：

- 從盲孔直式進刀及銑刀橫式進刀加工均無阻力
- 適用於模具加工
- 隅角=90°

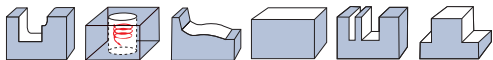
Feature:

- Drilling on the plate vertically or milling horizontally, processing without obstacle.
- Useful for mould processing.
- Angle=90°

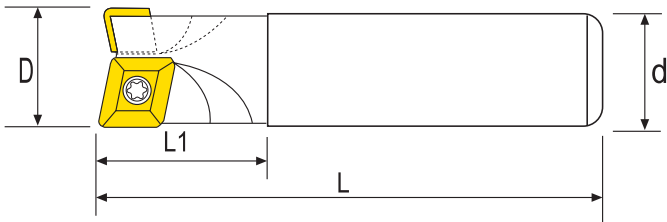
ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
GJU0811010	08	20	110	10	1	CCMT060204	M2.5 (S2502-3)	
GJU0811012			110	12				
GJU1012010	10		120	10		CPMT080204Z		
GJU1012012			120	12				
GJU1213012	12	130						
GJU1217012		170						
GJU1613016	16	30	130	2	CCMT060204 CPMT080204Z	M2.5 (S2502-1)	FT8	
GJU1615016			150					
GJU1617516			175					
GJU1620016			200					
GJU1625016		40	250					
GJU1625025		70	250					25
GJU1713016	17	30	130	16				
GJU1715016			150					
GJU1720016			200					
GJU2013020	20	40	130	20	CCMT060204 CPMT090204Z	M2.5 (S2502-1) M3.5 (S3501-1)	FT8 FT15	
GJU2015020			150					
GJU2020020		40	200					
GJU2022020			220					
GJU2025020			250					
GJU2025025		70	250					25
GJU2115020	21	30	150	20				
GJU2120020		40	200					

Inserts..》D01

Cutting Conditions..》D06



鑽銑刀
End Mill Cutter

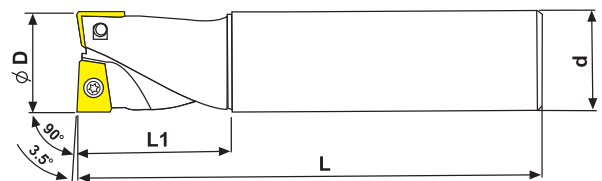
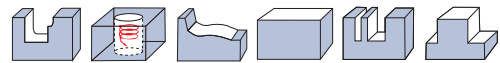


- 特點：
- 從盲孔直式進刀及銑刀橫式進刀加工均無阻力
 - 適用於模具加工
 - 隅角=90°

- Feature:
- Drilling on the plate vertically or milling horizontally, processing without obstacle.
 - Useful for mould processing.
 - Angle=90°

ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
GJU2515025	25	40	150	25	2	CPMT090308 CPMT120308Z	M4 (S4001-3)	FT15
GJU2520025		45	200					
GJU2522025		50	220					
GJU2525025			250					
GJU2530025			300					
GJU2540025		60	400					
GJU2540032		100	400					
GJU3215032	32	40	150	32		CPMT120408 CPMT160408Z	M5 (S5001-1)	FT20
GJU3220032		45	200					
GJU3225032		50	250					
GJU3230032		60	300					
GJU3235032			350					
GJU3240032			400					
GJU4018032	40	50	180	32		CPMT160408Z	M5 (S5001-1)	FT20
GJU4025032			250			CPMT190408Z	M6 (S6004-2)	LT25

Inserts..》D01 Cutting Conditions..》D06

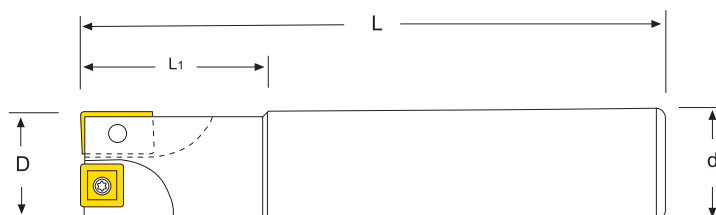
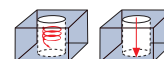


Item Code	D	L1	L	d	T	Insert	Screw	Wrench
AQXR 1615016-2	16	30	150	16	2	QO__0830R-__	M2.2 (S2202-1)	FT6
AQXR 1620016-2			200					
AQXR 1715016-2	17		150					
AQXR 1720016-2			200					
AQXR 2015020-2	20	35	150	20		QO__1035R-__	M2.5 (S2503-3)	FT8
AQXR 2021020-2			210					
AQXR 2025020-2			250					
AQXR 2115020-2	21		150					
AQXR 2121020-2			210					
AQXR 2125020-2			250					
AQXR 2516025-2	25	40	160	25		QO__1342R-__	M3.0 (S3002-1)	FT8
AQXR 2523025-2			230					
AQXR 2530025-2			300					
AQXR 2616025-2	26		160					
AQXR 2623025-2			230					
AQXR 2630025-2			300					
AQXR 3217032-2	32	45	170	32		QO__1651R-__	M4.0 (S4001-1)	FT15
AQXR 3223032-2			230					
AQXR 3230032-2			300					
AQXR 3235032-2			350					
AQXR 3240032-2			400					
AQXR 3317032-2	33		170					
AQXR 3323032-2			230					
AQXR 3330032-2			300					
AQXR 3335032-2			350					
AQXR 3340032-2			400					
AQXR 3515032-2	35	50	150			QO__1856R-__	M4.0 (S4001-1)	FT15
AQXR 3520032-2			200					
AQXR 3525032-2			250					
AQXR 3530032-2			300					
AQXR 3535032-2			350					
AQXR 3540032-2			400					

Inserts..» D02

Cutting Conditions..» D08

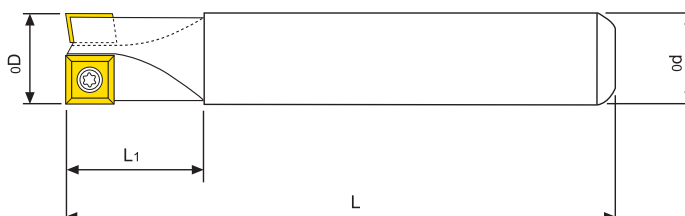
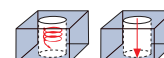
G 2 0 3 7 鑽 銑 共 用 型 銑 刀
 WEI GUAN G2037 Throw Away End Mill Cutter



ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
G2037-2015020	20	40	150	20	2	SDMT060304	M2.5 (S2502-1)	FT8
G2037-2021020		40	210			APMT060304		
G2037-2515025	25	45	150	25		SDMT090308	M4 (S4003-1)	FT15
G2037-2521025		45	210					
G2037-3220032	32	50	200	32				

Inserts..» D02

B H P 鑽 銑 共 用 型 銑 刀
 WEI GUAN BHP Throw Away End Mill Cutter



ITEM CODE	D	L ₁	L	d	T	Insert	Screw	Wrench
BHP2515025	25	45	150	25	2	APNT120208	M3.5 (S3501-1)	FT15
BHP2520025			200			SPMT120308	M5 (S5006)	FT20

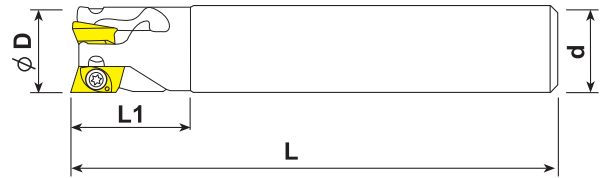
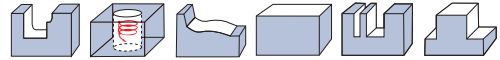
Inserts..» D01,D02



ASM07小徑直角端銑刀

WEI GUAN

ASM07 Super Excellent Mini Milling Cutter

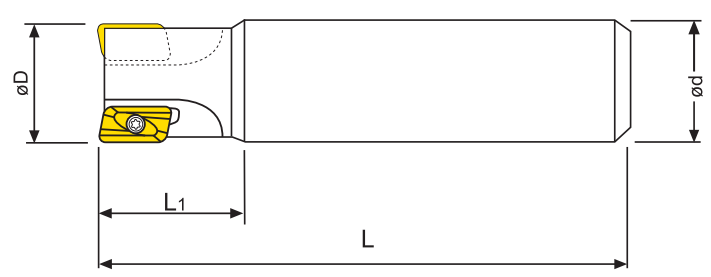
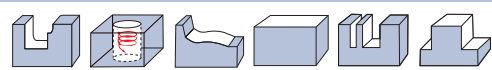


端銑刀
Right Angle
Mill Cutter

ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
ASM07-1010010-2	10	20	100	10	2	JDMT0702_R EDMT070220R	M1.8 (S1801-3)	FT6
ASM07-1112012-2	11	20	120	12	2			
ASM07-1212012-3	12	20	120	12	3			
ASM07-1313016-3	13	20	130	16	3			
ASM07-1413016-3	14	21	130	16	3			
ASM07-1513016-3	15	21	130	16	3			
ASM07-1613016-4	16	25	130	16	4			
ASM07-1713016-4	17	25	130	16	4			
ASM07-1813020-4	18	25	130	20	4			
ASM07-1913020-5	19	30	130	20	5			
ASM07-2013020-5	20	30	130	20	5			
ASM07-2113020-5	21	30	130	20	5			
ASM07-2515025-6	25	35	150	25	6			
ASM07-2615025-6	26	35	150	25	6			
ASM07-3015025-7	30	35	150	25	7			
ASM07-3215032-8	32	40	150	32	8			
ASM07-3315032-8	33	40	150	32	8			

Inserts..» D 22

Cutting Conditions..» D 22

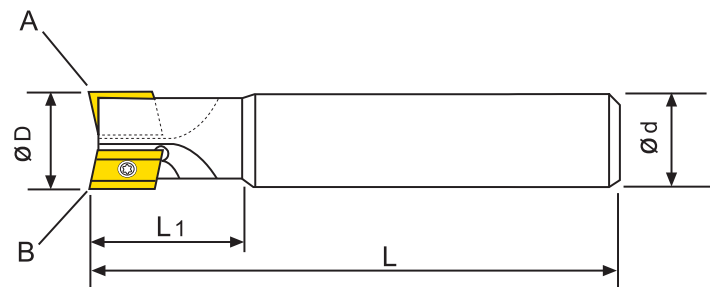
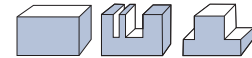


- 特點：
- 本端銑刀適用於強力切削
 - 迴轉速及進刀量多於一般銑刀三倍

- Feature:
- Fit for strenght cutting.
 - R.P.M. and feeding speed are three times more than the general ones.

ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
AHF3215032-3	32	40	150	32	3	APMT150408R	M4 (S4001-3)	FT15
AHF3223032-3			230					
AHF3230032-3			300					
AHF3235032-3			350					
AHF3240032-3			400					
AHF3515032-3	35	45	150		3			
AHF3523032-3			230					
AHF3530032-3			300					
AHF3540032-3			400					
AHF4016032-4	40	50	160		4			
AHF4025032-4			250					
AHF4030032-4			300					
AHF4040032-4			400					

Inserts..» D01
Cutting Conditions..» D06



特點：

- A.B點公差0.02mm以內（採用精密級刀片）
- 直角公差0.02mm以內（採用精密級刀片）
- 本端銑刀適合精修切削

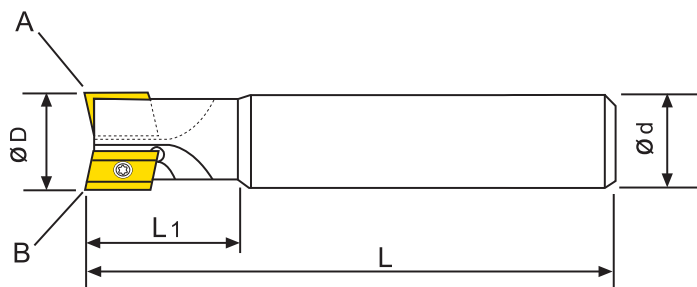
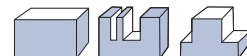
Feature:

- Point A. and B. tolerance within 0.02mm (uses precision classs insert)
- right angle tolerance within 0.02mm (uses precision class insert)
- Suited for precisioncutting.

ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
UEX 1213012-1	12	25	130	12	1	APET120204SR	M3.5 (S3501-1)	FT15
UEX 1413016-1	14	30	130	16		ADET160308SR	M4 (S4001-3)	FT15
UEX 1613016-1	16	30	130					
UEX 1617016-1		40	170					
UEX 1620016-1		40	200					
UEX 1813020-2	18	30	130	20	APET120204SR	M3.5 (S3501-1)	FT15	
UEX 2013020-2	20	30	130					
UEX 2015020-2		35	150					
UEX 2022020-2		40	220					
UEX 2025020-2		50	250					
UEX 2030020-2		60	300					
UEX 2115020-2	21	30	150					2
UEX 2213025-2	22	30	130	25				
UEX 2413025-2	24	30	130	25				
UEX 2515025-2	25	35	150					
UEX 2520025-2		40	200					
UEX 2523025-2		45	230					
UEX 2525025-2		50	250					
UEX 2530025-2		55	300					
UEX 2535025-2		60	350					
UEX 2540025-2		70	400					
UEX 2540032-2		70	400	32				
UEX 2615025-2	26	35	150	25				
UEX 2620025-2		35	200					

Inserts..》D01

Cutting Conditions..》D07



特點：

- A、B點公差0.02mm以內（採用精密級刀片）
- 直角公差0.02mm以內（採用精密級刀片）
- 本端銑刀適合精修切削

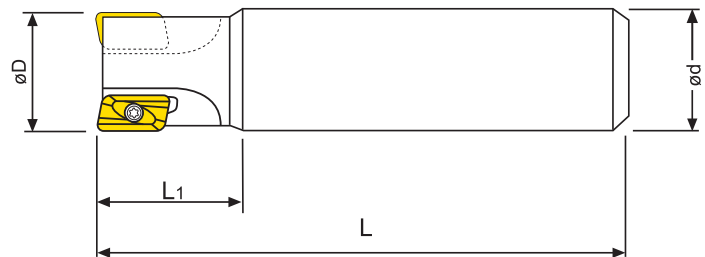
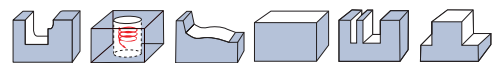
Feature:

- Point A. and B. tolerance within 0.02mm (uses precision class insert)
- right angle tolerance within 0.02mm (uses precision class insert)
- Suited for precision cutting.

ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
UEX2815025-2	28	35	150	25	2	ADET160308SR	M4 (S4001-3)	FT15
UEX3015032-2	30	40	150	32				
UEX3215032-2	32	40	150					
UEX3220032-2		45	200					
UEX3225032-2		50	250					
UEX3230032-2		60	300					
UEX3235032-2		70	350					
UEX3240032-2		70	400					
UEX3240042-2		90	400	42				
UEX3315032-2	33	40	150	32				
UEX3320032-2		45	200					
UEX3325032-2		50	250					
UEX3330032-2		50	300					
UEX3335032-2		50	350					
UEX3415032-2	34	40	150	32				
UEX3515032-2	35	40	150					
UEX3523032-2		50	230					
UEX3530032-2		50	300					
UEX3535032-2		50	350					
UEX3540032-2		50	400					
UEX3540042-2		280	400	42				
UEX4015032-3	40	45	150	32	3			
UEX4023032-3		45	230					

Inserts..»D01

Cutting Conditions..»D07



特點：· 本銑刀適用於強力切削
· 迴轉速及進刀量多於一般銑刀x3倍

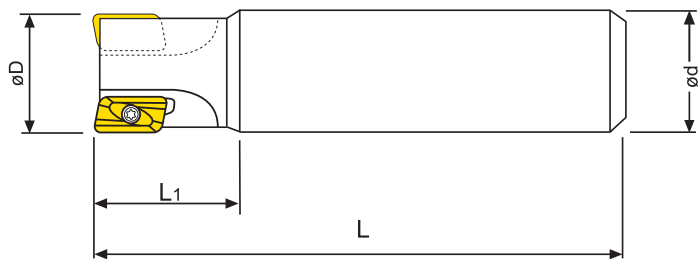
Feature: · Fit for strenght cutting.
· P.R.M. and feeding speed are three times more than general ones.

ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench			
JTS1010016-1	10	25	100	16	1	APMT1135PDER	M2.5 (S2502-1)	FT8			
JTS1210016-1	12	25	100								
JTS1213012-1		30	130	12							
JTS1217012-1		30	170								
JTS1410016-1	14	25	100	16	2						
JTS1511016-2	15	30	110								
JTS1613016-2	16	30	130	15							
JTS1615015-2		30	150								
JTS1615015.6-2		30	150								
JTS1615016-2		30	150	16							
JTS1620016-2		40	200								
JTS1715016-2	17	30	150								
JTS1720016-2		40	200								
JTS1812020-2	18	30	120	20							
JTS1912020-2	19	30	120								
JTS2013020-2	20	30	130								
JTS2015020-2		30	150								
JTS2020020-2		30	200								
JTS2025020-2		50	250								
JTS2030020-2		50	300								
JTS2115020-2	21	30	150								
JTS2120020-2		40	200								
JTS2212025-2	22	30	120								

Inserts..» D01

Cutting Conditions..» D07

端銑刀
Right Angle
Mill Cutter



特點：· 本銑刀適用於強力切削
· 迴轉速及進刀量多於一般銑刀x3倍

Feature: · Fit for strenght cutting.
· P.R.M. and feeding speed are three times more than general ones.

ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench	
JTS2412025-2	24	30	120	25	2	APMT1604PDER	M4 (S4001-1)	FT15	
JTS2515025-2	25	35	150						
JTS2520025-2		45	200						
JTS2522025-2		50	220						
JTS2525025-2		50	250						
JTS2530025-2		60	300						
JTS2613025-2	26	30	130						
JTS2620025-2		40	200						
JTS2625025-2		50	250						
JTS2630025-2		50	300						
JTS2813032-2	28	30	130	32					
JTS3015025-2	30	40	150	25	2				
JTS3020025-2		40	200						
JTS3025025-2		40	250						
JTS3030025-2		40	300						
JTS3015032-2		35	150						
JTS3213032-2	32	40	130	32					2
JTS3213032-3		40	130						3
JTS3215032-2		45	150						2
JTS3215032-3		45	150						3
JTS3220032-2		50	200						2
JTS3220032-3		50	200		3				
JTS3225032-2		55	250		2				
JTS3230032-2		60	300						
JTS3235032-2		65	350						
JTS3240032-2		70	400						
JTS3315032-2	33	40	150		2				
JTS3320032-2		50	200						
JTS3325032-2		50	250						
JTS3330032-2		50	300						
JTS3415032-3	34	40	150		3				
JTS3515032-3	35	40	150						
JTS3523032-3		40	230						
JTS3530032-3		40	300						
JTS3540032-3		40	400						
JTS4015032-3	40	45	150						
JTS4020032-3		45	200						

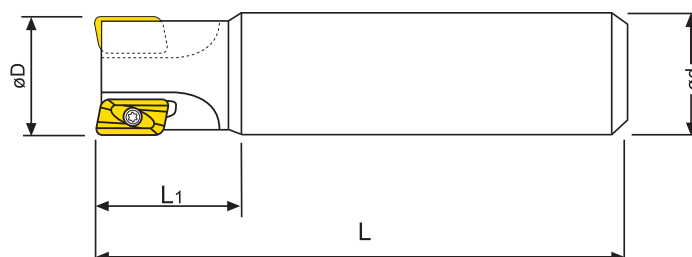
Inserts..» D01

Cutting Conditions..» D07



A H U 高 速 進 給 端 銑 刀

AHU High-Feed Milling Cutter



端銑刀
Right Angle
Mill Cutter

Item Code	D	L1	L	d	T	Insert	Screw	Wrench		
AHU 1615016-2	16	30	150	16	2	JDMT100308R	M2.5 (S2503-3)	FT8		
AHU 1620016-2		30	200							
AHU 1715016-2	17	30	150							
AHU 1720016-2		30	200							
AHU 2015020-2	20	30	150	20	2					
AHU 2020020-2		30	200							
AHU 2115020-2	21	30	150							
AHU 2120020-2		30	200							
AHU 2515025-2	25	40	150	25	2	JDMT150508R	M4.0 (S4001-3)	FT15		
AHU 2520025-2		40	200							
AHU 2615025-2	26	40	150							
AHU 2620025-2		40	200							
AHU 3015025-2	30	40	150							
AHU 3020025-2		40	200							
AHU 3215032-3	32	40	150						32	3
AHU 3220032-3		40	200							
AHU 3225032-3		40	250							
AHU 3230032-3		40	300							
AHU 3315032-3	33	40	150							
AHU 3320032-3		40	200							
AHU 3325032-3		40	250							
AHU 3330032-3		40	300							
AHU 3515032-3	35	40	150							
AHU 3520032-3		40	200							
AHU 3525032-3		40	250							
AHU 3530032-3		40	300							
AHU 4015032-4	40	42	150	4						
AHU 4023032-4		42	230							

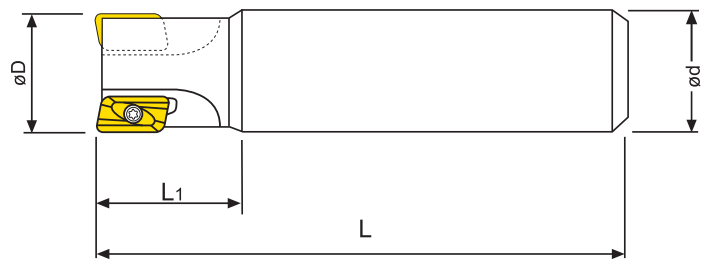
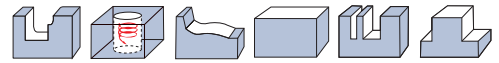
Inserts..» D14

Cutting Conditions..» D14



MEC.11T 高速直角端銑刀

MEC.11T High-Speed Milling Cutter



Item Code	D	L ₁	L	d	T	Insert	Screw	Wrench
MEC.11T-1613016-2	16	30	130	16	2	BDMT11T3	M2.5 (S2503-3)	FT8
MEC.11T-1615016-2		30	150					
MEC.11T-1713016-2	17	30	130					
MEC.11T-1715016-2		30	150					
MEC.11T-1815016-2	18	30	150					
MEC.11T-1915016-2	19	30	150					
MEC.11T-2011020-3	20	35	110	20	3			
MEC.11T-2013020-3		35	130					
MEC.11T-2015020-3		35	150					
MEC.11T-2113020-3	21	35	130					
MEC.11T-2115020-3		35	150					
MEC.11T-2215020-3	22	35	150					
MEC.11T-2415025-3	24	35	150	25	4			
MEC.11T-2513025-4	25	35	130					
MEC.11T-2515025-4		35	150					
MEC.11T-2518025-4		35	180					
MEC.11T-2615025-4	26	35	150					
MEC.11T-2618025-4		35	180					
MEC.11T-2815025-4	28	35	150					
MEC.11T-3015025-4	30	35	150					
MEC.11T-3215032-5	32	40	150	32	5			
MEC.11T-3315032-5	33	40	150					
MEC.11T-3515032-5	35	40	150					
MEC.11T-4015032-6	40	45	150		6			
MEC.11T-5015032-7	50	45	150		7			

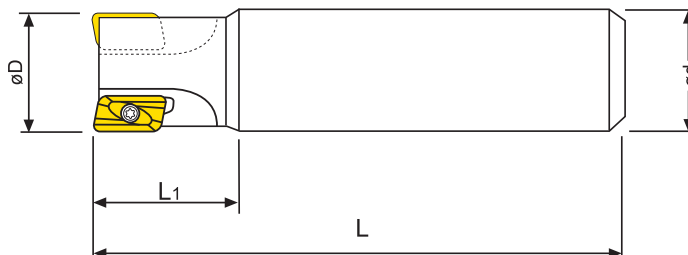
Inserts..» D15

Cutting Conditions..» D15



ER390.11 ER390.17 2刃經濟型高速直角端銑刀

ER390.11 ER390.17 2 Flutes Economy Type High-Speed Milling Cutter



端銑刀
Right Angle
Mill Cutter

ITEM CODE	D	L ₁	L	d	T	Insert	Screw	Wrench
ER390.11-1613516-2	16	30	135	16	2	R390-11T304M-PM	M2.5 (S2503-3)	FT8
ER390.11-1618016-2		30	180					
ER390.11-1713516-2	17	30	135					
ER390.11-1718016-2		30	180					
ER390.11-2015020-2	20	30	150	20				
ER390.11-2018020-2		30	180					
ER390.11-2115020-2	21	30	150					
ER390.11-2118020-2		30	180					
ER390.11-2515025-2	25	30	150	25				
ER390.11-2520025-2		30	200					
ER390.11-2615025-2	26	30	150					
ER390.11-2620025-2		30	200					
ER390.11-3015025-2	30	30	150					
ER390.11-3020025-2		30	200					
ER390.17-2513525-2	25	40	135	25	2	R390-170408M-PM	M3.5 (S3501-9)	FT15
ER390.17-2518525-2		40	185					
ER390.17-2613525-2	26	40	135					
ER390.17-2618525-2		40	185					
ER390.17-3013525-2	30	40	135	32				
ER390.17-3018525-2		40	185					
ER390.17-3215032-2	32	40	150					
ER390.17-3220032-2		40	200					
ER390.17-3315032-2	33	40	150					
ER390.17-3320032-2		40	200					
ER390.17-3515032-2	35	40	150					
ER390.17-3520032-2		40	200					

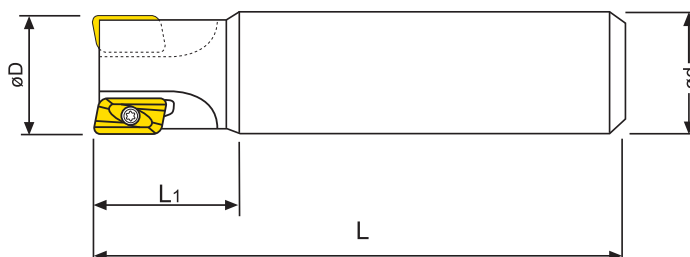
Inserts..» D24

Cutting Conditions..» D24



R390.11 高速直角端銑刀

R390.11 High-Speed Milling Cutter

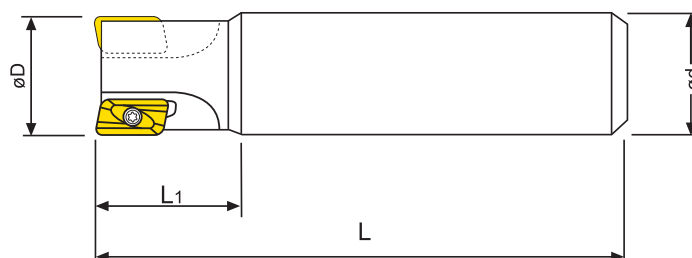


ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
R390.11-1513016-2	15	30	130	16	2	R390-11T304M-PM	M2.5 (S2503-3)	FT8
R390.11-1615016-2	16	30	150					
R390.11-1621016-2		30	210					
R390.11-1715016-2	17	30	150					
R390.11-1721016-2		30	210					
R390.11-1815020-2	18	30	150	20	2			
R390.11-1915020-3	19	30	150		3			
R390.11-2015020-3	20	30	150	20	3			
R390.11-2018020-3		30	180					
R390.11-2115020-3	21	30	150					
R390.11-2118020-3		30	180					
R390.11-2215025-3	22	30	150	25	3			
R390.11-2415025-3	24	30	150					
R390.11-2515025-4	25	35	150	25	4			
R390.11-2520025-4		35	200					
R390.11-2615025-4	26	35	150					
R390.11-2620025-4		35	200					
R390.11-2815032-4	28	35	150	32				
R390.11-2915032-4	29	35	150					
R390.11-3015025-4	30	35	150	25				
R390.11-3020025-4		35	200					
R390.11-3215032-5	32	40	150	32	5			
R390.11-3220032-5		40	200					
R390.11-3225032-5		40	250					
R390.11-3315032-5	33	40	150					
R390.11-3320032-5		40	200					
R390.11-3325032-5		40	250					
R390.11-3515032-5	35	40	150					
R390.11-3520032-5		40	200					
R390.11-3525032-5		40	250					
R390.11-4015032-5	40	45	150					

Inserts..» D24

Cutting Conditions..» D24

R 390.17 高速直角端銑刀
R390.17 High-Speed Milling Cutter



端銑刀
Right Angle
Mill Cutter

Item Code	D	L1	L	d	T	Insert	Screw	Wrench		
R390.17-2515025-2	25	40	150	25	2	R390-170408M-PM	M3.5 (S3501-9)	FT15		
R390.17-2520025-2		40	200							
R390.17-2523025-2		40	230							
R390.17-2615025-2	26	40	150							
R390.17-2620025-2		40	230							
R390.17-2623025-2		40	200							
R390.17-2715025-2	27	40	150							
R390.17-2815025-2	28	40	150							
R390.17-3015025-2	30	40	150							
R390.17-3020025-2		40	200							
R390.17-3023025-2		40	230							
R390.17-3215032-3	32	40	150	32	3					
R390.17-3220032-3		40	200							
R390.17-3225032-3		40	250							
R390.17-3230032-3		40	300							
R390.17-3315032-3	33	40	150							
R390.17-3320032-3		40	200							
R390.17-3325032-3		40	250							
R390.17-3330032-3		40	300							
R390.17-3515032-3	35	40	150							
R390.17-3520032-3		40	200							
R390.17-3525032-3		40	250							
R390.17-3530032-3		40	300							
R390.17-4015032-4	40	45	150							4
R390.17-5015032-5	50	50	150							5

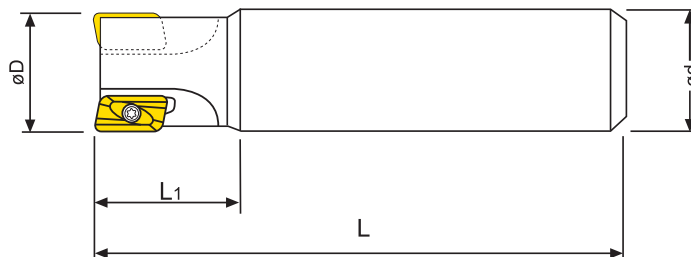
Inserts..» D24

Cutting Conditions..» D24



APX 3000 高速直角端铣刀

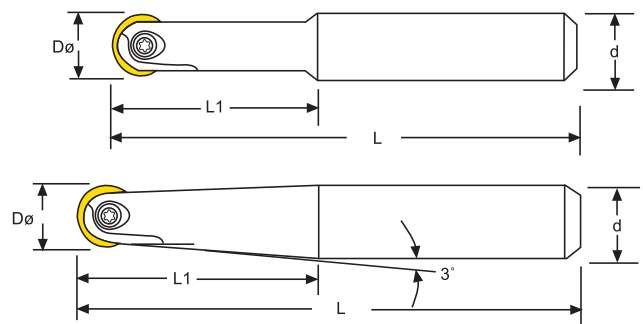
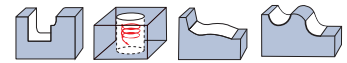
APX 3000 High-Speed Milling Cutter



Item Code	D	L1	L	d	T	Insert	Screw	Wrench
APX3000-1613016-2	16	25	130	16	2	AO__1236__PEER	M2.5 (S2503-3)	FT8
APX3000-1618016-2		25	180					
APX3000-1713016-2	17	25	130					
APX3000-1718016-2		25	180					
APX3000-1813016-2	18	25	130					
APX3000-1818016-2		25	180					
APX3000-2015020-3	20	30	150	20	3			
APX3000-2020020-3		30	200					
APX3000-2115020-3	21	30	150					
APX3000-2120020-3		30	200					
APX3000-2215020-3	22	30	150					
APX3000-2415025-3	24	35	150	25	4			
APX3000-2515025-4	25	35	150					
APX3000-2520025-4		35	200					
APX3000-2615025-4	26	35	150					
APX3000-2620025-4		35	200					
APX3000-2815025-4	28	35	150					
APX3000-3015025-4	30	45	150					
APX3000-3020025-4		45	200					
APX3000-3215032-5	32	45	150	32	5			
APX3000-3220032-5		45	200					
APX3000-3315032-5	33	45	150					
APX3000-3320032-5		45	200					
APX3000-3515032-5	35	45	150					
APX3000-3520032-5		45	200					
APX3000-4015032-6	40	45	150					

Inserts..» D27

Cutting Conditions..» D28



特點：

- 切削能力及精準度均優
- 排屑良好，高速切削亦即安定
- 模具三次元及圓弧加工

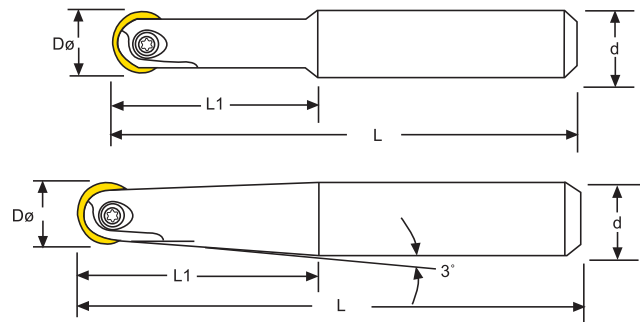
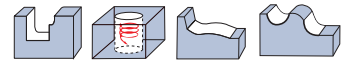
Feature:

- Good cutting capacity and precision.
- Good capacity for removing the metal chips and cutting steadily with high speed.
- Processed for three-dimension mould and circularizing to an arc.

ITEM CODE	D	L ₁	L	d	T	Insert	Screw	Wrench
RGA0812010	08 (R4)	25	120	10	1	WPR 08N P320_-D08	M3 (5008)	FT8
RGA0813012		25	130	12				
RGA0815012		30	150	12				
RGA1013010	10 (R5)	30	130	10		WPR 10N P320_-D10	M4 (5010)	FT15
RGA1015012		35	150	12				
RGA1017012		40	170	12				
RGA1215012	12 (R6)	30	150	10		WPR 12N P320_-D12	M5 (5012)	FT20
RGA1216016		30	160	16				
RGA1220016		45	200	16				
RGA1230032	16 (R8)	200	300	32		WPR 16N P320_-D16	M5 (5016)	FT20
RGA1613016		38	130	16				
RGA1616016		38	160	16				
RGA1621016		38	210	16				
RGA1621020		60	210	20				
RGA1621025		70	210	25				
RGA1625025		80	250	25				
RGA1630032		200	300	32				

Inserts..» D03

Cutting Conditions..» D09



Feature:

- Good cutting capacity and precision.
- Good capacity for removing the metal chips and cutting steadily with high speed.
- Processed for three-dimension mould and circularizing to an arc.

特點：

- 切削能力及精準度均優
- 排屑良好，高速切削亦即安定
- 模具三次元及圓弧加工

ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
RGA2015020	20 (R10)	35	150	20	1	WPR 20N P320_-D20	M5 (5020)	FT20
RGA2017020		35	170	20				
RGA2020025		60	200	25				
RGA2021020		45	210	20				
RGA2025020		50	250	20				
RGA2025025		100	250	25				
RGA2030032	25 (R12.5)	200	300	32		WPR 25N P320_-D25	M6 (5025)	LT30
RGA2516025		35	160	25				
RGA2519025		40	190	25				
RGA2523032		70	230	32				
RGA2525025		60	250	25				
RGA2525032		85	250	32				
RGA2530025	30 (R15)	70	300	25		WPR 30N P320_-D30	M8 (5032)	LT30
RGA2530032		100	300	32				
RGA3015032		55	150	32				
RGA3018032		55	180	32				
RGA3021032		55	210	32				
RGA3025032		55	250	32				
RGA3030032	32 (R16)	65	300	32		WPR 32N P320_-D32	M8 (5032)	LT30
RGA3035032		65	350	32				
RGA3215032		35	150	32				
RGA3218032		45	180	32				
RGA3221032		55	210	32				
RGA3225032		70	250	32				
RGA3230032	32 (R16)	80	300	32				
RGA3235032		100	350	32				
RGA3242032		100	420	32				

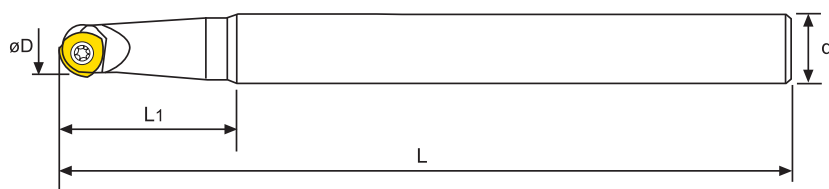
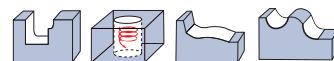
Inserts..» D03

Cutting Conditions..» D09



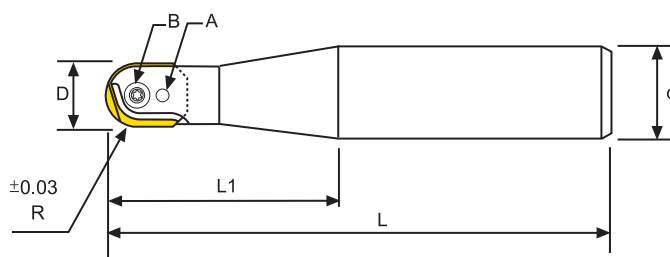
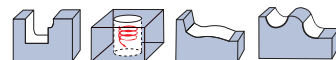
SE 球型精銑刀

SE Ball Type Milling Cutter



ITEM CODE	D	L ₁	L	d	T	Insert	Screw	Wrench
SE0812012	08	25	120	12	1	QCHW0802T1FN	M2.2 (S2201)	FT7
SE0815012		30	150			QCHW100702FN		
SE1015012	10	30	150	16		QPHW120903EN QPMT120903EN21	M3 (S3001-4)	FT10
SE1213016	12	35	130	16				
SE1215012		30	150	12				
SE1216016		45	160	16		QPHW1612T3EN QPMT1612T3SN21	M4 (S4001-3)	FT15
SE1614020	16	35	140	20				
SE1616016		35	160	16				
SE1617020		45	170	20				
SE1620016		45	200	16				
SE2015025	20	35	150	25		QPHW201504EN QPMT201504SN21	M4 (S4001-3)	FT15
SE2017020		40	170	20				
SE2019025		45	190	25				
SE2021020		45	210	20				
SE2025025		50	250	25		QPHW251904EN	M5 (S5002-1)	FT20
SE2520025	25	40	200	25				
SE2528032		80	280	32				

Inserts..» D03



特點：

- 切削能力及精準度均優
- 排屑良好，高速切削亦即安定
- 模具三次元及圓弧加工

Feature:

- Good cutting capacity and precision.
- Good capacity for removing the metal chips and cutting steadily with high speed.
- Processed for three-dimension mould and circularizing to an arc.

ITEM CODE	D	L1	L	d	T	Insert	Screw	Wrench
ABP1616016	16	40	160	16	1	ZPFW160	A-M3.5 (S3501-1) B-M4 (S4006)	FT15
ABP1618020		40	180	20				
ABP1620020		40	200	20				
ABP1621016		50	210	16				
ABP1620025		50	200	25				
ABP1625020		70	250	20				
ABP2017020	20	40	170	20		ZPFW200	A-M5 (S5003-2) B-M5 (S5007)	FT20
ABP2018025		45	180	25				
ABP2020025		75	200	25				
ABP2023020		50	230	20				
ABP2025025		90	250	25				
ABP2518025	25	45	180	25		ZPFW250	A-M5 (S5003-2) B-M6 (5025)	FT20 LT30
ABP2520025		45	200	25				
ABP2520032		50	200	32				
ABP2525025		50	250	25				
ABP2525032		90	250	32				
ABP2530032		120	300	32				
ABP3018032	30	50	180	32		ZPFW300	A-M6 (S6004) B-M8 (5032)	FT20 LT30
ABP3025032		70	250	32				
ABP3030032		90	300	32				
ABP3035032		90	350	32				
ABP3042032		90	420	32				

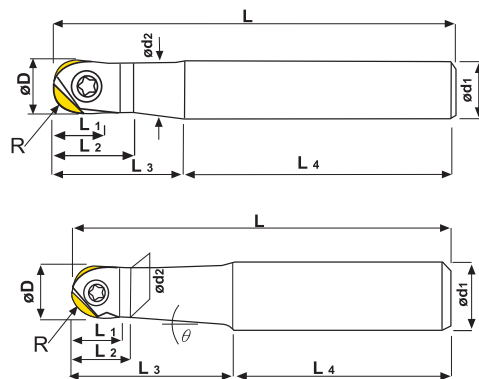
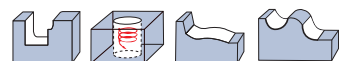
Inserts..》D03

Cutting Conditions..》D09



ABPF 球型精銑刀

ABPF Ball Type Milling Cutter



Item Code	D	R	L	L1	L2	L3	L4	d1	d2	Insert	Screw	Driver
ABPF 0812012	08	4	120	5	10	30	90	12	7.5	ZPFG080	5008F	FT8
ABPF 0815012			150			40	110					
ABPF 1011510	10	5	115	7	13	30	85	10	9.5	ZPFG100	5010F	FT10
ABPF 1012012			120			30	90	12				
ABPF 1015012			150			40	110					
ABPF 1018016			180			50	130	16				
ABPF 1215012	12	6	150	8	15	40	110	12	11.5	ZPFG120	5012F	FT20
ABPF 1216016			160			50	110	16				
ABPF 1220016			200			60	140					
ABPF 1613016	16	8	130	10	19	40	90	16	15.5	ZPFG160	5016F	FT20
ABPF 1616016			160			40	120					
ABPF 1620016			200			40	160					
ABPF 1618020			180			60	120					
ABPF 2014020	20	10	140	12.5	22	40	100	20	19.5	ZPFG200	5020F	LT25
ABPF 2017020			170			40	130					
ABPF 2020025			200			70	130	25				
ABPF 2023020			230			40	190	20				
ABPF 2025025	25	12.5	250	15	25	80	170	25	24.5	ZPFG250	5025F	LT30
ABPF 2515025			150			50	100					
ABPF 2518025			180			50	130					
ABPF 2523025			230			50	180					
ABPF 2520032			200			90	110					
ABPF 2525032			250			100	150					
ABPF 2530032	300	110	190									
ABPF 3015032	30	15	150	18	30	70	80	29.5	ZPFG300	5030F	LT30	
ABPF 3018032			180			80	100					
ABPF 3021032			210			130	80					
ABPF 3025032			250			100	150					
ABPF 3030032			300			110	190					
ABPF 3035032			350			110	240					
ABPF 3042032	32	16	420	19	30	110	310	31.5	ZPFG320	5030F	LT30	
ABPF 3218032			180			80	100					
ABPF 3225032			250			100	150					
ABPF 3230032			300			110	190					
ABPF 3235032			350			110	240					
ABPF 3242032	420	110	310									

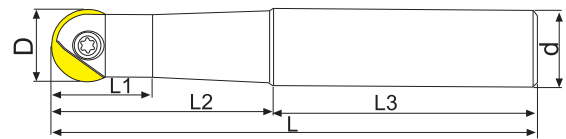
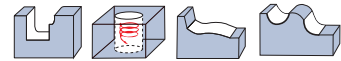
Inserts..» D03

Cutting Conditions..» D10



BNM 球型精銑刀

BNM Ball Type Milling Cutter



ITEM CODE	D	R	L	L1	L2	L3	d	Insert	Screw	Wrench
BNM 0811510	08	4	115	10	30	85	10	BNM-080	5008D	FT7
BNM 0812012			120		30	90	12			
BNM 0815012			150		30	120	12			
BNM 1011510	10	5	115	13	30	85	10	BNM-100	5010D	FT8
BNM 1012012			120		30	90	12			
BNM 1015012			150		30	120	12			
BNM 1215012	12	6	150	15	30	120	12	BNM-120	5012D	FT10
BNM 1216016			160		50	110	16			
BNM 1220016			200		60	140	16			
BNM 1613016	16	8	130	19	40	90	16	BNM-160	5016D	FT15
BNM 1616016			160		40	120	16			
BNM 1620016			200		40	160	16			
BNM 1618020			180	28	60	120	20			
BNM 1621020			210		70	140	20			
BNM 1630032			300		200	100	32			
BNM 2015020	20	10	150	22	40	110	20	BNM-200	5020D	FT20
BNM 2017020			170		40	130	20			
BNM 2021020			210		40	170	20			
BNM 2020025			200	34	70	130	25			
BNM 2025025			250		80	180	25			
BNM 2030032			300		200	100	32			
BNM 2516025	25	12,5	160	25	50	110	25	BNM-250	5025D	LT25
BNM 2520025			200		50	150	25			
BNM 2525025			250		50	200	25			
BNM 2520032			200	41	90	110	32			
BNM 2525032			250		100	150	32			
BNM 2530032			300		120	180	32			
BNM 3015032	30	15	150	49	60	90	32	BNM-300	5030D	LT30
BNM 3018032			180		100	80	32			
BNM 3021032			210		130	80	32			
BNM 3025032			250		170	80	32			
BNM 3030032			300		100	200	32			
BNM 3035032			350		100	250	32			

Inserts..» D16

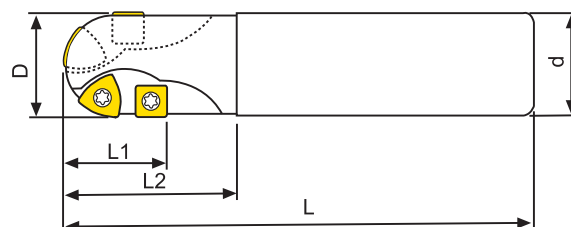
Cutting Conditions..» D16

球型銑刀
Ball Type Mill Cutter



RGK 球型粗銑刀

RGK Ball Type Milling Cutter



特點：

- 切削振動音較小安定切削
- 切削安定適中，重型彫加工用
- 靠模銑削型彫專用

Feature:

- Minimum vibration so as to cutting steadily.
- With steady cutting, fit for heavy cutting and engraving.
- Special for cutting, milling, and engraving processing in mould.

Item Code	D	L1	L2	L	d	T	Insert	Screw	Wrench						
RGK2015020	20	20.5	45	150	20	4	P26315-R10 SDMT060304	M2.5 (S2502-1)	FT8						
RGK2020020			55	200			P26315-R12 SDMT060304								
RGK2515025	25	23	45	150	25										
RGK2520025			55	200											
RGK2521032			60	210											
RGK2525032	32	31	90	250	32		P26315-R16 SDMT090308	M4 (S4003-1)	FT15						
RGK3215032			50	150											
RGK3221032			70	210											
RGK3225032			80	250											
RGK3230032	40	41.5	90	300	42	4	P26315-R20 SPMT120408	M5 (S5003-2)	FT20						
RGK4022042			80	220											
RGK4026042			80	260											
RGK4030042			100	300											
RGK5020042	50	66	100	200	42	7	P26315-R25 SPMT120408	M5 (S5003-2)	FT20						
RGK5020050.8			100	200											
RGK5025050.8			120	250											
RGK5030050.8			120	300											

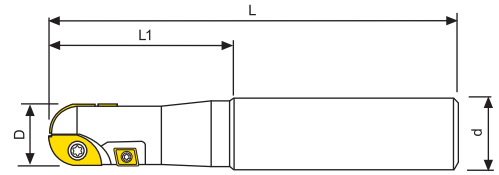
Inserts..》D02

Cutting Conditions..》D09



RCF 球型粗銑刀

RCF Ball Type Milling Cutter



特點：

- 刀片採凸面設計，切削震動音較小
- 刀片後端雙鍵溝付固鎖式切削安定
- 重型雕加工用，加工面R精度良好
- 靠模銑削型雕專用

Feature:

- With convex figure of inserts and cutting in a sound of vibration.
- With two slots in the inserts locked firm, fit for cutting steadily.
- Special for milling and cutting in mould.

ITEM CODE	D	L1	L	d	T	Master Insert	Slave Insert	Peripheral Insert	Screw	Wrench	
RCF1616016-2	16	80	160	16	2	ZCET 080CE	ZCET 080SE		M2.5 (S2501-3)	FT8	
RCF1620016-2		80	200	16							
RCF2015020-2	20	40	150	20	2	ZCEW 100CE	ZCEW 100SE		M3 (S3003)	FT10	
RCF2015025-2		60	150	25							
RCF2020020-2		60	200	20							
RCF2020025-2		70	200	25							
RCF2022020-2		70	220	20							
RCF2025025-2		90	250	25							
RCF2015020-4		4	50	150	20				CPMT 080204	M3 (S3003)	FT10
RCF2015025-4			60	150	25						
RCF2020020-4			60	200	20						
RCF2020025-4			70	200	25						
RCF2025032-4			90	250	32						
RCF2030032-4			110	300	32						
RCF2515025-2	25	40	150	25	2	ZCEW 125CE	ZCEW 125SE		M4 (S4005)	FT15	
RCF2515032-2		50	150	32							
RCF2523025-2		60	230	25							
RCF2523032-2		70	230	32							
RCF2525032-2		100	250	32							
RCF2515025-4		4	50	150	25				CPMT 090308	M4 (S4005)	FT15
RCF2520025-4			60	200	25						
RCF2515032-4			60	150	32						
RCF2520032-4			65	200	32						
RCF2523025-4			60	230	25						
RCF2523032-4			70	230	32						
RCF2525032-4			100	250	32						
RCF2530025-4			60	300	25						
RCF2530032-4			110	300	32						
RCF3015032-2	30	45	150	32	2	ZCEW 150CE	ZCEW 150SE		M5 (S5001)	FT20	
RCF3020032-2		50	200	32							
RCF3015032-4		4	50	150	32				CPMT 090308	M5 (S5001)	FT20
RCF3020032-4			80	200	32						
RCF3023032-4			100	230	32						
RCF3025032-4			100	250	32						
RCF3030032-4			100	300	32						
RCF3035032-4			100	350	32						
RCF3040032-4			100	400	32						
								M4 (S4001-3)	FT15		

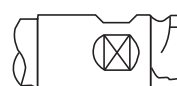
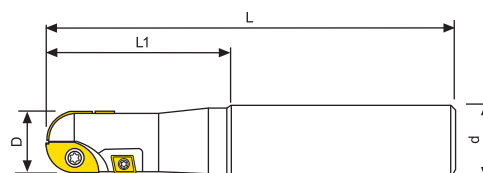
Inserts..》D04

Cutting Conditions..》D09



RCU 球型粗銑刀

RCU Ball Type Milling Cutter



特點：

- 刀片採凸面設計，切削震動音較小
- 刀片後端雙鍵溝付固鎖式切削安定
- 重型雕加工用，加工面R精度良好
- 靠模銑削型雕專用

Feature:

- With convex figure of inserts and cutting in a sound of vibration.
- With two slots in the inserts locked firm, fit for cutting steady.
- Special for milling and cutting in mould.

Item Code	D	L1	L	d	T	Master Insert	Slave Insert	Peripheral Insert	Screw	Wrench		
RCF4020042-4	40	100	200	42	4	ZCEW 200CE	ZCEW 200SE	CPMT 090308	M6 (S6001)	LT30		
RCF4025042-4			250									
RCF4030042-4			300									
RCF4035042-4			350									
RCF4016050.8-4		65	160	50.8					M4 (S4001-3)	FT15		
RCF4020050.8-4		100	200									
RCF4025050.8-4	250											
RCF5020042-4	50	75	200	42		ZCEW 250CE	ZCEW 250SE	CPMT 120408			M6 (S6001)	LT30
RCF5025042-4		75	250									
RCF5035042-4		90	350									
RCF5040042-4		100	400									
RCF5020050.8-4		100	200	50.8					M5 (S5001)	FT20		
RCF5025050.8-4			250									
RCF5030050.8-4			300									
RCF5035050.8-4			350									
RCF5040050.8-4			400									
RCU5020042-4	50	100	200	42		ZCET 250CE-N	ZCET 250SK-N	CPMT 120408			M6 (S6001)	LT30
RCU5025042-4			250									
RCU5030042-4			300									
RCU5035042-4			350									
RCU5040042-4			400	50.8					M5 (S5001)	FT20		
RCU5020050.8-4			200									
RCU5025050.8-4			250									
RCU5030050.8-4			300									
RCU5035050.8-4			350									
RCU5040050.8-4			400									

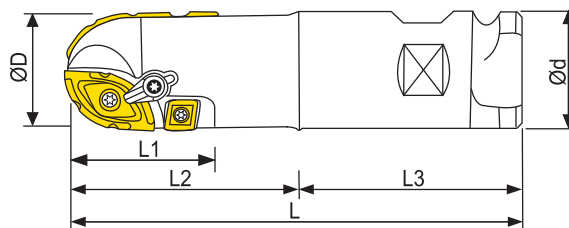
Inserts..》D04

Cutting Conditions..》D12



ASB 球型粗銑刀

ASB Ball Type Milling Cutter



ITEM CODE	D	L1	L2	L3	L	d	Master Insert	Slave Insert	Peripheral Insert	Insert Screw	Clamp+Screw	Wrench
ASB 4020042-4	40	50	100	100	200	42	ZPET200CE-N	ZPET200SK-N	CPMT090308	M6.0 (S6001-1)	YR-08 M5.0 (S5003-1)	FT15
ASB 4025042-4			140	110	250					M4.0 (S4001-3)		FT20
ASB 4030042-4			140	160	300							LT30
ASB 5020050.8-4	50	63	115	85	200	50.8	ZPET250CE-N	ZPET250SK-N	CPMT120408	M6.0 (S6001-1)	YR-28 M8.0 (S0822)	FT20
ASB 5025050.8-4				135	250					M5.0 (S5001-1)		LT30
ASB 5030050.8-4				185	300							

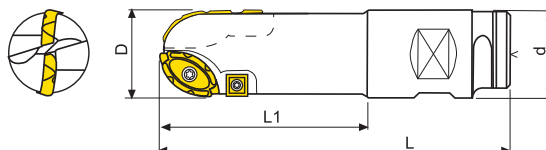
Inserts..» D04

Cutting Conditions..» D08



SWB 球型粗銑刀

SWB Ball Type Milling Cutter



ITEM CODE	D	L	L1	d	Master Insert	Slave Insert	Peripheral Insert	Screw	Wrench
SWB 2016020-2	20	160	80	20	SWB220MMW	SWB220MSW		S3001-4	FT10
SWB 2020020-2		200	120						
SWB 2516025-2	25	160	80	25	SWB225MMW	SWB225MSW		S4005-1	FT15
SWB 2520025-2		200	120						
SWB 3020032-2	30	200	120	32	SWB230MMW	SWB230MSW		S5006	FT20
SWB 3025032-2		250	170						
SWB 3030032-2		300	200						
SWB 3015032-4	30	150	70	32	SWB230MMW	SWB230MSW	IM-SP32GS	S5006 S4003-1	FT20 FT15
SWB 3018032-4		180	100						
SWB 3021032-4		210	130						
SWB 3023032-4		230	150						
SWB 3025032-4		250	170						
SWB 3030032-4		300	200						
SWB 3035032-4		350	200						
SWB 3040032-4		400	200						
SWB 4016042-4	40	160	80	42	SWB240MMW	SWB240MSW	SPGA090304	S6004-2 S4001-3	LT25 FT15
SWB 4020042-4		200	100						
SWB 4025042-4		250	140						
SWB 4030042-4		300	140						
⊙SWB 5020050.8-4(H)	50	200	120	50.8	SWB250HMN-N	SWB250HSN-N	IM-SP43GS (SPMT120408)	(4)S6002-1 (4H)S6002-2 S5003-2	LT30 FT20
⊙SWB 5025050.8-4(H)		250	150						
⊙SWB 5030050.8-4(H)		300	150						
⊙SWB 5035050.8-4(H)		350	270						
⊙SWB 5040050.8-4(H)		400	250						

Inserts..» D17

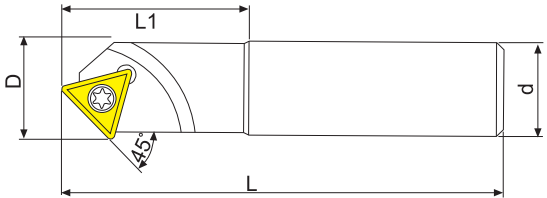
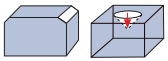
Cutting Conditions..» D17, D17-1

⊙SWB50-4 → S6002-1
⊙SWB50-4H → S6002-2



GCX - 45° 定位倒角刀

GCX-45° Spot Drill Cutter



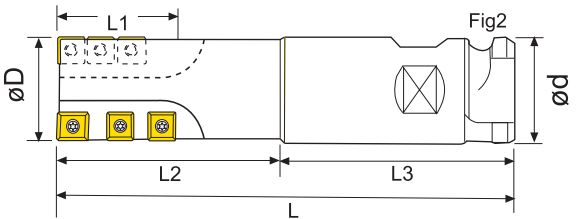
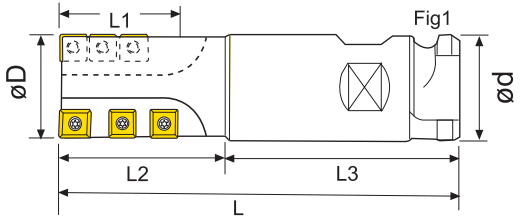
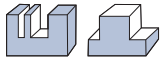
ITEM CODE	D	L	L1	d	Angle Range	Insert	Screw	Wrench
GCX2010012-45C	20	100	35	12	0mm~20mm	TCMX16T308	S4001-3	FT15
GCX2013020-45C	20	130	40	20				

定位倒角刀
Spot Drill Cutter



ATC 粗切削端铣刀 (加长刃)(加长柄)

ATC Rough End Mill Cutter



(加长刃)

ITEM CODE	D	L1	L2	L3	L	d	T	Insert (pcs)	Screw	Wrench
ATC 50-105-220-50.8	50	105	135	85	220	50.8	4	SPLT120408(20) APLT1504ZZR(2)	M5.0 (S5003-2)	FT20
ATC 50-158-275-50.8		158	190		275			SPLT120408(30) APLT1504ZZR(2)		
ATC 50-200-300-50.8		200	215		300			SPLT120408(38) APLT1504ZZR(2)		

Fig1

(加长柄)

ITEM CODE	D	L1	L2	L3	L	d	T	Insert (pcs)	Screw	Wrench
ATC 50-105-275-50.8	50	105	190	85	275	50.8	4	SPLT120408(20) APLT1504ZZR(2)	M5.0 (S5003-2)	FT20
ATC 50-105-300-50.8		105	215		300					

Fig2

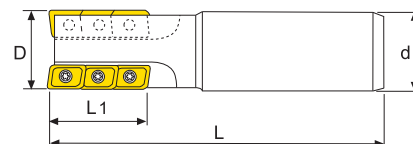
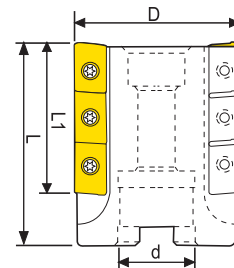
Inserts..》D02

Cutting Conditions..》D13



G T S 粗 切 削 端 銑 刀

G T S Rough End Mill Cutter



ITEM CODE	D	L1	L	d	T	Insert(pcs)	Screw	Wrench
GTS2010025	20	23	100	25	2	CCMT060204(6)	M2.5 (S2502-1)	FT8
GTS2513025	25	30	130	25	4	CCMT060204(8)		FT8
GTS3214032	32	40	140	32	2	CPMT090308(10)	M4 (S4001-3)	FT15
GTS4020042	40	77	200	42	3	APMT1135PDER(27)	M2.5 (S2502-1)	FT8
GTS-63-25.4	63	43	65	25.4	4	APKT1604(12)	M4 (S4001-1)	FT15
GTS-63-27.0	63	43	65	27.0	4			

Inserts..» D01

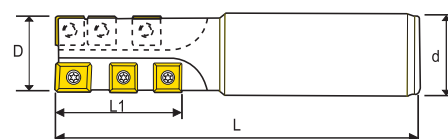
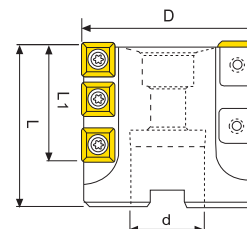
Cutting Conditions..» D13

粗切削端銑刀
Rough End
Mill Cutter



G 2 0 3 8 筒 狀 粗 切 削 銑 刀

G 2 0 3 8 Rough End Mill Cutter



ITEM CODE	D	L1	L	d	T	Insert(pcs)	Screw	Wrench
G2038-32-50-155-32	32	50	155	32	2	SDLX090308(6) ADLX1503ZZR(1)	M4 (S4003-3)	FT15
G2038-40-50-155-32	40	50	155	32	4	SDLX090308(12) ADLX1503ZZR(2)		
G2038-63-25.4	63	62	80	25.4	4	SPLT120408(12) APLT1504ZZR(2)	M5 (S5003-2)	FT20
G2038-80-31.75	80	67	80	31.75	6	SPLT120408(18) APLT1504ZZR(3)		
G2038-80-32.0	80	67	80	32.0	6			

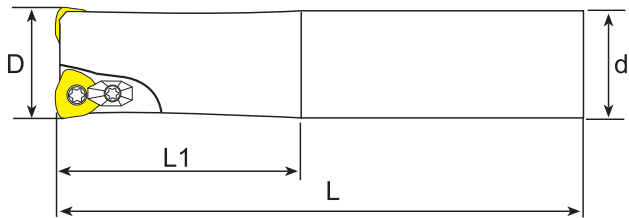
Inserts..» D02

Cutting Conditions..» D13



ASRT - 3 刃 R 角 端 銑 刀

ASRT Three Corners-Radius Milling Cutter



ITEM CODE	D	L1	L	d	T	Insert	Screw	Clamp+Screw	Wrench
ASRT 30-2515025-2	25	60	150	25	2	WDNW09T320	M3.5 (S3501-1)	YR-05 M3.5 (S3501-1)	FT15
ASRT 30-2520025-2		60	200						
ASRT 30-2815025-2	28	40	150						
ASRT 30-2820025-2		40	200						
ASRT 30-3015025-2	30	40	150	32	3				
ASRT 30-3020025-2		40	200						
ASRT 30-3215032-3	32	70	150	32	2	WDNW120420	M4.0 (S4003-6)	YR-06 M4.0 (S4008-6)	FT15
ASRT 30-3220032-3		70	200						
ASRT 40-3215032-2	32	70	150						
ASRT 40-3220032-2		70	200						
ASRT 40-3515032-2	35	50	150	32	3				
ASRT 40-3520032-2		50	200						
ASRT 40-4015032-3	40	50	150						
ASRT 40-4020032-3		50	200						

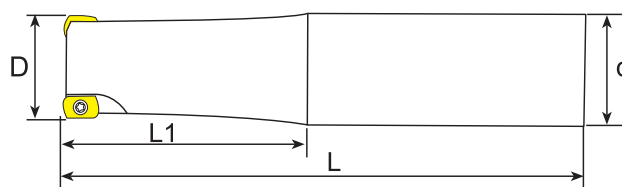
Inserts..» D20

Cutting Conditions..» D20-1



ASR20 多刃型端銑刀

ASR20 Multi-Flutes Milling Cutter



角R端銑刀
R-Type Surface
Milling Cutter

ITEM CODE	D	L ₁	L	d	T	Insert	Screw	Wrench
ASR20-1615016-2	16	50	150	16	2	EPNW0603TN-8	M2.5 (S2503-3)	FT8
ASR20-1618016-2		50	180		2			
ASR20-1715016-2	17	30	150		2			
ASR20-1718016-2		30	180		2			
ASR20-1815016-2	18	30	150		2			
ASR20-2015020-2	20	60	150	20	2			
ASR20-2015020-3	20	60	150		3			
ASR20-2020020-3		80	200		3			
ASR20-2115020-3	21	30	150		3			
ASR20-2120020-3		30	200		3			
ASR20-2216020-3	22	30	160		3			
ASR20-2515025-4	25	70	150	25	4			
ASR20-2520025-4		100	200		4			
ASR20-2615025-4	26	35	150		4			
ASR20-2620025-4		35	200		4			
ASR20-2815025-4	28	35	150		4			
ASR20-2820025-4		35	200		4			
ASR20-3015032-4	30	70	150	32	4			
ASR20-3020032-4		120	200		4			
ASR20-3215032-5	32	70	150		5			
ASR20-3220032-5		120	200		5			
ASR20-3515032-5	35	45	150		5			
ASR20-3520032-5		45	200		5			
ASR20-4015032-6	40	45	150		6			
ASR20-4023032-6		45	230		6			

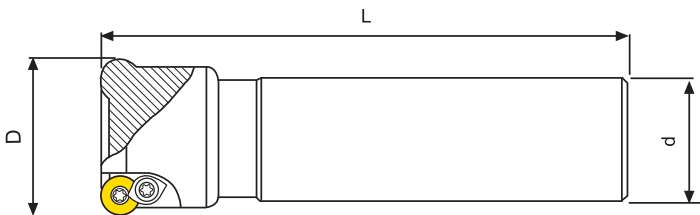
Inserts..》D20

Cutting Conditions..》D25



RAH 角 R 端 銑 刀 R4

RAH R-Type Surface Milling Cutter



特點：

- 模具加工三次元使用，刀片採用圓形刃具有經濟效益，進刀距快，表面度精細。

Feature:

- Used by processing of three-dimension mound.
- With round inserts, high economic efficiency, speed, and precision.

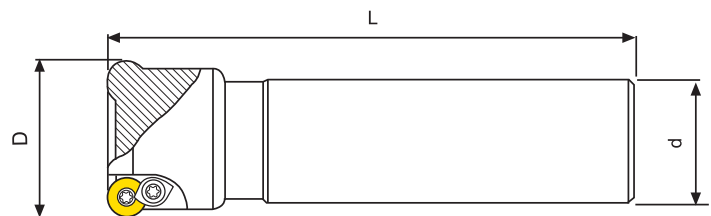
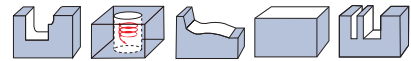
ITEM CODE	D	L	d	T	Insert	Insert Screw	Clamp+ Screw	Wrench
RAH1213012-R4-1	12	130	12	1	RDMT0802MOTN	M2.5 (S2502-1)	YR-05 M3.0 (S3002-1)	FT8
RAH1215012-R4-1		150						
RAH1415012-R4-1	14	150						
RAH1615015-R4-2	16	150	15	2				
RAH1615015.6-R4-2		150	15.6					
RAH1613016-R4-2		130	16	2				
RAH1615016-R4-2		150						
RAH1620016-R4-2		200						
RAH1715016-R4-2		150						
RAH1720016-R4-2	200							
RAH1820016-R4-2	18	200						
RAH2015020-R4-2	20	150	20					
RAH2020020-R4-2		200						
RAH2023020-R4-2		230						
RAH2025025-R4-2		250					25	
RAH2115020-R4-2	21	150	20					
RAH2120020-R4-2		200						
RAH2221020-R4-2	22	210						
RAH2515025-R4-2	25	150	25					
RAH2530025-R4-2		300						

Inserts..» D04 Cutting Conditions..» D12



RAH 角 R 端 銑 刀 R5

RAH R-Type Surface Milling Cutter



角R端銑刀
R-Type Surface
Milling Cutter

特點：

- 模具加工三次元使用，刀片採用圓形刃具有經濟效益，進刀距快，表面度精細。

Feature:

- Used by processing of three-dimension mound.
- With round inserts, high economic efficiency, speed, and precision.

ITEM CODE	D	L	d	T	Insert	Insert Screw	Clamp+ Screw	Wrench
RAH2515025-R5-2	25	150	25	2	RDMT10T3MOTN	M4 (S4003-1)	YR-05 M3.5 (S3501-1)	FT15
RAH2520025-R5-2		200						
RAH2523025-R5-2		230						
RAH2530025-R5-2		300						
RAH3015025-R5-2	30	150						
RAH3020025-R5-2		200						
RAH3025025-R5-2		250						
RAH3030025-R5-2		300						
RAH3215025-R5-3	32	150	25	3				
RAH3215032-R5-3		150	32					
RAH3220032-R5-3		200						
RAH3225032-R5-3		250						
RAH3230032-R5-3		300						
RAH3515032-R5-3	35	150	32					
RAH3517032-R5-3		170						
RAH3520032-R5-3		200						
RAH3525032-R5-3		250						
RAH3530032-R5-3		300						
RAH3535032-R5-3		350						
RAH3540042-R5-3		400						
RAH4015032-R5-3	40	150	32					
RAH4020032-R5-3		200						
RAH4025032-R5-3		250						
RAH4030032-R5-3		300						

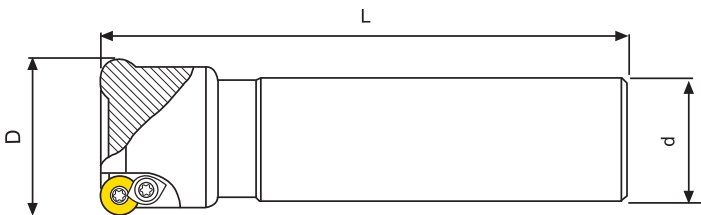
Inserts..» D04

Cutting Conditions..» D12



RAH 角 R 端 銑 刀 R6

RAH R-Type Surface Milling Cutter



特點：

- 模具加工三次元使用，刀片採用圓形刃具有經濟效益，進刀距快，表面度精細。

Feature:

- Used by processing of three-dimension mound.
- With round inserts, high economic efficiency,speed,and precision.

ITEM CODE	D	L	d	T	Insert	Insert Screw	Clamp+ Screw	Wrench
RAH2515025R6-2	25	150	25	2	RDMT1204MOTN	M4 (S4003-6)	YR-06 M4 (S4008-6)	FT15
RAH2520025R6-2		200						
RAH2615025R6-2	26	150						
RAH2620025R6-2		200						
RAH3015025R6-2	30	150						
RAH3020025R6-2		200						
RAH3215032R6-2	32	150	32	3				
RAH3220032R6-2		200						
RAH3225032R6-2		250						
RAH3515032R6-3	35	150						
RAH3520032R6-3		200						
RAH3525032R6-3		250						
RAH4015032R6-3	40	150						
RAH4020032R6-3		200						
RAH4025032R6-3		250						

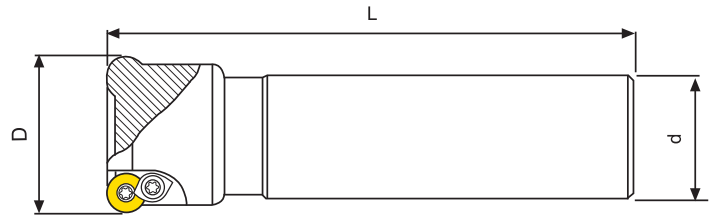
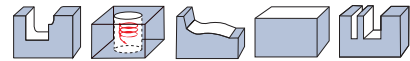
Inserts..» D04

Cutting Conditions..» D12



RAH 角 R 端 銑 刀 R8

RAH R-Type Surface Milling Cutter



特點：

- 模具加工三次元使用，刀片採用圓形刃具有經濟效益，進刀距快，表面度精細。

Feature:

- Used by processing of three-dimension mound.
- With round inserts, high economic efficiency, speed, and precision.

ITEM CODE	D	L	d	T	Insert	Insert Screw	Clamp+ Screw	Wrench								
RAH3515032-R8-2	35	150	32	2	RDMX1604MOTN	M5.0 (S5002-1)	YR-08	FT20								
RAH3523032-R8-2		230														
RAH4015032-R8-2	40	150		3												
RAH4023032-R8-2		230														
RAH5015032-R8-3	50	150		3												
RAH6315042-R8-3	63	150	42													
RAH6325042-R8-3		250														

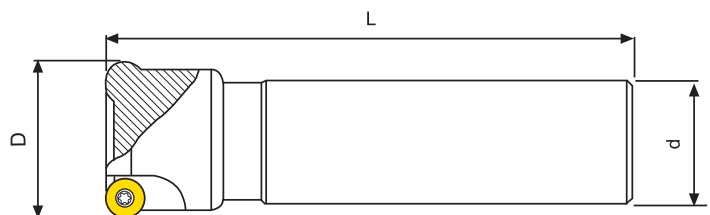
Inserts..》D04

Cutting Conditions..》D12



WA 角 R 端 銑 刀 R3

WA R-Type Surface Milling Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
WA12.515010-R3-1	12.5	150	10	1	RPMN0602MO	M2.5 (S2502-1)	FT8
WA12.515012-R3-1		150	12	1			
WA1615016-R3-2	16	150	16	2			
WA1625016-R3-2		250	16				
WA1625020-R3-2		250	20				

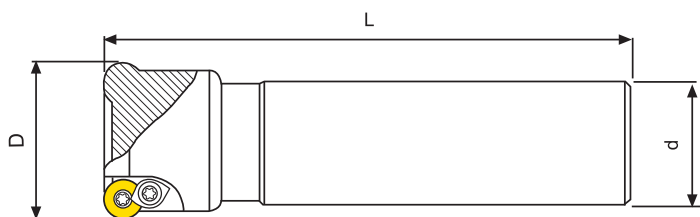
Inserts..》D04

Cutting Conditions..》D11



RAW 角 R 端 銑 刀 R6

RAW R-Type Surface Milling Cutter



特點：

- 模具加工三次元使用，刀片採用圓形刃具有經濟效益，進刀距快，表面度精細。

Feature:

- Used by processing of three-dimension mound.
- With round inserts, high economic efficiency, speed, and precision.

ITEM CODE	D	L	d	T	Insert	Insert Screw	Clamp+ Screw	Wrench
RAW2515025-R6-2	25	150	25	2	RPMT1204MOE	M4 (S4001-1)	YR-16	FT15 FT20
RAW2520025-R6-2		200		2				
RAW3015025-R6-2	30	150		2				
RAW3022025-R6-2		220		2				
RAW3215032-R6-2	32	150	32	2				
RAW3223032-R6-2		230		2				
RAW3230032-R6-2		300		2				
RAW3515032-R6-3	35	150		3				
RAW3523032-R6-3		230		3				
RAW3530032-R6-2		300		2				
RAW4018032-R6-3	40	180		3				
RAW4023032-R6-3		230		3				
RAW5015032-R6-4	50	150		4				

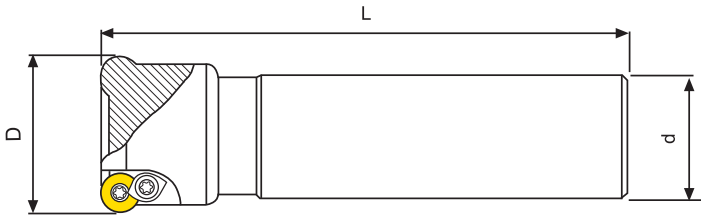
Inserts..» D04

Cutting Conditions..» D11



RAM 角 R 端 銑 刀 R4 R5

RAM R-Type Surface Milling Cutter



特點：

- 模具加工三次元使用，刀片採用圓形刃具有經濟效益，進刀距快，表面度精細。

Feature:

- Used by processing of three-dimension mound.
- With round inserts, high economic efficiency, speed, and precision.

ITEM CODE	D	L	d	T	Insert	Insert Screw	Clamp+ Screw	Wrench
RAM1615015-R4-2	16	150	15	2	RPMW0802MO	M3.0 (S3002-1)	YR-14 M3.0(S3002-1)	FT8
RAM1615015.6-R4-2		150	15.6					
RAM1615016-R4-2		150	16	2				
RAM2015020-R4-2	20	150	20	2				
RAM2515025-R5-2	25	150	25					
RAM2518025-R5-2		180						
RAM2523025-R5-2		230						
RAM3015025-R5-2	30	150		3				
RAM3020025-R5-2		200						
RAM3025025-R5-2		250						
RAM3030025-R5-2		300						
RAM3515032-R5-3	35	150	32	3				
RAM3520032-R5-3		200						
RAM3525032-R5-3		250						
RAM3530032-R5-3		300						

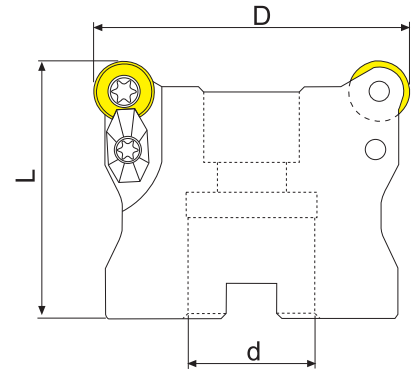
Inserts..》D04 Cutting Conditions..》D11

角R端銑刀
R-Type Surface
Milling Cutter



R H 角 R 殼 形 平 面 銑 刀 R5 R6 R8

RH R-Type Surface Milling Cutter



ITEM CODE	D	L	d	T	Insert	Insert Screw	Clamp+ Screw	Wrench
RH50-22.0-R5-4	50	50	22.0	4	RDMT10T3MOTN	M4 (S4003-1)	YR-05 M3.5 (S3501-1)	FT15
RH50-25.4-R5-4			25.4	4				
RH63-22.0-R5-5	63	50	22.0	5				
RH63-25.4-R5-5			25.4	5				
RH63-27.0-R5-5			27.0	5				
RH40-16.0-R6-3	40	45	16.0	3	RDMT1204MOTN	M4 (S4003-6)	YR-06 M4 (S4008-6)	FT15
RH50-22.0-R6-4	50	50	22.0	4				
RH63-22.0-R6-5	63	50	22.0	5				
RH63-25.4-R6-5			25.4	5				
RH50-22.0-R8-3	50	50	22.0	3	RDMX1604MOTN	M5 (S5002-1)	YR-08 M5 (S5003-1)	FT20
RH60-25.4-R8-3	60	50	25.4	3				
RH63-22.0-R8-4	63	50	22.0	4				
RH63-25.4-R8-3			25.4	3				
RH63-25.4-R8-4			25.4	4				
RH63-27.0-R8-3			27.0	3				
RH63-27.0-R8-4			27.0	4				
RH66-22.0-R8-4	66	50	22.0	4				
RH66-25.4-R8-3			25.4	3				
RH66-25.4-R8-4			25.4	4				
RH66-27.0-R8-3			27.0	3				
RH66-27.0-R8-4			27.0	4				
RH80-25.4-R8-3	80	50	25.4	3				
RH80-25.4-R8-5			25.4	5				
RH80-27.0-R8-5			27.0	5				
RH100-25.4-R8-5	100	55	25.4	5				
RH100-31.75-R8-5			31.75	5				
RH100-32.0-R8-5			32.0	5				

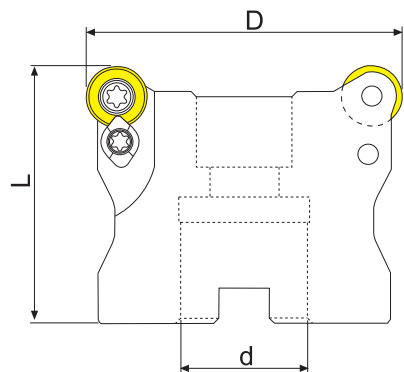
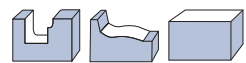
Inserts..» D04

Cutting Conditions..» D12



R W 角 R 殼 形 平 面 銑 刀 R6

RW R-Type Surface Milling Cutter



ITEM CODE	D	L	d	T	Insert	Insert Screw	Clamp+ Screw	Wrench
RW50-22.0-R6-4	50	50	22.0	4	RPMT1204MOE	M4 (S4001-1)	YR-16 M4.5 (S4501-1)	FT15 FT20
RW63-22.0-R6-5	63	50	22.0	5				
RW63-25.4-R6-5			25.4	5				
RW63-27.0-R6-5			27.0	5				
RW80-22.0-R6-5	80	55	22.0	5				
RW80-25.4-R6-5			25.4	5				
RW92-31.75-R6-6	92		31.75	6				

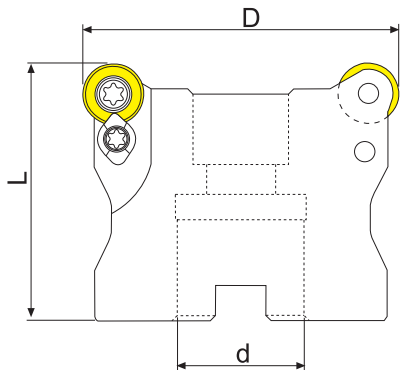
Inserts..» D04

Cutting Conditions..» D11



R M 角 R 殼 形 平 面 銑 刀 R5

RM R-Type Surface Milling Cutter



ITEM CODE	D	L	d	T	Insert	Insert Screw	Clamp+ Screw	Wrench
RM50-22.0-R5-4	50	50	22.0	4	RPMW1003MO	M4 (S4001-3)	YR-15 M3.5 (S3501-1)	FT15
RM50-25.4-R5-4	50	50	25.4	4				
RM63-22.0-R5-5	63	50	22.0	5				
RM63-25.4-R5-5	63	50	25.4	5				

Inserts..» D04

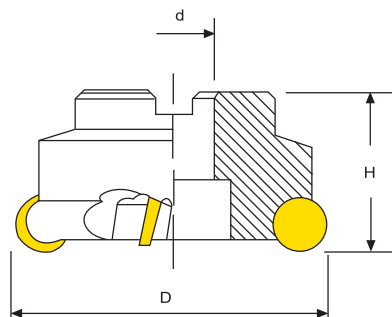
Cutting Conditions..» D11

角R端銑刀
R-Type Surface
Milling Cutter



GR 角 R 平面 銑 刀 R10

GR R - Type Surface Milling Cutter



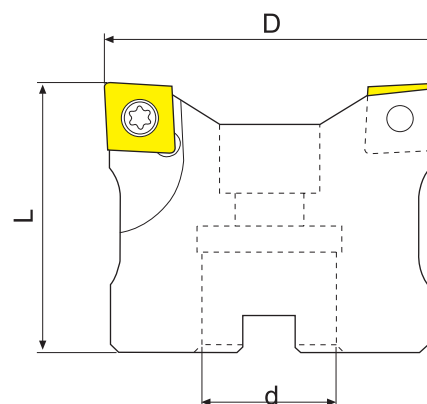
ITEM CODE	D	H	d	Insert	T	Wrench
GR120-31.75-6	120	60	31.75	RPMN2004	6	TH4

Cutting Data..》D11



ASV 高速軸向切削殼型銑刀

ASV Super Vertical Milling Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
ASV 50-22.0-3	50	50	22.0	3	MPHW120516ZEL MPMT120516ZEL	M5.0 (S5001-1)	FT20
ASV 50-22.225-3	50	50	22.225	3			
ASV 63-22.0-3	63	50	22.0	3			
ASV 63-22.0-4	63	50	22.0	4			
ASV 63-22.225-3	63	50	22.225	3			
ASV 63-22.225-4	63	50	22.225	4			
ASV 63-25.4-3	63	50	25.4	3			
ASV 63-25.4-4	63	50	25.4	4			

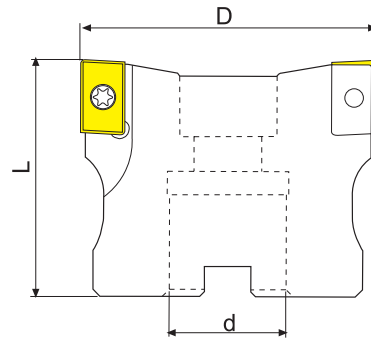
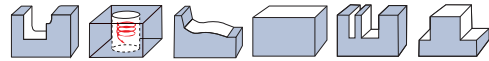
Inserts..》D18

Cutting Conditions..》D18



GPAHFB 直角殼形平面銑刀

GPAHFB Shell Type Surface Mill Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
GP500-22.0-4	50	45	22.0	4	AP__1604	M4 (S4001-1)	FT15
GP630-22.0-5	63	50	22.0	5			
GP630-25.4-5	63	50	25.4	5			
GP630-27.0-5	63	50	27.0	5			
GP800-31.75-6	80	55	31.75	6			
GP800-32.0-6	80	55	32.0	6			
GP1000-31.75-7	100	55	31.75	7			
GP1000-32.0-7	100	55	32.0	7			

Inserts..» D01

Cutting Conditions..» D07

ITEM CODE	D	L	d	T	Insert	Screw	Wrench
AHFB500-22.0-4	50	45	22.0	4	APMT150408R	M4 (S4001-3)	FT15
AHFB630-25.4-5	63	50	25.4	5			
AHFB800-31.75-6	80	55	31.75	6			

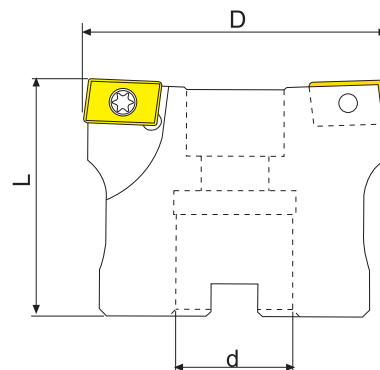
Inserts..» D01

Cutting Conditions..» D07



PE 殼形平面銑刀

PE Shell Type Surface Mill Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
PE630-22.0-4	63	50	22.0	4	AP__1604	M4 (S4001-1)	FT15
PE630-25.4-4	63	50	25.4	4			
PE800-25.4-5	80	55	25.4	5			
PE800-31.75-5	80	55	31.75	5			
PE1000-31.75-6	100	55	31.75	6			

Inserts..» D01

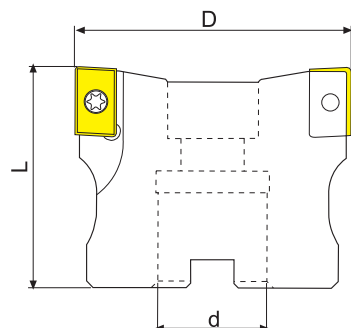
Cutting Conditions..» D07

殼形平面銑刀
Shell Type Surface
Mill Cutter



AHUB 高速進給平面銑刀

AHUB High-Feed Surface Milling Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
AHUB 50-22.0-4	50	45	22.0	4	JDMT150508R	M4.0 (S4001-3)	FT15
AHUB 50-22.225-4	50	45	22.225	4			
AHUB 63-22.0-5	63	50	22.0	5			
AHUB 63-22.225-5	63	50	22.225	5			
AHUB 63-25.4-5	63	50	25.4	5			
AHUB 80-22.0-6	80	55	22.0	6			
AHUB 80-25.4-6	80	55	25.4	6			
AHUB 100-31.75-7	100	55	31.75	7			
AHUB 100-32.0-7	100	55	32.0	7			

Inserts..» D14

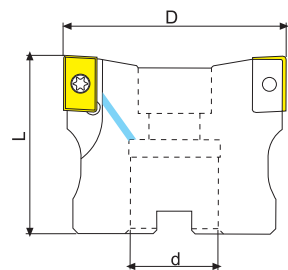
Cutting Conditions..» D14

殼形平面銑刀
Shell Type Surface
Mill Cutter



R390B.11 R390B.17 高速進給平面銑刀

R390B.11 R390B.17 High-Feed Surface Milling Cutter



With air hole	D	L	d	T	Insert	Screw	Wrench
R390B.11-50-22.0-7+A	50	50	22.0	7	R390 -11T304M-PM	M2.5 (S2503-3)	FT8
R390B.11-63-22.0-7+A	63	50	22.0	7			

Non air hole	D	L	d	T	Insert	Screw	Wrench
R390B.17-50-22.0-5	50	50	22.0	5	R390-170408M-PM	M3.5 (S3501-9)	FT15
R390B.17-63-22.0-6	63	50	22.0	6			
R390B.17-63-25.4-6	63	50	25.4	6			
R390B.17-80-31.75-7	80	55	31.75	7			
R390B.17-80-32.0-7	80	55	32.0	7			
R390B.17-100-31.75-7	100	55	31.75	7			
R390B.17-100-32.0-7	100	55	32.0	7			

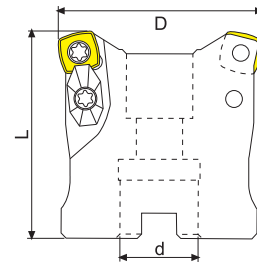
Inserts..» D24

Cutting Conditions..» D24



ASRF 高速角R殼型銑刀

ASRF Super Radius Surface Milling Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Clamp+Screw	Wrench
ASRF 50-22.0-3	50	50	22.0	3	SDMT1205ZDTN-R15 SDNW1205ZDTN-R15	M4.0 (S4003-6)	YR-06 M4.0 (S4008-6)	FT15
ASRF 50-22.225-3	50	50	22.225	3				
ASRF 50-22.0-4	50	50	22.0	4				
ASRF 50-22.225-4	50	50	22.225	4				
ASRF 63-22.0-3	63	50	22.0	3				
ASRF 63-22.225-3	63	50	22.225	3				
ASRF 63-22.0-4	63	50	22.0	4				
ASRF 63-22.225-4	63	50	22.225	4				
ASRF 63-25.4-3	63	50	25.4	3				
ASRF 63-25.4-4	63	50	25.4	4				
ASRF 80-31.75-4	80	55	31.75	4				
ASRF 80-32.0-4	80	55	32.0	4				
ASRF 80-31.75-5	80	55	31.75	5				
ASRF 80-32.0-5	80	55	32.0	5				

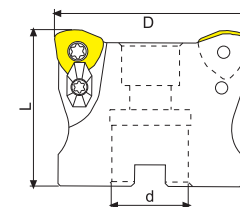
Inserts..» D19

Cutting Conditions..» D19



ASRT - 3 刃R角殼型銑刀

ASRT Three Corners-Radius Milling Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Clamp+Screw	Wrench
ASRT 50-22.0-3	50	50	22.0	3	JDMT120420 WDNW120420	M4.0 (S4003-6)	YR-06 M4.0 (S4008-6)	FT15
ASRT 50-22.225-3	50	50	22.225	3				
ASRT 50-22.0-4	50	50	22.0	4				
ASRT 50-22.225-4	50	50	22.225	4				
ASRT 52-22.0-4	52	50	22.0	4				
ASRT 52-22.225-4	52	50	22.225	4	JDMT140520 WDNW140520	M5.0 (S5002-8)	YR-08 M5.0 (S5003-1)	FT20
ASRT 63-22.0-4	63	50	22.0	4				
ASRT 63-22.225-4	63	50	22.225	4				
ASRT 63-25.4-4	63	50	25.4	4				
ASRT 80-22.0-5	80	60	22.0	5				
ASRT 80-25.4-5	80	60	25.4	5				
ASRT 80-31.75-5	80	60	31.75	5				
ASRT 100-31.75-6	100	60	31.75	6				
ASRT 100-32.0-6	100	60	32.0	6				

Inserts..» D20

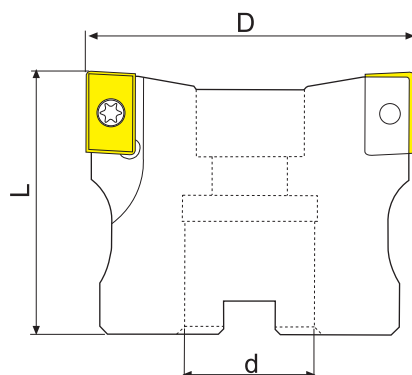
Cutting Conditions..» D20-2

殼形平面銑刀
Shell Type Surface
Mill Cutter



U E X B 直 角 殼 型 平 面 銑 刀

WEI GUAN UEXB Shell Type Surface Mill Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
UEXB 50-22.0-4	50	45	22.0	4	ADET160308SR	M4 (S4001-3)	FT15
UEXB 63-22.0-5	63	50	22.0	5			
UEXB 63-25.4-5	63	50	25.4	5			

Inserts..» D01

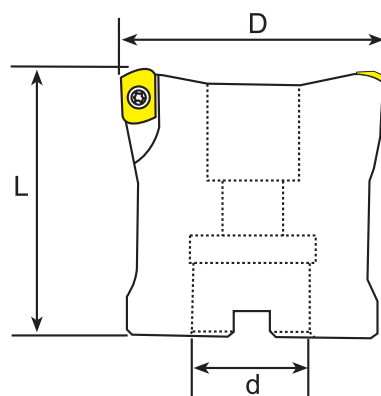
Cutting Conditions..» D07

殼形平面銑刀
Shell Type Surface
Mill Cutter



ASR20 多 刃 型 殼 型 平 面 銑 刀

WEI GUAN ASR20 Multi-Flutes Surface Mill Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
ASR20-50-22.0-7	50	50	22.0	7	EPNW0603TN-8	M2.5 (S2503-3)	FT8
ASR20-50-22.225-7		50	22.225	7			
ASR20-52-22.0-7	52	50	22.0	7			
ASR20-52-22.225-7		50	22.225	7			
ASR20-63-22.0-8	63	50	22.0	8			
ASR20-63-22.225-8		50	22.225	8			
ASR20-66-22.0-8	66	50	22.0	8			
ASR20-66-22.225-8		50	22.225	8			

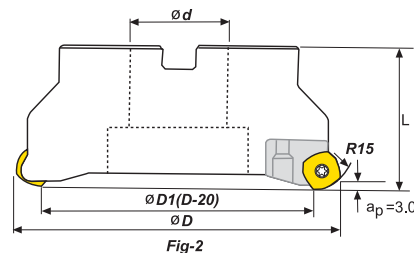
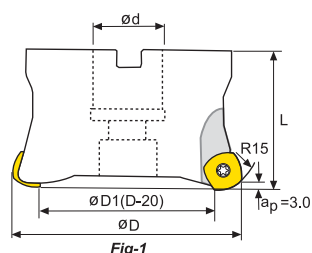
Inserts..» D20

Cutting Conditions..» D25-1



ASF5 高速角R殼型銑刀

ASF5 Super Radius Surface Milling Cutter



ITEM CODE	D	D1	L	d	T	Insert	Screw	Wrench	Shape
ASF5-63-22.225-4	63	43	50	22.225	4	SDNW1505ZDTN-R15	M5.0 (S5002-8)	FT20	Fig-1
ASF5-63-22.0-4			50	22.0	4				
ASF5-80-31.75-4	80	60	63	31.75	4				
ASF5-80-32.0-4			63	32.0	4				
ASF5-100-31.75-5	100	80	63	31.75	5				
ASF5-100-32.0-5			63	32.0	5				
ASF5-125-31.75-6	125	105	63	31.75	6				
ASF5-125-32.0-6			63	32.0	6				
ASF5-160-50.8-8	160	140	63	50.8	8		M5.0 (S5002-8)	FT20 TH4	Fig-2
ASF5-160-40.0-8			63	40.0	8				
ASF5-200-47.625-10	200	180	63	47.625	10				
ASF5-200-60.0-10			63	60.0	10				

Inserts...» D26

Cutting Conditions...» D26

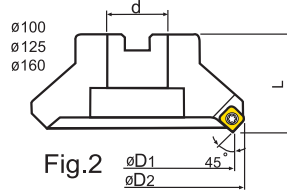
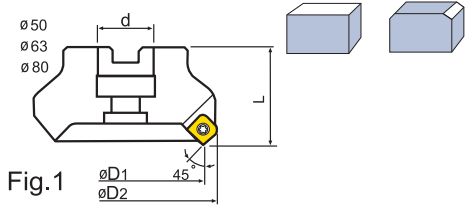
Insert Screw	Locater	Locater Screw	Wedge Screw	Wedge
S5002-8	ASF-SET	ASF-S01W	GCS816-2	GSC09

殼形平面銑刀
Shell Type Surface
Mill Cutter



ASX 445-45° 殼型平面銑刀

ASX445-45° Shell Type Surface Mill Cutter



ITEM CODE	D1	D2	L	d	T	Insert	Screw	Wrench	Shape
ASX 445-50-22.0-3	50	63	40	22.0	3	SE_T 13T3	M3.5 (S3506-4)	FT15 LH3.5	Fig,1
ASX 445-50-22.0-4					4				
ASX 445-50-22.0-5					5				
ASX 445-50-25.4-3	50	63	50	25.4	3				
ASX 445-50-25.4-4					4				
ASX 445-50-25.4-5					5				
ASX 445-63-22.0-4	63	75.9	45	22.0	4				
ASX 445-63-22.0-5					5				
ASX 445-63-22.0-6					6				
ASX 445-63-25.4-4	63	75.9	50	25.4	4				
ASX 445-63-25.4-5					5				
ASX 445-63-25.4-6					6				
ASX 445-80-25.4-4	80	93.2	50	25.4	4				Fig,2
ASX 445-80-25.4-6					6				
ASX 445-80-25.4-8					8				
ASX 445-80-27.0-4	80	93.2	50	27.0	4				
ASX 445-80-27.0-6					6				
ASX 445-80-27.0-8					8				
ASX 445-100-31.75-5	100	113.2	50	31.75	5				
ASX 445-100-31.75-7					7				
ASX 445-100-31.75-10					10				
ASX 445-100-32.0-5	100	113.2	50	32.0	5				
ASX 445-100-32.0-7					7				
ASX 445-100-32.0-10					10				
ASX 445-125-38.1-6	125	138	63	38.1	6				
ASX 445-125-38.1-8					8				
ASX 445-125-38.1-12					12				
ASX 445-125-40.0-6	125	138	63	40.0	6				
ASX 445-125-40.0-8					8				
ASX 445-125-40.0-12					12				
ASX 445-160-40.0-7	160	173	63	40.0	7				
ASX 445-160-40.0-10					10				
ASX 445-160-40.0-16					16				
ASX 445-160-50.8-7	160	173	63	50.8	7				
ASX 445-160-50.8-10					10				
ASX 445-160-50.8-16					16				

Inserts..» D27 Cutting Conditions..» D29

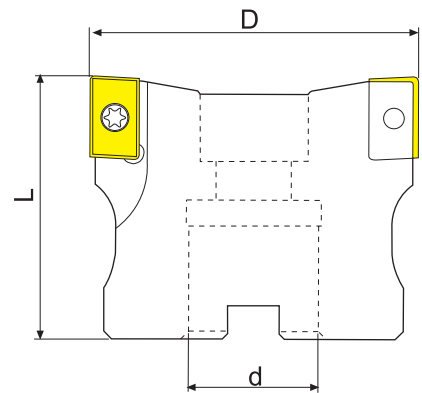
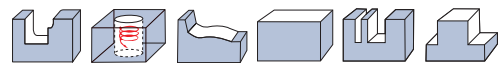
Carbide Shim	Shim Screw	Insert Screw
GMSE-T321	GCST-0535-2	S3506-4

殼形平面銑刀
Shell Type Surface
Mill Cutter



APX3000 高速進給平面銑刀

APX3000 High-Feed Surface Milling Cutter



ITEM CODE	D	L	d	T	Insert	Screw	Wrench
APX3000-40-16.0-6	40	45	16.0	6	AOMT1236__PEER AOGT1236__PEFR	M2.5 (S2503-3)	FT8
APX3000-50-22.0-7	50	45	22.0	7			
APX3000-63-22.0-8	63	50	22.0	8			
APX3000-63-25.4-8	63	50	25.4	8			

Inserts..» D 27

Cutting Conditions..» D 28

殼形平面銑刀
Shell Type Surface
Mill Cutter



WEI GUAN

MSD $\phi 12 \sim \phi 16$ Dx2 Dx3 Dx4

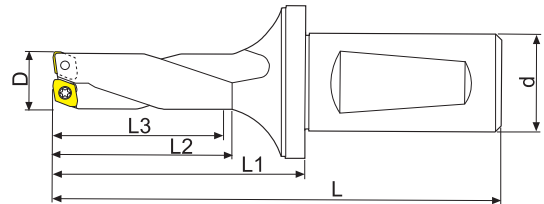
SD $\phi 16.5 \sim \phi 50$ Dx2

SD $\phi 16.5 \sim \phi 70$ Dx3

SD $\phi 16.5 \sim \phi 60$ Dx4

SD $\phi 20 \sim \phi 55$ Dx5





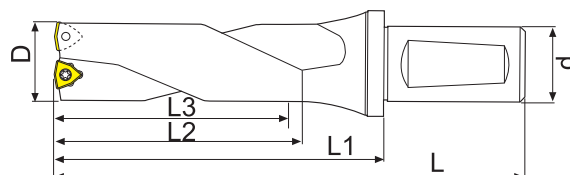
ITEM CODE	D	L	L ₁	L ₂	L ₃	d	Insert	Screw	Wrench
C20-MSD12-24LS	12	98	50	27	24	20	GCMT040204	M2.0 (S2001-1)	FT6
C20-MSD12-36LS	12	110	62	39	36				
C20-MSD12-48LS	12	122	74	51	48				
C20-MSD12.5-24LS	12.5	98	50	27	24				
C20-MSD12.5-36LS	12.5	110	62	39	36				
C20-MSD12.5-48LS	12.5	122	74	51	48				
C20-MSD13-26LS	13	100	52	29	26				
C20-MSD13-39LS	13	113	65	42	39				
C20-MSD13-52LS	13	126	78	55	52				
C20-MSD13.5-26LS	13.5	100	52	29	26				
C20-MSD13.5-39LS	13.5	113	65	42	39				
C20-MSD13.5-52LS	13.5	126	78	55	52				
C25-MSD14-28L	14	102	54	31	28	25(20)	GPMT060204	M2.2 (S2202-1)	FT6
C25-MSD14-42L	14	116	68	45	42	25(20)			
C20-MSD14-56L	14	130	82	59	56	20			
C25-MSD14.5-28L	14.5	102	54	31	28	25(20)			
C25-MSD14.5-42L	14.5	116	68	45	42	25(20)			
C20-MSD14.5-56L	14.5	130	82	59	56	20			
C25-MSD15-30L	15	104	65	33	30	25			
C25-MSD15-45L	15	119	80	48	45				
C25-MSD15-60L	15	134	95	63	60				
C25-MSD15.5-30L	15.5	104	65	33	30				
C25-MSD15.5-45L	15.5	119	80	48	45				
C25-MSD15.5-60L	15.5	134	95	63	60				
C25-MSD16-32L	16	106	67	35	32				
C25-MSD16-48L	16	122	83	51	48				
C25-MSD16-64L	16	138	99	67	64				

Inserts..》D21

Cutting Conditions..》D21

◎25柄徑銷售完，將由20柄徑取代
◎20 shank are supplied when the stock of
25 shank are depleted

快速鑽頭/粗搪刀/精搪刀
Drilling Tools
Boring Tools



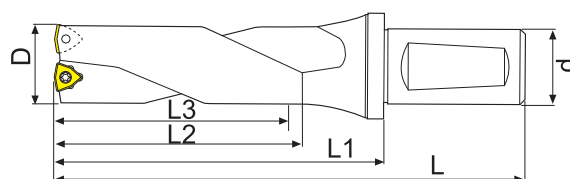
Dx 2

(2倍長)

ITEM CODE	D	L	L ₁	L ₂	L ₃	d	Insert	Screw	Wrench
C25-SD17-34L	17	124	69	37	34	25	WCMT030208	M2.5 (S2502-1)	FT8
C25-SD18-36L	18	126	71	39	36				
C25-SD19-38L	19	128	73	41	38				
C25-SD20-40L	20	130	75	43	40	25	WCMT040208	M2.5 (S2502-1)	FT8
C25-SD21-42L	21	132	77	45	42				
C25-SD22-44L	22	134	79	47	44				
C25-SD23-46L	23	136	81	49	46				
C25-SD24-48L	24	138	83	51	48				
C32-SD25-50L	25	148	88	53	50	32	WCMT050308	M3.0 (S3002-1)	FT8
C32-SD26-52L	26	150	90	55	52				
C32-SD27-54L	27	152	92	57	54				
C32-SD28-56L	28	154	94	59	56				
C32-SD29-58L	29	156	96	61	58				
C32-SD30-60L	30	158	98	63	60				
C32-SD31-62L	31	160	100	65	62				
C32-SD32-64L	32	162	102	67	64	32	WCMT06T308	M3.5 (S3506-1)	FT15
C32-SD33-66L	33	164	104	69	66				
C32-SD34-68L	34	166	106	71	68				
C32-SD35-70L	35	168	108	73	70				
C32-SD36-72L	36	170	110	75	72				
C32-SD37-74L	37	173	113	77	74				
C32-SD38-76L	38	176	116	79	76				
C32-SD39-78L	39	178	118	81	78				
C40-SD40-80L	40	191	126	83	80	40	WCMT080412	M4.0 (S4005)	FT15
C40-SD41-82L	41	194	129	85	82				
C40-SD42-84L	42	196	131	87	84				
C40-SD43-86L	43	198	133	89	86				
C40-SD44-88L	44	201	136	91	88				
C40-SD45-90L	45	203	138	93	90				
C40-SD46-92L	46	206	141	95	92				
C40-SD47-94L	47	208	143	97	94				
C40-SD48-96L	48	211	146	99	96				
C40-SD49-98L	49	213	148	101	98				
C40-SD50-100L	50	215	150	103	100				

Inserts..》D05

Cutting Conditions..》D13



Dx 3

(3 倍長)

ITEM CODE	D	L	L ₁	L ₂	L ₃	d	Insert	Screw	Wrench
C25-SD17-51L	17	133	77	56	51	25	WCMT030208	M2.5 (S2502-1)	FT8
C25-SD18-54L	18	137	81	59	54				
C25-SD19-57L	19	140	84	62	57				
C25-SD20-60L	20	145	87	66	60	25	WCMT040208	M2.5 (S2502-1)	FT8
C25-SD21-63L	21	148	90	67	63				
C25-SD22-66L	22	151	93	70	66				
C25-SD23-69L	23	154	96	73	69	32	WCMT050308	M3.0 (S3002-1)	FT8
C25-SD24-72L	24	157	99	76	72				
C32-SD20-60L	20	158	89	66	60				
C32-SD21-63L	21	161	92	67	63	32	WCMT06T308	M3.5 (S3506-1)	FT15
C32-SD22-66L	22	164	95	71	66				
C32-SD23-69L	23	167	99	74	69				
C32-SD24-72L	24	170	103	78	72	32	WCMT06T308	M3.5 (S3506-1)	FT15
C32-SD25-75L	25	173	107	81	75				
C32-SD26-78L	26	176	110	83	78				
C32-SD27-81L	27	179	113	86	81	32	WCMT06T308	M3.5 (S3506-1)	FT15
C32-SD28-84L	28	182	117	89	84				
C32-SD29-87L	29	185	120	92	87				
C32-SD30-90L	30	188	125	96	90	32	WCMT06T308	M3.5 (S3506-1)	FT15
C32-SD31-93L	31	191	129	99	93				
C32-SD32-96L	32	194	132	102	96				
C32-SD33-99L	33	197	136	105	99	32	WCMT06T308	M3.5 (S3506-1)	FT15
C32-SD34-102L	34	200	139	108	102				
C32-SD35-105L	35	203	143	111	105				
C32-SD36-108L	36	206	146	114	108	32	WCMT06T308	M3.5 (S3506-1)	FT15
C32-SD37-111L	37	210	150	117	111				
C32-SD38-114L	38	214	154	120	114				
C32-SD39-117L	39	217	157	123	117	32	WCMT06T308	M3.5 (S3506-1)	FT15

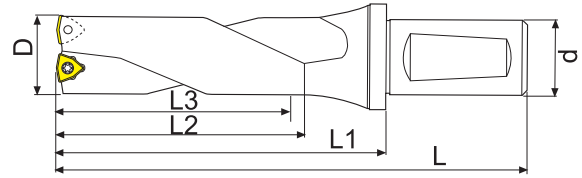
Inserts..» D05

Cutting Conditions..» D13



SD 捨棄式快速鑽頭 Dx3

SD Disposable Rapid Drilling Tools



Dx 3

(3 倍長)

ITEM CODE	D	L	L1	L2	L3	d	Insert	Screw	Wrench
C40-SD40-120L	40	235	161	126	120	40	WCMT080412	M4.0 (S4005)	FT15
C40-SD41-123L	41	238	165	129	123				
C40-SD42-126L	42	241	168	132	126				
C40-SD43-129L	43	244	171	135	129				
C40-SD44-132L	44	247	175	138	132				
C40-SD45-135L	45	250	178	141	135				
C40-SD46-138L	46	253	182	144	138				
C40-SD47-141L	47	256	185	147	141				
C40-SD48-144L	48	259	189	150	144				
C40-SD49-147L	49	262	192	153	147				
C40-SD50-150L	50	265	195	158	150				
C40-SD51-153L	51	268	198	162	153				
C40-SD52-156L	52	271	201	165	156				
C40-SD53-159L	53	274	204	168	159				
C40-SD54-162L	54	277	207	170	162				
C40-SD55-165L	55	280	210	175	165				
C40-SD56-168L	56	283	213	180	168				
C40-SD57-171L	57	285	215	185	171				
C40-SD58-174L	58	288	218	185	174				
C40-SD59-177L	59	290	220	187	177				
C40-SD60-180L	60	293	223	190	180	40	◎WCMT06T308 ◎WCMT090508	M3.5 (S3506-1)	FT15
C40-SD61-183L	61	295	225	190	183				
C40-SD62-186L	62	298	228	195	186				
C40-SD63-189L	63	301	231	195	189				
C40-SD64-192L	64	304	234	200	192				
C40-SD65-195L	65	307	237	200	195			M5.0 (S5003-2)	FT20
C40-SD66-198L	66	310	240	205	198				
C40-SD67-201L	67	312	242	205	201				
C40-SD68-204L	68	315	245	210	204				
C40-SD69-207L	69	318	248	210	207				
C40-SD70-210L	70	320	250	215	210				

Inserts..》D05

Cutting Conditions..》D13

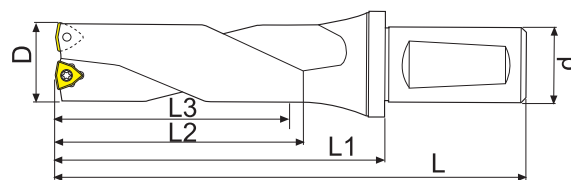
◎當WC09鑽頭銷售完庫存，將供應WC06系列鑽頭
◎WC06-Drilling tools are supplied when the stock of WC09-Drilling tools are depleted.



SD 捨棄式快速鑽頭

SD Disposable Rapid Drilling Tools

Dx2 Dx3 Dx4
POINT SPECIFICATION



Dx2 點數規格 POINT SPECIFICATION

SPEZIELLE TECHNISCHE DATEN									
ITEM CODE	D	L	L1	L2	L3	d	Insert	Screw	Wrench
C25-SD16.5-32L	16.5	114	58	37	32	25	WCMT030208	M2.5 (S2502-1)	FT8
C25-SD17.5-34L	17.5	116	60	39	34				
C25-SD18.5-36L	18.5	119	63	41	36				
C25-SD19.5-38L	19.5	121	65	43	38				
C25-SD20.5-40L	20.5	123	69	46	40	25	WCMT040208	M2.5 (S2502-1)	
C25-SD21.5-42L	21.5	125	71	47	42				
C25-SD22.5-44L	22.5	127	73	49	44				
C25-SD23.5-46L	23.5	130	76	51	46				
C25-SD24.5-48L	24.5	133	79	54	48	32	WCMT050308	M3.0 (S3002-1)	
C32-SD25.5-50L	25.5	148	82	56	50				
C32-SD26.5-52L	26.5	150	85	58	52				
C32-SD27.5-54L	27.5	152	87	60	54				
C32-SD28.5-56L	28.5	154	89	62	56				
C32-SD29.5-58L	29.5	156	91	64	58				

Dx3 點數規格 POINT SPECIFICATION

Table 3 规格值 POINT SPECIFICATION									
ITEM CODE	D	L	L1	L2	L3	d	Insert	Screw	Wrench
C25-SD16.5-48L	16.5	130	74	53	48	25	WCMT030208	M2.5 (S2502-1)	FT8
C25-SD17.5-51L	17.5	133	77	56	51				
C25-SD18.5-54L	18.5	137	81	59	54				
C25-SD19.5-57L	19.5	140	84	62	57				
C32-SD20.5-60L	20.5	158	89	66	60	32	WCMT040208	M2.5 (S2502-1)	
C32-SD21.5-63L	21.5	161	92	68	63				
C32-SD22.5-66L	22.5	164	95	71	66				
C32-SD23.5-69L	23.5	167	99	74	69				
C32-SD24.5-72L	24.5	170	103	78	72	32	WCMT050308	M3.0 (S3002-1)	
C32-SD25.5-75L	25.5	173	107	81	75				
C32-SD26.5-78L	26.5	176	111	84	78				
C32-SD27.5-81L	27.5	179	114	87	81				
C32-SD28.5-84L	28.5	182	117	90	84				
C32-SD29.5-87L	29.5	185	120	93	87				

Dx4 點數規格 POINT SPECIFICATION

POINT SPECIFICATION									
ITEM CODE	D	L	L1	L2	L3	d	Insert	Screw	Wrench
C25-SD16.5-64L	16.5	146	90	69	64	25	WCMT030208	M2.5 (S2502-1)	FT8
C25-SD17.5-68L	17.5	150	94	73	68				
C25-SD18.5-72L	18.5	155	99	77	72				
C25-SD19.5-76L	19.5	159	103	81	76				
C32-SD20.5-80L	20.5	178	108	85	80	32	WCMT040208	M2.5 (S2502-1)	
C32-SD21.5-84L	21.5	182	113	89	84				
C32-SD22.5-88L	22.5	186	117	93	88				
C32-SD23.5-92L	23.5	190	122	97	92				
C32-SD24.5-96L	24.5	194	127	102	96	32	WCMT050308	M3.0 (S3002-1)	
C32-SD25.5-100L	25.5	198	131	106	100				
C32-SD26.5-104L	26.5	202	136	110	104				
C32-SD27.5-108L	27.5	206	140	114	108				
C32-SD28.5-112L	28.5	210	145	118	112				
C32-SD29.5-116L	29.5	214	149	122	116				

Inserts..» D05

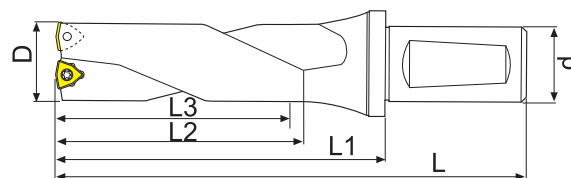
Cutting Conditions..» D13

快速鑽頭/粗搪刀/精搪刀
Drilling Tools
Boring Tools



SD 捨棄式快速鑽頭 Dx4

SD Disposable Rapid Drilling Tools



Dx 4

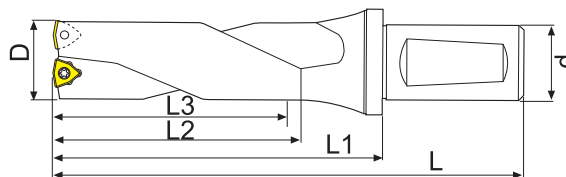
(4 倍長)

ITEM CODE	D	L	L1	L2	L3	d	Insert	Screw	Wrench
C25-SD17-68L	17	150	94	73	68	25	WCMT030208	M2.5 (S2502-1)	FT8
C25-SD18-72L	18	155	99	77	72				
C25-SD19-76L	19	159	103	81	76				
C32-SD20-80L	20	178	109	86	80	32	WCMT040208	M2.5 (S2502-1)	FT8
C32-SD21-84L	21	182	113	89	84				
C32-SD22-88L	22	186	117	93	88				
C32-SD23-92L	23	190	122	97	92				
C32-SD24-96L	24	194	127	102	96				
C32-SD25-100L	25	198	132	106	100	32	WCMT050308	M3.0 (S3002-1)	FT8
C32-SD26-104L	26	202	136	109	104				
C32-SD27-108L	27	206	140	113	108				
C32-SD28-112L	28	210	145	117	112				
C32-SD29-116L	29	214	149	121	116				
C32-SD30-120L	30	218	155	126	120				
C32-SD31-124L	31	222	160	130	124	32	WCMT06T308	M3.5 (S3506-1)	FT15
C32-SD32-128L	32	226	164	134	128				
C32-SD33-132L	33	230	169	138	132				
C32-SD34-136L	34	234	173	142	136				
C32-SD35-140L	35	238	178	146	140				
C32-SD36-144L	36	242	182	150	144				
C32-SD37-148L	37	247	187	154	148				
C32-SD38-152L	38	251	191	158	152				
C32-SD39-156L	39	256	196	162	156				

Inserts..》D05

Cutting Conditions..》D13

快速鑽頭/粗糖刀/精糖刀
Drilling Tools
Boring Tools



Dx 4

(4 倍長)

ITEM CODE	D	L	L1	L2	L3	d	Insert	Screw	Wrench
C40-SD40-160L	40	275	200	166	160	40	WCMT080412	M4.0 (S4005)	FT15
C40-SD41-164L	41	279	205	170	164				
C40-SD42-168L	42	283	209	174	168				
C40-SD43-172L	43	287	214	178	172				
C40-SD44-176L	44	291	219	182	176				
C40-SD45-180L	45	295	223	186	180				
C40-SD46-184L	46	299	227	190	184				
C40-SD47-188L	47	303	231	194	188				
C40-SD48-192L	48	307	235	198	192				
C40-SD49-196L	49	311	239	202	196				
C40-SD50-200L	50	315	243	206	200				
C40-SD51-204L	51	319	247	210	204				
C40-SD52-208L	52	323	251	214	208				
C40-SD53-212L	53	327	255	218	212				
C40-SD54-216L	54	331	259	222	216				
C40-SD55-220L	55	335	263	226	220				
C40-SD56-224L	56	339	267	230	224				
C40-SD57-228L	57	343	271	234	228				
C40-SD58-232L	58	347	275	238	232				
C40-SD59-236L	59	351	279	242	236				
C40-SD60-240L	60	355	283	246	240				

Inserts..» D05

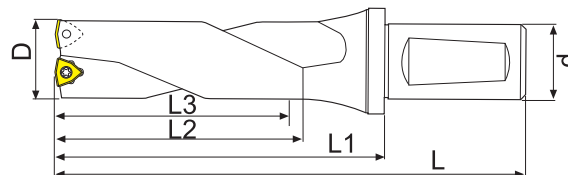
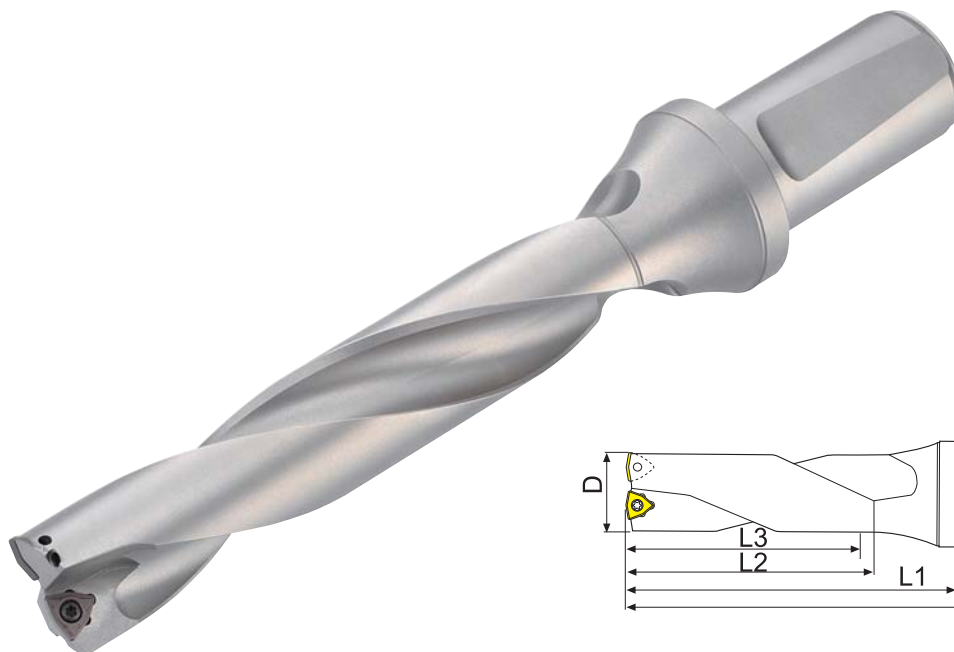
Cutting Conditions..» D13

快速鑽頭/粗搪刀/精搪刀
Drilling Tools
Boring Tools



SD 捨棄式快速鑽頭 Dx5

SD Disposable Rapid Drilling Tools



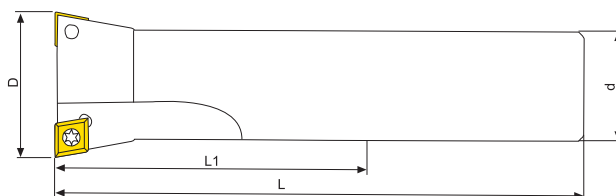
D x 5

(5 倍長)

ITEM CODE	D	L	L1	L2	L3	d	Insert	Screw	Wrench
C32-SD20-100L	20	198	129	106	100	32	WCMT040208	M2.5 (S2502-1)	FT8
C32-SD21-105L	21	203	134	110	105				
C32-SD22-110L	22	208	139	115	110				
C32-SD23-115L	23	213	145	120	115				
C32-SD24-120L	24	218	151	126	120				
C32-SD25-125L	25	223	157	131	125	32	WCMT050308	M3.0 (S3002-1)	FT8
C32-SD26-130L	26	228	162	135	130				
C32-SD27-135L	27	233	167	140	135				
C32-SD28-140L	28	238	173	145	140				
C32-SD29-145L	29	243	178	150	145				
C32-SD30-150L	30	248	185	156	150	32	WCMT06T308	M3.5 (S3506-1)	FT15
C32-SD31-155L	31	253	191	161	155				
C32-SD32-160L	32	258	196	166	160				
C32-SD33-165L	33	263	202	171	165				
C32-SD34-170L	34	268	207	176	170				
C32-SD35-175L	35	273	213	181	175				
C32-SD36-180L	36	278	218	186	180				
C32-SD37-185L	37	284	224	191	185				
C32-SD38-190L	38	289	229	196	190				
C32-SD39-195L	39	295	235	201	195	40	WCMT080412	M4.0 (S4005)	FT15
C40-SD40-200L	40	310	240	206	200				
C40-SD41-205L	41	316	246	211	205				
C40-SD42-210L	42	322	251	216	210				
C40-SD43-215L	43	327	257	221	215				
C40-SD44-220L	44	333	263	226	220				
C40-SD45-225L	45	339	268	231	225				
C40-SD46-230L	46	345	273	236	230				
C40-SD47-235L	47	350	278	241	235				
C40-SD48-240L	48	355	283	246	240				
C40-SD49-245L	49	360	288	251	245				
C40-SD50-250L	50	365	293	256	250				
C40-SD51-255L	51	370	298	261	255				
C40-SD52-260L	52	375	303	266	260				
C40-SD53-265L	53	380	308	271	265				
C40-SD54-270L	54	385	313	276	270				
C40-SD55-275L	55	390	318	281	275				

Inserts..» D05

Cutting Conditions..» D13



•L1長度可以提供4倍深度粗搪

Item Code	D	L1	L	d	Insert	Screw	Wrench						
GTB 15.7-135-16	15.7	85	135	16	CCMT060204	M2.5 (S2502-2)	FT7						
GTB 16.7-135-16	16.7	85	135										
GTB 17.7-135-16	17.7	85	135										
GTB 18.7-150-16	18.7	100	150										
GTB 19.7-150-16	19.7	100	150										
GTB 20.7-160-20	20.7	110	160	20				CCMT060204	M2.5 (S2502-2)	FT7			
GTB 21.7-160-20	21.7	110	160										
GTB 22.7-160-20	22.7	110	160										
GTB 23.7-170-20	23.7	120	170										
GTB 24.7-170-20	24.7	120	170										
GTB 25.7-190-20	25.7	140	190	25							CCMT060204	M2.5 (S2502-2)	FT7
GTB 26.7-190-25	26.7	140	190										
GTB 27.7-195-25	27.7	145	195										
GTB 28.7-195-25	28.7	145	195										
GTB 29.7-200-25	29.7	150	200										
GTB 30.7-200-25	30.7	150	200	32	CCMT09T308	M4.0 (S4001-3)	FT15						
GTB 31.7-200-25	31.7	150	200										
GTB 32.7-200-25	32.7	150	200										
GTB 33.7-210-32	33.7	150	210										
GTB 34.7-210-32	34.7	150	210										
GTB 35.7-220-32	35.7	160	220	42				CCMT09T308	M4.0 (S4001-3)	FT15			
GTB 36.7-220-32	36.7	160	220										
GTB 37.7-230-32	37.7	170	230										
GTB 38.7-230-32	38.7	170	230										
GTB 39.7-230-32	39.7	170	230										
GTB 41.7-240-32	41.7	180	240	42							CCMT09T308	M4.0 (S4001-3)	FT15
GTB 44.7-250-42	44.7	180	250										
GTB 46.7-260-42	46.7	190	260										
GTB 49.7-280-42	49.7	210	280										

Inserts..》D05



WEI GUAN

GEWN

CK BORING SYSTEM

CK 456 $\phi 1 \sim \phi 50$

CKB 123456 $\phi 20 \sim \phi 203$





WEI GUAN

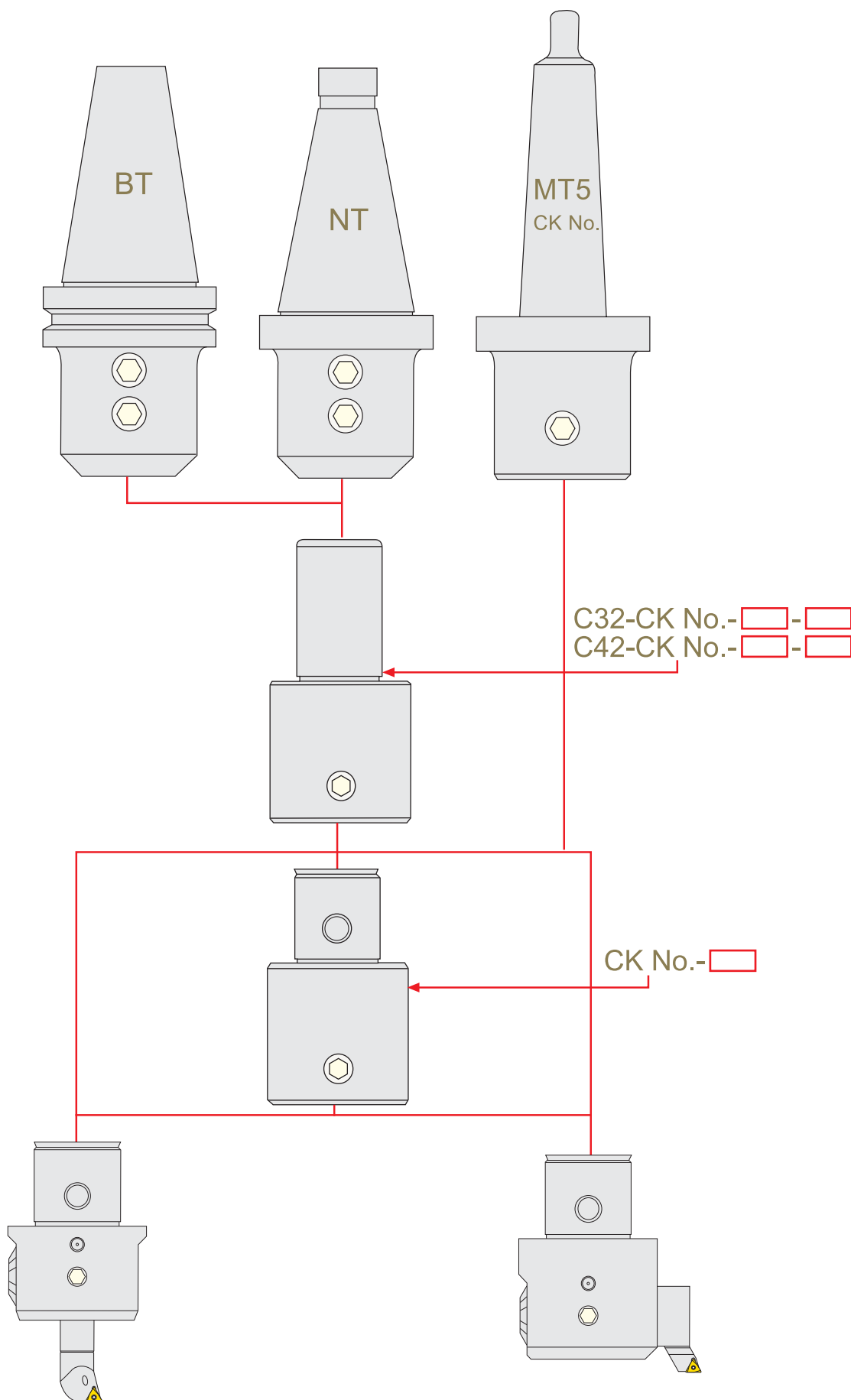


GEW Fine Boring System

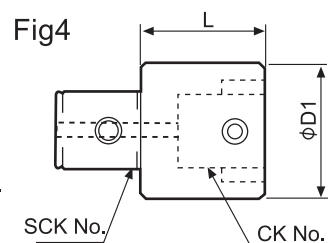
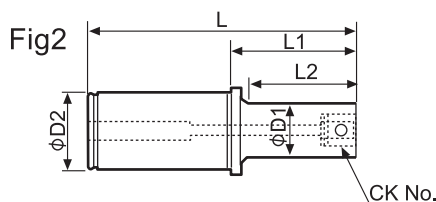
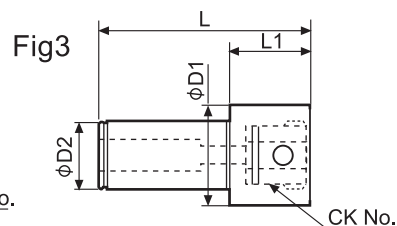
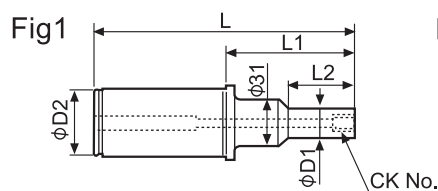


GEWN-CK 轉換刀桿 & 延長桿

GEWN -CK Reduction & Extensions Holders



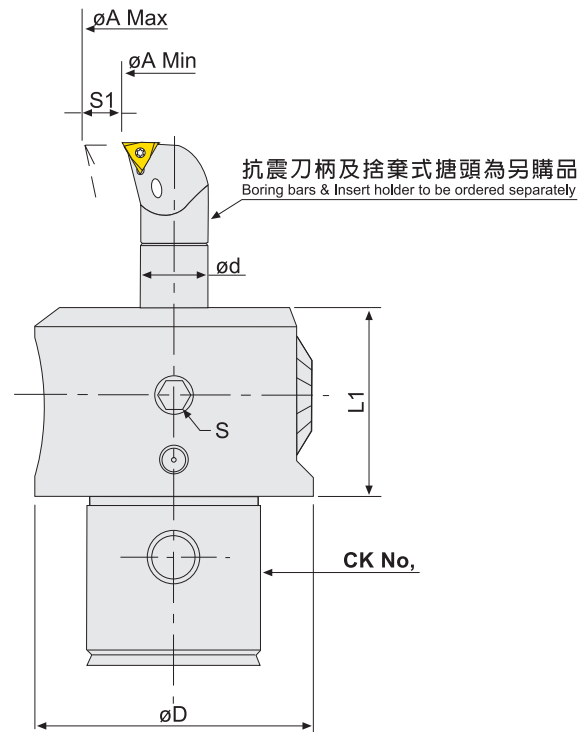
快速鑽頭/粗糖刀/精糖刀
Drilling Tools
Boring Tools



ITEM CODE	CK No.	SCK No.	L	L1	L2	D1	D2	Fig.
C32-CK1-40-157	1		157	77	40	19	32	1
C32-CK2-40-157	2		157	77	40	24		1
C32-CK3-69-157	3		157	77	70	31		2
C32-CK4-69-157	4		157	77	70	39		2
C32-CK5-69-157	5		157	77	70	50		2
C32-CK6-60-120	6		120	60		64		3
C42-CK1-40-157	1		157	77	40	19	42	1
C42-CK2-40-157	2		157	77	40	24		1
C42-CK3-69-157	3		157	77	70	31		2
C42-CK4-69-157	4		157	77	70	39		2
C42-CK5-69-157	5		157	77	70	50		2
C42-CK6-46-135	6		135	60		64		3
CK11-21	1	1	21			19		4
CK11-31	1	1	31					4
CK11-51	1	1	51					4
CK22-30	2	2	30			24		4
CK22-45	2	2	45					4
CK22-60	2	2	60					4
CK33-30	3	3	30			31		4
CK33-45	3	3	45					4
CK33-60	3	3	60					4
CK44-45	4	4	45			39		4
CK44-60	4	4	60					4
CK44-90	4	4	90					4
CK55-60	5	5	60			50		4
CK55-90	5	5	90					4
CK55-140	5	5	140					4
CK66-60	6	6	60			64		4
CK66-100	6	6	100					4
CK66-120	6	6	120					4
CK66-160	6	6	160					4
CK41-75	1	4	45			19		4



Boring Range $\varnothing 1 \sim \varnothing 50$



- * 清晰之大刻度盤，每刻度移動量為直徑0.01mm。
- * 中心通孔，可供切削液。
- * 請使用正確之六角扳手操作。
- * 在任何微調前，請先旋鬆固定螺絲"S"，調好後再鎖緊之。

- * One division on the scale corresponds to 0.01mm diametrical adjustment.
- * With spindle coolant supply.
- * Please use the correct hexagon wrenches.
- * Before adjusting, the screw "S" should be loosened first.

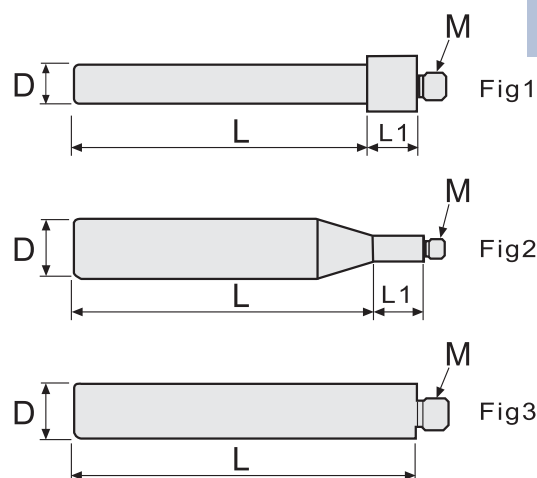
$\varnothing A$ Range	ITEM CODE	CK No,	$\varnothing d$	$\varnothing D$	L1	S1
1-22	GEWN2-22CK4	4	10	39	28.5	0-2.0
1-32	GEWN2-32CK5	5	12	50	36	0-3.5
1-50	GEWN2-50CK6	6	16	63.5	45	0-4.5

Inserts..》D05



G S T 抗 震 刀 柄

GST Steel Shank Boring Bars

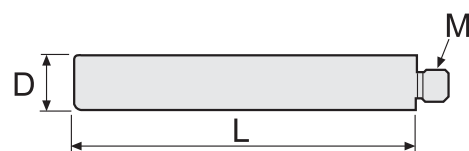
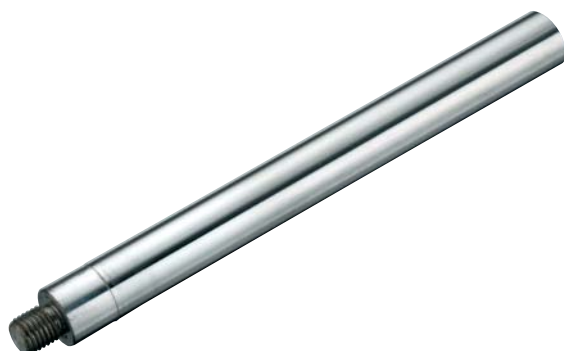


產 品 編 號	D	L	L1	M	Fig	組 合 搪 頭
GST08-M5-85	8	85		5	3	GEB09N GEB10.5N
GST10-M5-85	10	85	18		2	
GST12-M5-85	12	85	18		2	
GST10-M6-95	10	95		6	3	GEB12N
GST12-M6-135	12	135		6	3	GEB14N GEB16N
GST10-M10-95	10	95	12	10	1	GEB18N GEB46N
GST12-M10-135	12	135	12		1	
GST16-M10-165	16	165			3	



G S T W 鎢 鋼 抗 震 刀 柄

GSTW Solid Carbide Shank Boring Bars



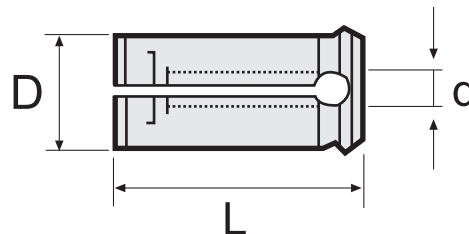
產 品 編 號	D	L	M	組 合 搪 頭
GSTW08-M5-85	8	85	5	GEB09N GEB10.5N
GSTW10-M6-95	10	95	6	GEB12N
GSTW12-M6-135	12	135	6	GEB14N GEB16N
GSTW12-M10-135	12	135	10	GEB18N GEB46N
GSTW16-M10-165	16	165	10	

快速鑽頭/粗搪刀/精搪刀
Drilling Tools
Boring Tools



G E C 精 搪 頭 - 刀 柄 套 筒

G E C R e d u c t i o n S l e e v e s

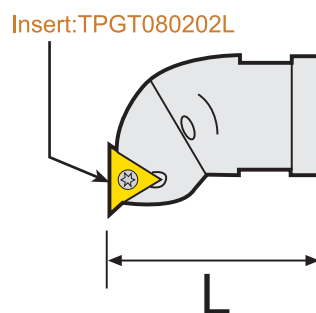


產 品 編 號	D	d	L
GEC-1608	16	08	40
GEC-1610	16	10	40
GEC-1612	16	12	40



G E B 捨 棄 式 搪 頭

GEB Interchangeable Insert Holders



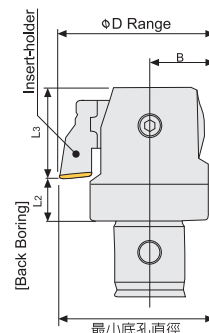
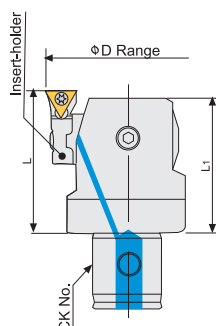
產 品 編 號	搪 孔 能 力	L(mm)	Screw
GEB09N	ø9~ø10.5	18	S2001-1
GEB10.5N	ø10.5~ø12	18	
GEB12N	ø12~ø14	23	S2001-3
GEB14N	ø14~ø16	23	
GEB16N	ø16~ø18	23	
GEB18N	ø18~ø20	27	
GEB20N	ø20~ø22	27	
GEB22N	ø22~ø24	27	
GEB24N	ø24~ø26	27	
GEB26N	ø26~ø28	27	

產 品 編 號	搪 孔 能 力	L(mm)	Screw
GEB28N	ø28~ø30	27	S2001-3
GEB30N	ø30~ø32	27	
GEB32N	ø32~ø34	27	
GEB34N	ø34~ø36	27	
GEB36N	ø36~ø38	27	
GEB38N	ø38~ø40	27	
GEB40N	ø40~ø42	27	
GEB42N	ø42~ø46	27	
GEB46N	ø46~ø50	27	

快速鑽頭/粗搪刀/精搪刀
Drilling Tools
Boring Tools



Boring Range Ø20~Ø203



最小底孔直徑 = B + (反搪加工直徑/2)

ITEM CODE	CK No.	Insert-holder	正搪 Boring			反搪 Back Boring				Insert		
			ØD Range	L	L1	ØD Range	L2	L3	B			
GEWN 20- 36CKB1	1	GENH1-1	20~26	32.5	29.5	—	10.5	19	10	TP0802		
		GENH1-2	25~31			30~31						
		GENH1-3	30~36			30~36						
GEWN 25- 47CKB2	2	GENH2-1	25~33	35.5	32.5	—	11.5	21	12.5		TP0802	
		GENH2-2	32~40			36~40						
		GENH2-3	39~47			39~47						
GEWN 32- 60CKB3	3	GENH3-1	32~42	40	35	—	10	25	16			TP0802
		GENH3-2	41~51			46~51						
		GENH3-3	50~60			50~60						
GEWN 41- 74CKB4	4	GENH4-1	41~54	47	43	—	14	29	20	TP0802		
		GENH4-2	50~63			53~63						
		GENH4-3	61~74			61~74						
GEWN 53- 95CKB5	5	GENH5-1	53~70	57	53	62~70	19	34	25.5		TP0802	
		GENH5-2	65~82			65~82						
		GENH5-3	78~95			78~95						
GEWN 68- 150CKB6	6	GENH6-1	68~100	71	67.2	80~100	22	45.2	32.5			TP0802
		GENH6-2	94~126			94~126						
		GENH6-3	118~150			118~150						
GEWN 100- 203CKB6	6	GENH6-1	100~153	71	67.2	112~153	22	45.2	45.5	TP0802		
		GENH6-2	126~179			126~179						
		GENH6-3	150~203			150~203						

1.加工範圍是指TP08刀片的刀尖半徑RO.2、TC11刀片的刀尖半徑RO.4時的值。

2.附帶GENH○-1刀片座。GENH○-2、GENH○-3刀片座需要另購。

3.反搪加工時，主軸應反轉。

4.不附帶刀片。

5.中心有內冷孔。

6.最高切削速度為Vmax=1200m/min。



GENH 刀片座

GENH Insert-holder

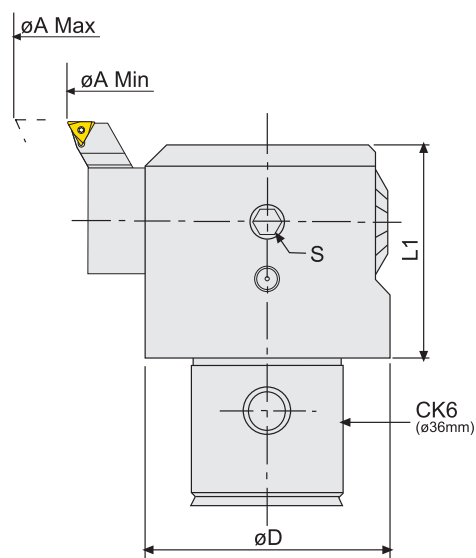
ITEM CODE	TYPE	Boring Head No.	ITEM CODE	TYPE	Boring Head No.
GENH1-1	 Insert-TP0802 (S2001-3)	GEWN20-36CKB1	GENH4-1	 Insert-TC1102 (S2503-3)	GEWN41-74CKB4
GENH1-2			GENH4-2		
GENH1-3			GENH4-3		
GENH2-1		GEWN25-47CKB2	GENH5-1		GEWN53-95CKB5
GENH2-2			GENH5-2		
GENH2-3			GENH5-3		
GENH3-1		GEWN32-60CKB3	GENH6-1		GEWN68-150CKB6 GEWN100-203CKB6
GENH3-2			GENH6-2		
GENH3-3			GENH6-3		

1.不附帶刀片，請另外訂購。

Inserts..》D05

Cutting Conditions..》D23

Boring Range Ø68~Ø150



- * 清晰之大刻度盤，每刻度移動量為直徑0.01mm。
- * 訂購精搪頭已包含一只精搪刀片座在內。
- * 請使用正確之六角扳手及星型扳手操作。
- * 在任何微調前，請先旋鬆固定螺絲"S"，調好後再鎖緊之。

- * One division on the scale corresponds to 0.01mm diametrical adjustment.
- * Included in the delivery are insert holders type GEB68.
- * Please use the correct hexagon and stellar wrenches.
- * Before adjusting, the screw "S" should be loosened first.

ITEM CODE	ØA Range	ØD	L1	Insert
GEW68-100CK6	Ø68~Ø100mm	63mm	63mm	TPGT080202L
GEW100-153CK6	Ø100~Ø153mm	95mm	65mm	TPGT080202L

Insert Holder	ITEM CODE	Insert	Screw	Wrench
	GEWH-01 (GEB68)	TPGT080202L	M2.0 (S2001-3)	FT6

Insert Holder	ITEM CODE	Insert	Screw	Wrench
	GEB 25	TPGT080202L	M2.0 (S2001-3)	FT6
	GEB 32			
	GEB 41			
	GEB 53			

Insert...D05

Wrench Stellar Wrench Hexagon





T For Wrench Stellar



T For Wrench Hexagon

11N-T型 星型扳手	
★	11N-TT 8
	11N-TT 9
	11N-TT 10
	11N-TT 15
	11N-TT 20

11N-T型 六角扳手	
⬡	11N-TH 2.0
	11N-TH 2.5
	11N-TH 3.0
	11N-TH 3.5
	11N-TH 4.0



Straight For Wrench Stellar



L For Color Wrench Hexagon

直柄星型扳手	
★	11N-ST 5
	11N-ST 6
	11N-ST 7
	11N-ST 8
	11N-ST 9
	11N-ST 10

L型彩色六角扳手 (mm) (inch)	
⬡ (mm)	⬡ (inch)
11N-LH 1.5	11N-LH 1/16
11N-LH 2.0	11N-LH 1/8
11N-LH 2.5	11N-LH 1/4
11N-LH 3.0	11N-LH 5/64
11N-LH 4.0	11N-LH 5/32
11N-LH 5.0	11N-LH 5/16
11N-LH 6.0	11N-LH 3/32
11N-LH 8.0	11N-LH 3/16
11N-LH 10.0	11N-LH 3/8



Flag For Wrench Stellar

旗型星型扳手	
★	FT5
	FT6
	FT7
	FT8
	FT9
	FT10
	FT15
	FT20



T For Wrench Stellar

T型星型扳手	
★	TT8
	TT9
	TT10
	TT15
	TT20
	TT25
	TT30



Straight For Wrench Stellar

直柄星型扳手	
★	ST8
	ST9
	ST10
	ST15
	ST20
	ST25
	ST30



L For Wrench Stellar

L型星型扳手	
★	LT5
	LT15
	LT6
	LT20
	LT7
	LT25
	LT8
	LT30
	LT9
	LT10



Flag For Wrench Hexagon

旗型六角板手	
	FH 1.5
	FH 2.0
	FH 2.5
	FH 3.0



T For Wrench Hexagon

T型六角板手	
	TH2.5 — 115L
	TH2.5 — 135L
	TH3 — 115L
	TH3 — 135L
	TH3 — 185L
	TH4 — 100L
	TH4 — 130L
	TH4 — 160L
	TH5 — 100L
	TH5 — 150L
	TH5 — 180L
	TH6 — 100L
	TH6 — 150L
	TH6 — 210L



L For Wrench Hexagon

L型六角板手	
	LH 1.5
	LH 2.0
	LH 2.5
	LH 3.0
	LH 3.5
	LH 4.0
	LH 5.0
	LH 6.0



T For Wrench Hexagon

T型六角板手	
	09N-TH6 — 120L
	09N-TH6 — 210L
	09N-TH8 — 177L
	09N-TH10 — 179L

Turning Accessories *Milling Accessories*



特點:

- 橫向拉出鎖刀座之軸心，可輕易的讓鎖刀座做向左及向右共5個45°定位旋轉
- 便利快速的緊固刀柄系統，可防止刀柄於水平裝夾刀具時，發生刀柄掉落現象

Features:

- Horizontally withdraw axis of the tool tightening fixture allowing tool tightening fixture to rotate both left and right at a angle of 45° for a total of five rotating.
- Rapidly and efficiently in securing tool tightening fixture system can effectively prevent the shank from falling when secured to the cutter horizontally.

GTF-HSK63



安全型鎖刀座
Intrinsically Safety Type
Tightening Fixture

PAT. 專利產品

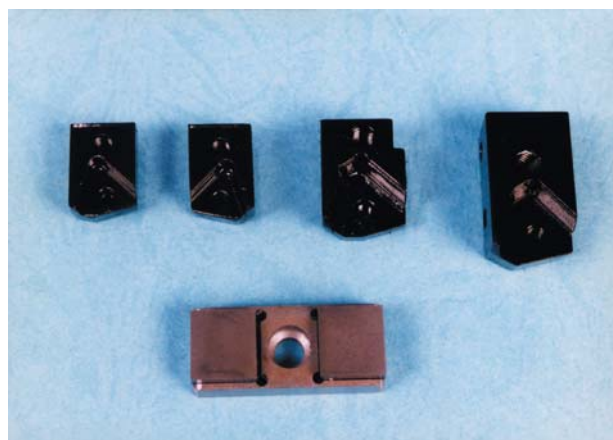
ITEM CODE	kg
GTF-HSK25	3.7
GTF-HSK32	3.7
GTF-HSK40	3.7
GTF-HSK50	3.9
GTF-HSK63	3.9
GTF-HSK100	4.9
GTF-BT30	4.0
GTF-BT40	4.1
GTF-BT50	5.1

GTF-BT40





ITEM CODE	INNER DIA(mm)	Extending length(mm)	ITEM CODE	INNER DIA(mm)	Extending length(mm)
BOX-22130	22	130~185	BOX-42135	42	135~210
BOX-22180	22	180~235	BOX-47155	47	155~205
BOX-27130	27	130~200	BOX-47185	47	185~235
BOX-27200	27	200~270	BOX-47230	47	230~280
BOX-32135	32	135~200	BOX-53140	53	140~210
BOX-36260	36	260~350	BOX-53185	53	185~255
BOX-38135	38	135~185	BOX-53285	53	285~355
BOX-38185	38	185~235	BOX-65280	65	280~480



- ◆ 深孔鑽配件（日式）
- ◆ 精銑刀座、粗銑刀座（各類型）
- ◆ 刀頭導墊



- ◆ 深孔鑽配件（歐式）
- ◆ 精銑刀座、粗銑刀座（各類型）
- ◆ 刀頭導墊及螺絲

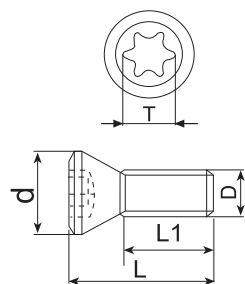


緯冠刀具專業用螺絲/板手扭力國際標準值對照表

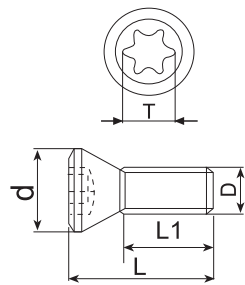
螺絲尺寸(mm)	星型板手規格	扭力大小
M1.8	T5-T6	0.5Nm
M2.0	T5-T6	0.5-0.6Nm
M2.2	T6-T7	0.6-0.8Nm
M2.5	T7-T8	0.9-1.0Nm
M3.0	T8-T10	1.1-2.0Nm
M3.5	T9-T15	2.0-2.5Nm
M4.0	T10-T15	3.0-3.8Nm
M4.5	T15-T20	3.8-4.0Nm
M5.0	T20-T25	5.0Nm
M6.0	T20-T30	6.0Nm

★: 螺絲如有使用螺絲油或等值品須減少扭力值.

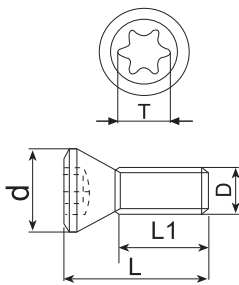
★: Excessive tightening force will damage the screw or wrench.



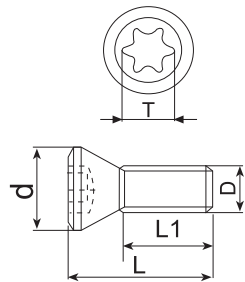
型 號	D	d	L	L1	T	備 註
S1601-1	M1.6*0.35	2.69	3.66	1.83	6	
S1601-2	M1.6*0.35	2.50	4.15	2.20	6	
S1601-3	M1.6*0.35	2.49	3.26	1.45	6	
S1601-5	M1.6*0.35	2.58	3.45	1.60	6	
S1801-2	M1.8*0.35	2.46	4.30	3.00	6	精搪刀具用
S1801-3	M1.8*0.35	2.55	4.00	2.24	6	
S1801-4	M1.8*0.35	2.54	3.14	1.50	6	
S2001-1	M2.0*0.4	2.68	3.70	2.30	6	精搪頭
S2001-2	M2.0*0.4	3.20	5.15	3.10	6	精搪頭
S2001-3	M2.0*0.4	2.68	4.90	3.55	6	精搪刀具用
S2001-5	M2.0*0.4	3.25	6.08	4.10	6	精搪刀具用
S2001-6	M2.0*0.4	2.79	4.54	2.42	6	
S2001-7	M2.0*0.4	3.66	5.37	3.71	6	
S2001-8	M2.0*0.4	2.88	5.49	3.89	6	
S2001-9	M2.0*0.4	3.00	5.55	3.81	6	
S2201-1	M2.2*0.45	3.45	5.60	3.50	7	一般共用
S2202-1	M2.2*0.45	3.05	4.95	3.50	6	一般共用
S2202-2	M2.2*0.45	3.35	5.50	3.10	7	一般共用
S2202-3	M2.2*0.45	2.86	4.70	3.17	6	
S2202-4	M2.2*0.45	3.07	4.75	3.22	7	
S2202-5	M2.2*0.45	3.05	5.90	4.00	7	
S2209-1	M2.2*0.45	3.01	4.20	2.77	6	



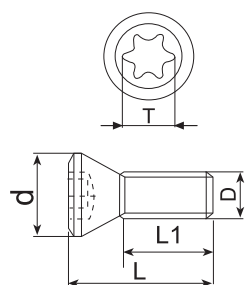
型 號	D	d	L	L1	T	備 註
S2501-3	M2.5*0.45	3.50	7.00	4.25	8	一般共用
S2501-5	M2.5*0.45	3.64	8.80	6.10	8	一般共用（加長）
S2502-1	M2.5*0.45	3.65	6.50	3.90	8	GJU,RAH刀片
S2502-2	M2.5*0.45	3.40	5.65	3.90	7	P26315-R10,R12
S2502-3	M2.5*0.45	3.65	5.12	2.80	8	GJU,RAH刀片
S2502-4	M2.5*0.45	3.52	6.30	4.10	8	ASJ20刀片
S2502-7	M2.5*0.45	3.70	6.20	3.25	8	
S2502-8	M2.5*0.45	3.63	5.90	3.25	8	
S2502-9	M2.5*0.45	3.22	6.50	4.00	7	
S2502-10	M2.5*0.45	3.29	5.52	3.10	8	
S2502-11	M2.5*0.45	3.41	4.72	2.50	7	DIJET CSW-2547
S2503-1	M2.5*0.45	3.45	7.30	5.10	8	山特R390刀片
S2503-2	M2.5*0.45	4.10	6.35	4.00	8	住友WCMT040208刀片
S2503-3	M2.5*0.45	3.65	6.20	3.80	8	一般共用
S2503-4	M2.5*0.45	3.48	6.58	4.70	8	
S2503-5	M2.5*0.45	3.70	6.00	3.80	8	京瓷刀片用
S2503-6	M2.5*0.45	4.50	6.75	4.25	8	
S2503-7	M2.5*0.45	3.35	4.60	2.90	6	
S2503-8	M2.5*0.45	3.57	5.00	3.13	8	
S2503-9	M2.5*0.45	3.55	5.95	3.90	8	
S2503-10	M2.5*0.45	3.55	7.92	6.00	8	
S2503-11	M2.5*0.45	4.10	5.58	3.00	8	
S2503-12	M2.5*0.45	3.51	5.94	3.37	8	
S2503-13	M2.5*0.45	3.49	6.48	3.90	8	
S2503-15	M2.5*0.45	3.60	6.60	4.45	8	DIJET-TSW-2567H
S2503-16	M2.5*0.45	3.60	5.62	3.35	8	DIJET-TSW-2556H
S2503-17	M2.5*0.45	3.32	8.68	6.20	8	SANDVIK



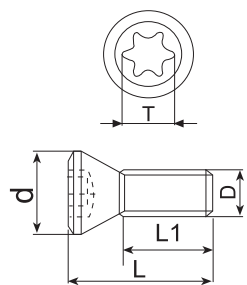
型 號	D	d	L	L1	T	備 註
S3001-2	M3.0*0.5	3.82	6.85	5.00	8	RAH R4刀片
S3001-4	M3.0*0.5	4.40	8.00	5.65	10	ASJ,SE,車床刀片用
S3001-5	M3.0*0.5	4.30	10.0	7.40	10	BIG刀片
S3001-6	M3.0*0.5	4.35	8.00	6.00	10	車床特殊刀片用 (釘頭)
S3001-7	M3.0*0.5	4.30	6.40	4.00	10	一般共用
S3001-8	M3.0*0.5	3.91	6.00	3.35	8	三菱TS3
S3001-9	M3.0*0.5	4.25	7.50	4.85	10	DIJET-DSW-307H
S3001-10	M3.0*0.5	4.30	7.60	5.05	10	DIJET-TSW-307H
S3002-1	M3.0*0.5	3.95	6.70	3.85	8	RAM R4刀片
S3002-2	M3.0*0.5	3.75	6.00	3.30	10	RAH R4刀片
S3002-3	M3.0*0.5	3.75	8.50	5.85	10	
S3002-5	M3.0*0.5	4.20	6.70	4.25	9	車床刀片用
S3002-6	M3.0*0.5	4.40	8.20	5.80	9	
S3002-7	M3.0*0.5	4.52	5.97	3.40	8	
S3002-71	M3.0*0.5	4.50	5.50	3.10	8	
S3002-8	M3.0*0.5	3.97	6.22	4.37	8	
S3002-9	M3.0*0.5	3.96	8.15	6.00	8	
S3002-10	M3.0*0.5	4.49	7.83	5.02	10	
S3002-11	M3.0*0.5	3.80	6.17	4.35	8	
S3003-1	M3.0*0.5	4.33	9.36	6.20	10	RCF20刀片
S3003-2	M3.0*0.5	5.52	8.50	4.20	10	
S3003-3	M3.0*0.5	4.15	6.30	3.35	10	日立265-143
S3004-1	M3.0*0.5	4.65	8.65	6.58	8	
S3008-1	M3.0*0.5	5.00	6.25	3.60	10	
S3008-2	M3.0*0.5	4.80	7.05	4.50	10	
S3009-1	M3.0*0.5	4.16	7.83	3.52	8	
SU3200-1	W1/8*40	5.65	12.25	9.45	10	
SU3001-7	M3.0*0.5	4.55	7.82	5.00	10	
S3018-1	M3.0*0.5	5.52	12.28	9.70	10	
S3020-1	M3.0*0.5	4.20	7.85	5.05	10	



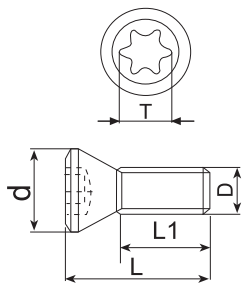
型 號	D	d	L	L1	T	備 註
S3501-1	M3.5*0.6	5.20	7.75	4.80	15	一般共用
S3501-2	M3.5*0.6	5.30	11.70	8.10	15	BIG 1504刀片用(大頭)
S3501-3	M3.5*0.6	5.55	8.65	5.00	15	BIG 1504刀片用(大頭)
S3501-5	M3.5*0.6	5.17	10.60	8.30	15	一般共用 (加長)
S3501-6	M3.5*0.6	5.20	13.70	10.50	15	車床刀片用 (加長)
S3501-7	M3.5*0.6	5.54	8.75	5.50	15	WT刀片用
S3501-8	M3.5*0.6	5.64	8.53	5.40	15	
S3501-9	M3.5*0.6	5.31	8.52	5.35	15	
S3501-10	M3.5*0.6	4.70	9.35	4.55	10	Ssandvik-880
S3502-1	M3.5*0.6	5.00	8.20	5.40	15	S3518-1
S3502-2	M3.5*0.6	4.77	6.82	4.20	10	
S3504-1	M3.5*0.6	6.65	8.67	5.85	15	
S3506-1	M3.5*0.6	5.00	9.00	6.50	15	SD-WCMT06 刀片
S3506-2	M3.5*0.6	5.80	8.84	4.90	15	一般共用 (加長)
S3506-3	M3.5*0.6	5.05	9.37	6.95	15	
S3506-4	M3.5*0.6	5.20	11.30	7.75	15	
S3506-5	M3.5*0.6	5.11	9.26	6.06	15	
S3506-6	M3.5*0.6	5.30	8.90	5.70	15	DIJET-TSW-3509H
S3507-1	M3.5*0.6	5.51	12.05	8.95	15	
S3507-2	M3.5*0.6	5.48	8.40	5.00	15	
S3507-3	M3.5*0.6	5.53	8.65	5.10	15	
S3508-1	M3.5*0.6	4.90	8.25	4.85	15	S3512-1
S3509-1	M3.5*0.6	4.85	9.30	6.60	10	京瓷刀片用
S3510-1	6#*32T	5.56	12.50	9.10	15	
S3520-1	M3.5*0.6	4.80	10.15	5.65	15	



型 號	D	d	L	L1	T	備 註
S4001-1	M4.0*0.7	5.60	8.73	5.50	15	AQXR,JTS刀片(厚頭)
S4001-2	M4.0*0.7	5.70	10.25	6.95	15	一般共用(加長厚頭)
S4001-3	M4.0*0.7	5.60	8.75	5.70	15	GJU,RCF刀片(薄頭)
S4001-5	M4.0*0.7	5.60	10.35	7.25	15	一般共用(加長薄頭)
S4001-6	M4.0*0.7	6.05	10.55	6.50	15	日立RDMT1204刀片
S4001-7	M4.0*0.7	5.70	11.05	8.25	15	
S4001-8	M4.0*0.7	5.20	10.50	7.53	15	
S4001-9	M4.0*0.7	5.65	11.60	9.20	15	
S4001-10	M4.0*0.7	5.41	8.02	4.61	15	三菱TS4
S4001-11	M4.0*0.7	5.41	9.88	6.52	15	三菱TS43
S4001-12	M4.0*0.7	5.61	7.66	4.75	15	
S4001-13	M4.0*0.7	5.30	9.90	7.50	15	DIJET-TSW-410H
S4002-2	W1/6*32	7.10	15.10	11.20	20	
S4003-1	M4.0*0.7	5.13	8.05	4.95	15	RAH R5刀片
S4003-2	M4.0*0.7	5.13	11.0	7.90	15	RAH R5刀片(加長)
S4003-3	M4.0*0.7	4.92	9.00	6.20	15	P28415-0刀片(薄頭)
S4003-5	M4.0*0.7	5.15	9.00	6.18	15	
S4003-6	M4.0*0.7	5.53	9.68	5.65	15	RH-R6,ASRF,ASRT
S4003-7	M4.0*0.7-L	5.80	10.22	6.75	15	左牙
S4003-8	M4.0*0.7	5.18	10.08	6.67	15	
S4004-1	M4.0*0.7	5.95	10.00	6.40	15	R3.5
S4005-1	M4.0*0.7	5.60	11.35	7.80	15	RCF25,SD刀片
S4005-2	M4.0*0.7	5.64	8.60	5.30	15	
S4005-3	M4.0*0.5	6.82	11.09	6.60	15	
S4005-4	M4.0*0.5	6.84	14.0	9.30	15	
S4005-5	M4.0*0.7	5.42	7.65	4.35	15	
S4005-6	M4.0*0.7	5.28	8.50	6.22	15	DIJET-DSW-4085
S4005-7	M4.0*0.7	5.31	10.25	6.95	15	DIJET-DSW-410H
S4005-8	M4.0*0.5	5.56	7.02	4.60	15	
S4005-9	M4.0*0.5	5.53	7.85	5.30	15	
S4005-10	M4.0*0.7	5.27	7.90	5.05	15	DIJET-DSW-4075H
S4006	M4.0*0.5	5.85	12.80	10.50	15	ABP精修R8
S4008-1	M4.0*0.7	5.53	12.15	9.90	15	深孔鑽刀片用
S4008-2	M4.0*0.7	6.78	14.40	10.20	15	一般共用(加長)
S4008-3	M4.0*0.7	4.98	12.30	10.00	15	
S4008-5	M4.0*0.7	7.03	15.85	11.65	15	
S4008-6	M4.0*0.7	6.00	12.75	9.40	15	
S4008-7	M4.0*0.7	5.50	12.20	9.80	15	
S4008-8	M4.0*0.7	6.72	9.98	5.62	15	
S4009-1	M4.0*0.7	5.85	10.00	7.80	15	京瓷刀片用
S4009-2	M4.0*0.7	5.80	14.10	11.30	15	京瓷刀片用(加長)
S4009-3	M4.0*0.7	6.95	14.40	11.45	15	
S4009-4	M4.0*0.7	6.38	10.50	8.70	15	
S4009-5	M4.0*0.7	6.17	5.24	3.17	15	側銑刀用
S4009-6	M4.0*0.7	6.18	8.00	5.62	15	側銑刀用
S4093	M4.0*0.7	5.65	9.53	8.15	10	

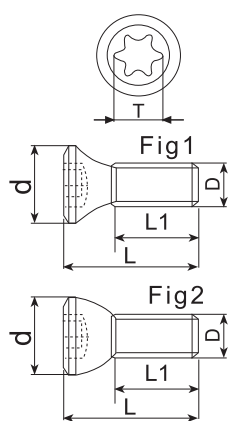
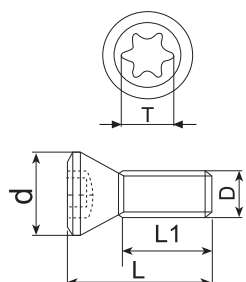


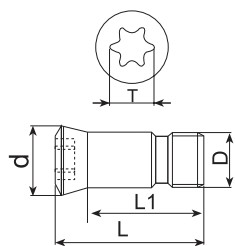
型 號	D	d	L	L1	T	備 註
S4501-1	M4.5*0.75	6.80	10.94	7.00	20	一般共用,車床刀片用
S4501-2	M4.5*0.75	5.65	11.05	8.20	15	一般共用 (小頭)
S4501-3	M4.5*0.75	6.60	14.85	11.00	15	一般共用 (加長)
S4501-4D	M4.5*0.75	5.60	14.17	11.75	15	
S4501-5	M4.5*0.75	6.75	11.85	8.50	15	SEKT1204用
S4501-6	M4.5*0.75	6.65	11.45	7.90	20	
S4505-1	M4.5*0.75	6.77	10.15	6.25	20	DIJET-DSW-4510H
S4505-2	M4.5*0.75	6.76	11.25	6.02	20	DIJET-DCM17-S
S4505-3	M4.5*0.75	6.75	12.35	8.15	20	DIJET-DSW-4512H



型 號	D	d	L	L1	T	備 註
S5001-1	M5.0*0.8	7.17	12.65	8.00	20	GJU,RCU,ASB刀片用
S5001-H	M5.0*0.8	6.47	11.20	7.80	20	G2038共用特殊型
S5007	M5.0*0.5	7.90	16.70	12.70	20	ABP精修用R10
S5002-1	M5.0*0.8	7.15	10.45	6.50	20	RAH R8 刀片
S5002-2	M5.0*0.8	6.70	11.10	7.40	20	
S5002-3	M5.0*0.8	7.10	12.45	9.00	20	
S5002-5	M5.0*0.8	7.00	12.25	9.10	20	
S5002-6	M5.0*0.8	7.00	12.10	8.80	20	
S5002-7	M5.0*0.8	7.18	16.73	12.40	20	
S5002-8	M5.0*0.8	7.00	10.65	6.90	20	
S5002-9	M5.0*0.8	7.10	16.00	12.65	20	
S5002-10	M5.0*0.8	8.30	21.85	17.30	25	
S5002-11	M5.0*0.8	6.90	12.80	9.10	20	DIJET-CSW-513H
S5002-12	M5.0*0.8	6.95	11.10	7.45	20	DIJET-DSW-511H
S5003-1	M5.0*0.8	6.75	10.75	7.30	20	G2038舊型刀片
S5003-2	M5.0*0.8	6.35	10.28	6.70	20	G2038新型刀片
S5003-3	M5.0*0.8	6.63	13.90	9.70	20	
S5005	M5.0*0.8	6.45	20.00	15.70	20	鏟鑽刀片用
S5005-2	M5.0*0.8	8.50	18.60	13.00	H4.0	
S5006	M5.0*0.8	7.10	12.20	9.40	20	BHP25刀片
S5006-2	M5.0*0.8	7.28	16.05	14.00	15	
S5006-3	M5.0*0.8	8.07	16.35	13.50	20	
S5501-1	W7/32*28	7.05	14.95	12.50	20	

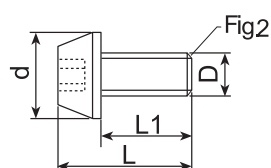
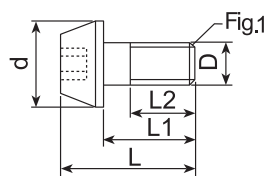
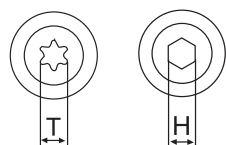
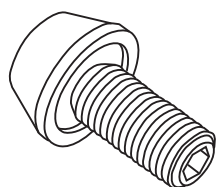
型 號	D	d	L	L1	T	備 註
S6001-1	M6.0*1.0	9.05	17.85	10.80	30	RCF,RCU,ASB刀片用
S6001-2	M6.0*1.0	9.80	15.05	9.00	30	
S6001-3	M6.0*1.0	8.30	11.95	8.00	25	
S6001-4	M6.0*1.0	8.30	17.30	13.20	25	
S6001-5	M6.0*1.0	8.64	13.12	7.38	30	
S6001-6	M6.0*1.0	8.30	20.00	15.90	25	
S6001-7	M6.0*1.0	8.70	17.85	10.80	30	RCF40.ASB40
S6002-1	M6.0*1.0	10.68	17.30	10.90	30	SWB50 刀片
S6002-2	M6.0*1.0	9.78	16.45	9.90	30	DIJET-HSW-614H
S6004	M6.0*1.0	8.00	17.10	11.80	20	ABP30(B孔)刀片
S6004-2	M6.0*1.0	8.40	17.60	12.90	25	GJU40,WT20R刀片
S6004-3	M6.0*1.0	8.55	14.10	10.50	20	
S6004-4	M6.0*1.0	8.50	14.12	10.40	25	
S6004-5	M6.0*1.0	8.55	13.05	7.70	30	
S6009-1	M6.0*1.0	10.10	18.50	13.70	H4.0	
S6009-2	M6.0*1.0	8.95	13.95	12.25	20	
S8003	M8.0*1.0	11.65	20.10	13.75	30	WT25R刀片用
S8003-2	M8.0*1.25	11.75	20.60	15.00	30	
6025-1	M2.5*0.45	3.64	6.08	3.65	8	M2.5黑色
6030-1	M3.0*0.5	4.32	7.15	5.20	10	M3.0黑色
6030-2	M3.0*0.5	4.25	10.07	8.00	10	M3.0黑色
6035-1	M3.5*0.6	5.00	8.20	5.00	15	M3.5黑色厚頭
6035-2	M3.5*0.6	4.98	8.03	5.10	15	M3.5黑色薄頭
6040-1	M4.0*0.7	5.48	11.02	8.00	15	M4.0黑色
6050-1	M5.0*0.8	7.20	12.31	7.80	20	M5.0黑色
S250R-1	M2.5*0.45	3.43	6.55	3.80	7	Fig1(R3.0)
S400R-1	M4.0*0.7	5.95	9.98	6.20	15	Fig2
S400R-2	M4.0*0.7	6.92	10.40	7.00	15	Fig2
S400R-3	M4.0*0.7	6.65	9.92	7.22	15	Fig2
S400R-4	M4.0*0.7	5.08	8.12	4.89	15	Fig1
S400R-5	M4.0*0.7	5.10	10.10	6.96	15	Fig1
S400R-6	M4.0*0.7	5.53	11.07	8.17	15	Fig1 (R2.0)
S400R-7	M4.0*0.7	5.72	9.98	7.60	15	Fig2
S500R-1	M5.0*0.8	6.43	12.15	8.30	20	Fig1
S500R-2	M5.0*0.8	7.00	12.10	8.60	20	Fig1



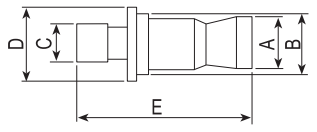
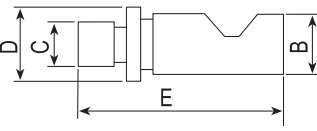
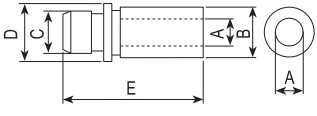
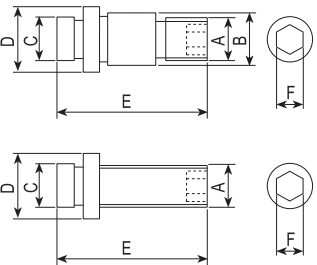
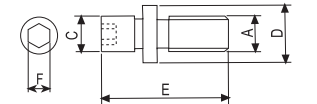
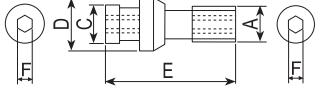
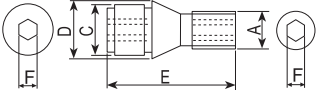
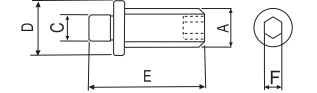


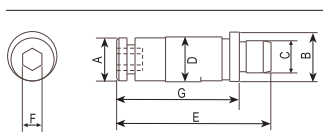
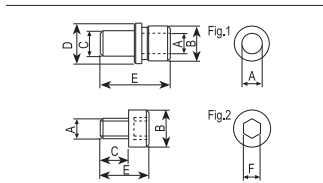
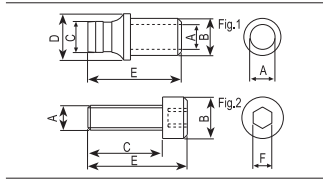
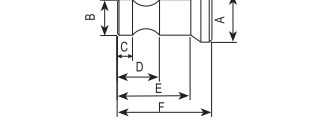
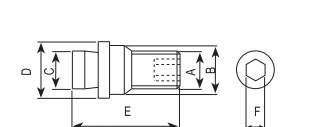
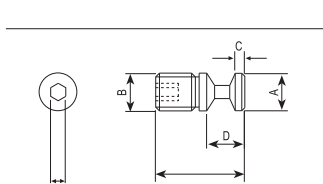
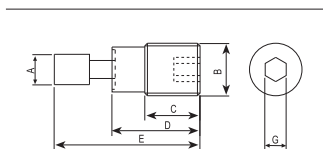
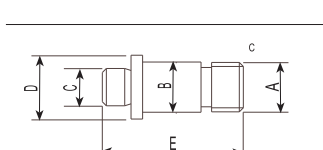
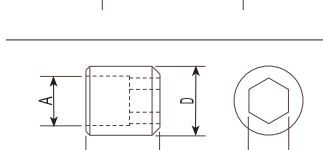
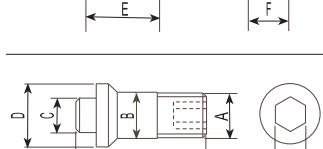
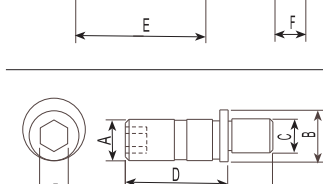
型 號	D	d	L	L1	T	備 註
5008	M3.0*0.5	4.18	7.00	5.40	8	RGA精球刀用R4
5010	M4.0*0.5	5.95	8.35	5.70	15	RGA精球刀用R5
5012	M5.0*0.5	6.80	9.15	7.50	20	RGA精球刀用R6
5016	M5.0*0.5	7.48	12.89	9.50	20	RGA精球刀用R8
5020	M5.0*0.5	7.97	15.30	11.50	20	RGA精球刀用R10
5025	M6.0*0.75	9.55	20.43	15.46	30	RGA精球刀用R12.5
5032	M8.0*0.75	12.00	24.70	19.30	30	RGA精球刀用R15 R16
5008-1	M3.0*0.5	4.15	6.95	5.65	8	RGA精球刀用R4黑色
5010-1	M4.0*0.5	5.68	8.35	6.55	15	RGA精球刀用R5黑色
5012-1	M5.0*0.5	6.70	9.40	7.00	20	RGA精球刀用R6黑色
5016-1	M5.0*0.5	7.42	12.83	9.70	20	RGA精球刀用R8黑色
5020-1	M5.0*0.5	7.97	16.74	12.80	20	RGA精球刀用R10黑色
5025-1	M6.0*0.75	9.56	20.82	16.65	30	RGA精球刀用R12.5黑色
5010M	M3.0*0.35	4.32	8.58	6.70	8	三菱精球刀用R5
5012M	M3.5*0.35	5.03	10.00	7.80	10	三菱精球刀用R6
5016M	M4.0*0.5	6.00	14.03	11.70	15	三菱精球刀用R8
5020M	M5.0*0.5	8.00	16.40	12.90	20	三菱精球刀用R10
5025M	M6.0*0.75	9.45	21.62	17.55	20	三菱精球刀用R12.5
5030M	M8.0*0.75	11.95	25.10	19.85	30	三菱精球刀用R15
5006D	M2.0*0.25	2.50	4.92	3.45	6	BNM精球刀用R3(日系)
5008D	M2.5*0.35	3.13	6.35	4.82	7	BNM精球刀用R4(日系)
5008D-K	M2.5*0.45	3.13	6.35	4.82	7	BNM精球刀用R4(韓系)
5010D	M3.0*0.35	3.72	7.80	5.90	8	BNM精球刀用R5(日系)
5010D-K	M3.0*0.5	3.72	7.80	6.13	8	BNM精球刀用R5(韓系)
5012D	M3.5*0.6	4.73	9.50	7.00	10	BNM精球刀用R6
5016D	M4.0*0.7	5.80	13.23	9.60	15	BNM精球刀用R8
5020D	M5.0*0.8	6.82	16.27	12.80	20	BNM精球刀用R10
5025D	M6.0*1.0	8.26	20.22	16.10	25	BNM精球刀用R12.5
5025D-T30	M6.0*1.0	8.50	20.65	16.10	30	BNM精球刀用R12.5
5030D	M8.0*1.25	11.05	25.10	19.67	30	BNM精球刀用R15 R16
5008F	M3.0*0.35	4.40	6.70	5.00	8	ABPF精球刀用R4
5010F	M3.5*0.35	5.70	8.15	6.00	10	ABPF精球刀用R5
5012F	M5.0*0.5	6.80	9.90	7.65	20	ABPF精球刀用R6
5016F	M5.0*0.5	6.65	13.42	10.55	20	ABPF精球刀用R8
5020F	M6.0*0.75	8.00	16.75	13.00	25	ABPF精球刀用R10
5025F	M6.0*0.75	9.60	21.88	15.40	30	ABPF精球刀用R12.5
5030F	M8.0*0.75	12.00	25.07	17.78	30	ABPF精球刀用R15 R16

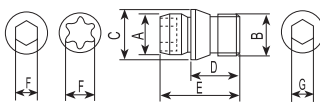
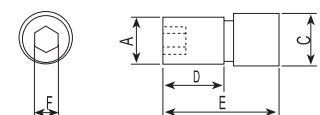
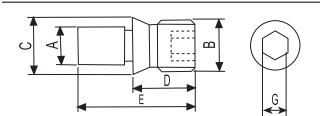
NO.	NOTE	NO.	NOTE	NO.	NOTE
S1801-2	For Fine Boring Tools	S3502-1	SANDVIK R390-INSERTS	5008	RGA R4-INSERTS
S2001-1	For Fine Boring Heads	S3506-1	SD-WCMT06T308 INSERTS	5010	RGA R5-INSERTS
S2001-2	For Fine Boring Heads	S3506-2	For General Use(Long type)	5012	RGA R6-INSERTS
S2001-3	For Fine Boring Tools	S3508-1	KYOCERA-INSERTS	5016	RGA R8-INSERTS
S2001-5	For Fine Boring Tools	S3509-1	KYOCERA-INSERTS	S4006	ABP R8-INSERTS
S2201-1	For General Use	S4001-1	AQXR.JTS-INSERTS	S5007	ABP R10-INSERTS
S2202-1	For General Use	S4001-2	For General Use(Long type)	5020	RGA R10-INSERTS
S2202-2	For General Use	S4001-3	GJU.RCF-INSERTS	5025	ABP.RGA R12.5-INSERTS
S2501-3	For General Use	S4001-5	For General Use(Long type)	5032	ABP.RGA R15 R16-INSERTS
S2501-5	For General Use(Long type)	S4001-6	HITACHI-RDMT1204 INSERTS	5008F	ABPF R4-INSERTS
S2502-1	GJU.RAH-INSERTS	S4003-1	RAH R5-INSERTS	5010F	ABPF R5-INSERTS
S2502-2	P26315-R10,R12-INSERTS	S4003-2	RAH R5-INSERTS(Long type)	5012F	ABPF R6-INSERTS
S2502-3	GJU.RAH-INSERTS	S4003-3	P28415-0 INSERTS	5016F	ABPF R8-INSERTS
S2502-4	ASJ20-INSERTS	S4005-1	RCF25.SD-INSERTS	5020F	ABPF R10-INSERTS
S2503-1	SANDVIK R390-INSERTS	S4008-1	Long Drilling Tools Inserts	5025F	ABPF R12.5-INSERTS
S2503-2	SUMITOMO-WCMT040208	S4008-2	For General Use(Long type)	5030F	ABPF R15.R16-INSERTS
S2503-3	For General Use	S4009-1	KYOCERA-INSERTS	0015	Square Seat Screw
S2503-5	KYOCERA-INSERTS	S4009-2	KYOCERA-INSERTS(Long type)	0018	Triangle Seat Screw
S3001-2	RAH R4-INSERTS	S4501-1	For General Use/Turning Inserts	0011-1	R10 Radius Seat Screw
S3001-4	ASJ.SE/Turning Inserts	S4501-2	For General Use(Small head)	0002-1	Side Mill Cutter Screw(One hole)
S3001-5	BIG-INSERTS	S4501-3	For General Use(Long type)	0002	Surface Mill Cutter Clamp Screw
S3001-6	Special Turning Inserts	S5001-1	GJU.RCF.RCU.ASB-INSERTS	0012-2	Turning Tools Screw(Double hole)
S3001-7	For General Use	S5001-H	G2038-INSERTS/For General Use	0003-1	Turning Tools Screw(Double hole)
S3002-1	RAM R4-INSERTS	S5002-1	RAH R8-INSERTS	0003-2	Turning Tools Screw(Double hole)
S3002-2	RAH R4-INSERTS	S5003-1	G2038-INSERTS(Old type)	0003-3	Turning Tools Screw(Double hole)
S3002-3	RAH R4-INSERTS(Long type)	S5003-2	G2038-INSERTS(New type)	3003-1	Umbrella Type Screw(One hole)
S3002-5	Turning Tools Inserts	S5005	For Drilling Inserts System	3004-1	Umbrella Type Screw(One hole)
S3003-1	RCF20-INSERTS	S5006	BHP 25-INSERTS	3005-2	Umbrella Type Screw(One hole)
S3501-1	For General Use	S6001-1	RCF.RCU.ASB-INSERTS	3005-3	Umbrella Type Screw(One hole)
S3501-2	BIG-1504 Inserts(Big head)	S6002-1	DIJET-INSERTS	3005-1	Umbrella Type Screw(One hole)
S3501-3	BIG-1504 Inserts(Big head)	S6004	ABP 30(B)-INSERTS	3006-12	Umbrella Type Screw(Double hole)
S3501-5	For General Use(Long type)	S6004-2	GJU40.WALTER 20R-INSERTS	3006-1	Umbrella Type Screw(One hole)
S3501-6	Turning Inserts(Long type)	S8003	WALTER 25R-INSERTS	3006-2	Umbrella Type Screw(One hole)
S3501-7	WALTER-INSERTS			3006-8	Umbrella Type Left Screw(Double hole)
				3006-6	Umbrella Type Screw(Double hole)
				3008-1	Umbrella Type Screw(Double hole)
				3008-2	Umbrella Type Screw(Double hole)
				0061	Counter Boring Tools Set Screw Axial
				0061-1	Counter Boring Tools Set Screw Axial

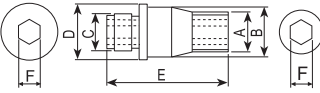


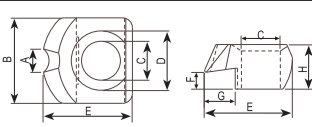
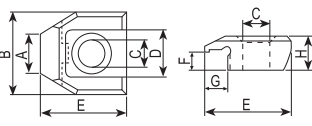
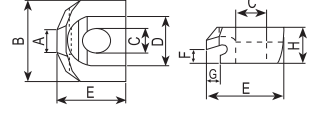
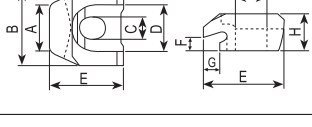
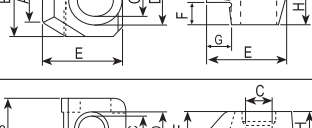
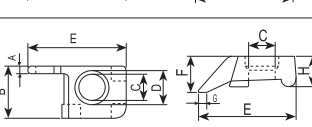
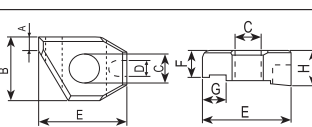
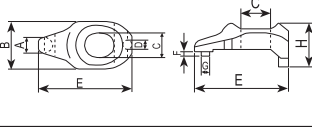
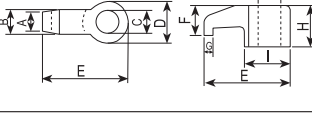
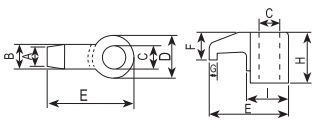
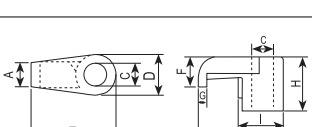
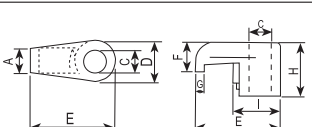
型 號 (新 型 號)	D	d	L	L1	L2	TH	Fig.	備 註
3003-1 (US-300301)	M3.0*0.5	7.00	10.00	6.00		T9	2	單孔(One hole)
3004-1 (US-300401)	M4.0*0.7	9.45	12.73	8.25	7.10	T15	1	單孔(One hole)
3005-1 (US-300501)	W3/16*32	9.45	12.80	8.00		H3.0	2	單孔(One hole)
3005-2 (US-300502)	M5.0*0.8	9.50	11.08	6.00		T15	2	單孔(One hole)
3005-3 (US-300503)	W3/16*32	9.43	12.85	8.15		T15	2	單孔(One hole)
(US-300504)	W3/16*32	9.55	11.48	6.45		H3	2	雙孔(Double hole)
3006-7 (US-300607)	M6.0*1.0	13.00	17.20	12.00	9.50	H4.0	1	單孔(One hole)
3006-11 (US-300611)	M6.0*1.0	13.00	17.45	12.40		H4.0	2	雙孔(Double hole)
(US-300612)	M6.0*1.0	10.19	20.36	14.92	12.45	H4.0	1	雙孔(Double hole)
(US-300603)	M6.0*0.75	12.97	17.10	12.00		T20	2	雙孔(Double hole)
3006-2 (US-300602)	M6.0*0.75	13.00	17.03	12.00		H4.0	2	雙孔(Double hole)
(US-300613)	M6.0*0.75	13.49	16.55	12.80	9.85	H3	1	單孔(One hole)
3006-8 (US-300608)	W1/4*28	13.00	17.20	12.00		T20	2	雙孔(Double hole)
(US-300604)	W1/4*28	12.95	15.10	10.00		T20	2	雙孔(Double hole)
(US-300605)	W1/4*28	12.95	17.30	12.20	10.00	T20	1	雙孔(Double hole)
3006-1 (US-300601)	W1/4*28	13.00	17.10	12.00		H4.0	2	雙孔(Double hole)
(US-300609)	W1/4*28-L	13.00	17.45	12.35	10.00	H4.0	1	左牙雙孔(Left screw-Double hole)
(US-300606)	W1/4*28	12.95	17.18	12.00	10.00	H4.0	1	雙孔(Double hole)
3008-5 (US-300805)	M8.0*1.25	16.95	21.35	19.10		H5.0	2	雙孔(Double hole)
(US-300804)	M8.0*1.25	16.95	21.32	14.20	11.30	H5.0	1	雙孔(Double hole)
3008-2-1 (US-300803)	M8.0*1.0	17.00	21.25	14.15	11.15	H5.0	1	雙孔(Double hole)
3008-2 (US-300802)	M8.0*1.0	17.85	25.12	18.05	14.50	H5.0	1	雙孔(Double hole)
(US-300808)	M8.0*1.0	17.90	22.20	16.90	10.75	H4.0	1	雙孔(Double hole)
3008-1 (US-300801)	W5/16*24	16.95	21.20	14.20		H5.0	2	雙孔(Double hole)
(US-300806)	W5/16*24	16.80	21.35	14.45	11.25	H5.0	1	雙孔(Double hole)
(US-300807)	W5/16*24-L	16.95	21.35	14.00		H5.0	2	左牙雙孔(Left screw-Double hole)
(US-300809)	M8.0*1.0	16.98	21.25	14.20		H5.0	2	雙孔(Double hole)

型號	A	B	C	D	E	F	備註
	GCT515N	5.0	5.92	3.72	7.02	15.60	
	GST929		4.97	3.70	6.00	15.25	
	GST-609	M3.0*0.5	5.00	3.70	5.90	8.60	
	GST-616	M3.0*0.5	5.00	3.70	5.97	16.15	
	GST-612	M3.0*0.5	5.00	3.70	5.85	12.00	
	GST-614	M3.0*0.5	4.45	3.65	6.07	13.80	
	GST-712	M4.0*0.7	6.00	5.00	6.90	12.00	
	GST-712-1	M4.0*0.7	5.97	4.97	6.95	12.20	
	GST-715	M4.0*0.7	5.99	4.99	6.97	14.50	
	GCT420N	M5.0*0.8	5.50	3.70	6.18	18.05	2.5
	GCT520N	M5.0*0.8	6.00	5.00	7.48	18.10	2.5
	GST-419	M4.0*0.7	4.00	3.70	6.05	19.10	GST419-1牙套
	GST-515	M5.0*0.8	6.47	4.98	7.52	14.30	2.5
	GST-516	M5.0*0.8	5.46	3.63	6.23	15.43	2.5
	GST-517	M5.0*0.8	4.96	3.75	6.80	18.10	2.5
	GST-517-1	M5.0*0.8	4.90	3.68	6.75	16.98	2.5
	GST-517-2	M5.0*0.8	4.96	3.66	5.88	16.62	2.5
	GST-519	M5.0*0.8	5.46	3.68	6.23	18.62	2.5
	GST-519-1	M5.0*0.8	5.47	3.66	6.19	18.49	2.5
	GST-519-2	M5.0*0.8	4.99	5.01	7.98	18.98	2.5
	GST-519-3	M5.0*0.8	5.47	3.67	6.16	18.58	2.5
	GST-519-4	M5.0*0.8	5.47	3.70	6.23	18.53	2.5
	GST-615	M6.0*1.0	6.96	4.96	7.76	14.43	3.0
	GST-617	M6.0*1.0	6.99	4.97	7.77	17.01	2.5
	GST-617-1	M6.0*1.0	6.98	4.98	7.76	16.88	3.0
	GST-618	M6.0*1.0	6.95	4.96	7.76	17.90	3.0
	GST-619	M6.0*1.0	6.50	5.00	7.48	18.55	3.0
	CP33	M5.0*0.8	5.44	3.67	6.45	19.05	2.5
	GST224	M6.0*1.0	5.92	4.78	7.80	18.10	3.0
	GST-311	M3.0*0.5-L		2.98	4.80	10.72	1.5
	GSV-0513	M5.0*0.8		4.90	6.20	12.45	2.5
	GSV-0412	M4.0*0.7		3.75	5.20	12.10	2.0
	GCSQ-4411	M4.0*0.7		4.27	5.10	11.00	T 8
	GCS-V511	M5.0*0.8		5.00	5.64	11.00	2.5
	GS-510	M5.0*0.8		3.74	5.47	11.00	2.0
	GS-0014	M6.0*1.0		4.97	7.20	13.30	2.5
	GST-516-1	M5.0*0.5		3.69	6.47	15.95	2.5

	型 號	A	B	C	D	E	F	G
	HSC-724	6.69	7.67	4.98	6.97	24.01	3.0	19.05
	GCT310N	M3x0.5	5.12	3.75	5.93	10.30		Fig1
	GCT310N-S	M3x0.5	5.45	4.10		7.10	2.5	Fig2
	GCT415N	M4x0.7	5.96	4.98	7.46	15.06		Fig1
	GCT415N-S	M4x0.7	6.68	12.00		16.00	3.0	Fig2
	GCTN410	5.43	3.90	1.40	4.40	8.10	10.40	
	GSA-514	M5x0.8	6.45	4.97	7.48	14.25	2.5	
	GLSG0512	4.90	M5x0.8	1.10	5.30	11.65	2.0	
	GLSG0616	5.80	M6x1.0	2.60	7.20	15.25	3.0	
	GTCS1028	5.75	M10x1.0	10.50	16.70	27.70		4.0
	GSTN514	M5.0*0.8	4.98	3.68	6.36	14.02		
	GSTN514-S	M5.0*0.8	6.98	7.50	4.00			
	GSTV514	M5.0*0.8	4.96	3.73	6.76	14.05	2.5	
	HSC-520-1	5.47	6.99	4.50	14.05	19.24	3.0	
	HSC520	5.48	6.87	4.51	14.20	19.60	3.0	

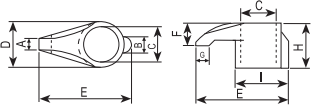
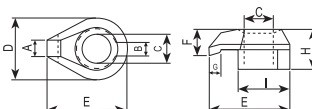
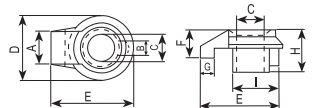
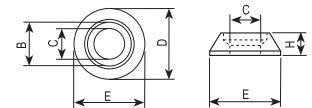
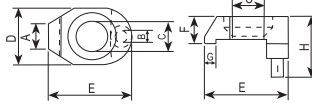
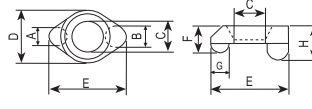
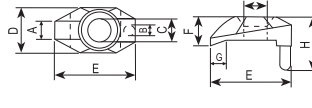
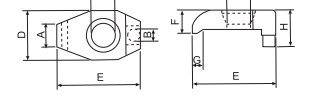
	型 號	A	B	C	D	E	F	G
	GS3-612	5.88	M6.0*0.75	7.32	7.10	11.50	T20	
	GS9-512	4.99	M5.0*0.8	6.00	7.45	12.00	2.5	2.5
	HSC-615-1 偏心柱	5.99		6.97	7.75	15.03	3.0	
	HSC-615 偏心柱	5.95		6.93	8.05	15.00	3.0	
	GSA-511	3.67	M5.0*0.8	5.56	6.00	11.30		2.5

	型 號	A	B	C	D	E	F	備 註
	GS-617-1	M6.0*1.0	7.17	5.00	7.76	17.20	2.5	
	GS3-617-2	W1/4*26	7.05	5.04	7.78	17.70	2.5	
	GS-617-2	W1/4*26	7.18	5.00	7.78	17.20	2.5	
	GS3-617-1	M6.0*1.0	7.14	5.00	7.75	17.20	2.5	
	GS-617-3	M6.0*1.0	7.18	5.00	7.75	17.20	3.0	
	GS3-617-3	M6.0*1.0	7.07	5.04	7.78	17.05	3.0	
	GS-619	M6.0*1.0	7.10	5.10	7.79	19.00	3.0	
	GS3-619	M6.0*1.0	7.18	5.00	7.79	19.05	3.0	
	GS-513	M5.0*0.8	5.46	3.65	6.20	12.88	2.0	
	GS-513N	M5.0*0.8	5.46	3.65	6.20	12.88	2.0	
	GS4-513	M5.0*0.8	5.60	3.76	6.20	14.05	2.0	
	GS3-513	M5.0*0.8	5.56	3.70	6.24	13.15	2.0	
	GS-1021-4	M10*1.0	11.00	7.95	11.95	22.10	4.0	
	GS-0821	M8.0*1.0	9.45	6.17	10.20	22.10	3.0	
	GS3-0821	M8.0*1.0	9.45	6.13	10.20	21.80	3.0	
	GS-615-1	W1/4*26	7.17	5.02	7.80	15.45	2.5	
	GS-615-2	M6.0*1.0	7.17	5.00	7.83	15.50	2.5	
	GS-622	W1/4*20	9.28	7.83	10.63	21.75	4.0	
	GS3-415	M4.0*0.7	4.70	3.76	6.22	14.50	2.0	

	型 號	A	B	C	D	E	F	G	H	I
	GTCT1515	4.00	14.80	6.68	10.00	15.33	3.21	5.54	7.72	
	GTCT8818	8.50	17.90	5.30	10.50	18.50	3.90	4.90	7.40	
	GTCW8820	4.50	19.20	5.60	11.40	15.80	3.60	3.20	7.70	
	GTCW8802	11.50	18.00	5.40	11.20	16.70	3.70	3.90	8.70	
	GTCT1517	9.60	14.85	6.50	10.00	16.50	4.90	5.80	7.50	
	GTCU-3R	2.05	13.85	7.00	9.00	26.20	9.55	2.20	8.05	
	GTCU-4R	3.55	13.85	7.00	9.00	26.20	9.55	2.20	8.05	
	GTCU-5R	4.85	13.85	7.00	9.00	26.20	9.55	2.20	8.05	
	GTCU-3L	2.50	13.85	7.00	9.00	26.20	9.55	2.20	8.05	
	GTCU-4L	3.60	13.85	7.00	9.00	26.20	9.55	2.20	8.05	
	GTCU-5L	4.80	13.85	7.00	9.00	26.20	9.55	2.20	8.05	
	GTCU-6L	4.80	13.85	7.00	9.00	26.20	9.55	2.20	8.05	
	GTCG-1419R	2.90	13.90	6.20	3.50	19.15	5.40	5.10	7.70	
	GCPM-1121	2.95	11.10	5.65	2.30	21.70	1.25	2.00	10.7	
	GCPM-1122	2.97	10.90	5.35	2.37	22.07	1.10	2.28	10.85	
	GCPM-1326	3.77	12.88	5.90	2.31	25.85	1.85	3.05	11.40	
	GCPM-1327	4.01	12.95	6.25	2.33	26.55	1.52	3.10	13.31	
	GCPM-1331	2.80	12.80	5.40	2.40	31.15	1.40	2.10	14.6	
	GCP5-6021	3.50	4.75	M5*0.8L	7.80	13.70	5.80	1.25	7.20	8.50
	GCP6-6026	3.60	4.70	M5*0.8L	7.95	16.55	5.40	1.75	7.85	8.80
	GCP7-6022	5.70	5.95	M6*1.0-L	9.45	18.50	7.20	2.20	13.6	10.7
	GCP3-6024	5.10	6.20	M6*1.0-L	9.25	21.40	7.75	1.85	13.5	10.6
	GCP4-6024	5.00	6.20	M6*1.0-L	9.25	24.35	7.90	1.75	13.7	10.6
	GCP-0013	4.20		M6*1.0-L	9.20	18.70	5.90	2.20	12.1	9.65
	GCPM-30	5.00		M8*1.0-L	10.70	25.65	8.80	2.30	16.9	11.4
	GCP-0012	4.10		M5*0.8-L	8.00	14.90	6.20	2.25	11.1	8.60
	GCP60-8019	5.10		M8*1.0-L	10.80	19.10	9.00	1.90	16.7	12.0
	GCP12-8023	5.20		M8*1.0-L	10.80	22.50	9.00	2.00	16.8	11.8

	型號	A	B	C	D	E	F	G	H	I
	GCP72-0713	1.50	7.94	4.40		13.21	1.67	1.30	6.90	1.93
	GTCW1720	6.04	16.85	8.47	12.92	21.00	3.25	5.45	9.11	
	GTCT1521	4.10	14.95	8.42	12.89	20.57	3.01	4.65	9.41	
	GTCW1414	5.02	13.71	4.26	7.33	14.05	3.31	3.46	6.64	8.72
	GCPH1120	2.90	9.53	4.12	10.50	19.61	1.97	2.60	7.41	
	GTCW1117	5.82	10.96	6.40		16.57	2.63	4.70	8.07	
	GSC-10	6.88	10.00	M8x1.0L		13.96	2.25		12.90	SECO Wedge
	GTCT1816	5.00	17.85	6.54	11.25	15.51	3.72	2.81	7.87	
	GTCD1727	6.43	16.80	9.35	13.17	27.20	3.67		9.13	
	GTCS1721	3.42	16.90	8.63	12.90	21.05	3.65		9.11	SN12
	GTCC1723	6.67	16.95	8.30	12.75	23.05	3.76		9.15	
	GTCD1322	4.32	12.76	6.58	10.28	21.55	3.17		9.11	DN11
	GTCV1322	4.50	12.82	6.60	10.25	22.25	2.46		9.11	VN12
	GTCV1326	6.55	13.22	6.75	11.27	25.26	3.98		9.26	

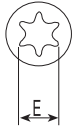
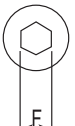
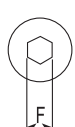
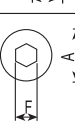
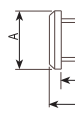
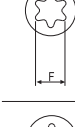
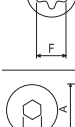
	型 號	A	B	C	D	E	F	G	H	I
	GCPM-1226	3.50	13.05	5.25	2.85	26.05	2.5	4.15	12.90	
	GTCT-1425	4.25	14.25	5.45	3.15	25.85	2.60	4.00	14.30	2.5
	GTCW1818	6.63	18.03	6.55	11.30	19.35	4.71	5.56	8.21	
	GTCG1318	13.40	9.25	6.36	2.84	17.71	1.81	4.48	11.30	
	GCPR1122	6.73	11.37	5.53	10.18	22.05	1.61	4.05	9.38	3.36
	GCPL1122	6.77	11.49	5.55	10.21	22.06	1.58	3.94	9.43	3.38
	GCP69-1016	2.10	10.55	5.44	8.67	16.08	2.48	2.15	9.36	1.96
	GCP73-0919	4.30	4.68	5.98	8.63	19.79	7.56	2.90	9.63	
	GCPT-0516	3.05	2.69	M6X1.0-L	8.48	16.31	4.69	2.35	7.94	
	GCP7-1915	6.17	15.03	6.30	10.90	19.05	4.53	1.82	8.94	
	GTCC-1721	4.51	16.84	8.90	12.65	21.15	3.71		9.11	CN12-A

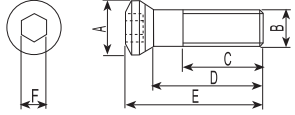
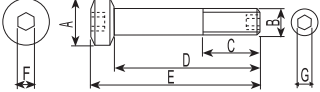
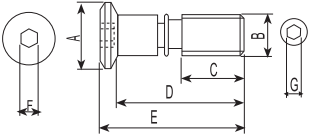
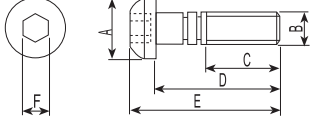
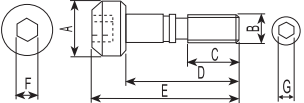
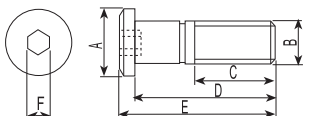
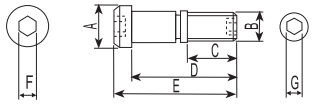
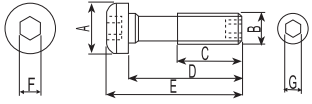
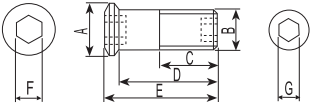
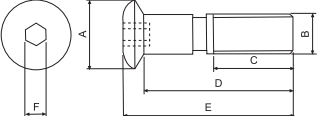
	型 號	A	B	C	D	E	F	G	H	I
	GCP5-0514	2.50	2.75	5.10	6.90	13.90	5.60	2.20	6.20	8.80
	GCP5-0515	3.50	3.85	5.10	6.70	14.70	5.40	2.10	7.40	8.50
	GCPD-0616	1.82	2.70	5.98	8.45	16.38	5.77	1.85	8.55	10.23
	GCPD-0618	3.60	5.00	6.00	8.60	18.15	5.40	1.90	7.70	11.0
	GCPK-0822	2.90	3.60	8.13	11.03	21.50	7.21	3.32	11.51	13.39
	YR-28	3.00	3.70	8.10	10.55	21.15	5.30	2.90	10.3	13.2
	GCPA-0513	3.50	2.35	5.10	10.15	12.70	4.25	2.10	6.40	8.35
	GCPB-0515	3.40	2.60	5.60	12.10	15.60	4.90	2.30	7.65	10.0
	GCP4-0412	2.60	1.90	4.15	7.50	11.35	4.15	2.30	5.65	6.60
	YR-18	7.45	3.60	6.20	14.80	18.80	5.80	5.90	9.50	10.2
	GQ-5410		6.60	4.65	9.70	9.70			4.00	
	GQ-6513		7.20	5.50	12.70	12.70			4.05	
	YR-06M	3.70	1.80	4.50	8.90	13.40	3.30	1.30	7.20	
	YR-08M	4.60	2.30	5.50	10.20	15.10	4.50	2.00	11.0	
	YR-14	1.80	2.90	3.20	6.05	9.00	3.20	1.80	4.55	
	YR-15	1.95	3.05	3.75	7.45	10.10	4.45	1.95	5.85	
	YR-16	3.40	3.70	5.35	9.00	13.30	4.20	3.40	5.75	
	YR-05	3.10	1.55	3.80	7.60	11.60	3.20	1.50	5.60	
	YR-06	3.20	1.90	4.10	8.10	14.40	4.30	2.50	9.45	
	YR-08	3.20	1.95	5.25	9.25	16.40	4.90	2.50	8.00	
	YR-06D	3.32	1.69	3.70	7.40	13.03	4.35	1.83	6.71	DIJET DCM-18
	YR-08D	4.50	2.58	5.09	10.45	17.85	5.29	2.37	7.92	DIJET DCM-17

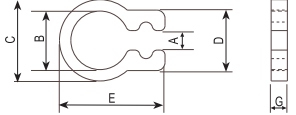
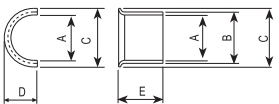
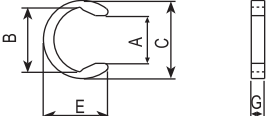
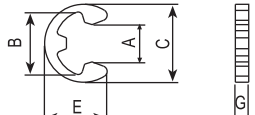
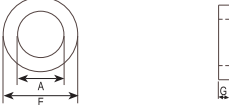
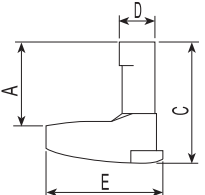
圖號	A	B	C	D	E	F	G	H	I
Fig.1									
GSC-07	12.0		M7x0.75	10.10	10.22	—		11.95	Fig1
GSC-08	7.95		W5/16-24	14.00	12.85	3.40		9.70	Fig2
GSC-09	11.45		M8x1.0	14.55	13.50	2.98		10.03	Fig2
GSC-11	12.35		M8x1.25	12.35	13.28			12.34	Fig3
0002 (GSC-01)	12.70		W5/16-24	14.60	12.85	3.40		9.80	Fig1
GSC-02	8.45		W5/16-24	14.50	13.00	3.20		9.70	Fig1
0002-3 (GSC-03)	12.10		W5/16-24	11.80	11.90	2.85		7.65	Fig1
0002-2 (GSC-04)	13.30		M8.0*1.0	14.85	12.85	3.30		9.85	Fig1
GSC-05	12.80		W5/16-24	14.30	13.20	3.90		9.90	Fig1
0002-5左旋 (GSC-06)Left	12.40		W5/16-24	14.25	12.70	2.75		9.35	Fig1
深孔鑽刀座-右 (GSD-T01-R)		7.90	5.95	14.80	13.60				
深孔鑽刀座-左 (GSD-T01-L)		7.90	5.95	14.80	13.60				
殼刀替換式刀座 (GSC-T01)		8.00	4.95	10.15	34.80	3.00	10.9	13.5	
GCP71-1315	8.80	14.75	5.55	7.70	12.60	4.45	1.00	7.50	
GCP30-1618	10.20	18.10	5.80		16.20	4.80	2.35	8.80	MW30

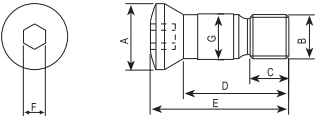
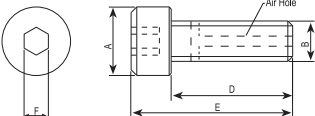
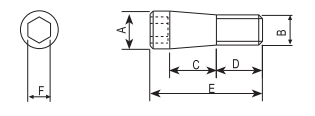
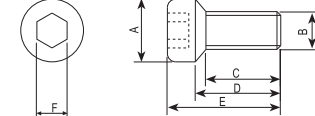
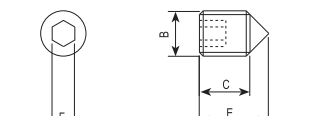
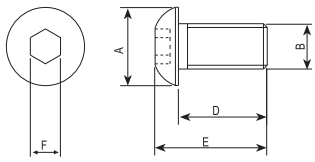
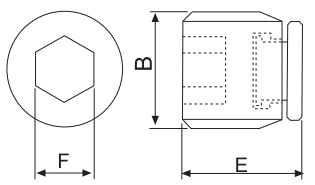
型號	A (Left)	B (Right)	C	D	E	Fig
GCS306	2.3	2.3	M3*0.5	6.0	H1.5	1
GCS409	3.5	3.5	M4*0.7	9.0	H2.0	1
GCS411	4.85	4.85	M4*0.7	10.9	T8	1
GCS512	5.11	5.11	M5*0.8	12.0	T10	2
GCS517	6.55	6.95	M5*0.8	17.16	H2.5	2
GCS520	7.2	7.2	M5*0.8	20.8	H2.5	2
GCS610	4.0	4.0	M6*0.75	10.1	T15	1
GCS610-1	4.0	4.0	M6*1.0	10.0	H3.0	1
GCS615-1	6.0	6.0	M6*1.0	15.2	T15	1
GCS616	7.3	6.2	M6*1.0	16.1	H3.0	1
GCS620-1	10.3	7.6	M6*1.0	20.6	H3.0	1
GCS620-3	8.6	8.2	M6*1.0	20.3	H3.0	2
GCS622	8.5	8.5	M6*0.75	22.2	T15	1
GCS625-1	10.5	11.5	M6*1.0	25.0	T15	1
GCS625-3	8.3	8.3	M6*1.0	24.7	H3.0	2
GCS630-3	11.7	11.5	M6*1.0	29.7	H3.0	2
GCS632	11.2	14.4	M6*1.0	32.0	H3.0	1
GCS718-1	7.0	7.0	M7*0.75	18.0	T25	1
GCS723-1	11.5	8.3	M7*0.75	23.1	H4.0	1
GCS813-1	5.1	5.1	M8*1.25	13.0	H4.0	1
GCS816-1	7.0	7.0	M8*1.25	16.7	H4.0	1
GCS816-2	6.0	6.0	M8*1.0	16.1	H4.0	1
GCS816-3	7.0	6.4	W5/16-24	16.3	H4.0	1
GCS820-1	8.1	8.1	M8*1.0	20.2	H4.0	1
GCS820-2	8.3	8.1	M8*1.25	20.2	H4.0	1
GCS820-3	8.1	8.1	M8*1.0L-1.25R	20.1	H4.0	1
GCS822-1	10.5	7.1	W5/16-24	21.6	H4.0	1
GCS825-1	9.3	11.1	M8*1.25	24.7	H4.0	1
GCS828-4	12.0	10.0	M8*1.0	28.2	H4.0	2
GCS830	13.63	12.25	M8*0.75L-1.25R	30.22	H4.0	1
GCS830-1	15.7	11.3	M8*1.25	30.2	H4.0	1
GCS1021-1	8.6	8.6	M10*1.0	21.1	H5.0	1
GCS1025-1	9.2	9.4	M10*1.5	25.6	H5.0	1

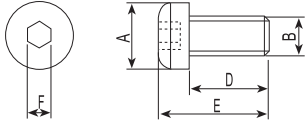
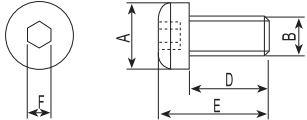
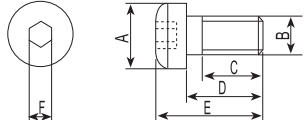
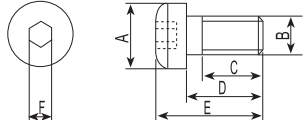
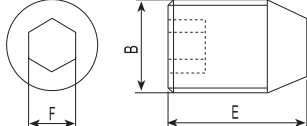
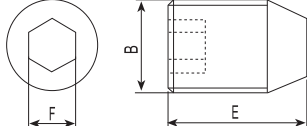
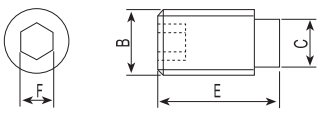
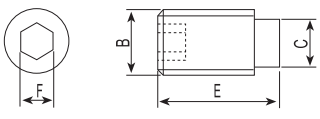
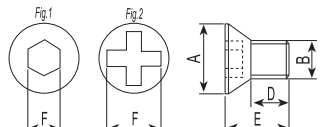
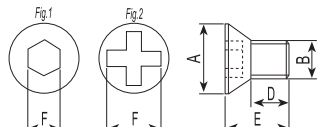
型號	A (Left)	B (Right)	C	D	E	F	Fig
GCS8166	6.2	7.1	W5/16x24-L	M6.0x1.0	16.0	3.0	1
GCS8296	13.0	11.1	M8x1.0-L	M6.0x1.0	28.7	4.0	1
GCS401930	8.0	9.0	M4x0.7-L	M3x0.5	19.2	2.0	1
GCS502340	9.4	10.7	M5x0.8-L	M4x0.7	23.0	2.5	1
GCS602850	12.6	13.2	M6x1.0-L	M5x0.8	28.0	3.0	1

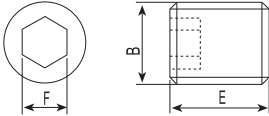
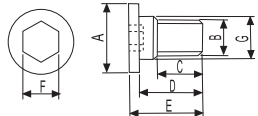
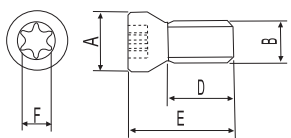
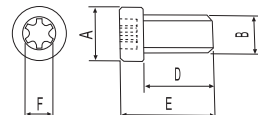
	型 號	A	B	C	D	E	F	G	備 註
	GLCS412-AJX	7.00	M4.0*0.7	6.2	8.8	11.70	T15		
	GTCS416	8.45	M4.0*0.7	4.5	12.5	16.63	3.0		
	GTCS515	7.30	M5*0.8	7.7	11.7	14.7	T15		
	GTCS4	8.90	M6.0*1.0	11.5	17.8	22.25	4.0		
	GTCS515-1	7.30	M5*0.8	8.0	11.8	15.0	T20		
	GTCM625	10.50	M6.0*1.0	15.9	24.8	28.25	4.0		
	GTCU-3R-S01	11.45	M5.0*0.8	10.2	15.0	19.05	4.0		
	GLCS105-1	9.97	M5.0*0.8	13.55	21.35	27.17	4.0		
	GLCS105-2	9.97	M5.0*0.8	13.0	20.95	27.15	4.0	2.5	
	T0412	5.49	M4x0.5		10.92	11.92	2.0		
	S400T-1		M4x0.7	8.20	9.70	13.20	T20	5.90	
	HS-3510	5.06	M3.5x0.6	4.00	7.01	9.38	T15	3.67	S3506-3
	HS-4016	5.76	M4x0.7	7.00	10.40	13.60	T15	4.00	
	HS-5015	7.27	M5x0.8	7.62	11.00	15.07	T15	5.21	
	HS-5017	7.95	M5x0.8	6.00	13.10	16.80	T20	4.97	
	HS-5018	7.26	M5x0.8	7.45	13.78	18.09	T20	5.20	
	HS-6020	7.52	M6x1.0	8.92	18.50	20.21	T15	5.96	
	HS-6025	9.96	M6x1.0	13.45	22.00	25.01	4.0	6.99	
	HS-6028	10.68	M6x1.0	15.75	21.70	27.60	T30	5.99	
	T0516	6.66	M5x0.8		13.33	16.12	T25		
	T0516-1	6.63	M5x0.8	10.40	13.40	15.99	T20		
	GRCS519	8.85	M5x0.8	9.15	17.85	19.23	3.0	2.5	H-5.45 I-6.03
	GVCS517	8.02	M5x0.8	11.32	14.17	16.38	T20	5.95	

	型 號	A	B	C	D	E	F	G
	GTCS622	8.90	M6.0*1.0	13.2	17.7	22.00	4.0	
	GTCS623	8.90	M6.0*1.0	13.6	18.1	22.50	4.0	
	GLCS33	8.80	M5.0*0.8	10.2	27.3	31.65	3.0	2.5
	GLCS43	11.82	M6.0*1.0	11.4	28.4	34.10	4.0	3.0
	GVCW516	8.54	M5.0*0.8	5.5	13.3	15.45	3.0	
	GVCW521	8.50	M5.0*0.8	10.9	18.6	20.55	3.0	
	GVCW621	9.42	M6.0*1.0	8.32	17.6	20.55	3.0	3.0
	GLCS0621	9.45	M6.0*1.0	9.05	18.5	20.90	3.0	
	GS0024	9.50	M5.0*0.8	11.7	19.7	23.75	4.0	
	GTCW521	8.32	M5.0*0.8	7.5	16.75	20.72	4.0	
	GTCW526-1	9.81	M5.0*0.8	10.85	20.05	26.06	4.0	
	GTCW526-2	9.78	M5.0*0.8	11.58	20.22	26.05	4.0	2.5
	GTCS415	6.98	M4.0*0.7	8.20	12.8	14.98	2.5	
	GTCS829	12.50	M8.0*1.0	14.5	25.9	28.75	4.0	
	GTCW522	7.28	M5.0*0.8	8.7	18.3	21.40	3.0	2.5
	GTCW525	9.95	M5.0*0.8	11.1	21.1	24.55	2.5	2.5
	GTCW527	9.97	M5.0*0.8	10.50	21.95	26.86	4.0	2.5
	GTCW623-2	9.92	M6.0*1.0	10.10	20.05	22.75	3.0	3.0
	GTCW826	11.98	M8.0*1.0	12.30	22.45	25.85	4.0	4.0
	GTCW829	11.97	M8.0*1.0	14.25	25.97	28.73	4.0	4.0
	GTCW418	6.98	M4.0*0.7	7.9	14.1	17.62	2.5	2.0
	GTCW418-1	6.31	M4.0*0.7	9.35	15.67	17.52	T8	2.0
	GTCW623	10.00	M6.0*1.0	9.7	18.9	23.00	3.0	3.0
	GTCW623-1	10.00	M6.0*1.0	11.33	19.00	23.31	3.0	3.0
	GTCW625	10.22	M6.0*1.0	12.45	20.85	25.03	T20	3.0
	GTCPS0521-1	7.98	M5.0*0.8	9.6	17.4	21.05	T15	T15
	GTCPS0521-2	7.98	M5.0*0.8	9.8	17.5	21.10	3.0	3.0
	GTCS626	9.92	M6.0*1.0	12.3	22.1	26.55	4.0	3.0
	GCPD-0513	6.46	M5.0*0.8	6.4	11.60	12.90	2.5	2.5
	GCPD-0514-S1	6.50	M5.0*0.8	4.2	12.2	13.70	T15	2.0
	GCPD-0515-S1	6.50	M5.0*0.8	5.7	14.0	15.50	T15	2.0
	GCPD-0412-S	5.00	M4.0*0.7	4.10	8.10	9.30	T10	
	GCPD-0617	7.98	M6.0*1.0	6.50	14.35	16.63	T15	3.0
	GCPD-0618-S1	8.00	M6.0*1.0	9.4	18.1	20.20	T20	T20
	GCPD-0618-S2	7.98	M6.0*1.0	9.3	16.9	18.85	3.0	3.0
	GCPD-0822	10.30	M8.0*1.0	9.04	20.20	22.38	4.0	4.0
	S0822	10.45	M8.0*1.25	11.1	20.5	22.25	T30	
	GLCS-830	10.65	M8.0*1.25	10.2	27.4	29.60	5.0	4.0
	GVCW625	10.28	M6.0*1.0	11.55	22.56	25.37	3.0	

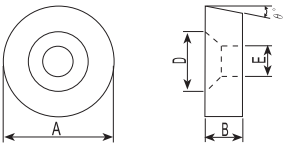
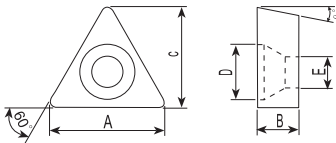
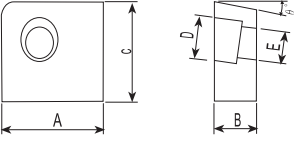
	型 號	A	B	C	D	E	F	G	H	備 註
	GCIV-35	1.22	3.56	4.95	3.69	6.50		0.45		
	GCIP-0404	4.14	4.45	5.81	3.50	5.48				
	GCIP-0505	5.01	5.39	6.21	3.24	5.28				
	GCIP-0504	4.18	4.54	6.02	3.51	6.97				
	GCIP-0606	5.97	6.66	7.76	4.16	5.87				
	GCIP-0606-1	5.91	6.37	7.54	4.63	9.20				
	GCIP-1110	9.22	10.41	11.97	6.54	11.02				
	GCIC-79	5.95	7.68	9.56		7.67		0.61		
	GCIC-68	4.43	6.20	7.85		6.42		0.59		
	GCIC-32	2.80	3.16	5.21		4.46		0.32		
	LTW5103-18	3.50	4.65	6.17		5.06		0.42		
	LTW5103-21	4.07	5.63	6.98		5.78		0.60		
	GCIE-35	2.70	5.02	7.02		6.05		0.60		M3.5用扣環
	GCIE-45	3.40	6.68	9.01		7.72		0.61		M4.5用扣環
	GCIE-65	3.29	6.71	9.03		7.76		0.60		8820扣環
	GCIO-0510	5.40				9.90		1.05		
	GCIO-0610	6.20				9.98		1.05		
	GCPL-5115	6.10		9.40	3.40	9.95				
	GCPL-5118	9.98		12.05	3.43	9.71				
	GCPL-5120	8.55		11.90	3.70	10.20				
	GCPL-5125	8.45		12.50	4.55	13.25				
	GCPL-5127	8.40		11.30	4.50	13.35				
	GCPL-5130	11.2		15.50	4.50	14.75				
	GCPL-5132	11.55		18.50	5.68	20.05				
	GCPL-5135	14.1		21.15	7.30	20.00				
	GCPL-5137	16.30		22.88	6.20	23.80				
	GCPL-5138	17.70		24.97	8.60	25.55				
	GCPL-5140	18.20		26.70	7.90	29.65				
	GCAS-0207	2.10	3.18			6.80				
	GCAS-0105	1.62	2.44			4.30				
	GCAS-0611	6.20	7.65			11.50				
	GCAS-0413	4.43	5.73			12.90				
	GCAS-0610	6.56	8.43			10.20				
	GCAS-0512	5.54	6.79			11.90				
	GCAS-0710	7.10	8.70			10.56				

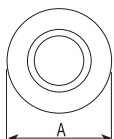
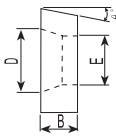
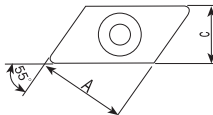
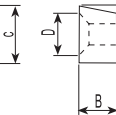
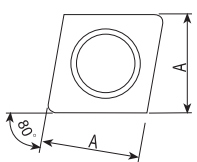
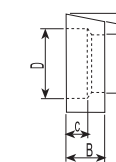
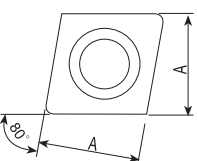
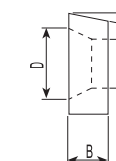
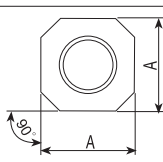
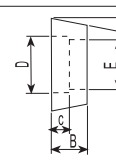
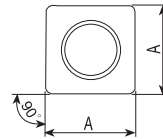
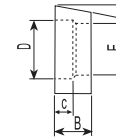
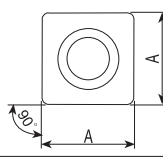
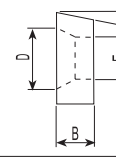
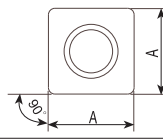
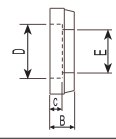
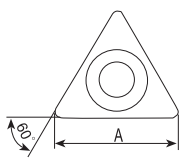
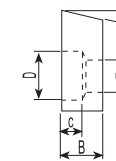
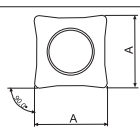
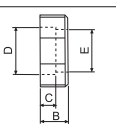
	型 號	A	B	C	D	E	F	G	備 註
	GTCS825	11.95	M8x1.0	7.0	19.12	25.05	4.0	8.24	
	S-SET1006C (S-SETA10040)	15.95	M10x1.5		30.20	39.90	6.0		Air hole
	GCSV-0415	5.0	M4x0.7	6.80	5.95	15.85	3.0		
	GCSV-0415-1	5.0	M4x0.7	3.00	5.15	10.95	3.0		
	GCSV-0415-2	5.0	M4x0.7	3.00	4.20	9.50	3.0		
	ASF-S01	8.30	M5x0.8	10.10	11.50	15.00	4.0		
	ASF-S01W	8.25	M5x0.8	13.20	15.85	19.05	4.0		
	S-SET0604 (S-SETV06009)		M6x1.0	6.60		9.20	3.0		
	S-SETM03008	6.7	M3.0*0.5		5.80	7.80	2.0		BCBFB3-6
	(S-SETM03507)	8.94	M3.5x0.6		4.61	7.11	T15		DIJET CB3540
	(S-SETM04014)	7.56	M4x0.7		11.92	14.20	2.5		
	(S-SETM05019)	9.24	M5x0.8		16.33	19.28	3.0		
	(S-SETM06028)	10.33	M6x1.0		25.10	28.20	4.0		
	S-SET0605 (S-SETM06015)	10.30	M6x1.0		12.0	14.90	4.0		
	S-SET0606 (S-SETM06023)	10.58	M6x1.0		20.0	23.42	4.0		For GTCT1419R
	S-SET0804 (S-SETM08041)	13.95	M8x1.25-L		35.10	40.60	4.0		
	(S-SETC04005)		M4x0.7			4.65	2.0		CKB1
	(S-SETC04006)		M4x0.7			5.51	2.0		CKB2
	(S-SETC05009)		M5x0.8			8.46	2.5		CKB3
	(S-SETC06011)		M6x1.0			11.30	3.0		CKB4
	(S-SETC08015)		M8x1.25			15.00	4.0		CKB5
	(S-SETC10013)		M10x1.5			12.72	5.0		CKB6
	S-SET0805 (S-SETC08013)		M8.0*1.25			12.70	4.0		活動式
	S-SET1005 (S-SETC10014)		M10*1.5			13.60	5.0		活動式
	S-SET1603 (S-SETC16030)		M16*1.5			30.30	8.0		活動式
	S-SET1801 (S-SETC18024)		M18*2.0			24.30	8.0		活動式
	S-SET2011 (S-SETC20021)		M20*1.5			20.50	10.0		活動式
	S-SET2012 (S-SETC20020)		M20*2.0			20.00	10.0		活動式
	S-SET2013 (S-SETC20020-1)		M20*2.5			20.00	10.0		活動式

		型 號	A	B	C	D	E	F	備 註
		S-GENH1	4.95	M3.0*0.5		4.50	6.60	2.0	
		S-GENH2	4.96	M3.0*0.5		6.10	8.10	2.0	
		S-SETP02507	3.60	M2.5*0.45		4.23	6.79	T8	
		S-SET0251 (S-SETP02508)	4.35	M2.5*0.45		5.90	8.25	2.0	
		S-SET0306-1 (S-SETP03009)	5.15	M3.0*0.5		6.20	9.15	2.5	
		S-SET0306 (S-SETP03008)	5.35	W1/8-40		4.92	8.00	2.5	
		S-SETP03507	5.00	M3.5*0.6		5.00	6.60	T8	
		S-SETP04010 0015方型墊片螺絲	5.05	M4.0*0.7		6.70	10.15	2.5	
		S-SET0402 (S-SETP04014)	6.75	M4.0*0.7		9.95	14.02	3.0	
		S-SET0505 (S-SETP05009)	8.30	M5.0*0.8		5.50	9.00	T25	
		S-SETP06018	12.05	M6.0*1.0		13.05	18.00	T25	
		S-GENH3	7.45	M4.0*0.7	7.05	8.15	11.20	2.5	
		S-GENH4	8.60	M5.0*0.8	8.50	10.0	14.00	3.0	
		S-GENH5	8.30	M5.0*0.8	8.80	9.70	13.60	4.0	
		S-GENH6	13.5	M8.0*1.25	10.30	13.1	18.05	5.0	
		S-SETD04005		M4.0*0.5			5.23	2.0	
		S-SETD04005-1		M4.0*0.5			4.90	2.0	60°
		S-SETD04005-2		M4.0*0.5			4.90	2.0	30°
		S-SET0503 (S-SETD05010)		M5.0*0.5			10.05	2.5	
		S-SET0506 (S-SETD05006)		M5.0*0.5			6.34	2.5	
		S-SETD05006-1		M5.0*0.5			6.00	2.5	60°
		S-SETD05006-2		M5.0*0.5			6.00	2.5	30°
		S-SETD06080		M6.0*0.75			7.90	3.0	30°
		S-SET0603 (S-SETD06012)		M6.0*0.75			12.00	3.0	
		S-SETD08011		M8.0*0.75			11.45	4.0	
		S-SETD08011-1		M8.0*0.75			10.93	4.0	30°
		S-SET0802 (S-SETD08014)		M8.0*0.75			14.05	4.0	
		S-SETD10013		3/8-24UNF			12.60	3/16	DIJET ECS-0030
		S-SET1003 (S-SETD10015)		M10*1.0			15.05	5.0	
		S-SET1002 (S-SETD10016)		M10*1.0			16.05	5.0	
		GVUS-1218		M12*1.0			18.10	6.0	
		GVUS-2020		M20*1.5			20.05	10.0	
		GVUS-2029		M20*1.5			29.15	10.0	
		GVUS0815-4		M8.0*0.75	6.0		15.00	4.0	
		S-SET2003 (S-SETG20025)		M20*2.5	16.9		25.00	10.0	
		S-SETA03006	5.77	M3.0*0.5		3.75	6.00	2.0	Fig.1
		S-SETA03008	5.95	M3.0*0.5		5.50	8.00	2.0	Fig.1
		0018 六角孔墊片螺絲	7.38	M4.0*0.7		5.10	7.55	2.5	Fig.1
		0018-1 十字孔墊片螺絲	6.95	M4.0*0.7			7.90		Fig.2

		型 號	A	B	C	D	E	F	備 註
		S-SET0501 (S-SETN05005)		M5.0*0.8			5.05	2.5	
		S-SETN03008		M3.0*0.5			7.93	1.5	
		S-SET0504 (S-SETN05008)		M5.0*0.8			8.00	2.5	
		S-SET0602 (S-SETN06006)		M6.0*1.0			6.05	3.0	
		S-SET0801 (S-SETN08008)		M8.0*1.25			8.20	4.0	
		S-SET0803 (S-SETN08006)		M8.0*1.25			6.05	4.0	
		S-SET1001 (S-SETN10012)		M10*1.5			11.85	5.0	
		S-SETP04080	7.72	M4.0x0.7	5.00	7.05	8.15	2.5	G=4.78
		GDS-2501	2.98	M2.5x0.45		2.95	4.60	T7	
		GDS-3001	3.58	M3.0x0.5		4.05	5.80	T8	
		GDS-3501	3.98	M3.5x0.6		5.16	7.20	T8	
		GDS-4001	4.98	M4.0x0.7		6.22	8.50	T10	
		GDS-5001	5.98	M5.0x0.8		7.70	10.00	T15	
		S-SETI02509	4.10	M2.5x0.45		6.70	8.80	IP10	

		型 號	A	B	C	D	E	F	G
		GMV-S02 牙套螺絲	6.80	M4.0*0.5		8.90	14.05	T15	
		GCST0535-1	6.30	M5.0*0.5	4.80	6.00	7.02	3.5	M3.5*0.6
		GCST0535	6.30	M5.0*0.5	5.40	7.45	8.65	3.5	M3.5*0.6
		GCST0535-2	6.40	M5.0*0.5	4.45	5.85	7.05	3.5	M3.5*0.6
		GCST0535-3	6.28	M5.0*0.5	4.10	6.03	7.00	3.5	M3.5*0.6
		GCST0604	7.77	M6.0*0.75	6.35	8.50	9.65	4.0	M4.0*0.5
		GMV-S01	7.75	M6.0*0.75	5.75	8.40	10.00	4.0	M4.0*0.5
		GCST0805	9.64	M8.0*1.0	9.70	11.00	13.50	5.0	M5.0*0.8
		GCST0806	9.46	M8.0*1.0	13.80	14.95	16.90	4.0	M6.0*1.0
		GQ-S4514	6.00	M4.5*0.75		9.92	13.57	3.0	
		3003-2	4.16	M3.0*0.5-L		4.10	6.35	2.0	
		HDS-0618 鏟鑽螺絲	8.55	M6.0*1.0		15.5	18.05	3.0	
		GTIS-1515L	14.95	M8.0*1.25-L		11.75	15.45	4.0	
		GTIS-1523L	14.90	M8.0*1.25-L		19.20	23.30	4.0	
		GTIS-1823L	17.85	M8.0*1.25-L		18.90	23.40	4.0	
		HDS-0416 深孔鑽滑塊螺絲	9.60	M4.0*0.7	7.75	13.85	15.90	3.0	6.20
		0061-5軸向螺絲	4.00	M3.0*0.5		5.70	8.59		
		0061-2軸向螺絲	5.00	M3.0*0.5		8.65	12.70		
		0061軸向螺絲	6.20	M4.0*0.7		7.40	13.65		
		0061-4軸向螺絲	7.72	M5.0*0.8		9.54	14.65		
		0061-1軸向螺絲	9.00	M5.0*0.8		8.15	14.00		
		0061-3軸向螺絲	9.90	M6.0*1.0		11.95	18.05		
		GLS-0824	8.45	M8.0*1.25	13.2	18.00	23.45	4.0	
		GLS-0616	5.90	M6.0*1.0	9.45	13.10	16.65	2.5	2.5
		GLS-0818	7.96	M8.0*1.0	9.00	15.15	17.81	3.0	3.0
		GLS-0821	8.00	M8.0*1.0	9.20	15.50	21.00	3.0	3.0
		GLS-0821-1	7.96	M8.0*1.25	9.30	15.30	20.82	3.0	3.0
		GLS-0821-2	8.00	M8.0*1.0	9.40	14.80	20.75	3.0	3.0
		GLS-0823	7.86	M8.0*1.0	11.80	17.65	23.50	3.0	3.0
		GLS-1030	9.89	M10.0*1.0	10.55	23.65	30.00	4.0	4.0
		GLS-1236	11.90	M12.0*1.0	17.25	26.42	36.05	5.0	5.0
		GLS-0829	11.00	M8.0*1.0	6.85	25.45	28.55	4.0	2.5
		GLS-0617	5.85	M6.0*1.0	6.50	10.15	16.80	2.5	2.5
		GLS-1027	9.82	M10*1.0	9.80	14.00	27.05	4.0	4.0

	型 號	A	B	C	D	E	θ°
	(0008-10R) 10R-圓型墊片	18.00	6.05		9.75	5.05	11°
	(0008-TP) TP-三角墊片	17.55	3.13		8.08	4.60	7°
	(0008-N2) N2-三角墊片	16.15	3.15		7.60	4.60	11°
	(0008-545) 545-四角墊片	14.58	5.80	15.10	6.20	4.40	8°
	(0008-435) 435-四角墊片	14.45	5.80	15.00	6.15	4.25	10°
	(0008-535) 535-四角墊片左旋	15.10	5.80	14.65	6.20	4.50	11°
	(0008-535-1) 535-1-四角墊片左旋	14.53	5.81	14.90	6.10	4.12	11°

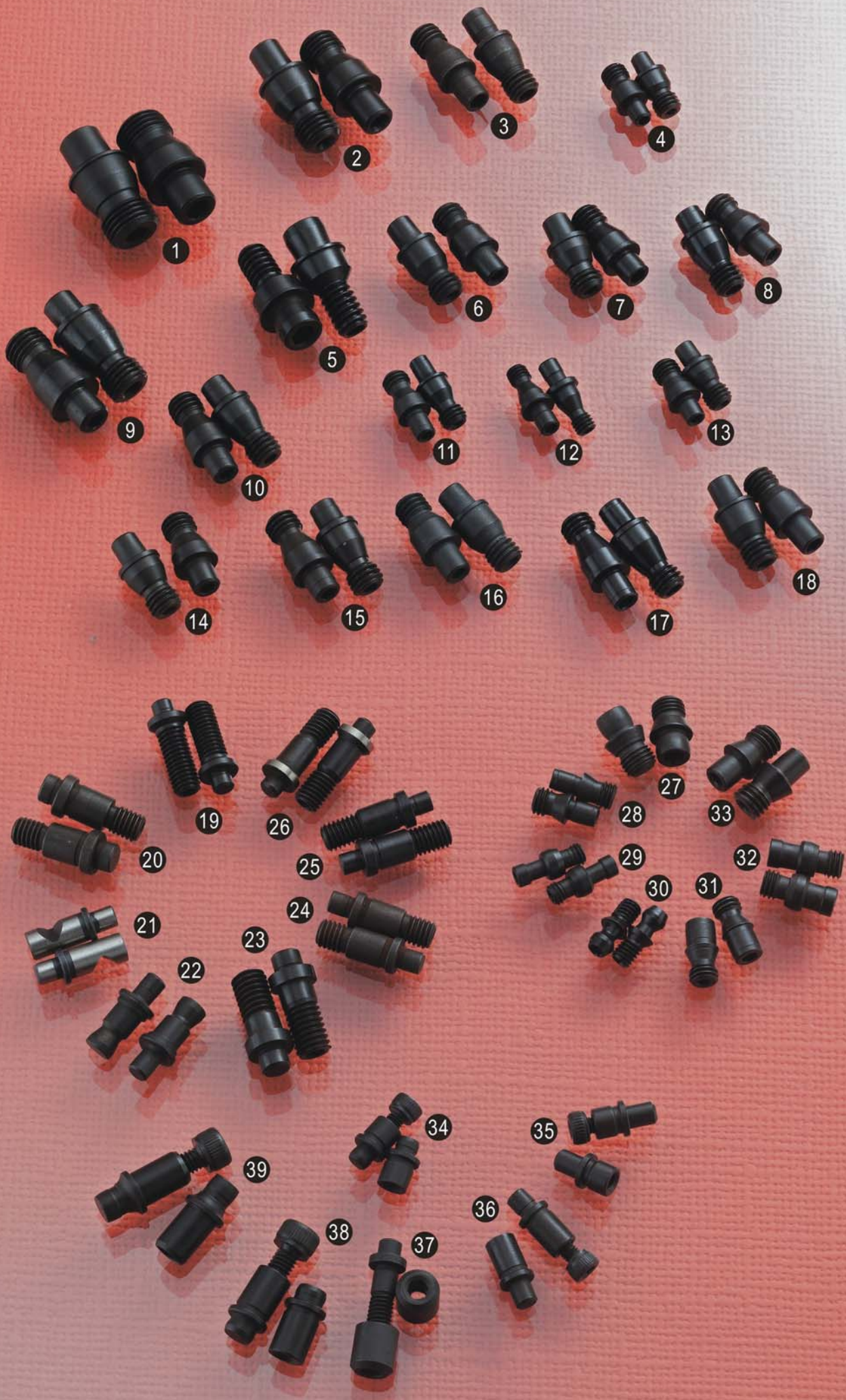
		型 號	A	B	C	D	E	θ°	備註
		GMR-633	17.40	4.76		10.60	8.30		
		GMD-431	14.40	4.76	9.30	6.70	3.42	6°	
		GMC-422-4	12.85	3.18	1.10	7.32	6.22		
		GMC-412	12.70	2.72	0.90	7.90	7.30		
		GMC-432	12.50	4.76	2.55	7.90	7.30		
		GMC-533	16.00	4.76	2.85	11.10	9.70		
		GMC-634	19.00	4.76	2.15	12.50	11.00		
		GMC-422-3	11.78	3.20		7.70	6.30		
		GMC-322	11.75	3.18		7.80	6.40		
		GMC-422	12.10	3.20		9.00	6.45		
		GMC-422-2	12.68	3.20		7.80	6.50		
		GMC-422-1	12.65	3.20		8.15	6.90		
		GMC-422-5	11.62	3.19		8.21	6.60		LSC42
		GMC-633	18.15	4.76		11.55	9.65		
		GMSE-T321-1	10.98	3.00	1.51	7.12	5.48	2° 17°	SS42SHF
		GMSE-T321	10.55	3.01	1.40	6.50	5.62	11° 25°	
		GMS-422-3	11.30	3.20	1.55	7.92	6.40		SS42S
		GMS-432	12.50	4.76	2.45	8.24	7.30		
		GMS-3T31	9.34	4.27		7.40	5.00		
		GMS-421	11.67	3.20		6.65	3.22		
		GMS-422-2	11.78	3.20		8.05	6.35		
		GMS-422	12.05	3.18		8.00	6.50		
		GMS-633	19.05	4.76		12.00	9.55		
		GMS-T321	10.53	3.00	1.53	6.62	5.29		
		GMT-311-1	14.68	2.72	0.95	6.20	5.45		
		GMT-321-1	14.62	3.24	1.97	6.55	5.75		
		GMT-321-2	14.10	3.18	2.10	6.25	5.15		
		GMT-321-5	14.05	3.18	2.02	6.26	5.21		
		GMT-321-6	15.16	3.24	2.00	6.56	5.86		R0.4
		GMT-322	14.75	3.20	2.05	7.25	6.05		
		GMT-322-1	15.52	3.20	1.75	6.80	4.18		
		GMT-331	15.31	4.76	2.70	6.82	5.88		
		GMT-331-1	15.22	4.77	2.00	6.72	5.58		R0.4R0.8R1.2
		GMT-331-2	15.39	4.76	2.70	7.25	5.75		R0.4R0.8R1.2
		GMT-632	19.92	4.76	2.70	8.02	7.25		
		GMT-631	19.04	4.76	1.80	7.55	5.98		
		GMSU-432	12.50	4.77	2.73	8.06	7.37		

	型號	A	B	C	D	E	θ°	備註
	GMT-311	13.80	2.76		6.30	4.80		
	GMTC-321	13.14	3.20		5.80	2.45	7°	
	GMT-321-3	15.30	3.20		6.40	4.73		
	GMT-321-4	13.90	3.18		7.20	5.05		
	GMT-612	20.16	2.00		8.08	6.86		
	GMT-622	18.70	3.18		8.00	6.35		
	GMT-622-1	20.30	3.18		8.15	6.92		
	GMW-322-2	12.50	3.20		6.33	4.75		LLSWN32
	GMW-422	16.63	3.20		7.95	6.46		
	GMW-322	11.08	3.18	1.45	6.50	5.08		
	GMW-322-1	11.92	3.19	2.01	6.49	5.99		
	GMW-422-1	16.17	3.18	1.12	7.35	6.20		
	GMW-432	16.65	4.76	2.60	8.10	7.36		
	GMW-432-1	16.56	4.76	2.70	8.12	6.90		
	GMW-432-2	15.80	4.76	2.66	8.28	7.46		
	GMW-432-3	16.16	4.76	2.65	8.10	6.20		
	GMW-432-4	16.40	4.76	2.22	7.80	6.65		
	GMD-432	12.62	4.76	2.60	8.14	7.35		
	GMD-442	12.60	6.38	3.98	8.06	7.40		
	GMD-422-2	12.72	3.18		8.40	6.72		
	GMD-422	12.52	3.20		8.10	6.75		
	GMD-422-1	11.72	3.18		7.76	6.40		
	GMD-422-4	12.59	3.18		8.22	6.86		LLSDN42
	GMD-432-1	12.66	4.76		9.45	6.40		
	GMD-432-2	12.56	4.76		8.10	6.65		
	GMD-422-3	11.80	3.22		7.88	6.50		
	GMD-321	9.10	3.18	1.50	4.62	3.30		
	GMG-321L-1	13.16	3.19	13.11	6.10	4.30		
	GMG-321L	12.60	3.20	12.05	6.25	4.00		
	GMG-321R-1	12.60	3.22	12.10	6.25	4.00		
	GMG-321R-2	13.10	3.19	12.99	6.13	4.31		
	GMG-321R	13.08	3.20	12.72	6.10	4.00		
	GMV-322-1	8.36	3.18	1.40	6.60	5.25		
	GMV-322	9.05	3.20	1.82	6.60	5.90		
	GMV-4T32	11.40	3.98	1.78	8.20	6.60		
	GMV-322-2	9.58	3.15		6.60	4.85		

緯冠刀具不斷研發創新更新產品，
若有其他的車削銑削配件需求，歡迎來電洽詢

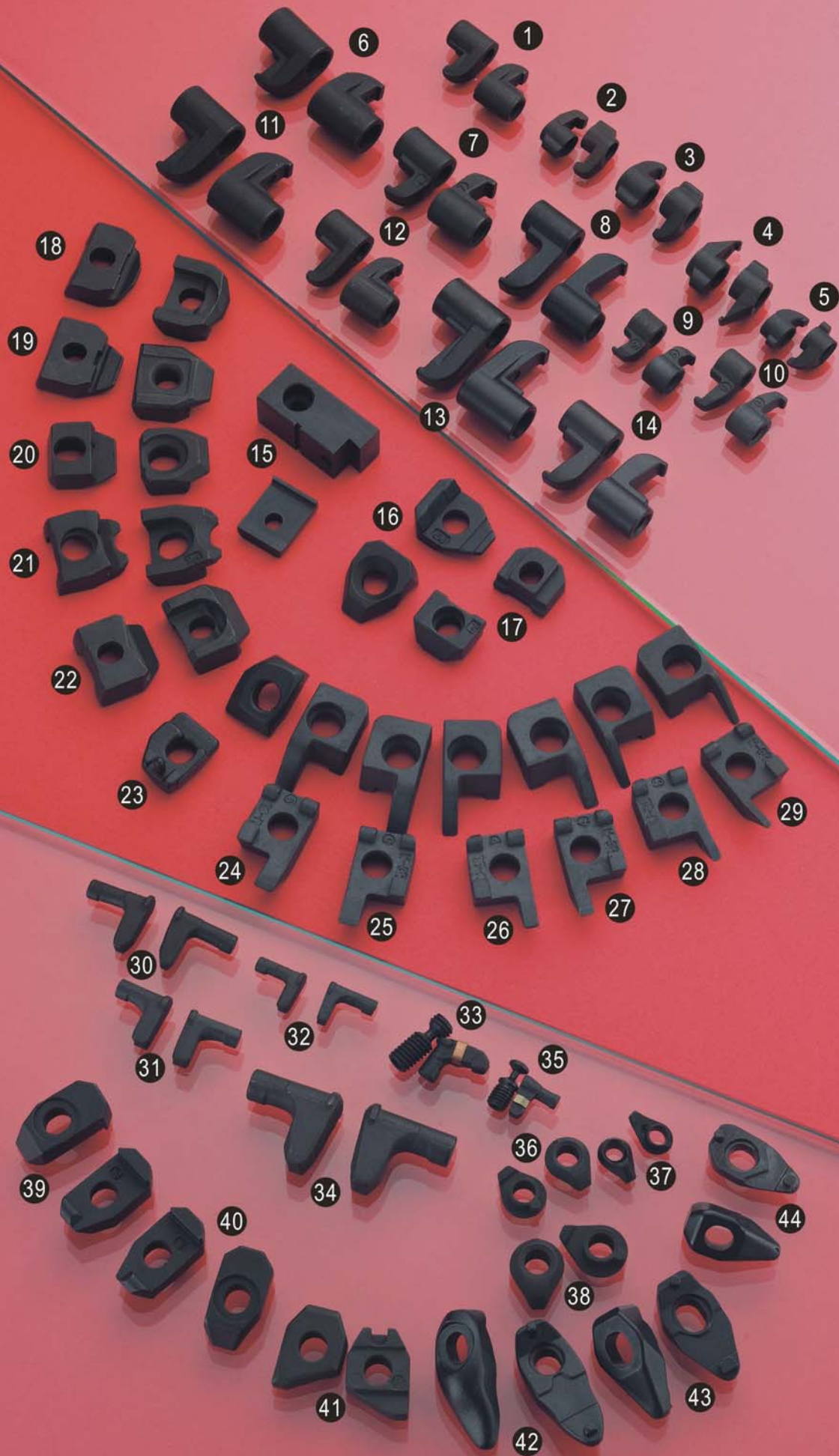
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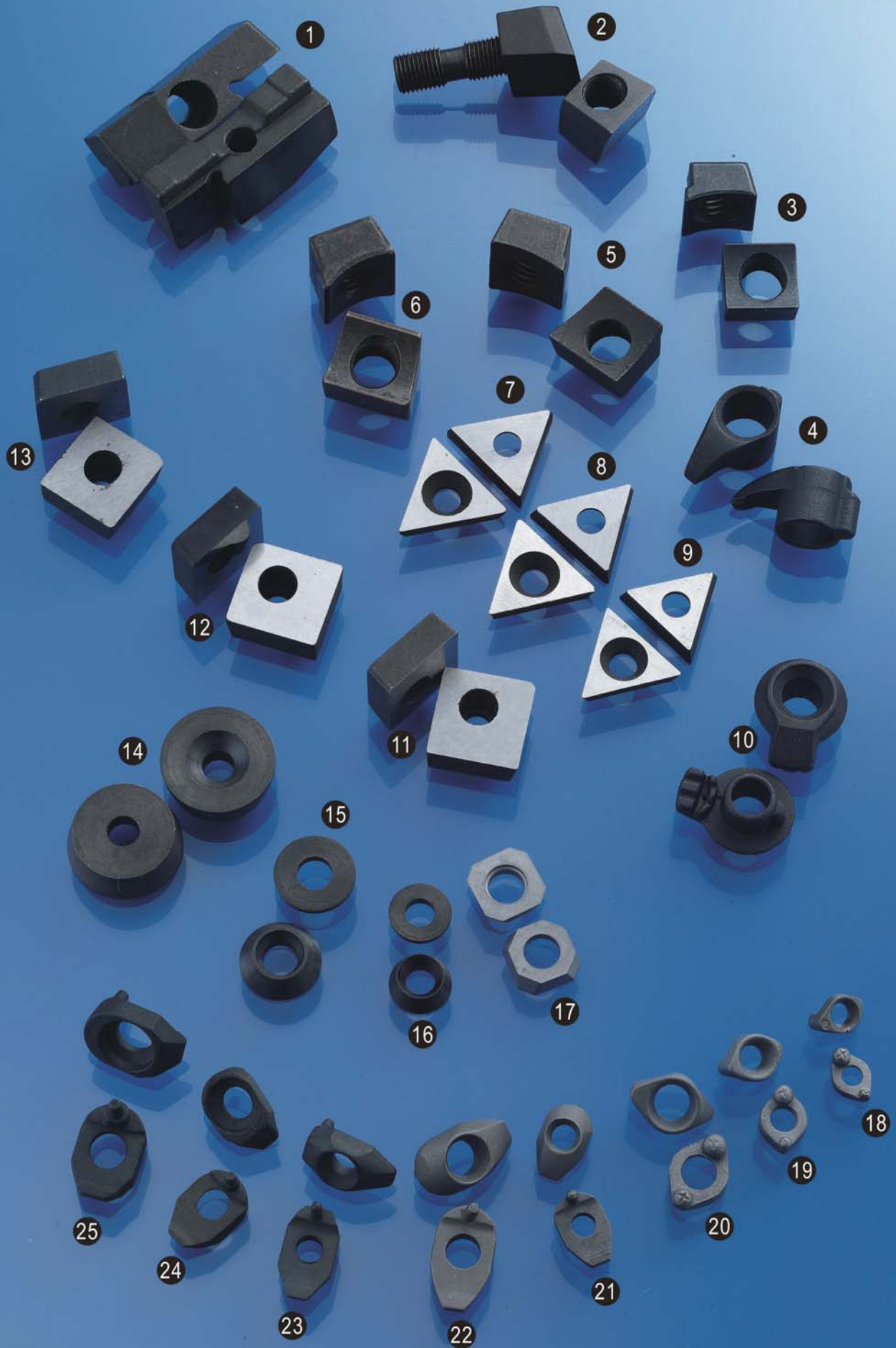


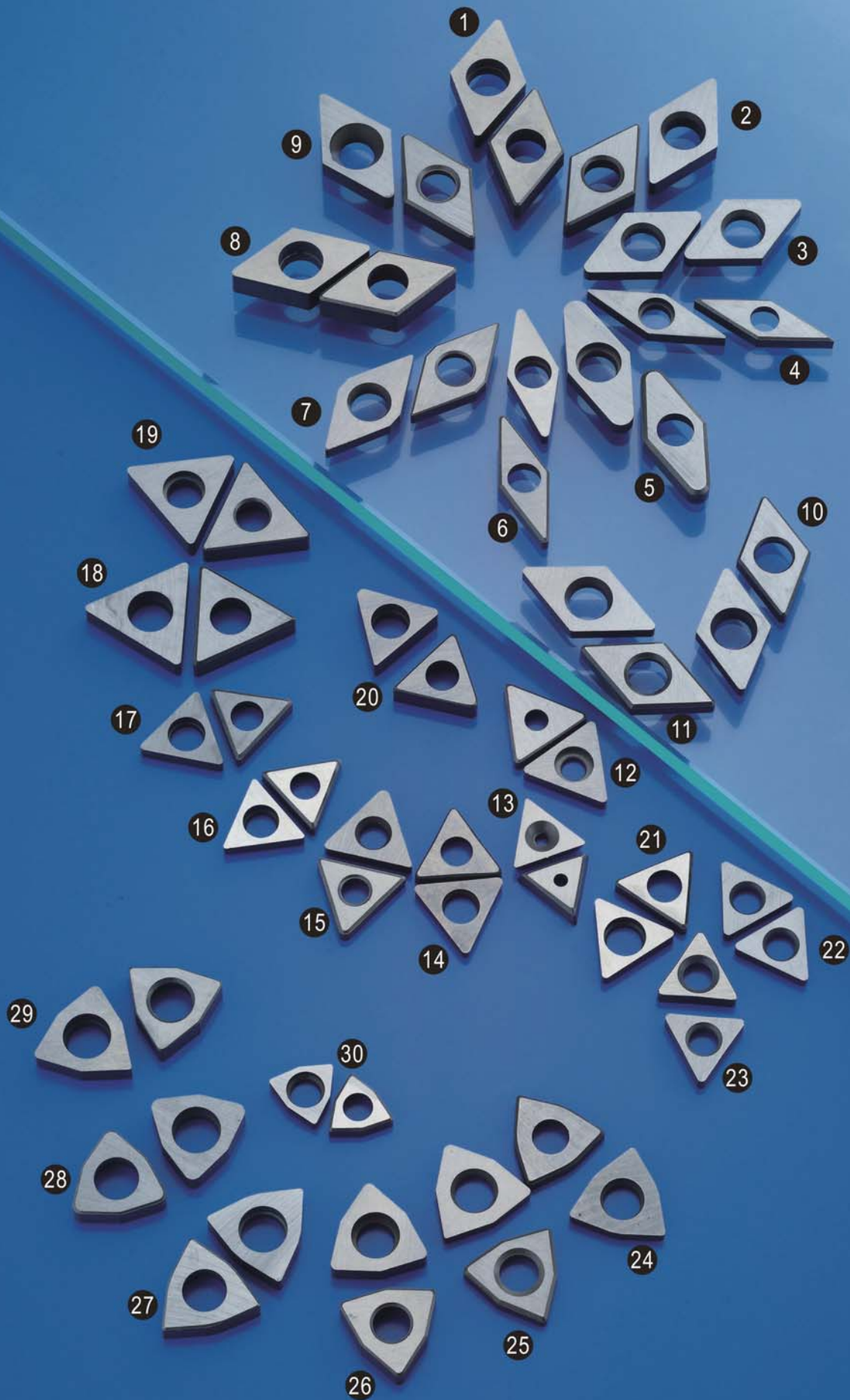


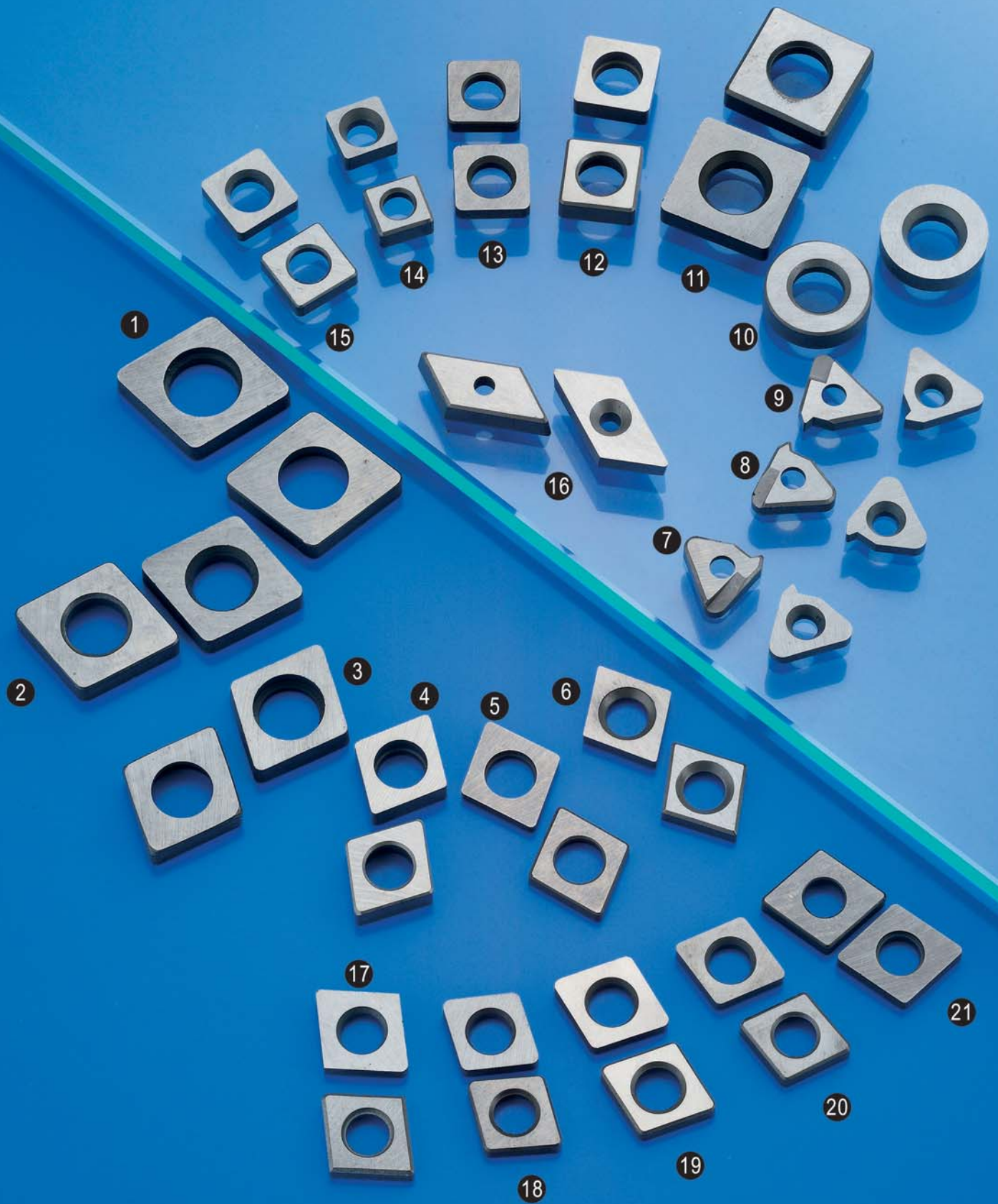
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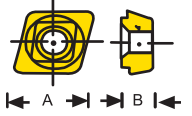


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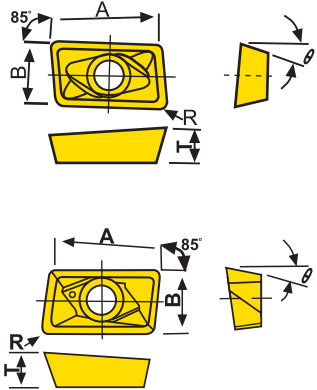
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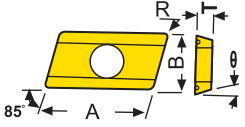
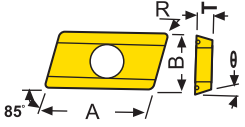
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	ITEM CODE	Size(mm)		Carbide Grade
		A	B	
	CCMT-060204	6.35	2.38	HC844 CY250
	CPMT-090308	9.525	3.18	
	CPMT-120408	12.70	4.76	
	CPMT-080204Z	7.94	2.38	
	CPMT-090204Z	9.525	2.38	
	CPMT-120308Z	12.70	3.18	
	CPMT-160408Z	15.875	4.76	
	CPMT-190408Z	19.05	4.76	

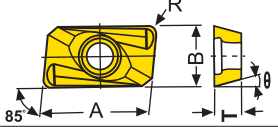
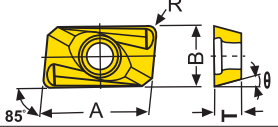
ASJ.ASL.AHF.AHFB

	ITEM CODE	Size(mm)				Carbide Grade
		A	B	T	θ°	
底刃 On end	ADMT100308L	10.4	6.35	3.18	15	WH10 CY250
	ADMT12T308L	12.6	7.39	3.9	15	
	APMT160408L	16.45	9.53	4.76	11	
	APMT170408L	17.6	9.53	7.76	11	
	APMT190508L	19.6	10.00	5.5	11	
外周刃 On periphery	ACMT100308R	10.0	6.35	3.4	7	
	APMT12T308R	13.14	7.39	3.9	11	
	APMT150408R	15.88	9.35	4.76	11	

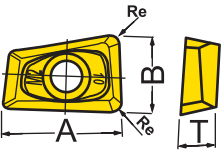
UEXM.UEX.BHP

	ITEM CODE	Size(mm)				Carbide Grade
		A	B	T	θ°	
	APET120202SR	12.70	7.938	2.5	11	CH550 HC844
	APET120204SR			2.5	11	
	ADET160304SR	15.875	9.525	3.18	15	
	ADET160308SR			3.18	15	

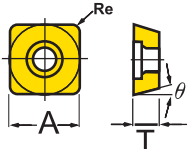
JTSM.JTS.GP.PE.GTS

	ITEM CODE	Size(mm)				Carbide Grade
		A	B	T	θ°	
	APMT1135PDER	11.0	6.35	3.5	11	UT120T F7030 VP15TF
	APMT1604PDER	16.5	9.525	4.76	11	

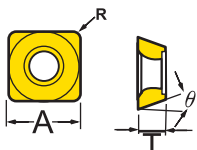
AQXR.AQXRM

	ITEM CODE	Size(mm)			Carbide Grade
		A	B	T	
	QOMT0830R-M2	8.4	5.5	3.0	VP15TF
	QOMT1035R-M2	10.6	7.0	3.5	
	QOMT1342R-M2	13.1	8.7	4.2	
	QOMT1651R-M2	16.5	11.0	5.1	

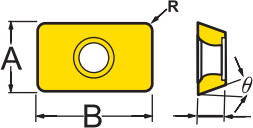
BHP

	ITEM CODE	Size(mm)			Carbide Grade
		A	T	θ°	
	SPMT120308	12.7	3.18	11	NX4545 UTi20T

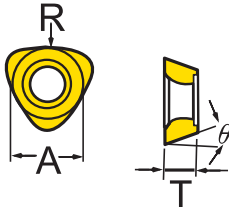
G2037.RGK.G2038.ATC

	ITEM CODE	Size(mm)			Carbide Grade
		A	B	θ°	
	SDMT060304	6.35	3.18	11	WTL71 HC844 CY250
	SDMT090308	9.525	3.18	14	
	SPMT120408	12.70	4.76	11	

G2037.G2038.ATC

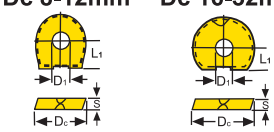
	ITEM CODE	Size(mm)				Carbide Grade
		A	B	T	θ°	
	APMT060304	6.35	7.94	3.18	11	WTL71 HC844 CY250
	ADMT150308	9.525	15.0	3.18	14	
	APMT150408	12.70	15.88	4.76	11	

RGK

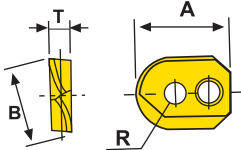
	ITEM CODE	Size(mm)				Carbide Grade
		A	R	T	θ°	
	P26315-R10	6.75	10.0	2.78	14	WAP35 WTP35
	P26315-R12	8.50	12.5	3.18	14	
	P26315-R15	10.50	15.0	3.97	14	
	P26315-R16	10.50	16.0	3.97	14	
	P26315-R20	12.70	20.0	4.76	11	
	P26315-R25	12.70	25.0	4.76	11	



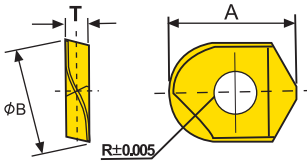
RGAM.RGA

	ITEM CODE	Size(mm)				Carbide Grade
		Dc	D1	L1	S	
	P3201-D08(WPR8N)	8	3	4	2.0	WAP35 WTL71 WTP35 LC610W
	P3201-D10(WPR10N)	10	4	5	2.5	
	P3201-D12(WPR12N)	12	5	6	2.5	
	P3201-D16(WPR16N)	16	5	6	3.0	
	P3201-D20(WPR20N)	20	5	6	3.0	
	P3201-D25(WPR25N)	25	6	9	4.0	
	P3201-D30(WPR30N)	30	8	10	5.0	
	P3201-D32(WPR32N)	32	8	10	5.0	

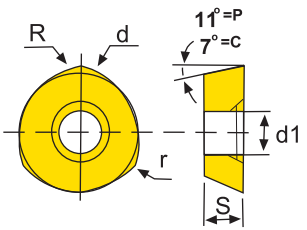
ABPM.ABP

	ITEM CODE	Size(mm)				Carbide Grade
		R	A	B	T	
	ZPFW160	8.0	20.0	16	4	PC20M PCA15M
	ZPFW200	10.0	24.8	20	5	
	ZPFW250	12.5	31.0	25	6	
	ZPFW300	15.0	37.2	30	7	

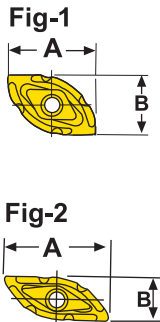
ABPF.ABPFM

	ITEM CODE	Size(mm)				Carbide Grade
		R	A	B	T	
	ZPFG080	4.0	9.7	8	2.1	PCS08M PCA08M PCA12M
	ZPFG100	5.0	12.1	10	2.7	
	ZPFG120	6.0	14.6	12	3.2	
	ZPFG160	8.0	16.6	16	4.2	
	ZPFG200	10.0	20.3	20	5.2	
	ZPFG250	12.5	24.1	25	6.2	
	ZPFG300	15.0	29.2	30	7.2	
	ZPFG320	16.0	30.2	32	7.2	

SE

	ITEM CODE	Size(mm)				
		d	S	r	R	d1
	QCHW 0806T1 FN	6.2	1.98	0.4	3.86	2.5
	QCHW 100702 FN	7.5	2.38	0.4	4.83	2.5
	QPHW 120903 EN	9.52	3.18	0.4	5.769	4.4
	QPHW 1612T3 EN	12.7	3.97	0.4	7.727	4.4
	QPHW 201504 EN	15.87	4.76	0.4	9.659	4.4
	QPHW 251904 EN	19.05	4.76	0.4	12.074	5.5
	QPHW 322505 EN	25.4	5.56	0.8	15.45	6.5
	QPHW 120903 FN	9.52	3.18	0.4	5.769	4.4
	QPHW 1612T3 FN	12.7	3.97	0.4	7.727	4.4
	QPHW 201504 FN	15.87	4.76	0.4	9.659	4.4

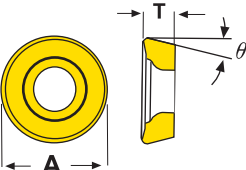
RCU.ASB

	ITEM CODE	Size(mm)		Shape	Carbide Grade
		A	B		
	ZCET250CE-N	38.8	26.0	Fig-1	HC844 CY250 CY9020 JX1045 JX1060 GX2030
	ZCET250SK-N	45.03	18.95	Fig-2	
	ZPET250CE-N	39.3	26.0	Fig-1	
	ZPET250SK-N	44.6	19.2	Fig-2	
	ZPET200CE-N	35.4	20.3	Fig-1	
	ZPET200SK-N	39.9	16.1	Fig-2	

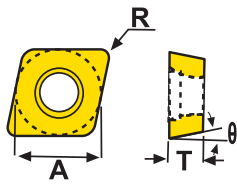
RCFM.RCF

ITEM CODE	Size(mm)				Shape	Carbide Grade
	R	A	B	T		
ZCEW100CE	10.0	18.3	10.0	4.74	Fig-1	HC844 CY250 CY9020
ZCEW125CE	12.5	23.1	12.3	6.10		
ZCEW150CE	15.0	28.3	14.9	7.59		
ZCEW160CE	16.0	28.8	15.4	7.45		
ZCEW200CE	20.0	35.4	20.1	8.00		
ZCEW100SE	10.0	16.7	8.1	4.24	Fig-2	
ZCEW125SE	12.5	20.8	9.3	5.40		
ZCEW150SE	15.0	25.7	11.8	7.09		
ZCEW160SE	16.0	26.3	12.4	6.96		
ZCEW200SE	20.0	31.9	15.7	7.00		

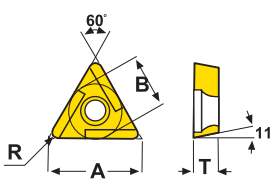
RAWM.RAHM.RAH.RAW.RAM.WA.RW.RM.RH

	ITEM CODE	Size(mm)			Carbide Grade
		R	T	θ°	
	RPMT0602MOE	6.0	2.38	11	MP91M
	RPMW1003MOE	10.0	3.18	11	VP15TF
	RPMT1204MOE	12.0	4.76	11	
	RDMT0802MOTN	8.0	2.38	15	CY150 CY250
	RDMT10T3MOTN	10.0	3.97	15	
	RDMT1204MOTN	12.0	4.76	15	
	RDMX1604MOTN	16.0	4.76	15	

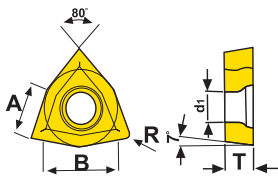
GTB

	ITEM CODE	Size(mm)				Carbide Grade
		A	T	θ°	R	
	CCMT060204	6.35	2.38	7	0.4	GM25 HC844
	CCMT09T308	9.525	3.97	7	0.8	

GEW.GEB.GEWN.GENH

	ITEM CODE	Size(mm)				Carbide Grade
		A	B	T	R	
	TPGT080202L	8.2	4.76	2.38	0.2	T12A T1200A T2000Z BN250 BN700
	TPGT090204L	9.6	5.56	2.38	0.4	
	TPGT011204L	11.0	6.35	2.38	0.4	

SD

	ITEM CODE	Size(mm)					Carbide Grade
		A	B	T	d1	R	
	WCMX030208	3.8	5.56	2.38	2.85	0.8	JC325V ACZ330
	WCMX040208	4.3	6.35	2.38	3.15	0.8	
	WCMX050308	5.4	7.94	3.18	3.2	0.8	
	WCMX06T308	6.5	9.52	3.97	3.72	0.8	
	WCMX080412	8.7	12.7	4.76	4.3	1.2	



刀片規格 / 切削參數

Inserts/Cutting Conditions

ASJ.ASL

被加工材料 Work material	刀片牌號 Grade	切削速度 m/min Cutting Speed	每齒進給量 mm/t Feed rate	ø16		ø20		ø25		ø32		ø35		ø40	
				轉速 min ⁻¹	進給速度 mm/min	轉速 min ⁻¹	進給速度 mm/min	轉速 min ⁻¹	進給速度 mm/min	轉速 min ⁻¹	進給速度 mm/min	轉速 min ⁻¹	進給速度 mm/min	轉速 min ⁻¹	進給速度 mm/min
低碳鋼 Mild Steels (200HB以下)	CY250	150~ 220	0.03~ 0.08	4,380	440	3,500	350	2,800	280	2,190	220	2,000	200	1,750	180
				V=220m/min fz=0.05mm/t 間歇進給量		step feed=0.3mm		V=220m/min fz=0.05mm/t 間歇進給量		step feed=0.3mm		step feed=0.3mm		step feed=0.3mm	
碳鋼·合金鋼 Carbon & Alloy (300HRC以下)	CY250	120~ 220	0.03~ 0.08	3,980	400	3,180	320	2,550	250	1,990	200	1,820	180	1,590	160
				V=200m/min fz=0.05mm/t 間歇進給量		step feed=0.5mm		V=200m/min fz=0.05mm/t 間歇進給量		step feed=0.5mm		step feed=0.5mm		step feed=0.5mm	
不鏽鋼 Stainless Steels SUS	CY250	120~ 220	0.03~ 0.06	3,980	400	3,180	320	2,550	250	1,990	200	1,820	180	1,590	160
				V=200m/min fz=0.05mm/t 間歇進給量		step feed=0.3mm		V=200m/min fz=0.05mm/t 間歇進給量		step feed=0.3mm		step feed=0.3mm		step feed=0.3mm	
鑄鋼 Cast Iron FC,FCD	CY100H	120~ 180	0.03~ 0.1	3,180	510	2,550	410	2,040	330	1,590	250	1,460	230	1,270	200
				V=160m/min fz=0.08mm/t 間歇進給量		step feed=1mm		V=160m/min fz=0.08mm/t 間歇進給量		step feed=1mm		step feed=1mm		step feed=1mm	

★注意事項：1.表中切削條件為一般切削條件，請根據機床動力、工作狀況進行調整。2.在銑削硬度HRC40以上孔時，請使用螺旋式銑削加工。
3.溼式銑削用刀片材料推薦使用GF30，請將銑削速度設定在下限一側。

GJUM.GJU

被加工材料 Work material	刀片牌號 Grade	切削速度 m/min Cutting Speed	加工方式 Machining mode	立 銑 刀							
				ø16		ø20		ø25		ø32	
				轉速Revolutions min ⁻¹	進給速度 Table Speed mm/min	轉速Revolutions min ⁻¹	進給速度 Table Speed mm/min	轉速Revolutions min ⁻¹	進給速度 Table Speed mm/min	轉速Revolutions min ⁻¹	進給速度 Table Speed mm/min
低碳鋼 Mild Steels SS,SM (200HB以下)	HC844 EX40	80~150	側面銑削 Side milling		420		384		382		450
			*螺旋式加工 Helical	2,980	1,200	2,400	1,150	1,190	1,150	1,500	1,350
			*鑽銑加工 Drilling	1,600	130	1,600	130	1,270	130	1,500	150
碳鋼·合金鋼 Carbon·Alloy Steels S-C,SCM (30HRC以下)	HC844 EX40	65~120	側面銑削 Side milling		420		384		382		450
			*螺旋式加工 Helical	2,980	1,200	2,400	1,150	1,910	1,150	1,500	1,350
			*鑽銑加工 Drilling	1,280	100	1,280	100	1,020	100	1,200	120
碳鋼·合金鋼 Carbon·Alloy Steels (30~40HRC)	HC844 EX40	40~80	側面銑削 Side milling		224		203		204		240
			*螺旋式加工 Helical		660		530		640		700
			*鑽銑加工 Drilling	700	60	720	60	570	60	680	70
不鏽鋼 Stainless Steels SUS	HC844	60~110	側面銑削 Side milling		280		256		254		320
			*螺旋式加工 Helical	2,000	800	1,600	770	1,270	770	1,050	960
			*鑽銑加工 Drilling	1,120	90	1,120	90	890	90	1,050	100
鑄鋼 Cast Iron FC,FCD	WH40	40~80	側面銑削 Side milling		600		480		380		450
			*螺旋式加工 Helical	3,000	1,250	2,400	1,000	1,910	1,200	1,500	1,320
			*鑽銑加工 Drilling	700	60	720	60	570	60	680	70

★注意事項：1.用鑽銑加工銑削產生長切屑材料時，要避免由於切削的捲入，飛濺引起的事故，請進行步進式進給。因為切屑要產生無定向飛濺，請在使用時採取適當的安全措施。
2.在銑削大直徑孔時，利用CNC(NC控制)的螺旋功能G02，G03進行螺旋式銑削，沒有切屑的捲入問題，是安全的。而且銑削效率非常高。最小加工孔徑是立銑刀直徑的1.2倍，最大為1.8倍。
1)上述的切削條件是使用標準型立銑刀的條件：使用長型立銑刀時，請取上述進給速度的70%。
2)要獲得平滑的加工底面，鑽銑加工後橫向進給銑削或者進行成形銑削加工。
3)在銑削凹腔等容易堆積屑的工件時，請用壓縮空氣一邊吹一邊進行銑削。

AHF

被加工材料 Work material	刀片牌號 Grade	切削速度 m/min Cutting Speed	機床主軸 Spindle of Machine	每齒進給量 mm/t Feed rate	ø25			ø30			ø32			ø35		
					轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min
低碳鋼 Mild Steels (200HB以下)	CH570	150 ~ 220	BT40	0.1 ~ 0.25	2,800	840	31.5	2,335	700	31.5	2,190	985	47.3	2,000	900	47.3
			BT50		V=220m/min fz=0.15mm/t Ad=5mm Rd=0.3D											
碳鋼·合金鋼 Carbon & Alloy Steel (30HRC以下)	CY250	120 ~ 200	BT40	0.1 ~ 0.2	2,545	1,018	63.6	2,120	850	63.6	1,990	1,950	95.6	1,820	1,090	95.6
			BT50		V=200m/min fz=0.15mm/t Ad=5mm Rd=0.5D											
碳鋼·合金鋼 Carbon & Alloy Steel (30~40HRC)	CY250	60 ~ 120	BT40	0.08 ~ 0.2	2,545	764	28.7	2,120	635	28.7	1,990	895	43	1,820	820	43
			BT50		V=200m/min fz=0.15mm/t Ad=5mm Rd=0.3D											
碳鋼·合金鋼 Carbon & Alloy Steel (40~45HRC)	CY250	50 ~ 100	BT40	0.05 ~ 0.2	2,290	915	38.4	1,910	765	38.4	1,790	1,075	86	1,640	985	86
			BT50		V=180m/min fz=0.2mm/t Ad=5mm Rd=0.5D											
不鏽鋼 Stainless Steels SUS	CY250	120 ~ 220	BT40	0.08 ~ 0.25	1,530	305	11.4	1,275	255	11.4	1,195	360	17.3	1,090	330	17.3
			BT50		V=120m/min fz=0.1mm/t Ad=5mm Rd=0.3D											
鑄鋼 Cast Iron FC,FCD	WH10	80 ~ 100	BT40	0.08 ~ 0.25	1,275	380	23.8	1,060	320	23.8	995	450	36	910	410	36
			BT50		V=100m/min fz=0.15mm/t Ad=5mm Rd=0.5D											
					1,080	215	4.8	900	180	4.8	845	255	7.3	775	230	7.3
					V=85m/min fz=0.1mm/t Ad=3mm Rd=0.3D											
					890	270	10.1	740	220	10.1	695	310	14.8	640	290	14.8
					V=70m/min fz=0.15mm/t Ad=3mm Rd=0.5D											
					2,800	840	31.5	2,335	700	31.5	2,190	985	47.3	2,000	900	47.3
					V=220m/min fz=0.15mm/t Ad=5mm Rd=0.3D											
					2,545	1,018	63.6	2,120	850	63.6	1,990	1,195	95.6	1,820	1,090	95.6
					V=200m/min fz=0.2mm/t Ad=5mm Rd=0.5D											
					1,275	380	14.3	1,060	320	14.3	995	450	21.6	910	410	21.6
					V=100m/min fz=0.15mm/t Ad=5mm Rd=0.3D											
					1,020	410	25.6	850	340	25.6	795	480	38.4	730	440	38.4
					V=80m/min fz=0.2mm/t Ad=5mm Rd=0.5D											

★注意事項：1.表中的切削條件銑削30分鐘時，後面磨損0.3mm的切削條件。銑刀的懸伸量為標準型的額以下長度。
2.表中的Q值表示單位時間的切削排出量。Q(cm³/min)=Ad(mm) × Rd(mm) × F(mm/min)/1000。
3.長柄型立銑刀（長懸伸切削）銑削時，請將Ad進給速度的50%作為目標參考值。
4.溼式銑削，推薦使用刀片材料GF30，銑削速度，請設定在下限一側。
5.銑槽時，請取表中進給速度的70%。



UEXM.UEX.UEXB

被加工材料 Work material	刀片牌號 材種 Grade	使用刀片 Inserts	切削速度 V Cutting speed V (m/min)	立 銑 刀 直 徑													
				16		20		25		30		35		40		50	
				轉速 Revolutions min ⁻¹	進給速度 Table Speed mm/min	轉速 Revolutions min ⁻¹	進給速度 Table Speed mm/min	轉速 Revolutions min ⁻¹	進給速度 Table Speed mm/min	轉速 Revolutions min ⁻¹	進給速度 Table Speed mm/min	轉速 Revolutions min ⁻¹	進給速度 Table Speed mm/min	轉速 Revolutions min ⁻¹	進給速度 Table Speed mm/min	轉速 Revolutions min ⁻¹	進給速度 Table Speed mm/min
低碳鋼 Mild Steels (200HB以下)	CH550	AP T12020 SR AD T16030 SR	180	3,580	180	2,860	290	2,290	370	1,910	370	1,640	490	1,430	490	1,150	510
	HC844		140	2,780	220	2,230	360	1,780	360	1,490	360	1,270	460	1,110	460	890	500
碳鋼・合金鋼 Carbon・Alloy Steel (30HRC以下)	CH550		150	2,980	150	2,390	240	1,910	310	1,590	310	1,360	410	1,190	410	950	420
	EX35 HC844		100	1,990	160	1,590	250	1,270	250	1,060	250	910	330	800	330	640	350
碳鋼・合金鋼 Carbon・Alloy Steel (30~40HRC)	CH550		50	990	80	800	130	640	130	530	130	450	160	400	160	320	170
	HC844		80	1,590	130	1,270	200	1,020	200	850	200	730	260	640	260	510	290
不銹鋼 Stainless Steels	EX35		100	1,990	160	1,590	250	1,270	250	1,060	250	910	330	800	330	640	360
	HC844		125	2,490	200	1,990	320	1,590	320	1,330	320	1,140	410	990	410	800	450
鑄鋼 Cast Iron	WH10	AP T12020 SR AD T16030 SR	80	1,590	160	1,270	250	1,020	250	850	250	730	330	640	330	510	350
	CY100H		80	1,590	190	1,270	300	1,020	300	850	300	730	390	640	390	510	400
鋁合金鋼 Aluminium (Si<15%以下) 石墨 Graphite (65HS)	WH10	APET120202FR ADET160302FR	350	6,960	1,040	5,570	1670	4,460	1,340	3,710	1,110	3,180	1,430	2,790	1,260	2,230	1,340

★注意事項：1.B型（銑洗槽）的刀柄，請使用上表條件的70%。 2.為了防止黏屑，推薦使用有壓力的空氣冷卻。

Note :1.In case of B type bobby(under cut type),apply 70% of the above listed values.

2.Blow residing chips with the air,to prevent clogging of cutting edge.

JTSM.JTS.GP.AHFB.PE

被削材	硬度	刀片材料	斷屑槽	切削範圍	切削速度 (m/min)	每刃進給量 (mm/刃)
軟鋼 (SS400,S10C等)	180HB 以下	NX4545	H	精切削	160 (120~180)	0.1(0.05~0.15)
		F7030	M	一般切削	180 (150~200)	0.15(0.1~0.2)
炭素鋼 合金鋼 (S45C,SCM440等)	180~280HB	NX4545	H	精切削	120 (100~160)	0.08(0.05~0.1)
		F7030	M	一般切削	150 (120~200)	0.15(0.1~0.2)
		UTi20T,UP20M	H	一般切削	120 (100~160)	0.2(0.1~0.25)
		F7030	H	不穩定切削	120 (100~160)	0.15(0.1~0.2)
	280~350HB	NX4545	H	精切削	100 (80~120)	0.8(0.05~0.1)
		F7030	M	一般切削	140 (120~160)	0.15(0.1~0.2)
高硬度鋼	40HRC 以上	F7030	H	不穩定切削	100 (80~120)	0.2(0.1~0.25)
		AP15TF	M	一般切削	70 (50~100)	0.1(0.05~0.15)
		F7030	M	一般切削	140 (120~160)	0.15(0.1~0.2)
不銹鋼 (SUS304等)	200HB 以下	UTi20T,UP20M	H	一般切削	120 (80~140)	0.1(0.05~0.15)
		F7030	H	不穩定切削	120 (80~140)	0.2(0.1~0.25)
		AP15TF	M	一般切削	140 (120~160)	0.15(0.1~0.2)
普通鑄鐵 (FC250等)	抗拉強度 350N/mm ² 以下	HTi10T,UTi20M	H	一般切削	120 (100~140)	0.2(0.1~0.25)
		AP15TF	M	一般切削	120 (100~140)	0.15(0.1~0.2)
高強度鑄鐵	FCD450 以下	HTi10T,UTi20M	H	一般切削	100 (80~120)	0.2(0.1~0.25)
		AP15TF	M	一般切削	100 (80~120)	0.1(0.05~0.15)
	FCD500 以下	HTi10T,UTi20M	H	一般切削	80 (60~100)	0.15(0.1~0.2)
		HTi10	G	一般切削	500 (200~1000)	0.2(0.1~0.3)
鋁合金	—	HTi10	G	一般切削	40 (30~60)	0.2(0.1~0.3)
耐熱合金	—	F7030	M	一般切削	30 (20~40)	0.15(0.1~0.2)

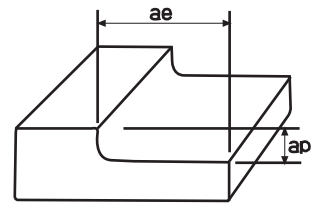
◆刀具轉速(min⁻¹)=(1000x切削速度)÷(3.14 x刀具切削刃直徑)

◆機台工作台進給(mm/min)=每刃進給量 x 刀具刃數 x 刀具轉速



AQXR.AQXRM

Work		硬 度	Grade	m/min cutting Speed	Ø16,17		Ø20,21		Ø25,26		Ø32,33		Ø40		Ø50	
					(mm/rev)	(mm)	(mm/rev)	(mm)	(mm/rev)	(mm)	(mm/rev)	(mm)	(mm/rev)	(mm)	(mm/rev)	(mm)
P	SS400 S10C	≤180HB	VP15TF	180 (150-220)	0.035	0.2	0.045	0.3	0.05	0.3	0.055	0.3	0.06	0.3	0.065	0.3
	S50C SCM440	180 -350HB	VP15TF	160 (120-200)	0.03	0.2	0.04	0.3	0.045	0.3	0.05	0.3	0.055	0.3	0.06	0.3
M	SUS304	≤270HB	VP30RT (VP15TF)	150 (120-180)	0.03	0.15	0.04	0.25	0.045	0.25	0.05	0.25	0.055	0.25	0.06	0.25
K	FC300	≤450MPa	VP15TF	180 (150-220)	0.04	0.4	0.05	0.5	0.06	0.5	0.065	0.5	0.07	0.5	0.075	0.5
N	Aluminium Alloy	—	HTi10	500 (200-800)	0.04	0.2	0.05	0.3	0.06	0.3	0.065	0.3	0.07	0.3	0.075	0.3
H	SKD SKT	40 -55HRC	VP15TF	80 (50-120)	0.02	0.15	0.03	0.25	0.035	0.25	0.04	0.25	0.045	0.25	0.05	0.25



ASB

Work	Grade	15x10mm(apxae)			25x15mm(apxae)			55x5mm(apxae)		
		min ⁻¹	mm/min	cm ³ /min	min ⁻¹	mm/min	cm ³ /min	min ⁻¹	mm/min	cm ³ /min
Carbon Steels Alloy Steels (250HB以下)	CY250	1,500	900	135	1,500	500	86.3	800	240	66
		Vc=236m/min fz=0.3mm/tooth			Vc=236m/min fz=0.17mm/tooth			Vc=126m/min fz=0.15mm/tooth		
Hardened Steels Pre-Harden Steels (40HRC~45HRC)	CY250 CY9020	450	90	13.5	450	140	24.2	380	90	24.8
		Vc=70m/min fz=0.1mm/tooth			Vc=70m/min fz=0.16mm/tooth			Vc=60m/min fz=0.12mm/tooth		
Cast Iron (200HB以下)	CY250	1,500	1,500	225	1,500	900	155.4	1,000	400	110
		Vc=236m/min fz=0.5mm/tooth			Vc=236m/min fz=0.3mm/tooth			Vc=157m/min fz=0.2mm/tooth		

【Note】

These conditions are for general guidance; in actual machining conditions adjust the parameters according to your actual machine and work-piece conditions

①For long type please reduce speed and feed by 70%.

②If using a machine with less than 15kw power reduce daa to 60% speed and 35% feed, cutting data listed is based on or over 22kw

③The following formula shows the chip removal volume (Q) per unit time.

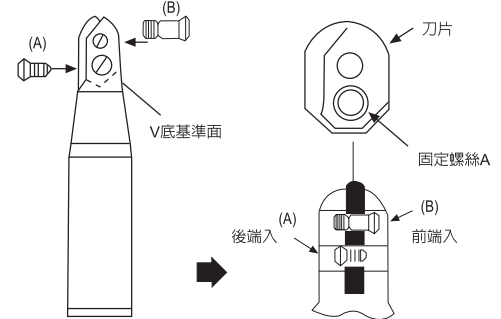
$$Q(\text{cm}^3/\text{min}) = a_p(\text{mm}) \times a_e(\text{mm}) \times V_f(\text{mm}/\text{min}) / 1000$$



ABPM.ABP

被加工材料 Work material	刀片牌號 Grade	切削速度 m/min Cutting Speed	每齒進給量 mm/t Feed rate	ø16		ø20		ø25		ø30	
				轉速 min ⁻¹	進給速度 mm/min	轉速 min ⁻¹	進給速度 mm/min	轉速 min ⁻¹	進給速度 mm/min	轉速 min ⁻¹	進給速度 mm/min
碳鋼・合金鋼 Carbon & Alloy (300HRC以下)	PCA15M (PC20M)	100~ 200	0.2~ 0.3	3,200	1,600	2,550	1,300	2,050	1,030	1,700	850
				V=160m/min fz=0.25mm/t Ad=0.05D Rd=0.1D							
碳鋼・合金鋼 Carbon & Alloy (30~40HRC)	PCA15M (PC20M)	80~ 150	0.2~ 0.3	2,400	1,200	1,910	955	1,530	765	1,280	640
				V=120m/min fz=0.25mm/t Ad=0.05D Rd=0.1D							
模具鋼・自硬鋼 Die Tool Steels Pre-Harden Steel (40~45HRC)	PCA15M (PC20M)	70~ 150	0.1~ 0.15	1,600	385	1,280	310	1,020	245	850	205
				V=80m/min fz=0.12mm/t Ad=0.05D Rd=0.1D							
鑄鐵 Cast Iron FC,FCD	PCA15M (PC20M) (WH10)	100~ 200	0.3~ 0.4	3,200	2,240	2,550	1,790	2,050	1,440	1,700	1,190
				V=160m/min fz=0.35mm/t Ad=0.05D Rd=0.1D							

◎上刀片請將(A)螺絲先鎖緊再上(B)螺絲



- ★注意事項：1. 請結合銑削的實際情況，參考上表切削條件調整銑削條件。
2. 使用本銑刀實有產生破損的危險，應裝安全罩，使用保護眼鏡和穿安全鞋。

RCFM.RCF

被加工材料 Work material	刀片牌號 Grade	切削速度 m/min Cutting Speed	機床主軸 Spindle of Machine	每齒進給量 mm/t Feed rate	ø20			ø25			ø30			ø40		
					轉速	進給 速度	Q值	轉速	進給 速度	Q值	轉速	進給 速度	Q值	轉速	進給 速度	Q值
					min ⁻¹	mm/min	cm ³ /min	min ⁻¹	mm/min	cm ³ /min	min ⁻¹	mm/min	cm ³ /min	min ⁻¹	mm/min	cm ³ /min
碳鋼 Carbon Steels S40C~ (200HB以下)	CY250	150 ~ 250	BT40	0.15 ~ 0.3	5,840	1,750	19.4	4,670	1,870	32.4	3,890	1,560	38.9	2,920	1,170	51.9
			BT50	0.1 ~ 0.3	V=220m/min Ad=0.1mm Rd=0.3D											
				3,500	650	38.4	2,800	800	81.2	2,330	720	95.7	1,430	450	127.6	
合金鋼 Alloy Steels SKD,SKT (200~250HB)	CY250	120 ~ 200	BT40	0.15 ~ 0.3	5,310	1,590	17.6	4,240	1,700	29.4	3,540	1,420	35.4	2,650	1,060	47
			BT50	0.08 ~ 0.3	V=220m/min Ad=0.1mm Rd=0.3D											
				3,180	540	31.9	2,550	660	60.9	2,120	530	70.5	1,270	410	96.9	
合金鋼 Alloy Steels SKT,SKT (25~35HRC)	CY250	60 ~ 120	BT40	0.08 ~ 0.25	3,450	1,040	11.5	2,760	1,100	19.1	2,300	920	23	1,720	690	30.6
			BT50	0.05 ~ 0.25	V=130m/min Ad=0.1mm Rd=0.3D											
				2,070	440	26	1,660	540	49.9	1,380	460	61.2	870	330	78	
合金鋼・自硬鋼 Alloy & Pre-Harden Steels (40~45HRC)	CY250	50 ~ 100	BT40	0.07 ~ 0.2	1,860	370	4.1	1,480	440	7.6	1,240	370	9.2	930	240	10.6
			BT50	0.05 ~ 0.2	V=70m/min Ad=0.1mm Rd=0.3D											
				1,110	150	8.9	890	200	18.5	740	200	26.6	560	100	23.6	
鑄鋼 Cast Iron FC200,FC300,GM241	CY250 CY9020	120 ~ 240	BT40	0.15 ~ 0.6	5,840	2,340	25.9	4,670	2,340	40.5	3,890	2,330	58.1	2,920	2,330	103.4
			BT50	0.1 ~ 0.8	V=220m/min Ad=0.1mm Rd=0.3D											
				3,500	1,050	103.4	2,800	1,120	103.4	2,230	1,400	186.2	1,430	1,150	326.1	

- ★注意事項：1. 表中切削條件是銑削30分鐘時，後面磨損0.3mm的切削條件。刀具懸伸量為標準型銑刀頸部以下長度（樣本的）
2. 表中的Q值表示單位時間內的切削排出量。
3. 高速機床的轉速按下式計算：

$$\text{轉速} = \frac{500 \times \text{切削速度}}{\pi \times \sqrt{2} \times R \times d - d^2}$$
R: 球頭半徑 d: 軸向切深量 π=圓周率
4. 進行等高銑削時，推薦高速機床的銑削條件。
5. 在凹腔銑削中進行傾斜切深時，推薦的傾斜角為3~5°。進給量取表中值得70%。銑鋼時，切屑不斷開，有飛濺的危險，機床上裝防護罩。銑高硬度材料時，其角度在3°以下。

RGAM.RGA

刀片材質		WTL71	WTA21
被削材質	Vc(m/min)	150~200	
	fz(mm/刃)	0.1~0.2	
軟鋼・炭素鋼	Vc	140~200	
	fz	0.1~0.2	
合金鋼 (~25HRC)	Vc	80~150	
	fz	0.1~0.2	
金型用鋼 (30HRC~45HRC)	Vc	100~250	150~300
	fz	0.15~0.3	0.12~0.3
鑄鐵	Vc	-	220~400
	fz	-	0.2~0.3

RGK

刀片材質		WTL71	WTA21
被削材質	Dc≤25	0.06-0.1	
	Dc≥30	0.1-0.15	
軟鋼・低碳鋼	Dc≤25	0.06-0.1	
	Dc≥30	0.1-0.15	
低合金鋼	Dc≤25	0.04-0.08	
	Dc≥30	0.8-0.1	
工具鋼	Dc≤25	0.06-0.1	
	Dc≥30	0.1-0.15	
鑄鋼	Dc≤25	0.08-0.12	
	Dc≥30	0.12-0.18	

ABPF.ABPFM

Work	Grade	m/min cutting Speed	mm/tooth Feed rate	Ø8		Ø10		Ø12			
				min	mm/min	min	mm/min	min	mm/min		
Carbon Steels Alloy Steels (30HRC以下)	PCS08M (PCA12M PCA08M)	100 ~200	0.2~0.3	6,370	2,550	5,090	2,040	4,240	1,700		
				Vc=160m/min fz=0.2mm/tooth ap=0.025D ae=0.1D							
Carbon Steels Alloy Steels (30~40HRC)	PCS08M (PCA12M PCA08M)	80 ~150	0.2~0.3	4,770	1,910	3,820	1,530	3,180	1,270		
				Vc=120m/min fz=0.2mm/tooth ap=0.025D ae=0.1D							
Die Tool Steels Pre-Harden Steels (30~40HRC)	PTH08M (PCA12M PCA08M)	70 ~100	0.1~0.15	3,180	640	2,550	510	2,120	420		
				Vc=80m/min fz=0.1mm/tooth ap=0.025D ae=0.1D							
Hardened Steels (55~65HRC) SKD11.SKH51	PTH08M	200 ~250	0.2~0.4	9,150	3,660	7,320	2,930	6,100	2,440		
				Vc=230m/min fz=0.2mm/tooth ap=0.01D ae=0.02D							
Cast Iron FC,FCD	PTH08M (PCA12M PCA08M)	100 ~200	0.3~0.4	6,370	3,820	5,090	3,050	4,240	2,550		
				Vc=160m/min fz=0.3mm/tooth ap=0.025D ae=0.1D							

Work	Grade	m/min cutting Speed	mm/tooth Feed rate	Ø16		Ø20		Ø25		Ø30(Ø32)	
				min	mm/min	min	mm/min	min	mm/min	min	mm/min
Carbon Steels Alloy Steels (30HRC以下)	PCS08M (PCA12M PCA08M)	100 ~200	0.2~0.3	2,400	1,600	2,550	1,300	2,050	1,030	1,700	850
				Vc=160m/min fz=0.25mm/tooth ap=0.05D ae=0.1D							
Carbon Steels Alloy Steels (30~40HRC)	PCS08M (PCA12M PCA08M)	80 ~150	0.2~0.3	1,600	1,200	1,910	955	1,530	765	1,280	640
				Vc=120m/min fz=0.25mm/tooth ap=0.05D ae=0.1D							
Die Tool Steels Pre-Harden Steels (30~40HRC)	PTH08M (PCA12M PCA08M)	70 ~100	0.1~0.15	3,200	385	1,280	310	1,020	245	850	205
				Vc=80m/min fz=0.12mm/tooth ap=0.05D ae=0.1D							
Hardened Steels (55~65HRC) SKD11.SKH51	PTH08M	200 ~250	0.2~0.4	4,575	2,740	3,660	2,200	2,930	1,760	2,440	1,460
				Vc=230m/min fz=0.3mm/tooth ap=0.01D ae=0.02D							
Cast Iron FC,FCD	PTH08M (PCA12M PCA08M)	100 ~200	0.3~0.4	3,200	2,240	2,550	1,790	2,050	1,440	1,700	1,190
				Vc=160m/min fz=0.35mm/tooth ap=0.01D ae=0.1D							

【Note】

- ①According to the machining situation, refer to the table above to determine the cutting conditions.
- ②Be sure to practice safety instructions and precautions such as wearing glasses and safety shoes, and placing safety covers when you use this tool. Because this tool can be broken during machining so failure to follow these instructions may cause personal injury.
- ③Never attempt to modify the carbide shank holder. Use the value for the depth of cut(ap) when the carbide shank holder is used
Mill diameters D=8~12mm:ap≤0.2mm.
Mill diameters D=16~32mm:ap≤0.3mm.



RAMM.RAM.RM RAWM.RAW.RW

被削材	硬度	刀片材料	切削速度 m/min
P	軟鋼 (SS400, S10C等)	F7030	250
		AP15TF	(200~300)
		UTi20T	150 (100~200)
	炭素鋼 合金鋼 (S45C, SCM440等)	F7030	180
		AP15TF	(1320~220)
		UTi20T	140 (100~170)
	280~380HB以下	F7030	160
		AP15TF	(110~190)
		UTi20T	100 (70~120)
	預硬鋼 (NAK55)	F7030	120
		AP15TF	(80~140)
		UTi20T	90 (60~110)
	高合金鋼 (SKD, SKT等)	F7030	130
		AP15TF	(90~160)
		UTi20T	100 (70~120)
	淬火鋼 (SKD, SKT等)	AP15TF	60 (50~100)
		UTi20T	60 (40~70)
M	不鏽鋼 (SUS420J2等)	F7030	180
		AP15TF	(130~220)
		UTi20T	140 (100~170)
K	普通鑄鐵 (FC250等)	AP15TF	170 (130~220)
		UTi20T	140 (100~170)
	抗拉強度 350N/mm ² 以下	AP15TF	140 (100~180)
		UTi20T	120 (80~140)
	FCD250 等	AP15TF	110 (80~140)
		UTi20T	90 (70~110)
	FCD500 等	AP15TF	110 (80~140)
		UTi20T	90 (70~110)

WA

工件材料 Materials to be machined	硬度 H B	刀片規格 Insert Gemoetries	刀片材質 Grades	線速度 (m/min) Speal	進給 Feed (mm/tooth) RP06
碳鋼 Unalloyed Steel	118-280	RPMT(-41)	MP91M	300-110	—
	118-280	RPMT(-41)	X500	250-110	—
合金鋼 Alloyed Steel	200-280	RPMT(-41)	MP91M	220-110	—
	200-280	RPMT(-41)	X500	150-110	—
	280-415	RPMT(-41)	MP91M	150-80	0.03-0.05
	280-415	RPMT(-41)	X500	120-80	0.03-0.05
不鏽鋼 Stainless Steel		RPMT(-41)	MP91M	200-120	0.03-0.15
		RPMT(-41)	X500	150-110	0.03-0.05
鑄鐵 Cast Iron	灰鑄鐵	RPMT(-41)	X500	300-110	0.04-0.1
	球狀鑄鐵	RPMT(-41)	X500	200-80	0.03-0.08
鋁合金 Aluminum & Alloys		RPEX(-701)	GH1	1000-400	0.04-0.15

GR

被削材	硬度	刀片材料	切削速度 m/min	每刃進給量 (mm/刃)	推薦 最大切深 (mm)
P	180HB以下	UTi20T	125 (100~150)	0.35 (0.2~0.5)	4.5
		NX2525	175 (150~200)	0.25 (0.2~0.3)	
		UTi20T	110 (80~150)	0.3 (0.2~0.4)	
		NX2525	165 (130~200)	0.25 (0.2~0.3)	
	280~350HRC	UTi20T	30 (15~50)	0.2 (0.1~0.3)	2
		HTi10	30 (15~50)	0.2 (0.1~0.3)	
M	不鏽鋼 (奧氏體系 SUS等)	UTi20T	140 (100~180)	0.35 (0.2~0.5)	3
K	普通鑄鐵 (FC250等)	HTi10	125 (100~150)	0.4 (0.3~0.5)	4.5
	抗拉強度 350N/mm ² 以下	HTi10	125 (100~150)	0.4 (0.3~0.5)	4.5
	鈦合金	UTi20T	55 (40~70)	0.25 (0.1~0.4)	3
	耐熱合金	UTi20T	50 (30~70)	0.25 (0.1~0.4)	3

- ◆ 刀具轉速(min⁻¹)=(1000 x 切削速度)÷(3.14 x 刀具切削刃直徑)
- ◆ 機床工作台進給(mm/min)=每刃進給量 x 刀具刃數 x 刀具轉速

TP

被削材	硬度	刀片材料	切削速度 m/min	每刃進給量 (mm/刃)
P	軟鋼 (SS400, S10C等)	F7030	200 (160~250)	0.35 (0.2~0.5)
		NX4545	160 (125~200)	
		UTi20T UP20M	160 (125~200)	
	炭素鋼 合金鋼 (S45C, SCM440等)	F7030	160 (125~250)	0.2 (0.1~0.3)
		NX4545	130 (100~160)	
		UTi20T UP20M	75 (50~100)	
M	不鏽鋼 (奧氏體系 SUS304等)	UP20M	160 (125~200)	0.2 (0.1~0.3)
		UTi20T	160 (125~200)	
K	鑄鐵 (FC300, FCD400等)	F5010	175 (100~250)	0.2 (0.1~0.3)
		HTi10	100 (80~125)	
		UTi20T	80 (60~100)	
	鋁合金	MD220	1000 (200~1500)	0.15 (0.05~0.25)
		HTi10	650 (300~1000)	0.12 (0.05~0.2)

- ◆ 刀具轉速(min⁻¹)=(1000 x 切削速度)÷(3.14 x 刀具切削刃直徑)
- ◆ 機床工作台進給(mm/min)=每刃進給量 x 刀具刃數 x 刀具轉速



RCU

被加工材料 Work material	刀片牌號 Grade	切深15x10(0.3Dx0.2D)			切深15x10(0.3Dx0.2D)			切深15x10(0.3Dx0.2D)		
		轉速 min ⁻¹	進給速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給速度 mm/min	Q值 cm ³ /min
碳鋼・合金鋼 Carbon & Alloy Steels (250HB以下)	CY250	1,500	900	135	1,500	500	86.3	800	240	66
		V=236m/min fz=0.3mm/t			V=236m/min fz=0.17mm/t			V=126m/min fz=0.15mm/t		
淬硬鋼・自硬鋼 Hardened & Pre-Harden Steels (40HRC-45HRC)	CY250	450	90	13.5	450	140	24.2	380	90	24.8
		V=70m/min fz=0.1mm/t			V=70m/min fz=0.16mm/t			V=60m/min fz=0.12mm/t		
鑄鐵 Cast Iron (200HB以下)	CY250	1,500	1,500	225	1,500	900	155.4	1,000	400	110
		V=236m/min fz=0.5mm/t			V=236m/min fz=0.3mm/t			V=157m/min fz=0.2mm/t		

★注意事項：把上表中的切削參數值作為中間值，結合下述情況調整切削速度和進給速度。

1. 使用長刃部和長柄型時，請將條件表中的數值降低到70%後使用。

2. 機床主軸輸出功率在15K以下時，請將轉速降到60%，進給速度降到35%後使用。（上表切削條件是在22KW以上條件下制定的）

RAHM.RAH.RH

被加工材料 Work material	刀片牌號 Grade	切削 速度 m/min Cutting Speed	機床 主軸 Spindle of Machine	每齒 進給量 mm/t Feed rate	ø20(2齒R4)			ø25(2齒R5)			ø32(3齒R5)			ø80(4齒R8)			ø100(5齒R8)			ø125(6齒R8)		
					轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min
低 碳鋼 Mild Steels (200HB以下)	CY150	150 ~ 250	BT40	0.3 ~ 0.8	3,980	3,180	28.6	3,180	2,540	28.6	2,490	2,990	43.1	-	-	-	-	-	-	-	-	
	CY250 (CY25)		BT50		V=250m/min fz=0.4mm/t Ad=1.5mm Rd=0.3D			V=250m/min fz=0.5mm/t Ad=2mm Rd=0.3D			V=250m/min fz=0.8mm/t Ad=2mm Rd=0.5D			V=250m/min fz=0.5mm/t Ad=2mm Rd=0.3D			V=250m/min fz=0.8mm/t Ad=2mm Rd=0.5D					
					3,980	3,180	47.7	3,180	2,540	47.6	2,490	2,990	71.8	1,000	3,200	320	800	3,200	400	640	3,070	479.7
碳鋼・合金鋼 Carbon & Alloy Steels (30HRC以下)	CY150	120 ~ 230	BT40	0.3 ~ 0.8	3,180	2,540	22.9	2,550	2,040	23	1,190	2,390	34.4	-	-	-	-	-	-	-	-	
	CY250 (CY25)		BT50		V=200m/min fz=0.4mm/t Ad=1.5mm Rd=0.3D			V=200m/min fz=0.4mm/t Ad=2mm Rd=0.3D			V=200m/min fz=0.7mm/t Ad=2mm Rd=0.5D			V=200m/min fz=0.4mm/t Ad=2mm Rd=0.3D			V=200m/min fz=0.7mm/t Ad=2mm Rd=0.5D					
					3,180	2,540	38.1	2,550	2,040	38.3	1,990	2,390	57.4	800	2,240	224	640	2,240	280	510	2,140	334.4
碳鋼・合金鋼 Carbon & Alloy Steels (30~40HRC)	CY150	100 ~ 200	BT40	0.2 ~ 0.6	2,390	960	8.6	1,910	760	8.6	1,490	890	12.8	-	-	-	-	-	-	-	-	
	CY250 (CY25)		BT50		V=150m/min fz=0.2mm/t Ad=1.5mm Rd=0.3D			V=150m/min fz=0.2mm/t Ad=2mm Rd=0.5D			V=150m/min fz=0.4mm/t Ad=2.5mm Rd=0.5D			V=150m/min fz=0.2mm/t Ad=2mm Rd=0.5D			V=150m/min fz=0.4mm/t Ad=2.5mm Rd=0.5D					
					2,390	1,430	21.5	1,910	1,150	21.6	1,490	1,340	32.2	600	960	96	480	960	120	380	910	142.2
碳鋼・合金鋼 Carbon & Alloy Steels (40~45HRC)	CY150	60 ~ 150	BT40	0.15 ~ 0.3	1,590	480	2.9	1,270	380	2.9	990	450	4.3	-	-	-	-	-	-	-	-	
	CY250 (CY25)		BT50		V=100m/min fz=0.15mm/t Ad=1mm Rd=0.3D			V=100m/min fz=0.15mm/t Ad=1.5mm Rd=0.3D			V=100m/min fz=0.2mm/t Ad=2mm Rd=0.5D			V=100m/min fz=0.15mm/t Ad=1.5mm Rd=0.3D			V=100m/min fz=0.2mm/t Ad=2mm Rd=0.5D					
					1,590	640	6.4	1,270	510	6.4	990	590	9.4	400	320	25.6	320	320	32	250	300	37.5
碳鋼・合金鋼 Carbon & Alloy Steels (45~55HRC)	CY150	60 ~ 100	BT40	0.15 ~ 0.3	1,270	380	2.3	1,020	310	2.3	800	360	3.5	-	-	-	-	-	-	-	-	
	BT50		V=80m/min fz=0.15mm/t Ad=1mm Rd=0.3D			V=80m/min fz=0.17mm/t Ad=1.5mm Rd=0.3D			V=80m/min fz=0.2mm/t Ad=1.5mm Rd=0.5D			V=80m/min fz=0.17mm/t Ad=1.5mm Rd=0.3D			V=80m/min fz=0.2mm/t Ad=1.5mm Rd=0.5D							
			1,270		380	3.8	1,020	310	3.9	800	360	5.8	320	260	15.6	250	250	18.8	200	240	22.5	
不 鏽 鋼 Stainless Steels SUS	CY250	150 ~ 240	BT40	0.2~ 0.8	3,180	1,590	14.3	2,550	1,280	14.4	1,990	1,490	21.5	-	-	-	-	-	-	-	-	
	CY30		BT50		V=200m/min fz=0.25mm/t Ad=1.5mm Rd=0.3D			V=200m/min fz=0.3mm/t Ad=2mm Rd=0.3D			V=200m/min fz=0.6mm/t Ad=2.5mm Rd=0.5D			V=200m/min fz=0.3mm/t Ad=2mm Rd=0.3D			V=200m/min fz=0.6mm/t Ad=2.5mm Rd=0.5D					
					2,860	1,716	25.7	2,290	1,370	25.7	1,790	1,610	38.6	720	1,730	173	570	1,710	213.8	460	1,660	259.4
鑄 鋼 Cast Iron FC,FCD	CY100H (WH10)	150 ~ 220	BT40	0.3 ~ 1.0	2,860	2,990	20.6	2,290	1,830	20.6	1,790	2,150	31	-	-	-	-	-	-	-	-	
	BT50		V=180m/min fz=0.4mm/t Ad=1.5mm Rd=0.3D			V=180m/min fz=0.5mm/t Ad=2mm Rd=0.3D			V=180m/min fz=0.8mm/t Ad=2.5mm Rd=0.5D			V=180m/min fz=0.4mm/t Ad=2mm Rd=0.3D			V=180m/min fz=0.8mm/t Ad=2.5mm Rd=0.5D							
			2,860		2,860	42.9	2,290	2,290	42.9	1,790	2,690	64.6	720	2,300	230	570	2,280	228	460	2,210	345.3	



SD

MATERIAL	硬 度 HB	切 削 速 度 Cutting Speed Meter/Min	鑽 頭 直 徑 (Diameter)			
			17.5~22	22.5~30	30.5~40	40.5~50
一般鋼 Unalloyed Steel	80~180	200~280	0.05~0.1	0.07~0.12	0.1~0.2	0.15~0.25
一般鋼 Unalloyed Steel	150~225	150~220	0.05~0.12	0.08~0.15	0.12~0.25	0.18~0.28
低合金鋼 Low Alloy Steel	150~260	160~220	0.06~0.12	0.08~0.18	0.15~0.3	0.2~0.3
高合金鋼 High Alloy Steel	150~240	120~180	0.05~0.1	0.06~0.15	0.12~0.2	0.18~0.25
不鏽鋼 Stainless Steel	150~250	100~200	0.05~0.1	0.07~0.12	0.12~0.2	0.15~0.22
工具鋼 Tool Steel	170~270	120~200	0.05~0.12	0.07~0.15	0.12~0.22	0.15~0.25
鑄鐵 Cast Iron	160~220	120~180	0.1~0.17	0.15~0.2	0.18~0.25	0.2~0.3
合金鑄鐵 Alloyed Cast Iron	150~260	110~180	0.08~0.14	0.12~0.18	0.15~0.22	0.18~0.25
鋁合金 Aluminum Alloy	40~140	250~350	0.075~0.15	0.1~0.18	0.15~0.25	0.18~0.3
鑄鋁 Cast Aluminum	50~150	220~280	0.1~0.2	0.15~0.22	0.18~0.3	0.22~0.35

◆上表的切削條件為SDX2倍及SDX3倍使用

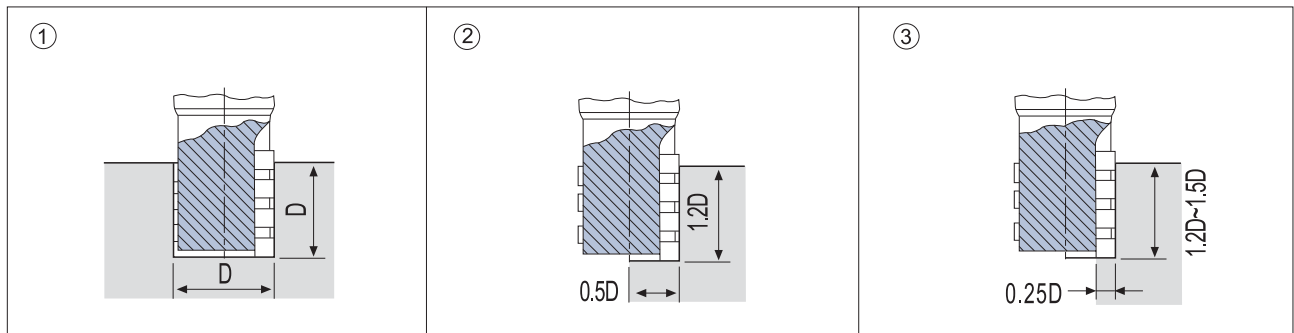
◆SDX4倍-切削米數及進給X80%使用

◆SDX5倍-切削米數及進給x70%使用

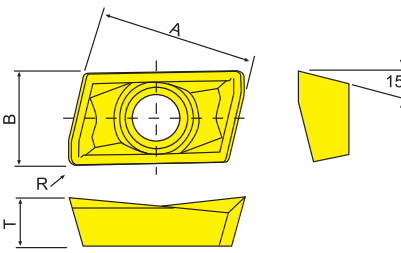
GTS.G2038.ATC

被削材種	材 種	切削 速度 m/min	加工 形態	刀 徑 D (mm)											
				ø20		ø25		ø32		ø40		ø50		ø63	
				回轉數 min ⁻¹	切削 速度 mm/min	回轉數 min ⁻¹	切削 速度 mm/min	回轉數 min ⁻¹	切削 速度 mm/min	回轉數 min ⁻¹	切削 速度 mm/min	回轉數 min ⁻¹	切削 速度 mm/min	回轉數 min ⁻¹	切削 速度 mm/min
軟鋼 SS,SM (90~130HB)	HCB844 EX40	80 ~ 160	①	1590	190	1270	330	990	300	790	300	640	300	510	290
			②	2070	280	1660	430	1290	430	1030	430	830	430	660	410
			③	2070	390	1660	620	1290	620	1030	620	830	620	660	590
炭素鋼・合金鋼 S-C,SCM (250HB以下)	HCB844 EX40	60 ~ 150	①	1430	170	1150	270	895	270	715	270	570	270	450	260
			②	1910	260	1530	400	1190	400	950	400	760	400	600	370
			③	1910	360	1530	570	1190	570	950	570	760	570	600	550
合金工具鋼 SKD,SKT (25~35HRC)	HCB844 EX40	55 ~ 120	①	1270	120	1020	200	795	200	640	200	510	200	400	190
			②	1430	160	1150	240	895	240	715	255	570	255	450	240
			③	1430	230	1150	340	895	340	715	360	570	360	450	340
不鏽鋼 SUS (210HB以下)	HCB844	50 ~ 100	①	1270	120	1020	200	795	200	640	200	510	200	400	190
			②	1430	160	1150	240	895	240	715	255	570	255	450	240
			③	1430	230	1150	340	895	340	715	360	570	360	450	340
鑄鐵 FC,FCD (220HB以下)	WH20 HC832	55 ~ 120	①	1590	190	1270	300	990	300	790	300	640	300	510	280
			②	1910	260	1530	400	1190	400	950	400	760	400	610	380
			③	1910	360	1530	570	1190	570	950	570	760	570	610	550

加工形態



AHU.AHUM.AHUB

	ITEM CODE	Size(mm)			
		A	B	T	R
	JDMT100304R	11	6.1	3.5	0.4
	JDMT100308R				0.8
	JDMT100320R				2.0
	JDMT150504R	16	9.1	5	0.4
	JDMT150508R				0.8
	JDMT150520R				2.0
	JDMT150530R				3.0

AHU.AHUM.AHUB

Work material	Grade		Dia				
			AHU10		AHU15		
			Ø16	Ø20~32	Ø25~50	Ø63~80	Ø100
Mild Steels	PTH30E	Vc(m/min)	120~200	120~180	120~180	120~180	120~180
		fz(mm/tooth)	0.06~0.12	0.1~0.2	0.15~0.25	0.15~0.25	0.15~0.25
Carbon Steels, Alloy Steels	PTH30E TB6045	Vc(m/min)	120~200	120~180	120~180	120~180	120~180
		fz(mm/tooth)	0.05~0.1	0.08~0.2	0.15~0.25	0.15~0.25	0.15~0.25
Die Steels	TB6045	Vc(m/min)	120~180	120~160	120~160	120~160	120~160
		fz(mm/tooth)	0.05~0.1	0.08~0.2	0.1~0.2	0.1~0.2	0.1~0.2
Stainless Steels	TB6045	Vc(m/min)	200~300	200~300	200~300	200~300	200~280
		fz(mm/tooth)	0.1~0.15	0.15~0.2	0.15~0.25	0.15~0.25	0.15~0.25
Stainless Steels (wet condition)	PTH40H PTH30E	Vc(m/min)	80~120	80~120	80~120	80~120	80~120
		fz(mm/tooth)	0.1~0.15	0.15~0.2	0.15~0.25	0.15~0.25	0.15~0.25
Cast Iron	PTH13S	Vc(m/min)	120~180	120~160	120~160	120~160	120~160
		fz(mm/tooth)	0.06~0.12	0.1~0.2	0.15~0.25	0.15~0.25	0.15~0.25
Titanium Alloy (wet condition)	PTH30E	Vc(m/min)	30~60	30~60	30~60	30~60	30~50
		fz(mm/tooth)	0.08~0.1	0.1~0.2	0.1~0.2	0.1~0.2	0.1~0.2

- ① Choose the best cutting condition from above table.
- ② Please reduce feed rate 30% from above table for slotting.
In order to avoid of insert breakage, please change insert earlier.
- ③ The steel chips may cause cuts, burns or damages to eyes. Be sure to install the
- ④ safety cover around the tool and wear the safety glasses when carrying out any works.
- ⑤ Please don't use cutting oil as coolant. (It may be cause of fire.)

MECM.11T MEC.11T

ITEM CODE	Size(mm)						Angle	
	A	T	2.8	W	R	S	α	β
11T304ER-JT	6.7	3.80	2.8	11.0	0.4	-	18°	13°
11T308ER-JT					0.8			
11T312ER-JT					1.2			
11T316ER-JT					1.6			
11T320ER-JT					2.0			
11T331ER-JT					3.1			

MECM.11T MEC.11T

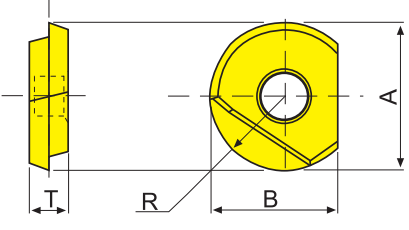
Work material	Feed Rate (mm/tooth)	Insert Grade (Speed)	
		PVD Coated	
		PR830	PR905
Stainless Steel	0.06~0.08~0.1	100~180	-
Carbon Steel	0.06~0.1~0.15	120~200	-
Alloy Steel	0.06~0.1~0.12	100~180	-
Metal Mold Steel	0.06~0.08~0.1	80~150	-
Gray Cast Iron	0.06~0.1~0.15	-	100~180
Ductile Iron	0.06~0.08~0.1	-	80~120

Work material	Feed Rate (mm/tooth)	Insert Grade (Speed)	
		PVD Coated	
		PR830	PR905
Stainless Steel	0.08~0.12~0.15	100~180	-
Carbon Steel	0.08~0.15~0.25	120~200	-
Alloy Steel	0.08~0.15~0.2	100~180	-
Metal Mold Steel	0.08~0.12~0.2	80~150	-
Gray Cast Iron	0.08~0.18~0.25	-	100~180
Ductile Iron	0.08~0.15~0.2	-	80~120

Work material	Feed Rate (mm/tooth)	Insert Grade (Speed)	
		PVD Coated	
		PR830	PR925
Stainless Steel	0.06~0.08~0.1	100~180	100~180
Carbon Steel	0.06~0.1~0.12	120~200	100~150
Alloy Steel	0.06~0.08~0.1	100~180	-
Metal Mold Steel	0.06~0.08~0.1	80~150	-

Work material	Feed Rate (mm/tooth)	Insert Grade (Speed)	
		PVD Coated	
		PR830	PR925
Stainless Steel	0.08~0.1~0.12	100~180	100~180
Carbon Steel	0.08~0.15~0.18	120~200	100~150
Alloy Steel	0.08~0.12~0.15	100~180	-
Metal Mold Steel	0.08~0.1~0.12	80~150	-

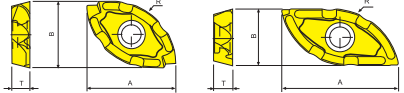
BNM.BNMM

	ITEM CODE	Size(mm)			
		A	B	T	R
	BNM-060	6	5	2	3
	BNM-070	7	5.5	2	3.5
	BNM-080	8	7	2.4	4
	BNM-100	10	8.5	2.6	5
	BNM-110	11	9	2.6	5.5
	BNM-120	12	10	3	6
	BNM-160	16	12	4	8
	BNM-200	20	15	5	10
	BNM-250	25	18.5	6	12.5
	BNM-300	30	22.5	7	15
	BNM-320	32	23.5	7	16

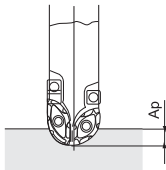
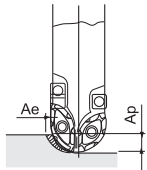
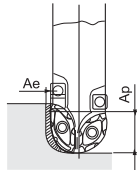
BNM.BNMM

工件材料	硬度	切削速度	Fr(mm/rev)									Ap (mm)	Ae (mm)
			ØD(mm)										
			ø 6	ø 8	ø 10	ø 12	ø 16	ø 20	ø 25	ø 30	ø 32		
灰鑄鐵	160~260HB	200~400	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.7	D/10	D/10
球墨鑄鐵	170~300HB	150~350	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.7	D/15	D/15
碳素鋼	180~280HB	180~230	0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	D/15	D/15
低合金鋼	180~280HB	150~200	0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	D/15	D/15
模具鋼	280~400HB	110~170	0.15	0.25	0.3	0.4	0.4	0.4	0.5	0.5	0.5	D/20	D/20
工具鋼	180~255HB	130~180	0.15	0.25	0.3	0.4	0.5	0.5	0.6	0.6	0.6	D/20	D/20
淬火鋼	40~55HRC	70~90	0.15	0.25	0.3	0.4	0.5	0.5	0.6	0.6	0.6	D/30	D/30
不鏽鋼	150~250HB	90~130	0.15	0.25	0.3	0.4	0.4	0.4	0.5	0.5	0.5	D/20	D/20
銅合金	80~150HB	150~200	0.25	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8	D/10	D/10
鋁合金	30~100HB	200~300	0.25	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8	D/6	D/6
石墨		200~400	0.3	0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.9	D/5	D/5

SWB30, SWB50

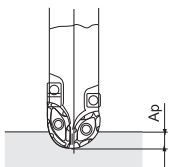
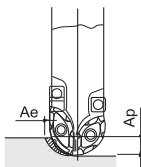
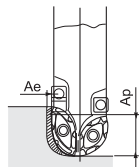
	ITEM CODE	Size(mm)			
		A	B	T	R
	SWB230MMN	22.2	14.8	5.35	15
	SWB230MSW	27.5	12.3	5.35	15
	SWB250HMN-N	34.4	25.7	7	25
	SWB250HSN-N	42.6	20.8	7	25

SWB 50

切削型態						
Work material	Grade	切削參數	溝槽加工	淺側面銑削		深側面銑削
中碳鋼 (50#,55#) 硬度150-250HB	JC5040	N(min ⁻¹)	1500	1500	1500	1200
		F(mm/min)	720	1000	680	420
		Ap(mm)	15	10	25	40
		Ae(mm)	-	10	15	10
鑄鋼 (ZG45) 硬度150-280HB	JC5040	N(min ⁻¹)	1350	1350	1350	1100
		F(mm/min)	350	900	600	380
		Ap(mm)	15	10	25	40
		Ae(mm)	-	10	15	10
模具鋼 (Cr12Mo1V1) 硬度150-255HB	JC5040	N(min ⁻¹)	1250	1250	1250	1000
		F(mm/min)	550	750	500	300
		Ap(mm)	15	10	25	40
		Ae(mm)	-	10	15	5
淬火鋼 (4Cr5MoSiV1) 硬度40-50HRC	SWB250MMW SWB250MSW JC8015	N(min ⁻¹)	1200	1200	1200	-
		F(mm/min)	420	540	400	-
		Ap(mm)	~6	~5	~8	-
		Ae(mm)	-	6	10	-
堆焊料及淬火鋼 硬度55-63HRC	SWB250MMW SWB250MSW JC8015	N(min ⁻¹)	1200	1200	-	-
		F(mm/min)	360	400	-	-
		Ap(mm)	~3	~3	-	-
		Ae(mm)	-	6	-	-
灰鑄鋼 (HT250) 硬度160-260HB	JC5015 (JC5040)	N(min ⁻¹)	1500	1500	1500	1200
		F(mm/min)	970	1400	900	480
		Ap(mm)	15	10	25	40
		Ae(mm)	-	10	15	10
球墨鑄鋼 (QT450,GM241) 硬度170-300HB	JC5015 (JC5040)	N(min ⁻¹)	1300	1300	1300	1050
		F(mm/min)	700	1000	650	370
		Ap(mm)	15	10	25	40
		Ae(mm)	-	10	15	10



SWB 30

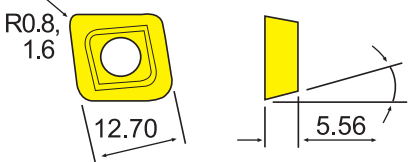
切削型態						
Work material	Grade	切削參數	溝槽加工	淺側面銑削		深側面銑削
中碳鋼 (50#,55#) 硬度150-250HB	JC5040	N(min ⁻¹)	2,300	2,300	2,300	1,800
		F(mm/min)	800	1,020	770	450
		Ap(mm)	10	10	16	28
		Ae(mm)	-	6	9	6
鑄鋼 (ZG45) 硬度150-280HB	JC5040	N(min ⁻¹)	2,090	2,090	2,090	1,670
		F(mm/min)	720	920	700	420
		Ap(mm)	10	10	16	28
		Ae(mm)	-	6	9	6
模具鋼 (Cr12Mo1V1) 硬度150-255HB	JC5040	N(min ⁻¹)	1,950	1,950	1,950	1,560
		F(mm/min)	630	810	600	390
		Ap(mm)	10	10	16	28
		Ae(mm)	-	6	9	3
淬火鋼 (4Cr5MoSiV1) 硬度40-50HRC	SWB230MMW SWB220MSW JC8015	N(min ⁻¹)	1,600	1,600	1,600	-
		F(mm/min)	400	480	400	-
		Ap(mm)	~4	~4	~6.5	-
		Ae(mm)	-	5	8	-
堆焊料及淬火鋼 硬度55-63HRC	SWB230MMW SWB220MSW JC8015	N(min ⁻¹)	1,400	1,400	-	-
		F(mm/min)	280	350	-	-
		Ap(mm)	~3	~3	-	-
		Ae(mm)	-	5	-	-
灰鑄鋼 (HT250) 硬度160-260HB	JC5015 (JC5040)	N(min ⁻¹)	2,300	2,300	2,300	1,840
		F(mm/min)	1,140	1,380	1020	640
		Ap(mm)	10	10	16	28
		Ae(mm)	-	6	9	6
球墨鑄鋼 (QT450,GM241) 硬度170-300HB	JC5015 (JC5040)	N(min ⁻¹)	2,060	2,060	2,060	1,650
		F(mm/min)	890	1,130	820	500
		Ap(mm)	10	10	16	28
		Ae(mm)	-	6	9	6

N, 機床主軸轉速(min⁻¹), F 工作台進給(mm/min)

注: 1. 表中數據請根據機床或工件的鋼性情況進行適當調整

2. 使用風冷

ASV

	ITEM CODE	Stocked															
		Coated Grades								Cermet & Carbide							
		C-Coated				G-Coated				Cermet		Carbide					
												P			K		
		CY100H	CV250V							GF30					GF30		WH10
	MPHW120516ZEL	●	●							●							
	MPHW120516ZFL															●	
	MPMT120508ZEL	●	●							●							
	MPMT120516ZEL	●	●							●							

ASV

被加工材料 Work material	刀片牌號 Grade	切削速度 m/min Cutting Speed	每齒進給量 mm/t Feed rate	Ø 50			Ø 63			Ø 80			Ø100			Ø125		
				轉速 min ⁻¹	進給速度 mm/min	Q值 cm³/min	轉速 min ⁻¹	進給速度 mm/min	Q值 cm³/min	轉速 min ⁻¹	進給速度 mm/min	Q值 cm³/min	轉速 min ⁻¹	進給速度 mm/min	Q值 cm³/min	轉速 min ⁻¹	進給速度 mm/min	Q值 cm³/min
Carbon Steels Alloy Steels (250HB以下)	CY250V GF30	100~ 200	0.15~ 0.3	1150	690	138	910	550	151	720	720	432	570	710	532	460	690	646
				Vc=180m/min P=0.5D ae=8mm						Vc=180m/min P=0.5D ae=15mm								
Pre-Harden Steels (40-50HRC)	CY250V GF30	80~ 150	0.1~ 0.15	640	230	46	500	180	58	400	240	144	320	240	180	250	220	206
				Vc=100m/min P=0.5D ae=8mm						Vc=100m/min P=0.5D ae=15mm								
Stainless Steels	CY250V GF30	100~ 200	0.15~ 0.3	1150	690	138	910	550	151	720	720	432	570	710	532	460	690	646
				Vc=180m/min P=0.5D ae=8mm						Vc=180m/min P=0.5D ae=15mm								
Cast Iron	CY100H	100~ 200	0.15~ 0.3	1150	860	172	910	680	186	720	860	516	570	850	637	460	830	778
				Vc=180m/min P=0.5D ae=8mm						Vc=180m/min P=0.5D ae=15mm								
Aluminium	WH10	400~ 1000	0.05~ 0.2	5100	2300	460	4040	1800	529	3180	2550	1530	2550	2550	1912	2040	2450	2296
				Vc=800m/min P=0.5D ae=8mm						Vc=800m/min P=0.5D ae=15mm								

① When performing wet cutting,GF30 is recommended as the insert material.

② The following formula shows the chip removal volume (Q) per unit time.

$$Q(\text{cm}^3/\text{min})=a_p(\text{mm}) \times a_e(\text{mm}) \times V_f(\text{mm}/\text{min})/1000$$

ASRF

	ITEM CODE		Size(mm)		
			R	T	W
	SDNW1205ZDTN-R15		15	5.56	12.7
	SDMT1205ZDTN-R15				

ASRF

被加工材料 Work material	刀片牌號 Grade	切削 速度 m/min Cutting Speed	每齒 進給量 mm/t Feed rate	Ø 32			Ø 40			Ø 50			Ø 63			Ø 80		
				轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min	轉速 min ⁻¹	進給 速度 mm/min	Q值 cm ³ /min
General Structural Steels (200HB以下)	TB6020	180~200	0.6~1.5	1790	5370	171	1430	6400	256	1150	6900	510	910	5500	520	720	5400	650
	TB6045 GX2030 CY250	90~150	0.6~2.0	Vc=180m/min fz=1.5mm/tooth ap=1.0mm ae=1.0D			Vc=180m/min fz=1.5mm/tooth ap=1.0mm ae=1.0D			Vc=180m/min fz=1.5mm/tooth ap=1.5mm ae=1.0D			Vc=180m/min fz=1.5mm/tooth ap=1.5mm ae=1.0D			Vc=180m/min fz=1.5mm/tooth ap=1.5mm ae=1.0D		
	TB6020	180~200	0.6~1.5	1790	5370	171	1430	6400	256	1150	6900	510	910	5500	520	720	5400	650
Carbon Steels Alloy Steels (30HRC以下)	TB6020	180~200	0.6~1.5	Vc=180m/min fz=1.5mm/tooth ap=1.0mm ae=1.0D			Vc=180m/min fz=1.5mm/tooth ap=1.0mm ae=1.0D			Vc=180m/min fz=1.5mm/tooth ap=1.5mm ae=1.0D			Vc=180m/min fz=1.5mm/tooth ap=1.5mm ae=1.0D			Vc=180m/min fz=1.5mm/tooth ap=1.5mm ae=1.0D		
	TB6045 GX2030 CY250	90~150	0.6~2.0	895	2690	86	720	3240	130	570	3420	257	455	2730	258	360	2700	325
	TB6020	180~200	0.6~1.5	1790	5370	171	1430	6400	256	1150	6900	510	910	5500	520	720	5400	650
Carbon Steels Alloy Steels (30~45HRC)	TB6045 TB6020 CY250	80~120	0.4~0.8	Vc=90m/min fz=0.8mm/tooth ap=1.0mm ae=1.0D			Vc=90m/min fz=0.8mm/tooth ap=1.0mm ae=1.0D			Vc=90m/min fz=0.8mm/tooth ap=1.5mm ae=1.0D			Vc=90m/min fz=0.8mm/tooth ap=1.5mm ae=1.0D			Vc=90m/min fz=0.8mm/tooth ap=1.5mm ae=1.0D		
	TB6005	70~120	0.2~0.6	995	600	19	790	710	28	630	760	38	500	600	38	400	600	48
	TB6020	70~120	0.2~0.6	700	280	9	550	330	13	440	360	18	350	280	18	280	280	22
Alloy Steels (50~55HRC)	TB6005	70~100	0.05~0.2	700	280	5	550	330	7	440	350	9	350	280	9	270	270	11
	TB6005	50~100	0.05~0.2	500	50	0.8	400	60	1	440	350	9	350	280	9	270	270	11
	TB6020	180~200	0.8~2.0	1790	7160	344	1430	8580	515	1150	9200	920	910	7280	920	720	7200	1150
Cast Iron	TB6045 CY250	90~150	0.8~2.0	Vc=180m/min fz=2.0mm/tooth ap=1.5mm ae=1.0D			Vc=180m/min fz=2.0mm/tooth ap=1.5mm ae=1.0D			Vc=180m/min fz=2.0mm/tooth ap=2.0mm ae=1.0D			Vc=180m/min fz=2.0mm/tooth ap=2.0mm ae=1.0D			Vc=180m/min fz=2.0mm/tooth ap=2.0mm ae=1.0D		
	TB6020	180~200	0.8~2.0	895	3580	172	720	4320	259	570	4560	456	455	3640	459	360	3600	576
	TB6020	180~200	0.8~2.0	Vc=90m/min fz=2.0mm/tooth ap=1.5mm ae=1.0D			Vc=90m/min fz=2.0mm/tooth ap=1.5mm ae=1.0D			Vc=90m/min fz=2.0mm/tooth ap=2.0mm ae=1.0D			Vc=90m/min fz=2.0mm/tooth ap=2.0mm ae=1.0D			Vc=90m/min fz=2.0mm/tooth ap=2.0mm ae=1.0D		

① Select the best cutting condition when working,referring to the above list.

(If the over hung is 3D or less,the recommended cutting speed is Vc=180~200m/min;3D or more:Vc=90~130m/min.

② The thick and heavy chips are generated by using this tool.Be sure to remove them with air blow in order to avoid any breakage by blocking with chips.

The recommended method is "Spindle center through" when blowing air.(Pay attention when removing chips in cavity work with the machining center<vertical type>.)

③ Before carrying out the work without any workers,be sure to remove the chips and confirm the safe condition for cutting.

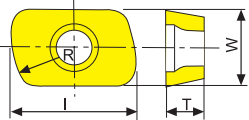
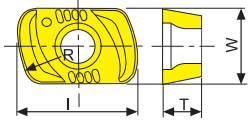
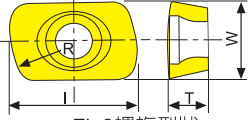
④ The steel chips may cause cuts,burns or damages to eyes.Be sure to install the safety cover around the tool and wear the safety glasses when carrying out any works.

⑤ Replace the insert in good time to avoid any breakage of the tools because of wear and tear.

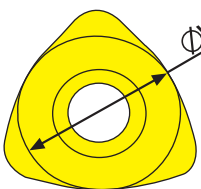
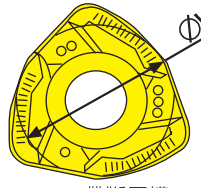
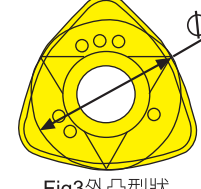
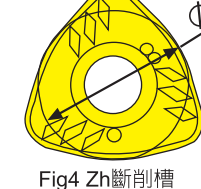
⑥ The following formula shows the chip removal volume (Q) per unit time.

$Q(\text{cm}^3/\text{min}) = \text{ap}(\text{mm}) \times \text{ae}(\text{mm}) \times \text{Vf}(\text{mm}/\text{min})/1000$

ASR 20. ASRM20

 Fig1 標準型狀  Fig2 帶斷屑槽  Fig3 螺旋型狀	ITEM CODE	Telarance Class	Size(mm)				Shape
			R	I	T	W	
	EPNW0603TN-8	N Class	8	10	3.18	6.35	Fig1
	EDNW12T3TN-10		10	12	3.97	10	
	EPMT0603TN-8	M Class	8	10	3.18	6.35	Fig2
	EDMT12T3TN-10		10	12	3.97	10	
	EPMT0603EN-8LF	M Class	8	10	3.18	6.35	Fig3

ASRT. ASRTM

 Fig1 標準型狀  Fig2 帶斷屑槽  Fig3 外凸型狀  Fig4 Zh 斷屑槽	ITEM CODE	Size(mm)		
		ΦW	T	
	WDNW09T320	9.525	3.97	Fig1
	WDNW120420	12	4.76	
	WDNW140520	14	5.56	
	WDNT09T320	9.525	3.97	Fig2
	WDNT120420	12	4.76	
	WDNT140520	14	5.56	
	WDNW120420Z	12	4.76	Fig3
	WDNW140520Z	14	5.56	
	WDNT09T320ZH	9.525	3.97	Fig4
	WDNT120420ZH	12	4.76	
	WDNT140520ZH	14	5.56	

(WDNW120420=JDMT120420)
(WDMW140520=JDMT140520)

標準切削條件表 直柄型 ASRT . ASRTM

被加工材料 Work material	紅字為第一推薦材料	直 柄 型						
		刀徑 D_c 突出比例	$\varnothing 25$ (2刃)		$\varnothing 32$ (2刃)		$\varnothing 40$ (3刃)	
			<30 D_c		<30 D_c		<30 D_c	
			通用	高速加工	通用	高速加工	通用	高速加工
普通結構用鋼 (200HB以下)	JS4060 JX1045 (GX2030)	$n(\text{min}^{-1})$	1,910	2,550	1,500	1,990	1,200	1,600
		$V_c(\text{m/min})$	150	200	150	200	150	200
		$V_f(\text{m/min})$	3,820	6,120	3,000	5,970	3,600	7,200
		$f_z(\text{mm/t})$	1.0	1.2	1.0	1.5	1.0	1.5
		$a_p(\text{mm})$	1.0	0.8	1.2	1.0	1.2	1.0
		$a_e(\text{mm})$	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{min})$	76	98	90	149	138	230
碳素鋼 合金鋼 (35HRC以下)	JP4060 JX1045 (GX2030)	$n(\text{min}^{-1})$	1,910	2,550	1,500	1,990	1,200	1,600
		$V_c(\text{m/min})$	150	200	150	200	150	200
		$V_f(\text{m/min})$	3,820	6,120	3,000	5,970	3,600	7,200
		$f_z(\text{mm/t})$	1.0	1.2	1.0	1.5	1.0	1.5
		$a_p(\text{mm})$	1.0	0.8	1.2	1.0	1.2	1.0
		$a_e(\text{mm})$	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{min})$	76	98	90	149	138	230
碳素鋼 合金鋼 (35~45HRC)	JP4020 JX1045 JS4060	$n(\text{min}^{-1})$	1,280	1,910	1,000	1,500	800	1,200
		$V_c(\text{m/min})$	100	150	100	150	100	150
		$V_f(\text{m/min})$	2,050	3,060	1,600	2,400	1,920	2,880
		$f_z(\text{mm/t})$	0.8	0.8	0.8	0.8	0.8	0.8
		$a_p(\text{mm})$	1.0	0.8	1.2	1.0	1.2	1.0
		$a_e(\text{mm})$	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{min})$	41	49	48	60	74	92
不鏽鋼 SUS	JP1060	$n(\text{min}^{-1})$	1,280	2,550	1,000	1,990	800	1,600
		$V_c(\text{m/min})$	100	200	100	200	100	200
		$V_f(\text{m/min})$	2,050	4,080	1,600	3,190	1,920	3,840
		$f_z(\text{mm/t})$	0.8	0.8	0.8	0.8	0.8	0.8
		$a_p(\text{mm})$	1.0	0.8	1.2	1.0	1.2	1.0
		$a_e(\text{mm})$	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{min})$	41	65	48	80	74	123
鑄鐵 FC FCD	JX4060 JS1045 JP4020	$n(\text{min}^{-1})$	1,910	2,550	1,500	1,990	1,200	1,600
		$V_c(\text{m/min})$	150	200	150	200	150	200
		$V_f(\text{m/min})$	5,730	7,650	4,500	5,970	5,400	7,200
		$f_z(\text{mm/t})$	1.5	1.5	1.5	1.5	1.5	1.5
		$a_p(\text{mm})$	1.0	0.8	1.2	1.0	1.2	1.0
		$a_e(\text{mm})$	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{min})$	115	122	135	149	207	230
淬火鋼 (45~55HRC)	JP4020 JX1005	$n(\text{min}^{-1})$	1,020	1,530	800	1,200	640	960
		$V_c(\text{m/min})$	80	120	80	120	80	120
		$V_f(\text{m/min})$	410	620	320	480	390	580
		$f_z(\text{mm/t})$	0.2	0.2	0.2	0.2	0.2	0.2
		$a_p(\text{mm})$	1.0	0.8	1.2	1.0	1.2	1.0
		$a_e(\text{mm})$	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{min})$	8	10	10	12	15	19
淬火鋼 (55~62HRC)	JX1005	$n(\text{min}^{-1})$	770	1,280	600	1,000	480	800
		$V_c(\text{m/min})$	60	100	60	100	60	100
		$V_f(\text{m/min})$	80	130	60	100	80	120
		$f_z(\text{mm/t})$	0.05	0.05	0.05	0.05	0.05	0.05
		$a_p(\text{mm})$	0.5	0.5	0.5	0.5	0.5	0.5
		$a_e(\text{mm})$	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{min})$	1	1	1	1	1	2

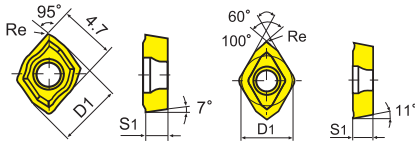


標準切削條件表 刀盤型 ASRT

刀 盤 型																			
ø 50(4刃)					ø 63(4刃)					ø 80(5刃)					ø 100(6刃)				
<3Dc	3Dc	5Dc	7Dc	>7Dc	<3Dc	3Dc	5Dc	7Dc	>7Dc	<3Dc	3Dc	5Dc	7Dc	>7Dc	<3Dc	3Dc	5Dc	7Dc	>7Dc
通用	高速加工	通用	高速加工	通用	通用	高速加工	通用	高速加工	通用	通用	高速加工	通用	高速加工	通用	通用	高速加工	通用	高速加工	通用
960	1,280	960	830	580	760	1,020	760	660	460	600	800	600	520	360	480	640	480	420	290
150	200	150	130	90	150	200	150	130	90	150	200	150	130	90	150	200	150	130	90
5,760	7,680	5,760	4,980	3,480	4,560	6,120	4,560	3,960	2,760	4,500	6,000	4,500	3,900	2,700	4,320	5,760	4,320	3,780	2,610
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1.5	1.25	1.0	0.7	0.7	1.5	1.25	1.5	0.7	0.7	1.5	1.25	1.5	0.7	0.7	1.5	1.25	1.0	0.7	0.7
40	40	40	40	40	40	50	40	50	50	65	65	65	65	65	80	80	80	80	80
346	384	346	139	97	342	383	228	139	97	439	488	293	177	123	518	576	346	212	146
960	1,280	960	830	580	760	1,020	760	660	460	600	800	600	520	360	480	640	480	420	290
150	200	150	130	90	150	200	150	130	90	150	200	150	130	90	150	200	150	130	90
5,760	7,680	5,760	4,980	3,480	4,560	6,120	4,560	3,960	2,760	4,500	6,000	4,500	3,900	2,700	4,320	5,760	4,320	3,780	2,610
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1.5	1.25	1.5	0.7	0.7	1.5	1.25	1.0	0.7	0.7	1.5	1.25	1.5	0.7	0.7	1.5	1.25	1.0	0.7	0.7
40	40	40	40	40	40	50	50	50	50	65	65	65	65	65	80	80	80	80	80
346	384	230	139	97	342	383	228	139	97	439	488	293	177	123	518	576	346	212	146
640	960	640	580	580	510	760	510	460	460	400	600	400	360	360	320	480	320	290	290
100	150	100	90	90	100	150	100	90	90	100	150	100	90	90	100	150	100	90	90
2,050	3,080	2,050	1,860	1,860	1,640	2,440	1,640	1,480	1,480	1,600	2,400	1,600	1,440	1,440	1,540	2,310	1,540	1,400	1,400
0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
1.5	1.5	1.0	0.7	0.7	1.5	1.5	1.0	0.7	0.7	1.5	1.5	1.5	0.7	0.7	1.5	1.5	1.0	0.7	0.7
40	40	40	40	40	50	50	50	50	50	65	65	65	65	65	80	80	80	80	80
123	185	82	52	52	123	183	82	52	52	156	234	104	66	66	185	277	123	78	78
640	1,280	640	640	580	510	1,020	510	510	460	400	800	400	400	360	320	640	320	320	290
100	200	100	100	90	100	200	100	100	90	100	200	100	100	90	100	200	100	100	90
2,050	4,100	2,050	2,050	1,860	1,640	3,270	1,640	1,640	1,480	1,600	3,200	1,600	1,600	1,440	1,540	3,080	1,540	1,540	1,400
0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
1.5	1.5	1.0	0.7	0.7	1.5	1.5	1.0	0.7	0.7	1.5	1.5	1.5	0.7	0.7	1.5	1.5	1.0	0.7	0.7
40	40	40	40	40	50	50	50	50	50	65	65	65	65	65	80	80	80	80	80
123	246	82	52	52	123	245	82	57	52	156	312	104	73	66	185	370	123	86	78
960	1,280	960	830	580	760	1,020	760	660	460	600	800	600	520	360	480	640	480	420	290
150	2000	150	130	90	150	200	150	130	90	150	200	150	130	90	150	200	150	130	90
5,760	7,680	5,760	4,980	3,480	6,080	8,160	6,080	3,960	2,760	6,000	8,000	6,000	3,900	2,700	5,760	7,680	5,760	3,780	2,610
1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	1.5	1.5	2.0	2.0	2.0	1.5	1.5	2.0	2.0	2.0	1.5	1.5
1.5	1.5	1.5	1.0	0.7	1.5	1.5	1.5	1.0	0.7	1.5	1.5	1.5	1.0	0.7	1.5	1.5	1.5	1.0	0.7
40	40	40	40	40	50	50	50	50	50	65	65	65	65	65	80	80	80	80	80
346	461	346	199	97	456	612	456	198	97	585	780	585	254	123	691	922	691	302	146
510	770	510	510	510	410	610	410	410	410	320	480	320	320	320	260	390	260	260	260
80	120	80	80	80	80	120	80	80	80	80	120	80	80	80	80	120	80	80	80
410	620	410	410	410	330	490	330	330	330	320	480	320	320	320	320	470	320	320	320
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
1.5	1.5	1.0	0.7	0.7	1.5	1.5	1.0	0.7	0.7	1.5	1.5	1.0	0.7	0.7	1.5	1.5	1.0	0.7	0.7
40	40	40	40	40	50	50	50	50	50	65	65	65	65	65	80	80	80	80	80
25	37	16	11	11	25	37	17	12	12	31	47	21	15	15	38	56	26	18	18
390	640	390	390	390	310	510	310	310	310	240	400	240	240	240	200	320	200	200	200
60	100	60	60	60	60	100	60	60	60	60	100	60	60	60	60	100	60	60	60
80	130	80	80	80	70	110	70	70	70	60	100	60	60	60	60	100	60	60	60
0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
40	40	40	40	40	50	50	50	50	50	65	65	65	65	65	80	80	80	80	80
2	3	2	2	2	2	3	2	2	2	2	3	2	2	2	2	4	2	2	2



MSD

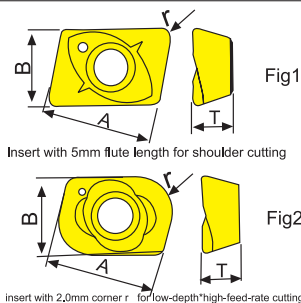
	ITEM CODE	Size(mm)		
		D1	S1	Re
	GCMT040204-U1	5.0	2.38	0.4
	GPMT060204-U1	5.56	2.38	0.4
	GCMT040204-U2	5.0	2.38	0.4
	GPMT060204-U2	5.56	2.38	0.4

MSD

被削材	硬度	切削速度			進給(mm/rev)				
		l/d=2,3用		l/d=4用 Ø16-	外徑(mm)				
		Ø12-Ø14.5	Ø15-		Ø12-Ø14.5	Ø15-Ø22.5	Ø23-Ø34	Ø35-Ø48	Ø49-Ø56
軟鋼 (SS400)	≤180HB	150 (100-200)	200 (150-300)	140 (100-200)	0.06 (0.04-0.10)	0.07 (0.04-0.10)	0.08 (0.04-0.10)	0.10 (0.04-0.12)	0.08 (0.04-0.10)
					0.06 (0.04-0.10)	0.08 (0.04-0.12)	0.10 (0.04-0.12)	0.12 (0.04-0.14)	0.10 (0.04-0.12)
					-	0.08 (0.04-0.12)	0.10 (0.04-0.12)	0.12 (0.04-0.14)	0.10 (0.04-0.12)
炭素鋼 (S45C、 S48C)	180-280HB	120 (80-160)	150 (120-180)	100 (80-120)	0.06 (0.04-0.10)	0.09 (0.06-0.12)	0.12 (0.08-0.14)	0.15 (0.08-0.18)	0.12 (0.08-0.14)
					0.06 (0.04-0.10)	0.12 (0.06-0.14)	0.14 (0.08-0.18)	0.17 (0.08-0.20)	0.14 (0.08-0.18)
					-	0.12 (0.06-0.14)	0.14 (0.08-0.18)	0.17 (0.08-0.20)	0.14 (0.08-0.18)
合金鋼 (SCM440、 SCr420)	180-280HB	120 (80-160)	150 (120-180)	100 (80-120)	0.06 (0.04-0.10)	0.08 (0.06-0.10)	0.09 (0.06-0.12)	0.11 (0.06-0.14)	0.09 (0.06-0.12)
					0.06 (0.04-0.10)	0.10 (0.06-0.12)	0.12 (0.08-0.16)	0.14 (0.08-0.18)	0.12 (0.08-0.16)
					-	0.10 (0.06-0.12)	0.12 (0.08-0.16)	0.14 (0.08-0.18)	0.12 (0.08-0.16)
不鏽鋼 (SUS304、 SUS316)	≤200HB	100 (80-120)	150 (120-200)	110 (80-140)	0.07 (0.04-0.10)	0.07 (0.04-0.10)	0.08 (0.04-0.10)	0.10 (0.04-0.12)	0.08 (0.04-0.10)
					0.07 (0.04-0.10)	0.08 (0.04-0.12)	0.10 (0.04-0.14)	0.12 (0.04-0.16)	0.10 (0.04-0.14)
					-	0.08 (0.04-0.12)	0.10 (0.04-0.14)	0.12 (0.04-0.16)	0.10 (0.04-0.14)
鑄鐵 (FC250)	≤350MPa	120 (80-160)	150 (120-180)	140 (110-160)	0.07 (0.06-0.10)	0.07 (0.06-0.10)	0.10 (0.04-0.14)	0.10 (0.06-0.14)	0.10 (0.06-0.14)
					0.07 (0.06-0.10)	0.15 (0.10-0.18)	0.20 (0.10-0.25)	0.20 (0.10-0.25)	0.20 (0.10-0.25)
					-	0.15 (0.10-0.18)	0.20 (0.10-0.25)	0.20 (0.10-0.25)	0.20 (0.10-0.25)
鑄鐵 (FCD400)	≤450MPa	120 (80-150)	150 (120-180)	100 (80-120)	0.06 (0.04-0.10)	0.07 (0.06-0.10)	0.10 (0.06-0.14)	0.10 (0.06-0.14)	0.10 (0.06-0.14)
					0.06 (0.04-0.10)	0.12 (0.08-0.14)	0.15 (0.08-0.20)	0.18 (0.08-0.20)	0.15 (0.08-0.20)
					-	0.12 (0.08-0.14)	0.15 (0.08-0.20)	0.18 (0.08-0.20)	0.15 (0.08-0.20)

ASM07.ASMM07

ITEM CODE	Telarance Class	Size(mm)				Shape
		A	B	R	T	
JDMT070202R	M Class	6.4	4.3	0.2	2.45	
JDMT070204R		6.4	4.3	0.4	2.45	
JDMT070208R		6.4	4.3	0.8	2.45	
EDMT070220R-T		6.4	4.3	2	2.5	Fig2
EDMT070220R		6.4	4.3	2	2.5	Fig2



ASM07.ASMM07

Work	recommended material types Red indicates primary recommended material types	外徑 Dc Tool diameter	ø 10 (2 枚刃) 2 Flutes	ø 12 (3 枚刃) 3 Flutes	ø 14 (3 枚刃) 3 Flutes	ø 16 (4 枚刃) 4 Flutes	ø 20 (5 枚刃) 5 Flutes
S-C SCM SKD SKT <30HRC Carbon Steels Alloy Steels Die Tool Steels	JX1020 (Vc=100~180)	n(min ⁻¹)	3,820	3,180	2,730	2,390	1,910
		Vc(m/min)	120	120	120	120	120
		Vf(mm-min)	~4,590	~5,730	~6,550	~7,640	~7,640
		fz(min/t)	~0.6	~0.6	~0.8	~0.8	~0.8
		ap(mm)	0.3	0.3	0.3	0.3	0.3
		ae(mm)	~5	~7	~8	~10	~11
		Q(min ³ /min)	7	12	16	23	25
SCM SKD SKT <30~40HRC Pre-Harden Steels Alloy Steels Die Tool Steels	JX1020 (Vc=100~160)	n(min ⁻¹)	3,500	2,920	2,500	2,190	1,750
		Vc(m/min)	110	110	110	110	110
		Vf(mm-min)	~4,200	~5,260	~6,010	~7,010	~7,010
		fz(min/t)	~0.6	~0.6	~0.8	~0.8	~0.8
		ap(mm)	0.3	0.3	0.3	0.3	0.3
		ae(mm)	~5	~7	~8	~10	~11
		Q(min ³ /min)	6	11	14	21	23
SCM SKD SKT <40~50HRC Pre-Harden Steels Alloy Steels Die Tool Steels	JX1020 (Vc=80~180)	n(min ⁻¹)	2,870	2,390	2,050	1,790	1,430
		Vc(m/min)	90	90	90	90	90
		Vf(mm-min)	~2,290	~2,870	~3,690	~4,300	~4,300
		fz(min/t)	~0.4	~0.4	~0.6	~0.6	~0.6
		ap(mm)	0.3	0.3	0.3	0.3	0.3
		ae(mm)	~5	~7	~8	~10	~11
		Q(min ³ /min)	3	6	9	13	14
SUS Stainless Steels	JX1020 (Vc=100~180)	n(min ⁻¹)	3,820	3,180	2,730	2,390	1,910
		Vc(m/min)	120	120	120	120	120
		Vf(mm-min)	~4,590	~5,730	~6,550	~7,640	~7,640
		fz(min/t)	~0.6	~0.6	~0.8	~0.8	~0.8
		ap(mm)	0.3	0.3	0.3	0.3	0.3
		ae(mm)	~5	~7	~8	~10	~11
		Q(min ³ /min)	7	12	16	23	25
FC FCD Cast Iron	JX1020 (Vc=120~220)	n(min ⁻¹)	4,780	3,980	3,410	2,990	2,390
		Vc(m/min)	150	150	150	150	150
		Vf(mm-min)	~5,730	~7,170	~8,190	~9,550	~9,550
		fz(min/t)	~0.6	~0.6	~0.8	~0.8	~0.8
		ap(mm)	0.3	0.3	0.3	0.3	0.3
		ae(mm)	~5	~7	~8	~10	~11
		Q(min ³ /min)	9	15	20	29	32

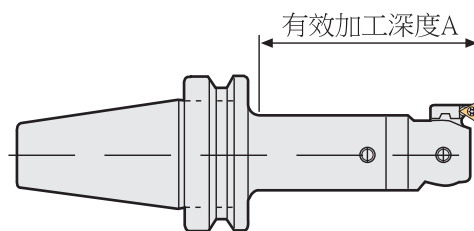
1. please refer to the above list for cutting conditions
2. for slotting or ramping*feed rate should be set to 70% as general criteria
3. ensure to index the insert at the correct time to ensure safety of the tool-body

4. the evacuation of swarf can cause burns*cuts or damage to the eyes please ensue the correct safety cover is fitted around the machine*and necessary personal protection equipment is worn by the machine operator
5. due to fire risks do not use neat cutting oil as a coolant



刀片規格 / 切削參數

Inserts / Cutting Conditions

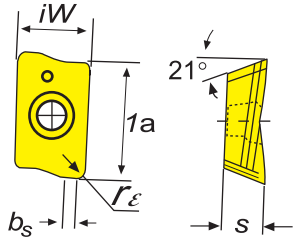
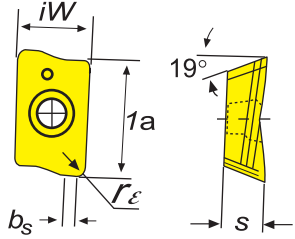


Boring Head No,	Work material	A	Insert		切削速度 (m/min)	切削量 (mm/φ)	進給量(mm/rev)	
			刀尖半徑R	GRADE			推薦值	MAX
GEWN20- 36CKB1	碳鋼・合金鋼(Carbon・Alloy Steels)	73	0.2	T1200A	160	0.15	0.06	0.15
	不鏽鋼(Stainless Steels)		0.2	T1200A	100	0.15	0.06	0.15
	淬火鋼(Hardened Steels)		0.2	BN250	50	0.10	0.06	0.10
	鑄鐵(Cast Iron)		0.2	H1	100	0.20	0.06	0.15
	球鐵(Ductile Iron)		0.2	H1	80	0.15	0.06	0.12
	球鐵(Ductile Iron)		0.2	BN700	120	0.15	0.06	0.10
	鋁合金(Aluminum)		0.2	H1	200	0.20	0.06	0.15
	鋁合金(Aluminum)		0.2	DA2200	300	0.20	0.06	0.15
GEWN25- 47CKB2	碳鋼・合金鋼(Carbon・Alloy Steels)	88	0.2	T1200A	180	0.15	0.06	0.15
	不鏽鋼(Stainless Steels)		0.2	T1200A	120	0.15	0.06	0.15
	淬火鋼(Hardened Steels)		0.2	BN250	60	0.10	0.06	0.10
	鑄鐵(Cast Iron)		0.2	H1	120	0.20	0.06	0.15
	球鐵(Ductile Iron)		0.2	H1	100	0.15	0.06	0.12
	球鐵(Ductile Iron)		0.2	BN700	180	0.15	0.06	0.10
	鋁合金(Aluminum)		0.4	H1	200	0.20	0.10	0.15
	鋁合金(Aluminum)		0.2	DA2200	400	0.20	0.06	0.15
GEWN32- 60CKB3	碳鋼・合金鋼(Carbon・Alloy Steels)	103	0.2	T1200A	180	0.20	0.06	0.15
	不鏽鋼(Stainless Steels)		0.2	T1200A	150	0.20	0.06	0.15
	淬火鋼(Hardened Steels)		0.2	BN250	80	0.10	0.06	0.10
	鑄鐵(Cast Iron)		0.2	H1	150	0.20	0.06	0.15
	球鐵(Ductile Iron)		0.2	H1	100	0.15	0.06	0.12
	球鐵(Ductile Iron)		0.2	BN700	200	0.15	0.06	0.10
	鋁合金(Aluminum)		0.4	H1	300	0.25	0.10	0.15
	鋁合金(Aluminum)		0.4	DA2200	800	0.25	0.10	0.15
GEWN41- 74CKB4	碳鋼・合金鋼(Carbon・Alloy Steels)	103	0.2	T1200A	180	0.25	0.06	0.15
	不鏽鋼(Stainless Steels)		0.2	T1200A	150	0.25	0.06	0.15
	淬火鋼(Hardened Steels)		0.4	BN250	80	0.10	0.08	0.10
	鑄鐵(Cast Iron)		0.4	H1	150	0.30	0.10	0.15
	球鐵(Ductile Iron)		0.4	H1	100	0.20	0.10	0.12
	球鐵(Ductile Iron)		0.4	BN700	200	0.20	0.10	0.10
	鋁合金(Aluminum)		0.4	H1	300	0.30	0.12	0.15
	鋁合金(Aluminum)		0.4	DA2200	800	0.30	0.12	0.15
GEWN53- 95CKB5 GEWN68- 150CKB6 GEWN100- 203CKB6	碳鋼・合金鋼(Carbon・Alloy Steels)	103	0.4	T1200A	180	0.25	0.10	0.15
	不鏽鋼(Stainless Steels)		0.4	T1200A	150	0.25	0.10	0.15
	淬火鋼(Hardened Steels)		0.4	BN250	80	0.10	0.10	0.10
	鑄鐵(Cast Iron)		0.4	H1	150	0.30	0.10	0.15
	球鐵(Ductile Iron)		0.4	H1	100	0.20	0.10	0.12
	球鐵(Ductile Iron)		0.4	BN700	200	0.20	0.10	0.10
	鋁合金(Aluminum)		0.8	H1	300	0.30	0.16	0.28
	鋁合金(Aluminum)		0.4	DA2200	800	0.30	0.12	0.15

- 1.本表是切削條件的選擇基準,請根據機床.工件等具體情況,進行適當調整。
- 2.高壓內冷加工可能會使刀柄擾曲。公差要求很嚴格時,請降低冷卻液的壓強。
- 3.作為鋼件的加工磨損對策,建議用金屬陶瓷塗層T2000Z。
- 4.使用CBN材質BN250及BN700時,建議用乾式切削。



R390M.11 , R390M.17 , R390.11 , R390.17 , R390B.17,ER390.11,ER390.17

	ITEM CODE	Size(mm)				
		1a	iW	s	bs	rε
	R390-11 T3 04E-PL	11	6.8	3.59	0.9	0.4
	R390-11 T3 08E-PL	11	6.8	3.59	1.5	0.8
	R390-11 T3 08M-PL	11	6.8	3.59	1.2	0.8
	R390-11 T3 08E-ML	11	6.8	3.59	1.5	0.8
	R390-11 T3 16E-ML	11	6.8	3.59	0.8	1.6
	R390-11 T3 24E-ML	11	6.8	3.59		2.4
	R390-11 T3 31E-ML	11	6.8	3.59		3.1
	R390-11 T3 08E-KL	11	6.8	3.59	1.5	0.8
	R390-11 T3 08M-KL	11	6.8	3.59	1.2	0.8
	R390-11 T3 04E-NL	11	6.8	3.59	0.9	0.4
	R390-11 T3 08E-NL	11	6.8	3.59	1.5	0.8
	R390-11 T3 20E-NL	11	6.8	3.59		2
R390-11 T3 31E-NL	11	6.8	3.59		3.1	
	ITEM CODE	Size(mm)				
		1a	iW	s	bs	rε
	R390-17 04 08E-PL	17	9.6	4.76	1.5	0.8
	R390-17 04 08M-PL	17	9.6	4.76	1.5	0.8
	R390-17 04 08E-ML	17	9.6	4.76	1.5	0.8
	R390-17 04 08E-KL	17	9.6	4.76	1.5	0.8
	R390-17 04 08M-KL	17	9.6	4.76	1.5	1.6
	R390-17 04 08E-NL	17	9.6	4.76	1.5	2.4
	R390-17 04 20E-NL	17	9.6	4.76	0.3	2
	R390-17 04 31E-NL	17	9.6	4.76		3.1
	R390-17 04 40E-NL	17	9.6	4.76		4
	R390-17 04 50E-NL	17	9.6	4.76		5

R390M.11 , R390M.17 , R390.11 , R390.17 , R390B.17,ER390.11,ER390.17

刀片槽形		刀片型號	每齒進給量, fz(mm/齒) 初始值	普通加工
E-PL E-ML E-KL E-NL	輕型	11	0.08	(0.05-0.12)
			0.10	(0.05-0.15)
			0.08	(0.05-0.12)
			0.20	(0.10-0.30)
M-PL M-KL	輕型	11	0.08	(0.05-0.15)
			0.10	(0.08-0.15)
E-PL E-ML E-KL E-NL	輕型	17	0.08	(0.05-0.12)
			0.10	(0.05-0.15)
			0.08	(0.05-0.12)
			0.20	(0.10-0.30)
M-PL M-KL	輕型	17	0.08	(0.05-0.15)
			0.10	(0.08-0.15)
E-PM E-MM E-KM	半精加工	11	0.10	(0.08-0.15)
			0.13	(0.08-0.20)
			0.12	(0.12-0.20)
M-PM M-MM M-KM	半精加工	11	0.10	(0.08-0.15)
			0.13	(0.08-0.20)
			0.12	(0.12-0.20)
E-PM E-MM E-KM	半精加工	17	0.10	(0.08-0.15)
			0.15	(0.08-0.20)
			0.15	(0.12-0.20)
M-PM M-MM M-KM	半精加工	17	0.10	(0.08-0.15)
			0.15	(0.08-0.20)
			0.15	(0.12-0.20)
M-PH M-MH M-KH	重載	11	0.12	(0.08-0.20)
			0.16	(0.08-0.22)
			0.15	(0.12-0.22)
M-PH M-KH	重載	17	0.20	(0.15-0.35)
			0.20	(0.15-0.35)
E	PCD	11	0.15	(0.10-0.25)
E	PCD	17	0.15	(0.10-0.25)



標準切削條件表-直柄型 ASR20,ASRM20

被加工材料 Work material	紅字為第一 推薦材料	每刃進給量 m/min Feed rate	Ø 16(2刃)		Ø 20(3刃)		Ø 25(4刃)		Ø 32(5刃)		Ø 40(6刃)	
			<30Dc		<30Dc		<30Dc		<30Dc		<30Dc	
			通用	高速加工	通用	高速加工	通用	高速加工	通用	高速加工	通用	高速加工
碳素鋼 合金鋼 < 30HRC	JS4060 JX1045 (GX2030)	$n(\text{min}^{-1})$	1,800	3,590	1,440	2,870	1,150	2,300	900	1,800	720	1,440
		$Vc(\text{m/min})$	90	180	90	180	90	180	90	180	90	180
		$Vf(\text{m/min})$	2,880	10,060	3,450	12,060	4,600	14,720	4,500	14,400	4,320	13,830
		$fz(\text{mm/t})$	0.8	1.4	0.8	1.4	1.0	1.6	1.0	1.6	1.0	1.6
		$a_p(\text{mm})$	0.8	0.6	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5
		$ae(\text{mm})$	13	13	16	16	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{mmin})$	30	78	55	96	92	147	113	180	138	221
預硬化鋼 合金鋼 (30~40HRC)	JP4020 JX1045 JS4060	$n(\text{min}^{-1})$	1,800	3,590	1,440	2,870	1,150	2,300	900	1,800	720	1,440
		$Vc(\text{m/min})$	90	180	90	180	90	180	90	180	90	180
		$Vf(\text{m/min})$	2,880	10,060	3,460	12,060	4,600	14,720	4,500	14,400	4,320	13,830
		$fz(\text{mm/t})$	0.8	1.4	0.8	1.4	1.0	1.6	1.0	1.6	1.0	1.6
		$a_p(\text{mm})$	0.8	0.6	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5
		$ae(\text{mm})$	13	13	16	16	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{mmin})$	30	78	55	96	92	147	113	180	138	221
預硬化鋼 合金鋼 (40~50HRC)	JP4020 JX1045	$n(\text{min}^{-1})$	1,800	2,590	1,440	2,080	1,150	1,660	900	1,300	720	1,040
		$Vc(\text{m/min})$	90	130	90	130	90	130	90	130	90	130
		$Vf(\text{m/min})$	2,160	6,220	2,600	7,400	2,760	7,970	2700	7,800	2,600	7,490
		$fz(\text{mm/t})$	0.6	1.2	0.6	1.2	0.6	1.2	0.6	1.2	0.6	1.2
		$a_p(\text{mm})$	0.5	0.35	0.6	0.35	0.6	0.35	0.6	0.35	0.6	0.35
		$ae(\text{mm})$	13	13	16	16	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{mmin})$	14	28	25	42	33	56	41	68	50	84
預硬化鋼 合金鋼 (50~55HRC)	JP4020 JX1005	$n(\text{min}^{-1})$	1,600	2,390	1,280	1,920	1,020	1,530	800	1,200	640	990
		$Vc(\text{m/min})$	80	120	80	120	80	120	80	120	80	120
		$Vf(\text{m/min})$	640	960	770	1,160	820	1,230	800	1,200	770	1,160
		$fz(\text{mm/t})$	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
		$a_p(\text{mm})$	0.4	0.25	0.4	0.25	0.4	0.25	0.4	0.25	0.4	0.25
		$ae(\text{mm})$	13	13	16	16	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{mmin})$	3	3	5	5	7	6	8	8	10	9
預硬化鋼 合金鋼 (50~55HRC)	JX1005	$n(\text{min}^{-1})$	1,200	2,000	960	1,600	770	1,280	600	1,000	480	800
		$Vc(\text{m/min})$	60	100	60	100	60	100	60	100	60	100
		$Vf(\text{m/min})$	120	200	150	240	160	260	150	250	150	240
		$fz(\text{mm/t})$	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
		$a_p(\text{mm})$	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.3
		$ae(\text{mm})$	13	13	16	16	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{mmin})$	0.8	0.8	1.2	1.2	1.6	1.5	1.9	1.9	2.4	2.3
不鏽鋼 SUS	JX1060	$n(\text{min}^{-1})$	1,800	3,590	1,440	2,870	1,150	2,300	900	1,800	720	1,440
		$Vc(\text{m/min})$	90	180	900	180	90	180	90	180	90	180
		$Vf(\text{m/min})$	1,800	7,180	2,160	8,610	2,300	9,200	2,250	9,000	2,160	8,640
		$fz(\text{mm/t})$	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0
		$a_p(\text{mm})$	0.8	0.6	1.0	0.5	1.0	0.5	1.6	0.5	1.0	0.5
		$ae(\text{mm})$	13	13	16	16	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{mmin})$	19	56	35	69	46	92	56	113	69	138
鑄鐵 FC FCD	JX1045	$n(\text{min}^{-1})$	1,800	3,590	1,440	2,870	1,150	1,300	900	1,800	720	1,440
		$Vc(\text{m/min})$	90	180	90	180	90	180	90	180	90	180
		$Vf(\text{m/min})$	1,320	11,490	6,050	5,500	6,440	16,560	6,300	6,200	6,050	15,560
		$fz(\text{mm/t})$	1.2	1.6	1.4	1.8	1.4	1.8	1.4	1.8	1.4	1.8
		$a_p(\text{mm})$	1.0	0.8	1.25	1.0	1.25	1.0	1.25	1.0	1.25	1.0
		$ae(\text{mm})$	13	13	16	16	20	20	25	25	32	32
		$Q(\text{cm}^3/\text{mmin})$	56	119	121	248	161	331	197	405	242	498
最大 $fz(\text{mm/t})$			<1.8(通用 fz :<1.0)		<1.8(通用 fz :<1.0)		<1.8(通用 fz :<1.0)		<1.8(通用 fz :<1.0)		<1.8(通用 fz :<1.0)	
最大 $a_p(\text{mm/t})$			<1.25(通用 a_p :<1.0)		<1.25(通用 a_p :<1.0)		<1.5(通用 a_p :<1.0)		<1.5(通用 a_p :<1.0)		<1.5(通用 a_p :<1.0)	



標準切削條件表-刀盤型 ASR20

被加工材料 Work material	紅字為第一推薦材料	刀徑Dc 突出比例	Ø 50(7刃)					Ø 52(7刃)					Ø 63(8刃)					Ø 66(8刃)					
			<3Dc		3Dc-5Dc	5Dc-7Dc	>7Dc	<3Dc		3Dc-5Dc	5Dc-7Dc	>7Dc	<3Dc		3Dc-5Dc	5Dc-7Dc	>7Dc	<3Dc		3Dc-5Dc	5Dc-7Dc	>7Dc	
			通用	高速加工				通用	高速加工				通用	高速加工				通用	高速加工				
碳素鋼 合金鋼 < 30HRC	JS4020 JX1045 (GX2030)	n(min ⁻¹)	580	1,150	830	830	580	560	1,110	800	800	560	460	910	660	660	460	440	870	630	630	440	
		Vc(m/min)	90	180	130	130	90	90	180	130	130	90	90	180	130	130	90	90	180	130	130	90	
		Vf(m/min)	3,770	9,200	4,150	4,150	2,900	3,920	2,440	5,600	5,600	3,920	3,590	3,740	3,960	3,960	2,760	3,520	11,140	5,040	5,040	3,520	
		fz(mm/t)	1.3	1.6	1.0	1.0	1.0	1.0	1.5	1.0	1.0	1.0	1.3	1.5	1.0	1.0	1.0	1.0	1.6	1.0	1.0	1.0	
		ap(mm)	1.0	0.8	1.0	0.7	0.5	1.0	0.5	0.8	0.5	0.4	1.0	0.8	1.0	0.7	0.5	1.0	0.5	0.8	0.5	0.4	
		ae(mm)	40	40	40	40	40	40	40	40	40	40	50	50	50	50	50	50	50	50	50	50	
		Q(cm³/mmin)	151	294	155	116	58	157	249	179	112	63	180	350	198	139	69	176	279	292	125	170	
預硬化鋼 合金鋼 (30~40HRC)	JP4020 JX1045 JS4060	n(min ⁻¹)	580	1,150	830	830	580	560	1,110	800	800	560	460	910	660	660	460	440	870	630	630	440	
		Vc(m/min)	90	180	130	130	90	90	180	130	130	90	90	180	130	130	90	90	180	130	130	90	
		Vf(m/min)	3,770	9,200	4,150	4,150	2,900	3,920	2,440	5,600	5,600	3,920	3,590	3,740	3,960	3,960	2,760	3,520	11,140	5,040	5,040	3,520	
		fz(mm/t)	1.3	1.6	1.0	1.0	1.0	1.0	1.6	1.0	1.0	1.0	1.3	1.5	1.0	1.0	1.0	1.0	1.6	1.0	1.0	1.0	
		ap(mm)	1.0	0.8	1.0	0.7	0.5	1.0	0.5	0.8	0.5	0.4	1.0	0.8	1.0	0.7	0.5	1.0	0.5	0.8	0.8	0.4	
		ae(mm)	40	40	40	40	40	40	40	40	40	40	50	50	50	50	50	50	50	50	50	50	
		Q(cm³/mmin)	151	294	166	116	58	157	249	179	112	63	180	350	198	139	69	176	279	202	202	70	
預硬化鋼 合金鋼 (40~50HRC)	JP4020 JX1045	n(min ⁻¹)	580	830	580	580	580	560	800	560	560	560	460	660	460	460	460	440	630	440	440	440	
		Vc(m/min)	90	130	90	90	90	90	130	90	90	90	90	130	90	90	90	90	130	90	90	90	
		Vf(m/min)	2,320	3,320	2,320	2,320	2,320	2,360	2,720	2,360	2,360	2,360	2,210	3,170	2,210	2,210	2,210	2,210	6,050	2,120	2,120	2,120	
		fz(mm/t)	0.8	0.8	0.8	0.8	0.8	0.6	1.2	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.8	0.5	1.2	0.6	0.6	0.5	
		ap(mm)	1.0	1.0	1.0	0.7	0.5	0.6	0.35	0.5	0.4	0.3	1.0	1.0	1.0	0.7	0.7	0.6	0.35	0.5	0.4	0.3	
		ae(mm)	40	40	40	40	40	40	40	40	40	40	50	50	50	50	50	50	50	50	50	50	
		Q(cm³/mmin)	93	133	93	65	46	57	94	47	38	28	111	159	111	77	55	64	106	53	42	32	
預硬化鋼 合金鋼 (50~55HRC)	JP4020 JX1005	n(min ⁻¹)	510	770	510	510	510	490	740	490	490	490	410	610	460	410	410	390	580	390	390	390	
		Vc(m/min)	80	120	80	80	80	80	120	80	80	80	80	120	90	80	80	80	120	80	80	80	
		Vf(m/min)	510	770	510	510	510	690	1,040	690	690	690	500	740	2,210	500	500	630	930	630	630	630	
		fz(mm/t)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
		ap(mm)	1.0	1.0	1.0	0.7	0.5	0.4	0.25	0.35	0.25	0.15	1.0	1.0	1.0	0.7	0.5	0.4	0.25	0.35	0.25	0.15	
		ae(mm)	40	40	40	40	40	40	40	40	40	40	50	50	50	50	50	50	50	50	50	50	
		Q(cm³/mmin)	20	31	20	14	10	11	10	10	7	4	25	37	111	18	13	13	12	11	8	5	
預硬化鋼 合金鋼 (58~62HRC)	JX1005	n(min ⁻¹)	390	640	390	390	390	370	620	370	370	370	310	510	310	310	310	290	490	290	290	290	
		Vc(m/min)	60	100	60	60	60	60	100	60	60	60	60	100	60	60	60	60	100	60	60	60	
		Vf(m/min)	100	160	100	100	100	130	220	130	130	130	100	160	100	100	100	120	200	120	120	120	
		fz(mm/t)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
		ap(mm)	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.5	0.3	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.5	0.3	0.2	
		ae(mm)	40	40	40	40	40	40	40	40	40	40	50	50	50	50	50	50	50	50	50	50	
		Q(cm³/mmin)	20	3.2	2.0	2.0	2.0	2.6	2.5	2.6	1.6	1.0	2.5	4.0	2.5	2.5	2.5	3.0	3.0	3.0	1.8	1.2	
不鏽鋼 SUS	JX1060	n(min ⁻¹)	580	1,150	960	580	580	560	1,110	920	560	560	460	910	760	460	460	440	870	730	440	440	
		Vc(m/min)	90	180	150	90	90	90	180	150	90	90	90	180	150	90	90	90	180	150	90	90	
		Vf(m/min)	1,450	5,750	2,400	1,450	1,450	1,960	7,770	3,220	1,960	1,960	1,380	5,460	2,280	1,380	1,380	1,760	6,960	2,920	1,760	1,760	
		fz(mm/t)	0.5	1.0	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	
		ap(mm)	1.0	0.8	1.0	0.7	0.5	1.0	0.5	0.8	0.5	0.4	1.0	0.8	1.0	0.7	0.5	1.0	0.5	0.8	0.5	0.4	
		ae(mm)	40	40	40	40	40	40	40	40	40	40	50	50	50	50	50	50	50	50	50	50	
		Q(cm³/mmin)	58.0	184.0	96.0	40.6	29.0	78.4	155.4	103.0	39.2	31.4	69.0	218.4	114.0	48.3	34.5	88.0	174.0	116.8	44.0	35.2	
鑄鐵 FC FCD	JX1045	n(min ⁻¹)	580	1,150	830	830	580	560	1,110	800	800	560	460	910	660	660	460	440	870	630	630	440	
		Vc(m/min)	90	180	130	130	90	90	180	130	130	90	90	180	130	130	90	90	180	130	130	90	
		Vf(m/min)	4,350	10,350	6,230	6,230	4,350	5,490	13,990	7,840	7,840	5,490	4,140	8,830	5,940	5,940	4,140	4,930	12,530	7,060	7,060	4,930	
		fz(mm/t)	1.5	1.8	1.5	1.5	1.5	1.4	1.8	1.4	1.4	1.4	1.5	1.8	1.5	1.5	1.5	1.4	1.8	1.4	1.4	1.4	
		ap(mm)	1.5	1.5	1.0	1.0	0.7	1.25	1.0	0.8	0.6	0.4	1.5	1.5	1.5	1.0	0.7	1.25	1.0	0.8	0.6	0.4	
		ae(mm)	40	40	40	40	40	40	40	40	40	40	50	50	50	50	50	50	50	50	50	50	
		Q(cm³/mmin)	261	621	374	249	122	275	560	251	188	88	311	737	446	297	145	308	627	282	212	99	
最大 fz(mm/t)				<2.0(通用 fz:<1.0)					<1.8(通用 fz:<1.0)					<2.0(通用 fz:<1.0)					<1.8(通用 fz:<1.0)				
最大 ap(mm/t)				<2.0(通用 ap:<1.5)					<1.5(通用 ap:<1.0)					<2.0(通用 ap:<1.5)					<1.5(通用 ap:<1.0)				

ASF5

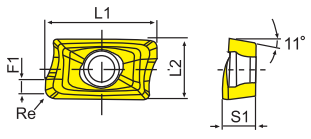
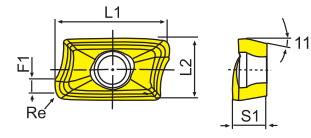
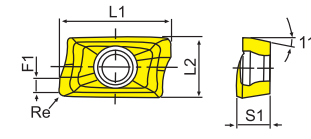
ITEM CODE	Size(mm)		
	R	T	W
SDNW1505ZDTN-R15	15	5.56	15.875
SDMT1505ZDTN-R15			
SDMT1505ZDTN-R15			
SDEW1505ZDTN-R15			

標準切削條件表 ASF5

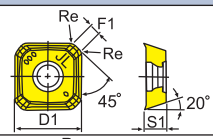
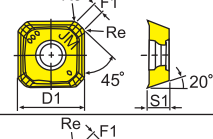
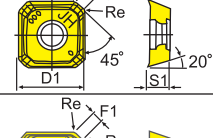
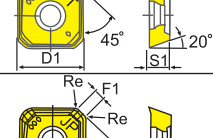
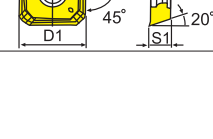
被加工材料 Work material	刀片材料 Grade	切削速度 m/min Cutting Speed	每刃進給量 m/min Feed rate	Ø63(4刃)		Ø100(5刃)		Ø160(8刃)		Ø200(10刃)		Ø250(12刃)	
				轉速 n mm/min	進給速度 v _f mm/min	轉速 n mm/min	進給速度 v _f mm/min	轉速 n mm/min	進給速度 v _f mm/min	轉速 n mm/min	進給速度 v _f mm/min	轉速 n mm/min	進給速度 v _f mm/min
軟鋼 (200HB以下)	JS4060 JX1045	150~ 200	1.0~2.0	910	5,460	570	4,300	360	4,320	290	4,350	230	4,140
Vc=180m/min fz=1.5mm/t ap=1.5mm ae=0.7Dc													
碳素鋼・合金鋼 (30HRC以下)		100~ 180		810	4,860	510	3,830	320	3,840	255	3,830	205	3,700
Vc=160m/min fz=1.5mm/t ap=1.5mm ae=0.7Dc													
碳素鋼・合金鋼 (30~40HRC)		100~ 160		810	4,860	510	3,830	320	3,840	255	3,830	205	3,700
Vc=160m/min fz=1.5mm/t ap=1.5mm ae=0.7Dc													
碳素鋼・合金鋼 (40~45HRC)	JP4020 JX1045 JS4060	80~ 120	0.4~0.8	505	1,620	320	1,280	200	1,280	160	1,280	127	1,220
Vc=100m/min fz=0.8mm/t ap=1.5mm ae=0.7Dc													
淬火鋼 (45~50HRC)	JP4020 JX1045	80~ 120	0.2~0.4	455	550	286	430	180	430	143	430	115	415
Vc=90m/min fz=0.3mm/t ap=1.5mm ae=0.7Dc													
淬火鋼 (50~60HRC)	JX1005 JP4020	50~ 100	0.05~0.2	350	280	220	220	140	220	110	220	90	210
Vc=72m/min fz=0.2mm/t ap=1.0mm ae=0.7Dc													
不鏽鋼	JX1060	100	1.0~2.0	455	1,820	285	1,430	180	1,430	143	1,430	115	1,400
Vc=90m/min fz=1.0mm/t ap=2.0mm ae=0.7Dc													
鑄鐵 FC,FCD	JS4060 JX1045 JP4020	100~ 180	1.0~2.0	810	6,480	510	5,100	320	5,100	255	5,100	205	5,000
Vc=160m/min fz=2.0mm/t ap=1.0mm ae=1.0Dc													

*JX1005為高硬度鋼專用材料，不適合於生材

APX3000M.APX3000

Shape	ITEM CODE	Grades					SIZE(mm)				
		MC5020	VP15TF	VP20RT	TF15		L1	L2	S1	F1	Re
	AOMT123602PEER-M	●	●				12	6.6	3.6	1.8	0.2
	123604PEER-M	●	●				12	6.6	3.6	1.6	0.4
	123608PEER-M	●	●				12	6.6	3.6	1.2	0.8
	123610PEER-M	●	●				12	6.6	3.6	1.0	1.0
	123612PEER-M	●	●				12	6.6	3.6	0.8	1.2
	123616PEER-M	●	●				12	6.6	3.6	0.4	1.6
	123620PEER-M	●	●				12	6.6	3.6	0.4	2.0
	123624PEER-M	●	●				12	6.6	3.6	0.4	2.4
	123630PEER-M	●	●				12	6.6	3.6	0.4	3.0
	123632PEER-M	●	●				12	6.6	3.6	0.4	3.2
	AOMT123604PEER-H	●	●	●			12	6.6	3.6	1.6	0.4
	123608PEER-H	●	●	●			12	6.6	3.6	1.2	0.8
	123616PEER-H	●	●	●			12	6.6	3.6	0.4	1.6
	AOGT123602PEFR-GM				●		12	6.6	3.6	1.8	0.2
	123604PEFR-GM				●		12	6.6	3.6	1.6	0.4
	123608PEFR-GM				●		12	6.6	3.6	1.2	0.8

ASX445

Shape	ITEM CODE	精度	Grades							SIZE(mm)			
			F7030	MC5020	VP15TF	VP30RT	NX4545		HT110	D1	S1	F1	Re
	SEET13T3AGEN-JL	E	●		●	●	●			13.4	3.97	1.9	1.5
	SEMT13T3AGSN-JM	M	●	●	●	●	●			13.4	3.97	1.9	1.5
	SEMT13T3AGSN-JH	M	●	●	●	●				13.4	3.97	1.9	1.5
	SEMT13T3AGSN-FT	M		●						13.4	3.97	1.9	1.5
	SEMT13T3AGSN-JP	G						●		13.4	3.97	2.2	-

APX3000M.APX3000

被加工材料	硬度	刀片牌號	切削速度 vc (m/min)	切削幅 ae (mm)	ø12-ø16		ø18-ø25		ø28-ø100	
					切深 ap (mm)	每齒進給量 fz (mm/tooth)	切深 ap (mm)	每齒進給量 fz (mm/tooth)	切深 ap (mm)	每齒進給量 fz (mm/tooth)
P	軟鋼 (SS400.S10C)	VP15TF	230 (180-270)	-0.25D1	-4	0.15	-5	0.25	-5	0.20
					4-7	0.10	5-7	0.20	5-7	0.15
							7-8.5	0.15	7-8.5	0.10
			220 (170-260)	-0.5D1			8.5-10	0.10	8.5-10	0.07
					-2	0.15	-3	0.25	-3	0.20
					2-5	0.10	3-5.5	0.20	3-5.5	0.15
	炭素鋼・合金鋼 (S45C,SCM440)	VP15TF	180 (140-210)	-0.25D1			5.5-8	0.15	5.5-8	0.10
							8-10	0.10	8-10	0.07
					-4	0.10	-4	0.15	-3	0.10
			170 (130-200)	-0.5D1	4-10	0.10	4-10	0.10	3-7	0.07
M	不銹鋼 (SUS304)	VP20RT	180 (140-210)	-0.25D1	-4	0.15	-5	0.25	-5	0.20
					4-7	0.10	5-7	0.15	5-7	0.15
							7-8.5	0.10	7-8.5	0.10
			170 (130-200)	-0.5D1			8.5-10	0.07	8.5-10	0.07
					-2	0.15	-3	0.20	-3	0.20
					2-5	0.10	3-5.5	0.15	3-5.5	0.15
	鑄鐵 (FC300)	MC5020	250 (200-300)	-0.25D1			5.5-8	0.10	5.5-8	0.10
							8-10	0.07	8-10	0.07
					-4	0.10	-4	0.10	-3	0.10
			240 (190-290)	-0.5D1	4-10	0.10	4-10	0.10	3-7	0.07
K	鑄鐵 (FCD450)	MC5020	210 (160-260)	-0.75D1	-4	0.10	-4	0.15	-3	0.10
							4-10	0.10	3-7	0.07
			130 (100-150)	-0.25D1	-4	0.10	-5	0.20	-5	0.20
					4-7	0.07	5-7	0.15	5-7	0.15
							7-8.5	0.10	7-8.5	0.10
	鑄鐵 (FCD450)	MC5020	120 (90-140)	-0.5D1			8.5-10	0.07	8.5-10	0.07
					-2	0.10	-3	0.20	-3	0.20
					2-5	0.07	3-5.5	0.15	3-5.5	0.15
			100 (80-120)	-0.75D1			5.5-8	0.10	5.5-8	0.10
							8-10	0.07	8-10	0.07
					-4	0.07	-4	0.10	-3	0.10
N	非鐵金屬	TF15	500 (200-1000)	-0.25D1	-4	0.15	-4	0.25	-4	0.20
					4-7	0.10	4-7	0.15	4-7	0.10
			500 (200-1000)	-0.5D1	-4	0.15	-4	0.20	-4	0.20
					4-7	0.10	4-7	0.10	4-7	0.10
H	高硬度鋼 (SKD)	VP15TF	90 (70-100)	-0.25D1	-4	0.10	-5	0.15	-5	0.15
					4-7	0.07	5-7	0.10	5-7	0.10
							7-8.5	0.07		
			85 (60-100)	-0.5D1	-2	0.10	-3	0.15	-3	0.15
					2-5	0.07	3-5.5	0.10		
			70 (50-80)	-0.75D1	-4	0.07	-4	0.07	-3	0.07

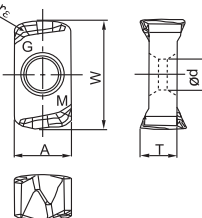


ASX445

被加工材料	硬度	刀片牌號	切削速度 (m/min)	精修—輕切削		輕切削—準重切削		中切削—重切削	
				每齒進給量 (mm/tooth)	對應	每齒進給量 (mm/tooth)	對應	每齒進給量 (mm/tooth)	對應
P 軟鋼 (SS400, S10C)	≤180HB	F7030	280(210-350)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		VP15TF	250(200-300)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		VP30RT	230(180-280)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		NX4545	180(130-230)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	-	-
炭素鋼・合金鋼 (S45C, SCM440)	180-280HB	F7030	250(200-300)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		VP15TF	220(170-270)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		VP30RT	200(150-250)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		NX4545	150(120-180)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	-	-
	280-350HB	F7030	180(130-230)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		VP15TF	140(100-180)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		VP30RT	120(80-160)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		NX4545	100(80-120)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	-	-
M 不銹鋼 (SUS304)	≤270HB	VP15TF	220(170-270)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		VP30RT	200(150-250)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
		NX4545	150(120-180)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	-	-
K 鑄鐵 (FCD250, FCD400)	≤450MPa	MC5020	200(150-250)	-	-	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH FT
		VP15TF	180(130-250)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH
	≥450MPa	MC5020	110(80-150)	-	-	0.2(0.1-0.3)	JM	0.3(0.2-0.4)	JH FT
N 非鐵金屬	-	HTI10	300-	0.15(0.1-0.2)	JP	0.2(0.1-0.3)	JP	0.3(0.2-0.4)	JP
S 耐熱合金	-	VP15TF	40(20-50)	0.15(0.1-0.2)	JL	0.2(0.1-0.3)	JM	-	-
H 高硬度鋼	40-55HRC	VP15TF	80(60-100)	0.1(0.05-0.15)	JL	0.15(0.1-0.2)	JM	0.2(0.1-0.3)	JH



MFH03・MFHM03

	Insert	ITEM CODE	Size(mm)							Angle	MEGACOAT NANO			CVD
			A	T	ød	W	Z	rε	α		PR1535	PR1525	PR1510	CVD Coated Carbide
 通用 General Purpose		LOGU 030310ER-GM	6.7	3.96	3.45	11.9	-	1.0	-	●	●	●	●	

推薦切削條件 Recommended Cutting Conditions

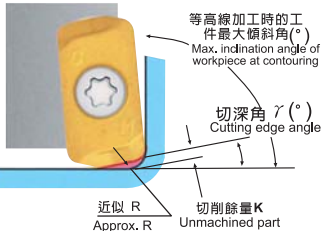
刀尖形狀 Insert	被削材 Workpiece	刀桿型號與進給(進給fz: mm/t) Holder Description and Feed Rate						* ap=0.5mm的推薦進給(基準值) Recommended Feed ap=0.5mm(reference value)						推薦刀片材質(切削速度Vc: m/min) Recommended Insert Grade			
		MFH162T	MFH20..... 3T	MFH204T	MFH254T	MFH255T	MFH325T	MFH326T	MEGACOAT NANO				CVD 涂層 CVD Coated Carbide				
									PR1535	PR1525	PR1510	CA6535					
GM	碳素鋼 Carbon Steel (Sxxc)	0.2~0.7~1.2		0.2~0.5~0.8	0.2~0.8~1.5	0.2~0.5~0.8	0.2~0.8~1.5	0.2~0.5~0.8	☆ 120~180~250	★ 120~180~250	-	-					
	合金鋼 Alloy Steel (SCM等)								☆ 100~160~220	★ 100~160~220	-	-					
	模具鋼 Die Steel (SKD等)(~40HRC)	0.2~0.5~0.9		0.2~0.4~0.6	0.2~0.6~1.2	0.2~0.4~0.6	0.2~0.6~1.2	0.2~0.4~0.6	☆ 80~140~180	★ 80~140~180	-	-					
	模具鋼 Die Steel (SKD等)(40~50HRC)	0.2~0.3~0.5		0.2~0.25~0.3	0.2~0.3~0.6	0.2~0.25~0.3	0.2~0.3~0.6	0.2~0.25~0.3	☆ 60~100~130	★ 60~100~130	-	-					
	奧氏體系不銹鋼 Austenitic Stainless Steel (SUS304等)	0.2~0.5~0.9			0.2~0.8~1.2	0.2~0.4~0.6	0.2~0.6~1.2	0.2~0.4~0.6	★ 100~160~200	☆ 100~160~200	-	-					
	馬氏體系不銹鋼 Martensitic Stainless Steel (SUS403等)								☆ 150~200~250	-	-	★ 180~240~300					
	析出硬化系不銹鋼 Precipitation Hardened Stainless Steel (SUS630等)								★ 90~120~150	-	-	-					
	灰口鑄鐵 Gray Cast Iron (FC)	0.2~0.7~1.2		0.2~0.5~0.8	0.2~0.8~1.5	0.2~0.5~0.8	0.2~0.8~1.5	0.2~0.5~0.8	-	-	★ 120~180~250	-					
	球墨鑄鐵 Nodular Cast Iron (FCD)	0.2~0.5~0.9		0.2~0.4~0.6	0.2~0.6~1.2	0.2~0.4~0.6	0.2~0.6~1.2	0.2~0.4~0.6	-	-	★ 100~150~200	-					
	Ni基耐熱合金 Ni-base heat resistant alloy	0.2~0.3~0.6		0.2~0.25~0.4	0.2~0.4~0.8	0.2~0.25~0.4	0.2~0.4~0.8	0.2~0.25~0.4	☆ 20~30~50	-	-	★ 20~30~50					
鈦合金 Titanium Alloy (Ti-6Al-4V)	★ 40~60~80								-	☆ 30~50~70	-						

□標準刀尖規格 / Standard pitch □多刀片規格 / Close pitch ★第1推薦 / 1st recommendation ☆第2推薦 / 2st recommendation

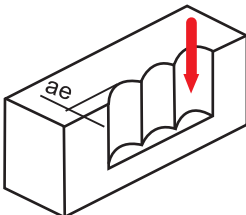
※Ni基耐熱合金,鈦合金推進濕式加工。切削條件中粗體字顯示為推薦條件的中心值。根據實際的加工狀態,請在範圍內調整切削速度,進給。與BT30相近的加工中心加工時,推薦將進給設定在推薦條件的25%以下。槽加工時推薦內部給油方式,中心貫穿冷卻液。

Machining with coolant is recommended for Ni-base heat resistant alloy and titanium alloy. The figure in bold font is center value of the recommended cutting conditions. Adjust the cutting speed and the feed rate within the above conditions according to the actual machining situation. For machining center equivalent to BT30, reduce feed rate to 25% or less of the recommended condition. For slotting, internal coolant or center through coolant is recommended.

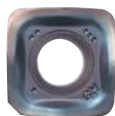
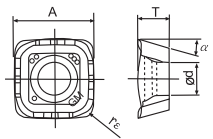
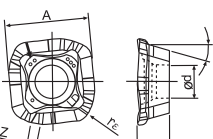
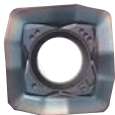
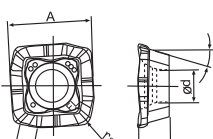
加工程序上的注意點(近似R的設定) Note for Machining Program (Approx. R)

形狀 Shape	型號 Holder	刀片形狀 Insert	切深角 γ (°) Cutting edge angle	近似 R(mm) Approx. R	切削餘量 K(mm) Unmachined part	等高線加工時的工件最大傾斜角(°) Max. inclination angle of workpiece at contouring
	MFH...03...	GM	12°	1.6	0.39	90°

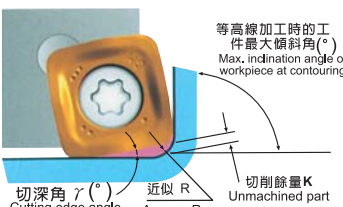
垂直加工(橫切) Vertical milling (plunging)

	可垂直加工(橫切) Available for vertical milling			
	刀片型號 Maximum	最大橫切深(ae) Maximum Width of Cut (ae)	垂直加工時進給請設定為fz=0.2(mm/t)以內 For vertical milling (plunging), reduce feed rate to fz=0.2mm/t or less	
	LOGU03型號	3.5mm		

MFH10 · MFHM10 · MFHB10

使用分類標準 Classification of Usage		P	碳素鋼 / 合金鋼 Carbon Steel / Alloy Steel				☆	★				
			模具鋼 Die Steel				☆	★				
★:粗加工 / 第1推荐 Roughing / 1st Choice ☆:粗加工 / 第2推荐 Roughing / 2nd Choice ■:精加工 / 第1推荐 Finishing / 1st Choice □:精加工 / 第2推荐 Finishing / 2nd Choice		M	奧氏體系不鏽鋼(SUS304等) Austenitic Stainless Steel				★	☆				
			馬氏體系不鏽鋼(SUS403等) Martensitic Stainless Steel				☆			★		
		K	灰口鑄鐵 Gray Cast Iron						★			
			球墨鑄鐵 Nodular Cast Iron						★			
		S	耐熱合金 (Ni基耐熱合金) Ni-base heat resistant alloy				★			☆		
			鈦合金(Ti-6Al-4V) Titanium Alloy				★		☆			
		H	高硬度材 High Hardened Steel					□				
Insert		ITEM CODE	Size(mm)				Angle	MEGACOAT NANO			CVD	
			A	T	ød	Z	rε	α	PR1535	PR1525	PR1510	CVD Coated Carbide CA6535
 通用 General Purpose		SOMT 100420ER-GM	10.30	4.58	4.6	-	2.0	16	●	●	●	●
		140520ER-GM	14.14	5.56	5.8				●	●	●	●
 大切深 Large ap		SOMT 100420ER-LD	10.45	4.58	4.6	0.9	2.0	16	●	●	●	●
		140520ER-LD	14.76	5.56	5.8	1.6			●	●	●	●
 帶修光刃 Wiper edge		SOMT 100420ER-FL	10.44	4.58	4.6	1.4	2.0	16	●	●	●	●
		140514ER-FL	14.57	5.56	5.8	3.1			1.4	●	●	●

加工程序上的注意點(近似R的設定) Note for Machining Program (Approx. R)

形狀 Shape	型號 Holder	刀片形狀 Insert	切深角 γ (°) Cutting edge angle	近似 R(mm) Approx. R	切削餘量 K(mm) Unmachined part	等高線加工時的工 件最大傾斜角(°) Max. inclination angle of workpiece at contouring
 等高線加工時的工 件最大傾斜角(°) Max. inclination angle of workpiece at contouring 切深角 γ (°) Cutting edge angle 近似 R Approx. R 切削餘量 K Unmachined part	MFH...10...	GM	10°	3.0	0.85	90°
		LD	14°	3.5	0.69	65°
		FL	14°	3.0	0.89	80°
	MFH...14...	GM	10°	3.5	1.37	90°
		LD	16°	5.0	1.06	65°
		FL	13°	3.0	1.36	80°



MFH10 · MFHM10 · MFHB10

推薦切削條件 Recommended Cutting Conditions

刀片形狀 Insert	被削材 Workpiece	刀桿型號與進給(進給fz: mm/t) Holder Description and Feed Rate					推薦刀片材質(切削速度Vc: m/min) Recommended Insert Grade			
		MFH25-	MFH32-	MFH40-	MFH...R-10	MFH...14	MEGACOAT NANO			CVD 塗層 CVD Coated Carbide
							PR1535	PR1525	PR1510	CA6535
GM	碳素鋼 Carbon Steel (Sxxc)	0.5~0.8~1.0(ap≤1.0mm) 0.2~0.4~0.5(ap≤1.5mm)	0.5~1.0~1.5(ap≤1.0mm) 0.3~0.7~1.0(ap≤1.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.4~1.0~1.5(ap≤1.5mm)	0.5~1.5~2.0		☆ 120~180~250	★ 120~180~250	-	-
	合金鋼 Alloy Steel (SCM等)	0.5~0.8~1.0(ap≤1.0mm) 0.2~0.4~0.5(ap≤1.5mm)	0.5~1.0~1.5(ap≤1.0mm) 0.3~0.7~1.0(ap≤1.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.4~1.0~1.5(ap≤1.5mm)	0.5~1.5~2.0		☆ 100~160~220	★ 100~160~220	-	-
	模具鋼 Die Steel (SKD等)(~40HRC)	0.5~0.7~0.8(ap≤1.0mm) 0.2~0.3~0.4(ap≤1.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.3~0.6~0.8(ap≤1.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.4~0.8~1.2(ap≤1.5mm)	0.5~1.2~1.8		☆ 80~140~180	★ 80~140~180	-	-
	模具鋼 Die Steel (SKD等)(40~50HRC)	0.15~0.3~0.5(ap≤1.0mm) 0.15~0.2~0.25(ap≤1.5mm)	0.2~0.5~0.8(ap≤1.0mm) 0.2~0.3~0.45(ap≤1.5mm)	0.2~0.6~0.9(ap≤1.0mm) 0.2~0.5~0.7(ap≤1.5mm)	0.2~0.7~1.0		☆ 60~100~130	★ 60~100~130	-	-
	奧氏體系不鏽鋼 Austenitic Stainless Steel (SUS304等)	0.5~0.7~0.8(ap≤1.0mm) 0.2~0.3~0.4(ap≤1.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.3~0.6~0.8(ap≤1.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.4~0.8~1.2(ap≤1.5mm)	0.5~1.2~1.8		★ 100~160~200	☆ 100~160~200	-	-
	馬氏體系不鏽鋼 Martensitic Stainless Steel (SUS403等)	0.5~0.7~0.8(ap≤1.0mm) 0.2~0.3~0.4(ap≤1.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.3~0.6~0.8(ap≤1.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.4~0.8~1.2(ap≤1.5mm)	0.5~1.2~1.8		☆ 150~200~250	-	-	★ 180~240~300
	析出硬化系不鏽鋼 Precipitation Hardened Stainless Steel (SUS630等)	0.5~0.7~0.8(ap≤1.0mm) 0.2~0.3~0.4(ap≤1.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.3~0.6~0.8(ap≤1.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.4~0.8~1.2(ap≤1.5mm)	0.5~1.2~1.8		★ 90~120~150	-	-	-
	灰口鑄鐵 Gray Cast Iron (FC)	0.5~0.8~1.0(ap≤1.0mm) 0.2~0.4~0.5(ap≤1.5mm)	0.5~1.0~1.5(ap≤1.0mm) 0.3~0.7~1.0(ap≤1.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.4~1.0~1.5(ap≤1.5mm)	0.5~1.5~2.0		-	-	★ 120~180~250	-
	球墨鑄鐵 Nodular Cast Iron (FCD)	0.5~0.7~0.8(ap≤1.0mm) 0.2~0.3~0.4(ap≤1.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.3~0.6~0.8(ap≤1.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.4~0.8~1.2(ap≤1.5mm)	0.5~1.2~1.8		-	-	★ 100~150~200	-
	Ni基耐熱合金 Ni-base heat resistant alloy	0.2~0.4~0.6(ap≤1.0mm) 0.15~0.2~0.3(ap≤1.5mm)	0.2~0.5~0.9(ap≤1.0mm) 0.2~0.4~0.6(ap≤1.5mm)	0.2~0.6~1.0(ap≤1.0mm) 0.2~0.5~0.8(ap≤1.5mm)	0.2~0.8~1.2		★ 20~30~50	-	-	☆ 20~40~50
LD	鈦合金 Titanium Alloy (Ti-6Al-4V)	0.2~0.4~0.6(ap≤1.0mm) 0.15~0.2~0.3(ap≤1.5mm)	0.2~0.5~0.9(ap≤1.0mm) 0.2~0.4~0.6(ap≤1.5mm)	0.2~0.6~1.0(ap≤1.0mm) 0.2~0.5~0.8(ap≤1.5mm)	0.2~0.8~1.2		★ 40~60~80	-	☆ 30~50~70	-
	碳素鋼 Carbon Steel (Sxxc)	0.5~0.8~1.0(ap≤1.0mm) 0.06~0.1~0.2(ap≤3.5mm)	0.5~1.0~1.5(ap≤1.0mm) 0.06~0.15~0.3(ap≤3.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.06~0.2~0.3(ap≤3.5mm)	0.5~1.5~2.0(ap≤1.0mm) 0.06~0.2~0.3(ap≤3.5mm)	0.5~1.5~2.0(ap≤2.0mm) 0.06~0.2~0.4(ap≤5.0mm)	☆ 120~180~250	★ 120~180~250	-	-
	合金鋼 Alloy Steel (SCM等)	0.5~0.8~1.0(ap≤1.0mm) 0.06~0.1~0.2(ap≤3.5mm)	0.5~1.0~1.5(ap≤1.0mm) 0.06~0.15~0.3(ap≤3.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.06~0.2~0.3(ap≤3.5mm)	0.5~1.5~2.0(ap≤1.0mm) 0.06~0.2~0.3(ap≤3.5mm)	0.5~1.5~2.0(ap≤2.0mm) 0.06~0.2~0.4(ap≤5.0mm)	☆ 100~160~220	★ 100~160~220	-	-
	模具鋼 Die Steel (SKD等)(~40HRC)	0.5~0.7~0.8(ap≤1.0mm) 0.06~0.08~0.15(ap≤3.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.06~0.1~0.2(ap≤3.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.06~0.15~0.2(ap≤3.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.06~0.15~0.2(ap≤3.5mm)	0.5~1.2~1.8(ap≤2.0mm) 0.06~0.15~0.3(ap≤5.0mm)	☆ 80~140~180	★ 80~140~180	-	-
	模具鋼 Die Steel (SKD等)(40~50HRC)	0.2~0.3~0.5(ap≤1.0mm) 0.03~0.05~0.1(ap≤3.5mm)	0.2~0.5~0.8(ap≤1.0mm) 0.03~0.08~0.15(ap≤3.5mm)	0.2~0.6~0.9(ap≤1.0mm) 0.03~0.1~0.15(ap≤3.5mm)	0.2~0.7~1.0(ap≤1.0mm) 0.03~0.1~0.15(ap≤3.5mm)	0.2~0.7~1.0(ap≤2.0mm) 0.03~0.1~0.2(ap≤5.0mm)	☆ 60~100~130	★ 60~100~130	-	-
	奧氏體系不鏽鋼 Austenitic Stainless Steel (SUS304等)	0.5~0.7~0.8(ap≤1.0mm) 0.06~0.08~0.15(ap≤3.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.06~0.1~0.2(ap≤3.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.06~0.15~0.2(ap≤3.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.06~0.15~0.2(ap≤3.5mm)	0.5~1.2~1.8(ap≤2.0mm) 0.06~0.15~0.3(ap≤5.0mm)	★ 100~160~200	☆ 100~160~200	-	-
	馬氏體系不鏽鋼 Martensitic Stainless Steel (SUS403等)	0.5~0.7~0.8(ap≤1.0mm) 0.06~0.08~0.15(ap≤3.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.06~0.1~0.2(ap≤3.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.06~0.15~0.2(ap≤3.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.06~0.15~0.2(ap≤3.5mm)	0.5~1.2~1.8(ap≤2.0mm) 0.06~0.15~0.3(ap≤5.0mm)	☆ 150~200~250	-	-	★ 180~240~300
	析出硬化系不鏽鋼 Precipitation Hardened Stainless Steel (SUS630等)	0.5~0.7~0.8(ap≤1.0mm) 0.06~0.08~0.15(ap≤3.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.06~0.1~0.2(ap≤3.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.06~0.15~0.2(ap≤3.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.06~0.15~0.2(ap≤3.5mm)	0.5~1.2~1.8(ap≤2.0mm) 0.06~0.15~0.3(ap≤5.0mm)	★ 90~120~150	-	-	-
	灰口鑄鐵 Gray Cast Iron (FC)	0.5~0.8~1.0(ap≤1.0mm) 0.06~0.1~0.2(ap≤3.5mm)	0.5~1.0~1.5(ap≤1.0mm) 0.06~0.15~0.3(ap≤3.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.06~0.2~0.3(ap≤3.5mm)	0.5~1.5~2.0(ap≤1.0mm) 0.06~0.2~0.3(ap≤3.5mm)	0.5~1.5~2.0(ap≤2.0mm) 0.06~0.2~0.4(ap≤5.0mm)	-	-	★ 120~180~250	-
	球墨鑄鐵 Nodular Cast Iron (FCD)	0.5~0.7~0.8(ap≤1.0mm) 0.06~0.08~0.15(ap≤3.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.06~0.1~0.2(ap≤3.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.06~0.15~0.2(ap≤3.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.06~0.15~0.2(ap≤3.5mm)	0.5~1.2~1.8(ap≤2.0mm) 0.06~0.15~0.3(ap≤5.0mm)	-	-	★ 100~150~200	-
	Ni基耐熱合金 Ni-base heat resistant alloy	0.2~0.4~0.6(ap≤1.0mm) 0.03~0.05~0.1(ap≤3.5mm)	0.2~0.5~0.9(ap≤1.0mm) 0.03~0.08~0.15(ap≤3.5mm)	0.2~0.6~1.0(ap≤1.0mm) 0.03~0.1~0.15(ap≤3.5mm)	0.2~0.8~1.2(ap≤1.0mm) 0.03~0.1~0.15(ap≤3.5mm)	0.2~0.8~1.2(ap≤2.0mm) 0.03~0.1~0.2(ap≤5.0mm)	★ 20~30~50	-	-	☆ 20~40~50
	鈦合金 Titanium Alloy (Ti-6Al-4V)	0.2~0.4~0.6(ap≤1.0mm) 0.03~0.05~0.1(ap≤3.5mm)	0.2~0.5~0.9(ap≤1.0mm) 0.03~0.08~0.15(ap≤3.5mm)	0.2~0.6~1.0(ap≤1.0mm) 0.03~0.1~0.15(ap≤3.5mm)	0.2~0.8~1.2(ap≤1.0mm) 0.03~0.1~0.15(ap≤3.5mm)	0.2~0.8~1.2(ap≤2.0mm) 0.03~0.1~0.2(ap≤5.0mm)	★ 40~60~80	-	☆ 30~50~70	-

★ 第1推荐 / 1st recommendation ☆ 第2推荐 / 2st recommendation

MFH10 · MFHM10 · MFHB10

推薦切削條件 Recommended Cutting Conditions

刀片形狀 Insert Shape	被削材 Workpiece	刀桿型號與進給(進給fz: mm/t) Holder Description and Feed Rate					推薦刀片材質(切削速度Vc: m/min) Recommended Insert Grade			
		MFH25-	MFH32-	MFH40-	MFH...R-10	MFH...14	MEGACOAT NANO			CVD 塗層 CVD Coated Carbide
							PR1535	PR1525	PR1510	CA6535
FL	碳素鋼 Carbon Steel (Sxxc)	0.5~0.8~1.0(ap≤1.0mm) 0.2~0.4~0.5(ap≤1.5mm)	0.5~1.0~1.5(ap≤1.0mm) 0.3~0.7~1.0(ap≤1.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.4~1.0~1.5(ap≤1.5mm)	0.5~1.5~2.0		☆ 120~180~250	★ 120~180~250	-	-
	合金鋼 Alloy Steel (SCM等)	0.5~0.8~1.0(ap≤1.0mm) 0.2~0.4~0.5(ap≤1.5mm)	0.5~1.0~1.5(ap≤1.0mm) 0.3~0.7~1.0(ap≤1.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.4~1.0~1.5(ap≤1.5mm)	0.5~1.5~2.0		☆ 100~160~220	★ 100~160~220	-	-
	模具鋼 Die Steel (SKD等)(~40HRC)	0.5~0.7~0.8(ap≤1.0mm) 0.2~0.3~0.4(ap≤1.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.3~0.6~0.8(ap≤1.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.4~0.8~1.2(ap≤1.5mm)	0.5~1.2~1.8		☆ 80~140~180	★ 80~140~180	-	-
	模具鋼 Die Steel (SKD等)(40~50HRC)	0.15~0.3~0.5(ap≤1.0mm) 0.15~0.2~0.25(ap≤1.5mm)	0.2~0.5~0.8(ap≤1.0mm) 0.2~0.3~0.45(ap≤1.5mm)	0.2~0.6~0.9(ap≤1.0mm) 0.2~0.5~0.7(ap≤1.5mm)	0.2~0.7~1.0		☆ 60~100~130	★ 60~100~130	-	-
	奧氏體系不銹鋼 Austenitic Stainless Steel (SUS304等)	0.5~0.7~0.8(ap≤1.0mm) 0.2~0.3~0.4(ap≤1.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.3~0.6~0.8(ap≤1.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.4~0.8~1.2(ap≤1.5mm)	0.5~1.2~1.8		★ 100~160~200	☆ 100~160~200	-	-
	馬氏體系不銹鋼 Martensitic Stainless Steel (SUS403等)	0.5~0.7~0.8(ap≤1.0mm) 0.2~0.3~0.4(ap≤1.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.3~0.6~0.8(ap≤1.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.4~0.8~1.2(ap≤1.5mm)	0.5~1.2~1.8		☆ 150~200~250	-	-	★ 180~240~300
	析出硬化系不銹鋼 Precipitation Hardened Stainless Steel (SUS630等)	0.5~0.7~0.8(ap≤1.0mm) 0.2~0.3~0.4(ap≤1.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.3~0.6~0.8(ap≤1.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.4~0.8~1.2(ap≤1.5mm)	0.5~1.2~1.8		★ 90~120~150	-	-	-
	灰口鑄鐵 Gray Cast Iron (FC)	0.5~0.8~1.0(ap≤1.0mm) 0.2~0.4~0.5(ap≤1.5mm)	0.5~1.0~1.5(ap≤1.0mm) 0.3~0.7~1.0(ap≤1.5mm)	0.5~1.2~1.8(ap≤1.0mm) 0.4~1.0~1.5(ap≤1.5mm)	0.5~1.5~2.0		-	-	★ 120~180~250	-
	球墨鑄鐵 Nodular Cast Iron (FCD)	0.5~0.7~0.8(ap≤1.0mm) 0.2~0.3~0.4(ap≤1.5mm)	0.5~0.8~1.2(ap≤1.0mm) 0.3~0.6~0.8(ap≤1.5mm)	0.5~1.0~1.6(ap≤1.0mm) 0.4~0.8~1.2(ap≤1.5mm)	0.5~1.2~1.8		-	-	★ 100~150~200	-
	Ni基耐熱合金 Ni-base heat resistant alloy	0.2~0.4~0.6(ap≤1.0mm) 0.15~0.2~0.3(ap≤1.5mm)	0.2~0.5~0.9(ap≤1.0mm) 0.2~0.4~0.6(ap≤1.5mm)	0.2~0.6~1.0(ap≤1.0mm) 0.2~0.5~0.8(ap≤1.5mm)	0.2~0.8~1.2		★ 20~30~50	-	-	☆ 20~40~50
	鈦合金 Titanium Alloy (Ti-6Al-4V)	0.2~0.4~0.6(ap≤1.0mm) 0.15~0.2~0.3(ap≤1.5mm)	0.2~0.5~0.9(ap≤1.0mm) 0.2~0.4~0.6(ap≤1.5mm)	0.2~0.6~1.0(ap≤1.0mm) 0.2~0.5~0.8(ap≤1.5mm)	0.2~0.8~1.2		★ 40~60~80	-	☆ 30~50~70	-

★第1推荐 / 1st recommendation ☆第2推荐 / 2st recommendation

※Ni基耐熱合金, 鈦合金推薦濕式加工。

Machining with coolant is recommended for Ni-base heat resistant alloy titanium alloy.

※切削條件中粗體字顯示為推薦條件的中心值。根據實際加工條件, 在範圍內調整切削速度, 進給。

The figure in bold font is center value of the recommended cutting conditions. Adjust the cutting speed and the feed rate within the above conditions according to the actual machining situation.

※修光刃LD型以及FL型在進行精加工時, 每刀進給量請設定在fz=0.1~0.3(mm/t)以內。

When finishing with LD type and FL type with wiper edge, reduce feed rate to fz=0.1~0.3mm/t or less.

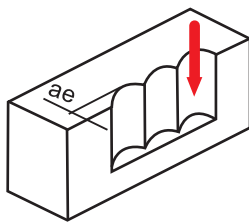
※BT30相近的加工中心加工時, 推薦進給設定在推薦條件的25%以下。

For machining center equivalent to BT30, reduce feed rate to 25% or less of the recommended condition.

※槽加工時推薦內部給油方式, 以及中心貫穿冷卻液。

For slotting, internal coolant or center through coolant is recommended.

垂直加工(橫切) Vertical milling (plunging)



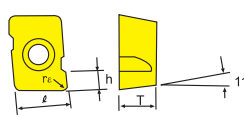
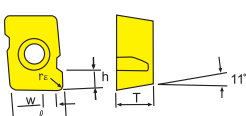
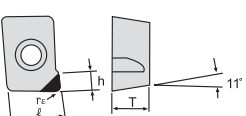
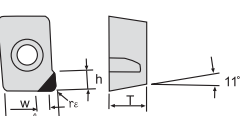
刀片型號 Maximum	最大橫切深(ae) Maximum Width of Cut (ae)
SOMT10型號	8mm
SOMT14型號	11.5mm

垂直加工時進給請設定為fz=0.2(mm/t)以內
For vertical milling (plunging), reduce feed rate to fz=0.2mm/t or less

刀片形狀 Insert	斜坡加工 Ramping	等高線加工 (對應立面角度) Contouring (rising wall angle)	垂直加工 Vertical	螺旋加工 Helical Milling	槽腔加工 Pocketing
GM	○	○ (90°)	○	○	○
LD	○	△ (65°)	x	x	x
FL	○	△ (80°)	x	x	x

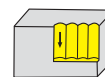
· 刀片形狀不同, 有可能對不能對應所有加工狀態。Some applications are not available depending on insert.
· 對於FL與LD的等高線加工中立面角度有限制。For FL and LD type, there is a limit of rising wall angle at contouring.

ASPV · ASPVM · ASPVB

																																															
Fig-1						Fig-2						Fig-3 (CBN)						Fig-4 (CBN)																													
P	鋼	Carbon steels																				 : 一般切削・第一推荐 General cutting, First recommended																									
M	SUS, etc.																						 : 一般切削・第二推荐 General cutting, Second recommended																								
K	FC・FCD																																														
H	高硬度材料	Hardened steels																																													
N	鋁合金	Aluminum Alloy																																													
S	鈦合金	Titanium Alloy																																													
產品代碼 ITEM CODE		精度 Tolerance Class	JP塗層 JP coated		JM塗層 JM coated		JS塗層 JS coated		金屬陶瓷塗層 Cermat coated		ATH塗層 ATH coated		JX塗層 JX coated		CBN		DLC塗層 DLC coated		尺寸 Size(mm)					形狀 Shape																							
			JP4005	JP4020	JM4060	JS4060	MZ1000	ATH08M	JX1020	JX1045	BH250	SD5010	ℓ	W	T	h	rε																														
MPHW060302ZEL		H級 H class						●											6.35	-	3.18	3	0.2	Fig.1																							
MPHW060302ZEL-0.5									●											6.35	0.5	3.18	3	0.2	Fig.2																						
MPHW060304ZEL			★						●	●										6.35	-	3.18	3	0.4	Fig.1																						
MPHW060304ZEL-0.5			★						●	●										6.35	0.5	3.18	3	0.4	Fig.2																						
MPHW060304ZFL																	●			6.35	-	3.18	3	0.4	Fig.1																						
MPHW060308ZEL			★	●					●	●	●	●								6.35	-	3.18	3	0.8																							
MPHW060308ZEL-1.5			★	●					●	●	●	●			●					6.35	1.5	3.18	3	0.8	Fig.2,4																						
MPHW060308ZFL																	●			6.35	-	3.18	3	0.8	Fig.1,3																						
MPHW060320ZEL			★						●	●					●					6.35	-	3.18	3	2																							
MPHW060308ZEL			●	★	●					●	●								6.35	-	3.18	3	0.8																								
MPHW060320ZEL			●	★	●					●	●								6.35	-	3.18	3	2																								



插銑粗加工標準切削條件 ASPV · ASPVM · ASPVB
Standard cutting conditions for vertical roughing



工件材料 Work	紅字為第一 推薦材料 Red indicates primary recommended material types.	外徑Dc Tool diameter 突出比例 Overhang ratio	Ø16(2刃 2 Flutes)					Ø20(3刃 3 Flutes)					Ø25(4刃 4 Flutes)				
			<3Dc		硬質合金刀柄 Modular Carbide Shank			<3Dc		硬質合金刀柄 Modular Carbide Shank			<3Dc		硬質合金刀柄 Modular Carbide Shank		
			通用 General purpose	高速加工 High-speed processing	3Dc-5Dc	5Dc-7Dc	>7Dc	通用 General purpose	高速加工 High-speed processing	3Dc-5Dc	5Dc-7Dc	>7Dc	通用 General purpose	高速加工 High-speed processing	3Dc-5Dc	5Dc-7Dc	>7Dc
碳素鋼 合金鋼 Carbon Steels Alloy Steels 30HRC以下	JS4060 JP4020 JX1045	n(min ⁻¹)	2,990	3,990	2,990	2,990	2,390	2,390	3,190	2,390	2,390	1,920	1,920	2,550	1,920	1,920	1,530
		Vc(m/min)	150	200	150	150	120	150	200	150	150	120	150	200	150	150	120
		Vf(mm/min)	900	1200	720	600	340	1,080	1,440	870	720	410	1,160	1,530	930	770	430
		fz(mm/t)	0.15	0.15	0.12	0.1	0.07	0.15	0.15	0.12	0.1	0.07	0.15	0.15	0.12	0.1	0.07
		ap(mm)	3.6	3.6	3.6	3.6	3	4	4	4	4	4	4.5	4.5	4.5	4.5	4.5
		ae(mm)	< 4	< 4	< 3	< 2	< 2	< 4	< 4	< 3	< 2	< 2	< 4	< 4	< 3	< 2	< 2
鑄鐵 Cast Iron FC FCD	ATH08M JP4020 JS4060 JX1045	n(min ⁻¹)	2,990	4,980	3,990	3,990	2,990	2,390	3,390	3,190	3,190	2,390	1,920	3,190	2,550	2,550	1,920
		Vc(m/min)	150	250	200	200	150	150	250	200	200	150	150	250	200	200	150
		Vf(mm/min)	1,200	2,000	1,200	1,040	600	1,440	2,400	1,440	1,250	720	1,540	2,560	1,530	1,330	770
		fz(mm/t)	0.2	0.2	0.15	0.13	0.1	0.2	0.2	0.15	0.13	0.1	0.2	0.2	0.15	0.13	0.1
		ap(mm)	3.6	3.6	3.6	3.6	3.6	4	4	4	4	4	4.5	4.5	4.5	4.5	4.5
		ae(mm)	< 4	< 4	< 4	< 4	< 3	< 4	< 4	< 4	< 4	< 3	< 4	< 4	< 4	< 4	< 3
最大fz Maximum fz (mm/t)			< 0.25					< 0.25					< 0.25				
最大ap Maximum ap (mm)			< 5					< 5					< 5				

工件材料 Work	紅字為第一 推薦材料 Red indicates primary recommended material types.	外徑Dc Tool diameter 突出比例 Overhang ratio	Ø32(5刃 5 Flutes)					Ø40(6刃 6 Flutes)					Ø50(7刃 7 Flutes)				
			<3Dc			硬質合金刀柄 Modular Carbide Shank	<3Dc			硬質合金刀柄 Modular Carbide Shank	<3Dc			硬質合金刀柄 Modular Carbide Shank	3Dc-5Dc	5Dc-7Dc	>7Dc
			通用 General purpose	高速加工 High-speed processing	3Dc-5Dc		5Dc-7Dc	>7Dc	通用 General purpose		高速加工 High-speed processing	3Dc-5Dc	5Dc-7Dc				
碳素鋼 合金鋼 Carbon Steels Alloy Steels 30HRC以下	JS4060 JP4020 JX1045	n(min ⁻¹)	1,500	2,000	1,500	1,500	1,200	1,200	1,600	1,200	1,200	960	960	1,280	960	960	770
		Vc(m/min)	150	200	150	150	120	150	200	150	150	120	150	200	150	150	120
		Vf(mm/min)	1,130	1,500	900	750	420	1,080	1,440	870	720	410	1,010	1,350	810	680	380
		fz(mm/t)	0.15	0.15	0.12	0.1	0.07	0.15	0.15	0.12	0.1	0.07	0.15	0.15	0.12	0.1	0.07
		ap(mm)	5	5	5	5	5	5.7	5.7	5.7	5.7	5.7	6.3	6.3	6.3	6.3	6.3
		ae(mm)	< 4	< 4	< 3	< 2	< 2	< 4	< 4	< 3	< 2	< 2	< 4	< 4	< 3	< 2	< 2
鑄鐵 Cast Iron FC FCD	ATH08M JP4020 JS4060 JX1045	n(min ⁻¹)	1,500	2,490	2,000	2,000	1,500	1,200	2,000	1,600	1,600	1,200	960	1,600	1,280	1,280	960
		Vc(m/min)	150	250	200	200	150	150	250	200	200	150	150	250	200	200	150
		Vf(mm/min)	1,500	3,120	2,000	2,000	1,130	1,440	3,000	1,920	1,920	1,080	1,350	2,800	1,800	1,800	1,010
		fz(mm/t)	0.2	0.25	0.2	0.2	0.15	0.2	0.25	0.2	0.2	0.15	0.2	0.25	0.2	0.2	0.15
		ap(mm)	5	5	5	5	5	5.7	5.7	5.7	5.7	5.7	6.3	6.3	6.3	6.3	6.3
		ae(mm)	< 4	< 4	< 4	< 4	< 3	< 4	< 4	< 4	< 4	< 3	< 4	< 4	< 4	< 4	< 3
最大fz Maximum fz (mm/t)			< 0.25					< 0.25					< 0.25				
最大ap Maximum ap (mm)			< 5					< 5					< 5				

工件材料 Work	紅字為第一 推薦材料 Red indicates primary recommended material types.	外徑Dc Tool diameter	Ø63(8刃 8 Flutes)				
		突出比例 Overhang ratio	<3Dc		3Dc-5Dc	5Dc-7Dc	>7Dc
			通用 General purpose	高速加工 High-speed processing			
碳素鋼 合金鋼 Carbon Steels Alloy Steels 30HRC以下	JS4060 JP4020 JX1045	n(min ⁻¹)	760	1,020	760	760	610
		Vc(m/min)	150	200	150	150	120
		Vf(mm/min)	920	1,230	730	610	350
		fz(mm/t)	0.15	0.15	0.12	0.1	0.07
		ap(mm)	7.1	7.1	7.1	7.1	7.1
		ae(mm)	< 4	< 4	< 3	< 2	< 2
鑄鐵 Cast Iron FC FCD	ATH08M JP4020 JS4060 JX1045	n(min ⁻¹)	760	1,270	1,020	1,020	760
		Vc(m/min)	150	250	200	200	150
		Vf(mm/min)	1,220	2,540	1,640	1,640	920
		fz(mm/t)	0.2	0.25	0.2	0.2	0.15
		ap(mm)	7.1	7.1	7.1	7.1	7.1
		ae(mm)	< 4	< 4	< 4	< 4	< 3
最大fz Maximum fz (mm/t)		< 0.25					
最大ap Maximum ap (mm)		< 5					

〈注意〉請使用R角為r_e 0.8的刀片。

〈Note〉 Use nose corner radius r_e 0.8 insert

〈注意〉

- 此標準切削條件表中的數值為切削條件的基準值。實際加工時，請考慮加工形狀，目的，使用機床等因素，對切削條件進行調整。
- 為防止因切屑卡住而損傷刀具，務必使用吹氣將切屑清除。
- 排出的切屑可能會四處飛濺，割傷或燙傷操作人員，也可能會濺入眼睛而導致受傷。故在使用時應在其周圍安裝防護罩，操作人員應穿戴防護鏡等防護用具，確保在安全的環境下作業。
- 刀片應儘早更換，以防過度使用而造成破損。
- 切削深度及每刃進給量的設定不要超過最大直
- MZ1000*JX1045*BH250不適合於濕式切削。請使用乾式（吹氣）切削。
- 請勿使用非水溶性切削液，以免造成火災。
- 使用可換式刀頭用BT30刀杆時，請按標準切削條件表設定加工條件。若擔心加工時產生的振動，請通過1.降低切削深度(ap)2.降低每刃進給量(fz)進行調整。

〈Note〉

- These conditions are for general guidance; in actual machining conditions adjust the parameters according to your actual machine and work-piece conditions.
- To prevent tool breakage due to chips clogging tool flutes, always be sure to use an air blower, etc. to remove chips.
- The evacuation of swarf can cause burns, cuts or damage to the eyes please ensure the correct safety cover is fitted around the machine, and necessary personal protection equipment is worn by the machine operator.
- Ensure to index the insert at the correct time to ensure safety of the tool-body.
- Make settings so that the cutting depth and per-flute feed rate do not exceed the maximum values.
- MZ1000, JX1045, and BH250 are not suitable for wet cutting. Use them for dry cutting (air blow).
- Due to fire risks do not use neat cutting oil as a coolant.
- When using the BT30 arbor for modular mills, determine the processing conditions using the standard cutting conditions table as a general guide. If vibrations are a concern due to the processing conditions, adjust conditions by 1. reducing cutting depth (ap) or 2. reducing per-flute feed rate (fz)

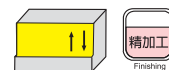


刀片規格 / 切削參數

Inserts/Cutting Conditions

插銑側面精加工標準切削條件 ASPV · ASPVM · ASPVB

Standard cutting conditions for vertical side finishing



工件材料 Work	紅字為第一 推薦材料 Red indicates primary recommended material types.	外徑Dc Tool diameter	Ø16(2刃 2 Flutes)						Ø20(3刃 3 Flutes)						Ø25(4刃 4 Flutes)					
		突出比例 Overhang ratio	<3Dc		硬質合金刀柄 Modular Carbide Shank				<3Dc		硬質合金刀柄 Modular Carbide Shank				<3Dc		硬質合金刀柄 Modular Carbide Shank			
			通用 General purpose	高速加工 High-speed processing	3Dc-5Dc	5Dc-7Dc	>7Dc	通用 General purpose	高速加工 High-speed processing	3Dc-5Dc	5Dc-7Dc	>7Dc	通用 General purpose	高速加工 High-speed processing	3Dc-5Dc	5Dc-7Dc	>7Dc			
碳素鋼 合金鋼 Carbon Steels Alloy Steels 30HRC以下	ATH08M MZ1000 JP4020 JS4060 JX1045	n(min ⁻¹)	5,980	11,950	7,970	7,970	5,980	4,780	9,560	6,370	6,370	4,780	3,830	7,650	5,100	5,100	3,830			
		Vc(m/min)	300	600	400	400	300	300	600	400	400	300	300	600	400	400	300			
		Vf(mm/min)	1,560	4,780	2,400	2,080	1,200	1,870	5,740	2,870	2,490	1,440	2,300	6,120	3,680	3,060	1,840			
		fz(mm/t)	0.13	0.2	0.15	0.13	0.1	0.13	0.2	0.15	0.13	0.1	0.15	0.2	0.18	0.15	0.12			
		ap(mm)	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7			
		ae(mm)	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2			
鑄鐵 Cast Iron FC FCD	ATH08M JP4020 JS4060 JX1045	n(min ⁻¹)	5,980	11,950	9,960	7,970	7,970	4,780	9,560	7,970	6,370	6,370	3,830	7,650	6,370	5,100	5,100			
		Vc(m/min)	300	600	500	400	400	300	600	500	400	400	300	600	500	400	400			
		Vf(mm/min)	1,800	4,780	3,990	3,190	2,400	2,160	5,740	4,790	3,830	2,870	3,070	7,650	5,100	4,080	3,060			
		fz(mm/t)	0.15	0.2	0.2	0.2	0.15	0.15	0.2	0.2	0.2	0.15	0.2	0.25	0.2	0.2	0.15			
		ap(mm)	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7			
		ae(mm)	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2			
最大fz Maximum fz (mm/t)			< 0.3					< 0.3					< 0.3							
最大ap Maximum ap (mm)			< 0.5					< 0.5					< 0.5							

工件材料 Work	紅字為第一 推薦材料 Red indicates primary recommended material types.	外徑Dc Tool diameter	Ø32(5刃 5 Flutes)						Ø40(6刃 6 Flutes)						Ø50(7刃 7 Flutes)					
			突出比例 Overhang ratio	硬質合金刀柄 Modular Carbide Shank			硬質合金刀柄 Modular Carbide Shank			硬質合金刀柄 Modular Carbide Shank			3Dc-5Dc	5Dc-7Dc	>7Dc					
				通用 General purpose	高速加工 High-speed processing	3Dc-5Dc	5Dc-7Dc	>7Dc	通用 General purpose	高速加工 High-speed processing	3Dc-5Dc	5Dc-7Dc				>7Dc	通用 General purpose	高速加工 High-speed processing	3Dc-5Dc	5Dc-7Dc
碳素鋼 合金鋼 Carbon Steels Alloy Steels 30HRC以下	ATH08M MZ1000 JP4020 JS4060 JX1045	n(min ⁻¹)	2,990	5,980	3,990	3,990	2,990	2,390	4,780	3,190	3,190	2,390	1,920	3,830	2,550	2,550	1,920			
		Vc(m/min)	300	600	400	400	300	300	600	400	400	300	300	600	400	400	300			
		Vf(mm/min)	2,250	5,980	3,600	3,000	1,800	2,160	5,740	3,450	2,880	1,730	2,020	5,370	3,220	2,680	1,750			
		fz(mm/t)	0.15	0.2	0.18	0.15	0.12	0.15	0.2	0.18	0.15	0.12	0.15	0.2	0.18	0.15	0.13			
		ap(mm)	0.8	0.8	0.8	0.8	0.8	0.88	0.88	0.88	0.88	0.88	1	1	1	1	1			
		ae(mm)	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2		
鑄鐵 Cast Iron FC FCD	ATH08M JP4020 JS4060 JX1045	n(min ⁻¹)	2,990	5,980	4,890	3,990	3,990	2,390	4,780	3,990	3,190	3,190	1,920	3,830	3,190	2,550	2,550			
		Vc(m/min)	300	600	500	400	400	300	600	500	400	400	300	600	500	400	400			
		Vf(mm/min)	2,990	7,480	4,980	3,990	3,000	2,870	7,170	4,790	3,830	2,880	2,690	6,710	4,920	3,570	3,220			
		fz(mm/t)	0.2	0.25	0.2	0.2	0.15	0.2	0.25	0.2	0.2	0.15	0.2	0.25	0.22	0.2	0.18			
		ap(mm)	0.8	0.8	0.8	0.8	0.8	0.88	0.88	0.88	0.88	0.88	1	1	1	1	1			
		ae(mm)	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2		
最大fz Maximum fz (mm/t)			< 0.3						< 0.3						< 0.3					
最大ap Maximum ap (mm)			< 0.5						< 0.5						< 0.5					

工件材料 Work	紅字為第一 推薦材料 Red indicates primary recommended material types.	外徑Dc Tool diameter	Ø63(8刃 8 Flutes)				
		突出比例 Overhang ratio	<3Dc		3Dc-5Dc	5Dc-7Dc	>7Dc
			通用 General purpose	高速加工 High-speed processing			
碳素鋼 合金鋼 Carbon Steels Alloy Steels 30HRC以下	ATH08M MZ1000 JP4020 JS4060 JX1045	n(min ⁻¹)	1,520	3,040	2,030	2,030	1,520
		Vc(m/min)	300	600	400	400	300
		Vf(mm/min)	1,830	4,870	2,930	2,440	1,590
		fz(mm/t)	0.15	0.2	0.18	0.15	0.13
		ap(mm)	1.12	1.12	1.12	1.12	1.12
		ae(mm)	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
鑄鐵 Cast Iron FC FCD	ATH08M JP4020 JS4060 JX1045	n(min ⁻¹)	1,520	3,040	2,530	2,030	2,030
		Vc(m/min)	300	600	500	400	400
		Vf(mm/min)	2,440	6,080	4,460	3,250	2,930
		fz(mm/t)	0.2	0.25	0.22	0.2	0.18
		ap(mm)	1.12	1.12	1.12	1.12	1.12
		ae(mm)	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
最大fz Maximum fz (mm/t)		< 0.3					
最大ap Maximum ap (mm)		< 0.5					

〈注意〉

- 此標準切削條件表中的數值為切削條件的基準值。實際加工時，請考慮加工形狀，目的，使用機床等因素，對切削條件進行調整。
- 為防止因切屑卡住而損傷刀具，務必使用吹氣將切屑清除。
- 排出的切屑可能會四處飛濺，割傷或燙傷操作人員，也可能會濺入眼睛而導致受傷。故在使用時應在其周圍安裝防護罩，操作人員應穿戴防護鏡等防護用具，確保在安全的環境下作業。
- 刀片應盡早更換，以防過度使用而造成破損。
- 切削深度及每刃進給量的設定不要超過最大直
- MZ1000*JX1045*BH250不適合於濕式切削。請使用乾式（吹氣）切削。
- 請勿使用非水溶性切削液，以免造成火災。
- 使用可換式刀頭用BT30刀杆時，請按標準切削條件表設定加工條件。若擔心加工時產生的振動，請通過1.降低切削深度(ap)2.降低每刃進給量(fz)進行調整。

〈Note〉

- These conditions are for general guidance; in actual machining conditions adjust the parameters according to your actual machine and work-piece conditions.
- To prevent tool breakage due to chips clogging tool flutes, always be sure to use an air blower, etc. to remove chips.
- The evacuation of swarf can cause burns, cuts or damage to the eyes please ensure the correct safety cover is fitted around the machine, and necessary personal protection equipment is worn by the machine operator.
- Ensure to index the insert at the correct time to ensure safety of the tool-body.
- Make settings so that the cutting depth and per-flute feed rate do not exceed the maximum values.
- MZ1000, JX1045, and BH250 are not suitable for wet cutting. Use them for dry cutting (air blow).
- Due to fire risks do not use neat cutting oil as a coolant.
- When using the BT30 arbor for modular mills, determine the processing conditions using the standard cutting conditions table as a general guide. If vibrations are a concern due to the processing conditions, adjust conditions by 1. reducing cutting depth (ap) or 2. reducing per-flute feed rate (fz)

ASRF30mini · ASRFM30mini · ASRFB30mini



Fig.1
泛用型
General edge type



Fig.2
低抵抗型
Sharp edge type



Fig.3
超低抵抗型
Ultra sharp edge type

P	Carbon steels					 : 一般切削 第一推荐 General cutting,First recommended	
M	SUS, etc.						
K	FC・FCD						
H	Hardened steels						

Item Code		Tolerance Class	AJ-Coated		GX-Coated	JS-Coated	Size(mm)		Shape	
			JP4105	JP4120	JM4160	GX2140	JS4045	Width		Thickness
SPNW07T2TR		M	●	●	●	●	●	7.8	2.8	Fig.1
SPMT07T2TR				●	●		●	7.8	2.8	Fig.2
SPMT07T2ER-LF				●	●			7.8	2.8	Fig.3

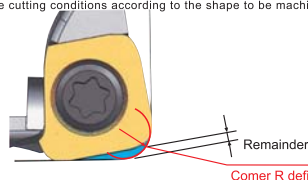
Red indicates primary recommended insert grade

Red indicates primary recommended insert grade													
被削材 Work material	推薦材料 Recommended Inserts grade	Tool diameter	Ø20		Ø25		Ø32		Ø40		Ø40	Ø50	Ø63
		Type	Regular	Long	Regular	Long	Regular	Long	Regular	Long	Bore	Bore	Bore
		flutes	2	2	3	3	4	3	5	3	5	7	8
碳素鋼•合金鋼 Carbon Steels Alloy Steels < 30HRC	GX2140 JS4045	n(min ⁻¹)	2710	2390	2170	1910	1690	1490	1350	1190	1350	1080	860
		Vc(m/min)	170	150	170	150	170	150	170	150	170	170	170
		Vf(mm/min)	7040	6210	8460	7440	8780	5810	8770	4640	8770	9820	8940
		fz(mm/t)	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
		ap(mm)	0.8	0.6	0.8	0.6	0.8	0.6	0.8	0.6	0.8	0.8	0.8
		ae(mm)	12	12	15	15	20	20	24	24	24	30	38
		Q(cm³/min)	68	45	102	67	140	70	168	67	168	236	272
合金鋼•工具鋼 Alloy Steels Tool Steels (30~40HRC)	JS4045 JP4120	n(min ⁻¹)	2390	2070	1910	1660	1490	1290	1190	1040	1190	960	760
		Vc(m/min)	150	130	150	130	150	130	150	130	150	150	150
		Vf(mm/min)	5730	4960	6870	5970	7150	4640	7140	3740	7140	8060	7290
		fz(mm/t)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
		ap(mm)	0.8	0.6	0.8	0.6	0.8	0.6	0.8	0.6	0.8	0.8	0.8
		ae(mm)	12	12	15	15	20	20	24	24	24	30	38
		Q(cm³/min)	55	36	82	54	114	56	137	54	137	193	222
Pre-hardened steels (40~50HRC)	JP4120 JS4045	n(min ⁻¹)	1590	1430	1270	1150	1000	900	800	720	800	640	510
		Vc(m/min)	100	90	100	90	100	90	100	90	100	100	100
		Vf(mm/min)	3810	2860	4570	3450	4800	2700	4800	2160	4800	5370	4890
		fz(mm/t)	1.2	1	1.2	1	1.2	1	1.2	1	1.2	1.2	1.2
		ap(mm)	0.5	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.5
		ae(mm)	12	12	15	15	20	20	24	24	24	30	38
		Q(cm³/min)	23	14	34	21	48	22	58	21	58	81	93
Stainless steels	JM4160	n(min ⁻¹)	1590	1430	1270	1150	1000	900	800	720	800	640	510
		Vc(m/min)	100	90	100	90	100	90	100	90	100	100	100
		Vf(mm/min)	3180	2280	3810	2760	4000	2160	4000	1720	4000	4480	4080
		fz(mm/t)	1	0.8	1	0.8	1	0.8	1	0.8	1	1	1
		ap(mm)	0.8	0.5	0.8	0.5	0.8	0.5	0.8	0.5	0.8	0.8	0.8
		ae(mm)	12	12	15	15	20	20	24	24	24	30	38
		Q(cm³/min)	31	14	46	21	64	22	77	21	77	108	124
鑄鐵 Cast Iron	JP4120 GX2140	n(min ⁻¹)	3180	2870	2550	2290	1990	1790	1590	1430	1590	1270	1010
		Vc(m/min)	200	180	200	180	200	180	200	180	200	200	200
		Vf(mm/min)	9540	6880	11470	8240	11940	6440	11920	5140	11920	13330	12120
		fz(mm/t)	1.5	1.2	1.5	1.2	1.5	1.2	1.5	1.2	1.5	1.5	1.5
		ap(mm)	0.8	0.6	0.8	0.6	0.8	0.6	0.8	0.6	0.8	0.8	0.8
		ae(mm)	12	12	15	15	20	20	24	24	24	30	38
		Q(cm³/min)	92	50	138	74	191	77	229	74	229	320	368
高硬度鋼 (50~55HRC) High-hardened Steels	JP4105 JP4120	n(min ⁻¹)	1270	1110	1020	890	800	700	640	560	640	510	400
		Vc(m/min)	80	70	80	70	80	70	80	70	80	80	80
		Vf(mm/min)	1520	1110	1830	1330	1920	1050	1920	840	1920	2140	1920
		fz(mm/t)	0.6	0.5	0.6	0.5	0.6	0.5	0.6	0.5	0.6	0.6	0.6
		ap(mm)	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.5	0.5
		ae(mm)	12	12	15	15	20	20	24	24	24	30	38
		Q(cm³/min)	9	4	14	6	19	6	23	6	23	32	36
高硬度鋼 (55~62HRC) High-hardened Steels	JP4105	n(min ⁻¹)	1040	960	830	760	650	600	520	480	520	410	330
		Vc(m/min)	65	60	65	60	65	60	65	60	65	65	65
		Vf(mm/min)	830	670	990	790	1040	630	1040	500	1040	1140	1050
		fz(mm/t)	0.4	0.35	0.4	0.35	0.4	0.35	0.4	0.35	0.4	0.4	0.4
		ap(mm)	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3
		ae(mm)	10	10	12	12	16	16	20	20	20	25	32
		Q(cm³/min)	2	1	4	2	5	2	6	2	6	9	11

This cutting condition table shows general guidelines for cutting conditions when $L/D < 3$. when performing actual machining adjust the cutting conditions according to the shape to be machined, purpose, machine being used, etc.

- Points requiring care when creating the machining program.
- Define the tool as the shape of the R2.0 radius.
- Use with axial-direction cutting depths ap of 1.2mm or less.

Corner R definition in CAM	Remainder (mm)	Over Cut (mm)
R2.0	0.62	0
R2.8	0.5	0.17
R3.0	0.47	0.23



SWBX,SWBXM,SWBK,SWBKM

Fig.1 主刃,低阻力型
(Main blade for low cutting force)

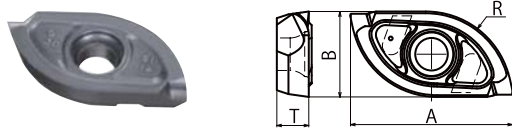


Fig.3 副刃,低阻力型
(Sub blade for low cutting force)

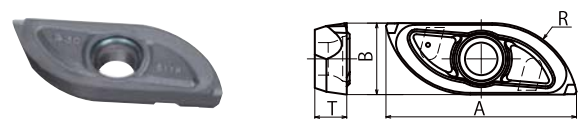


Fig.2 主刃,堆焊料加工用
(Main blade for welding & hardened material)

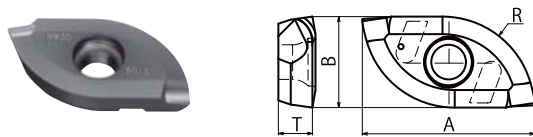
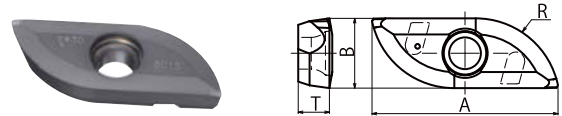


Fig.4 副刃,堆焊料加工用
(Sub blade for welding & hardened material)



型號 Cat. No.	刀片類型 Type	PVD塗層 PVD coated			尺寸 (mm) Dimensions					Fig.
		JC5240	JC8118	JC8015	R	A	B	T	r	
SWBX216HM	主刃,低阻力型 Main(for low cutting force)	●	●		8	15	7.9	3.3	—	1
SWBX216MMW	主刃,堆焊加工用 Main(forwelding & hardened material)		●		8	15	7.9	3.3	—	2
SWBX216HS	副刃,低阻力型 Sub(for low cutting force)	●	●		8	16.1	6.6	3.3	—	3
SWBX216MSW	副刃,堆焊加工用 Sub(forwelding & hardened material)		●		8	16.1	6.6	3.3	—	4
SWBX220HM	主刃,低阻力型 Main(for low cutting force)	●	●		10	18.8	9.9	3.9	—	1
SWBX220MMW	主刃,堆焊加工用 Main(forwelding & hardened material)		●		10	18.8	9.9	3.9	—	2
SWBX220HS	副刃,低阻力型 Sub(for low cutting force)	●	●		10	22.9	8.8	3.9	—	3
SWBX220MSW	副刃,堆焊加工用 Sub(forwelding & hardened material)		●		10	22.9	8.8	3.9	—	4
SWBX225HM	主刃,低阻力型 Main(for low cutting force)	●	●		12.5	22.3	12.4	4.6	—	1
SWBX225MMW	主刃,堆焊加工用 Main(forwelding & hardened material)		●		12.5	22.3	12.4	4.6	—	2
SWBX225HS	副刃,低阻力型 Sub(for low cutting force)	●	●		12.5	26.3	10.5	4.6	—	3
SWBX225MSW	副刃,堆焊加工用 Sub(forwelding & hardened material)		●		12.5	26.3	10.5	4.6	—	4
SWBX230HM	主刃,低阻力型 Main(for low cutting force)	●	●		15	27.9	14.7	6	—	1
SWBX230MMW	主刃,堆焊加工用 Main(forwelding & hardened material)			●	15	27.9	14.7	6	—	2
SWBX230HS	副刃,低阻力型 Sub(for low cutting force)	●	●		15	32.8	12.3	6	—	3
SWBX230MSW	副刃,堆焊加工用 Sub(forwelding & hardened material)			●	15	32.8	12.3	6	—	4



SWBX,SWBXM,SWBK,SWBKM

被加工材料 Work materials	刀片型號 Insert type	刀片材質 Grades	刀具直徑(mm) Tool dia.																			
			16					20					25					30				
			ℓ (mm)	a_p (mm)	a_e (mm)	n (min ⁻¹)	V_f (mm/min)	ℓ (mm)	a_p (mm)	a_e (mm)	n (min ⁻¹)	V_f (mm/min)	ℓ (mm)	a_p (mm)	a_e (mm)	n (min ⁻¹)	V_f (mm/min)	ℓ (mm)	a_p (mm)	a_e (mm)	n (min ⁻¹)	V_f (mm/min)
碳素鋼 (50#,55#) 硬度250HB以下 Carbon steel (c50,c55) Below 250HB	HM/HS	JC5240 (JC8118)	40	1.1	1.0	4200	800	60	1.3	1.3	3500	1100	70	1.3	1.3	3000	1000	80	1.5	1.5	3000	1200
			60	1.1	1.0	4000	560	70	1.3	1.3	3180	890	120	1.3	1.3	2550	760	120	1.5	1.5	2300	800
鑄鋼 (GM190,IDC5) 硬度285HB以下 Cast steel (1.7225) Below 285HB	HM/HS	JC8118 (JC5240)	40	1.1	1.0	4000	800	60	1.3	1.3	4000	1200	70	1.3	1.3	3200	1100	80	1.5	1.5	3000	1200
			60	1.1	1.0	3800	530	70	1.3	1.3	3020	820	120	1.3	1.3	2400	720	120	1.5	1.5	2090	720
模具鋼 (SKD61,SKD11) 硬度255HB以下 Die steel (1.2344,1.2379) Below 255HB	HM/HS	JC5240 (JC8118)	40	1.1	1.0	4000	900	60	1.3	1.3	3500	900	70	1.3	1.3	3200	900	80	1.5	1.5	2600	900
			60	1.1	1.0	3400	680	70	1.3	1.3	2700	680	120	1.3	1.3	2160	590	120	1.5	1.5	1950	630
預硬鋼 (HPM7,PX5,P20) 硬度30~36HRC Mold steel (1.2311,P20) 30~36HRC	HM/HS	JC8118	40	1.1	1.0	4000	900	60	1.3	1.3	4000	600	70	1.3	1.3	2600	600	80	1.5	1.5	2500	500
			60	1.1	1.0	3400	680	70	1.3	1.3	3020	450	120	1.3	1.3	2400	480	120	1.5	1.5	2060	310
預硬鋼 (NAK80,P21) 硬度38~43HRC Mold steel (1.2311,P21) 38~43HRC	HM/HS	JC8118	40	1.1	1.0	3600	550	60	1.3	1.3	2800	500	70	1.3	1.3	3200	600	80	1.5	1.5	1900	350
			60	1.1	1.0	3000	430	70	1.3	1.3	2700	400	120	1.3	1.3	2100	420	120	1.5	1.5	1800	270
淬火鋼 (SKD61,DAC,DHA) 硬度42~52HRC Hardened die steel (1.2344,1.2379) 42~52HRC	HW/HS (MMW/MSW)	JC8118 (JC8015)	40	0.8	0.8	3000	500	60	0.8	0.9	2400	550	70	1.0	1.0	1900	450	80	1.0	1.2	1900	500
			60	0.8	0.8	2200	260	70	0.8	0.9	1750	350	120	1.0	1.0	1600	350	120	1.0	1.2	1600	400
堆焊料, 淬火鋼 (Cr12MoV) 硬度55~62HRC Hardened die steel (1.2379) 55~62HRC	(MMW/MSW)	JC8118 (JC8015)	40	0.5	0.5	2000	300	60	0.5	0.5	1900	450	70	0.5	0.7	1500	320	80	0.6	0.8	1500	350
			60	0.5	0.5	1200	150	70	0.5	0.5	1400	280	120	0.5	0.7	1400	280	120	0.6	0.8	1400	280
灰鑄鐵 (HT250) 硬度160~260HB Grey iron (GG25) 160~260HB	HM/HS (MMW/MSW)	JC8118 (JC8015)	40	1.3	1.3	4000	1000	60	1.5	1.5	3200	1200	70	1.5	1.5	3200	1500	80	1.5	1.5	2500	1300
			60	1.3	1.3	3800	950	70	1.5	1.5	3180	1160	120	1.5	1.5	2550	1000	120	1.5	1.5	2300	1140
球墨鑄鐵 (QT700) 硬度170~300HB Nodular cast iron (GGG70) 170~300HB	HM/HS	JC8118 (JC5240)	40	1.1	1.0	4000	600	60	1.3	1.3	3600	1000	70	1.3	1.3	3200	900	80	1.5	1.5	2600	1000
			60	1.1	1.0	3800	530	70	1.3	1.3	3020	820	120	1.3	1.3	2400	720	120	1.5	1.5	2090	720
奧氏體不鏽鋼 (sus304,316,317) 17Cr系 Austenitic Stainless steel AISI 304,316,317	HM/HS	JC8118	40	1.1	1.0	3600	800	60	1.3	1.3	3200	600	70	1.3	1.3	2600	600	80	1.5	1.5	2200	400
			60	1.1	1.0	3400	680	70	1.3	1.3	3020	450	120	1.3	1.3	2400	480	120	1.5	1.5	2060	310
馬氏體不鏽鋼 (SUS403,420J2,430) 13Cr系 Martensitic stainless steel AISI 403,420J2,430	HM/HS	JC8118	40	1.1	1.0	4200	800	60	1.3	1.3	4200	800	70	1.3	1.3	3800	850	80	1.5	1.5	3000	1100
			60	1.1	1.0	4000	560	70	1.3	1.3	3180	600	120	1.3	1.3	2550	760	120	1.5	1.5	2300	800

■使用注意事項

- 1)表中加工參數請根據機床或工件鋼性情況進行適當調整。
- 2)使用風冷(乾式)。

NOTE) 1.The figure to be adjusted according to the machine rigidity or work rigidity.
2.Use air blow

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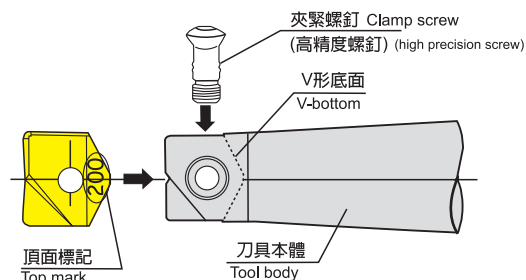
P	鋼	Carbon steels							: 一般切削 第一推荐 General cutting, First recommended : 一般切削 第二推荐 General cutting, Second recommended
K	FC・FCD								
	石墨	Graphite							
N	鋁合金	Aluminum Alloy							
H	高硬度材料	Hardened steels							

刃尖形狀圖 Details of cutting edge shape	產品代碼 Item Code	精度 Tolerance Class	庫存材料 Stock						刀尖形狀 Figure			
			塗層 Coated Grades					CBN	刀片尺寸 Size(mm)			
			ATH 塗層		TH 塗層	C 塗層	HD 塗層					
			ATH08M	ATH12M	PTH08M	PCA12M	HD7010					
	ZCFW160-R0.5-F	★	★					16.6	16	4.2	0.5	
	ZCFW160-R1.0-F			★	★							1
	ZCFW160-R2.0-F			★	★							2
	ZCFW160-R3.0-F			★	★							3
	ZCFW200-R0.5-F	★	★					19.9	20	5.2	0.5	
	ZCFW200-R1.0-F			★	★							1
	ZCFW200-R2.0-F			★	★							2
	ZCFW200-R3.0-F			★	★							3
	ZCFW250-R0.5-F	★	★					22.6	25	6.2	0.5	
	ZCFW250-R1.0-F			★	★							1
	ZCFW250-R2.0-F			★	★							2
	ZCFW250-R3.0-F			★	★							3
	ZCFW300-R1.0-F	★	★					27.2	30	7.2	1	
	ZCFW300-R2.0-F			★	★							2
	ZCFW300-R3.0-F			★	★							3
	ZCFW160-R0.3			●	●	●		16.6	16	4.2	0.3	
	ZCFW160-R0.5			●	●						0.5	
	ZCFW160-R1.0			●	●		●				1	
	ZCFW160-R1.5			●	●						1.5	
	ZCFW160-R2.0			●	●		●				2	
	ZCFW160-R3.0			●	●						3	
	ZCFW200-R0.3			●	●	●		19.9	20	5.2	0.3	
	ZCFW200-R0.5			●	●						0.5	
	ZCFW200-R1.0			●	●		●				1	
	ZCFW200-R1.5			●	●						1.5	
	ZCFW200-R2.0			●	●		●				2	
	ZCFW200-R3.0			●	●						3	
	ZCFW250-R0.3			●	●			22.6	25	6.2	0.3	
	ZCFW250-R0.5			●	●						0.5	
	ZCFW250-R1.0			●	●		●				1	
	ZCFW250-R2.0			●	●		●				2	
	ZCFW250-R3.0			●	●						3	
ZCFW300-R0.3			●	●			27.2	30	7.2	0.3		
ZCFW300-R0.5			●	●						0.5		
ZCFW300-R1.0			●	●		●				1		
ZCFW300-R2.0			●	●		●				2		
ZCFW300-R3.0			●	●						3		

■ 刀片安裝步驟 Set-up procedures of Inserts

- (1)清掃刀片座
通過吹氣等方法清掃刀片座側面及V形底面。
- (1)Clean the insert seat:
Using an air-blow etc., clean the sides and V-bottom of the insert seat.
- (2)將刀片的頂面標記對準刀具本體的螺釘緊固側，插入刀片
- (2)Put in the insert with its top positioned to the screw-tightening side of the tool body
- (3)用專用扳手緊固高精度螺釘。
- (3)Tighten the high precision screw with its special wrench.
- (4)緊固結束。
- (4)This is the end of set-up of inserts.

為了使振幅達到0.01mm以下，請按左側所述步驟進行安裝
To meet the precision requirement of "less than 0.01mm", please follow this procedure.





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工作材料 Work material	刀片材料 Insert Grade	切削條件 Cutting Condition	Ø16			Ø20			Ø25			Ø30			Ø32		
			半精加工 Semi Finishing		精加工 Finishing	半精加工 Semi Finishing		精加工 Finishing	半精加工 Semi Finishing		精加工 Finishing	半精加工 Semi Finishing		精加工 Finishing	半精加工 Semi Finishing		精加工 Finishing
			通用 General purpose	高速加工 High-speed processing		通用 General purpose	高速加工 High-speed processing		通用 General purpose	高速加工 High-speed processing		通用 General purpose	高速加工 High-speed processing		通用 General purpose	高速加工 High-speed processing	
碳素鋼 合金鋼 Carbon Steels Alloy Steels (30HRC以下)	ATH08M ATH12M (PCA12M)	$n(\text{min}^{-1})$	3,190	5,970	5,970	2,550	4,780	4,780	2,040	3,820	3,820	1,700	3,180	3,180	1,590	2,990	2,990
		$V_c(\text{m/min})$	160	300	300	160	300	300	160	300	300	160	300	300	160	300	300
		$V_f(\text{mm/min})$	1,600	2,390	2,390	1,280	1,910	1,910	1,020	1,530	1,530	850	1,270	1,270	800	1,200	1,200
		$f_z(\text{mm/t})$	0.25	0.2	0.2	0.25	0.2	0.2	0.25	0.2	0.2	0.25	0.2	0.2	0.25	0.2	0.2
		$a_p(\text{mm})$	0.8	0.8	0.2	1	1	0.2	1.25	1.25	0.2	1.6	1.6	0.2	1.6	1.6	0.2
		$a_e(\text{mm})$	1.6	1.6	0.2	2	2	0.2	2.5	1.25	0.2	3.2	3.2	0.2	3.2	3.2	0.2
碳素鋼 合金鋼 Carbon Steels Alloy Steels (30~45HRC)	ATH08M ATH12M (PCA12M)	$n(\text{min}^{-1})$	2,390	5,570	5,570	1,910	4,460	4,460	1,530	3,570	3,570	1,270	2,970	2,970	1,190	2,790	2,790
		$V_c(\text{m/min})$	120	280	280	120	280	280	120	280	280	120	280	280	120	280	280
		$V_f(\text{mm/min})$	1,200	2,230	2,230	960	1,780	1,780	760	1,430	1,430	640	1,190	1,190	600	1,120	1,120
		$f_z(\text{mm/t})$	0.25	0.2	0.2	0.25	0.2	0.2	0.25	0.2	0.2	0.25	0.2	0.2	0.25	0.2	0.2
		$a_p(\text{mm})$	0.8	0.8	0.2	1	1	0.2	1.25	1.25	0.2	1.6	1.6	0.2	1.6	1.6	0.2
		$a_e(\text{mm})$	1.6	1.6	0.2	2	2	0.2	2.5	2.5	0.2	3.2	3.2	0.2	3.2	3.2	0.2
淬火鋼 Hardened Steels 45~55HRC	ATH08M ATH12M	$n(\text{min}^{-1})$	1,990	5,570	5,570	1,590	4,460	4,460	1,270	3,570	3,570	1,060	2,970	2,970	1,000	2,790	2,790
		$V_c(\text{m/min})$	100	280	280	100	280	280	100	280	280	100	280	280	100	280	280
		$V_f(\text{mm/min})$	480	670	670	380	530	530	310	430	430	250	360	360	240	330	330
		$f_z(\text{mm/t})$	0.12	0.06	0.06	0.12	0.06	0.06	0.12	0.06	0.06	0.12	0.06	0.06	0.12	0.06	0.06
		$a_p(\text{mm})$	0.8	0.8	0.2	1	1	0.2	1.25	1.25	0.2	1.6	1.6	0.2	1.6	1.6	0.2
		$a_e(\text{mm})$	1.6	0.8	0.2	2	1	0.2	2.5	1.25	0.2	3.2	1.6	0.2	3.2	1.6	0.2
淬火鋼 Hardened Steels 55~62HRC	ATH08M	$n(\text{min}^{-1})$	1,590	4,380	4,380	1,270	3,500	3,500	1,020	2,800	2,800	850	2,330	2,330	800	2,190	2,190
		$V_c(\text{m/min})$	80	220	220	80	220	220	80	220	220	80	220	220	80	220	220
		$V_f(\text{mm/min})$	380	530	530	300	420	420	240	340	340	200	280	280	190	260	260
		$f_z(\text{mm/t})$	0.12	0.06	0.06	0.12	0.06	0.06	0.12	0.06	0.06	0.12	0.06	0.06	0.12	0.06	0.06
		$a_p(\text{mm})$	0.8	0.8	0.2	1	1	0.2	1.25	1.25	0.2	1.6	1.6	0.2	1.6	1.6	0.2
		$a_e(\text{mm})$	1.6	0.8	0.2	2	1	0.2	2.5	1.25	0.2	3.2	1.6	0.2	3.2	1.6	0.2
鑄鐵 Cast Iron	ATH08M ATH12M	$n(\text{min}^{-1})$	3,190	7,560	7,560	2,550	6,050	6,050	2,040	4,840	4,840	1,700	4,030	4,030	1,590	3,780	3,780
		$V_c(\text{m/min})$	160	380	380	160	380	380	160	380	380	160	380	380	160	380	380
		$V_f(\text{mm/min})$	2,240	4,540	4,540	1,790	3,630	3,630	1,430	2,900	2,900	1,190	2,420	2,420	1,110	2,270	2,270
		$f_z(\text{mm/t})$	0.35	0.3	0.3	0.35	0.3	0.3	0.35	0.3	0.3	0.35	0.3	0.3	0.35	0.3	0.3
		$a_p(\text{mm})$	0.8	0.8	0.2	1	1	0.2	1.25	1.25	0.2	1.6	1.6	0.2	1.6	1.6	0.2
		$a_e(\text{mm})$	1.6	1.6	0.2	2	2	0.2	2.5	2.5	0.2	3.2	3.2	0.2	3.2	3.2	0.2
石墨 Graphite	HD7010	$n(\text{min}^{-1})$	5,970	7,960	7,960	4,780	6,370	6,370									
		$V_c(\text{m/min})$	300	400	400	300	400	400									
		$V_f(\text{mm/min})$	2,990	4,780	3,980	2,390	3,820	3,190									
		$f_z(\text{mm/t})$	0.25	0.3	0.25	0.25	0.3	0.25									
		$a_p(\text{mm})$	0.8	0.6	0.1	1	0.7	0.1									
		$a_e(\text{mm})$	1.6	1.1	0.3	2	1.5	1.4									
鋁合金鑄件 Cast aluminum alloy AC4A, ADC12等	HD7010	$n(\text{min}^{-1})$	5,970	9,950	9,950	4,780	7,960	7,960									
		$V_c(\text{m/min})$	300	500	500	300	500	500									
		$V_f(\text{mm/min})$	2,990	7,960	4,980	2,390	6,370	3,980									
		$f_z(\text{mm/t})$	0.25	0.4	0.25	0.25	0.4	0.25									
		$a_p(\text{mm})$	0.8	0.6	0.1	1	0.7	0.1									
		$a_e(\text{mm})$	1.6	1.1	0.3	2	1.5	0.4									
最大 f_z Maxlimum f_z (mm/t)			<0.6			<0.6			<0.6			<0.6			<0.6		
最大 a_p Maxlimum a_p (mm)			<5.0			<6.0			<8.0			<10.0			<10.0		

(注意)

- (1)此標準切削條件表中的數值為切削條件的基準值。實際加工時,請考慮加工形狀,目的,使用機床等因素,對切削條件進行調整。
- (2)本刀具有在使用時有可能發生破損,故必須安裝護蓋,使用保護鏡,安全鞋等。
- (3)不要用手觸摸硬質合金刀柄夾。另外,使用硬質合金刀柄夾時,切削深度 a_p 請使用以下值:外徑 D_c12 以下時 $a_p=0.2\text{mm}$ 以下,外徑 D_c16 以上時 $a_p=0.3\text{mm}$ 以下。

※ 突出長 $3D_c$ 以上時,請根據上表並參考右表進行調整。
If overhang length is $3D_c$ or more, make adjustments to the table above according to the table at right.

突出比例 Overhang ratio	$V_c(\text{m/min})$	$V_f(\text{mm/min})$
< $3D_c$	100%	100%
$3D_c\sim5D_c$	70%	70%
$5D_c\sim8D_c$	60%	60%
$8D_c\sim10D_c$	50%	50%

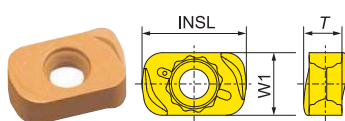
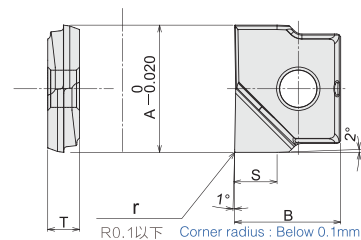
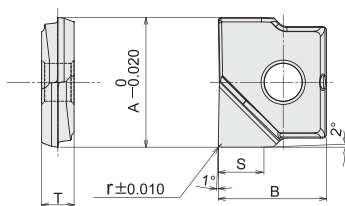


Fig.3* ENG0603ER-C

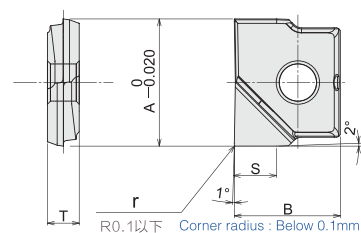
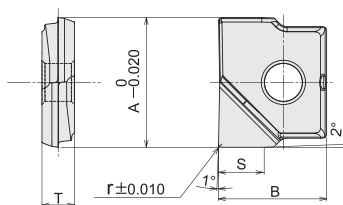
Red indicates primary recommended insert grade

Remains
(Programming R)



RNM,RNMM

型號 Cat. No.	PVD塗層 coated		金剛石塗層 Diamond Coated	硬質合金 Uncoated	尺 寸 (mm) Dimensions				
	DH103 (Z05)	JC8015 (Z10-20)	JC10000	KT9 (K10)	r	S	A	B	T
RNM-060-R03	●	●			0.3	2	6	5	2
RNM-060-R05	●	●			0.5				
RNM-060-R10	●	●			1				
RNM-080-R03	●	●		●	0.3	2.7	8	7	2.4
RNM-080-R05	●	●	●	●	0.5				
RNM-080-R10	●	●	●	●	1				
RNM-100-R0		●				3.3	10	8.5	2.6
RNM-100-R03	●	●		●	0.3				
RNM-100-R05	●	●	●	●	0.5				
RNM-100-R10	●	●	●	●	1				
RNM-100-R15		●		●	1.5				
RNM-100-R20	●	●		●	2				
RNM-120-R0		●				14	12	10	3
RNM-120-R03	●	●		●	0.3				
RNM-120-R05	●	●	●	●	0.5				
RNM-120-R10	●	●	●	●	1				
RNM-120-R15	●	●		●	1.5				
RNM-120-R20	●	●		●	2				
RNM-130-R03		●			0.3	4	13	10	3
RNM-130-R05		●			0.5				
RNM-130-R10		●			1				
RNM-130-R20		●			2				
RNM-160-R0		●				5.3	16	12	4
RNM-160-R03	●	●		●	0.3				
RNM-160-R05	●	●		●	0.5				
RNM-160-R10	●	●		●	1				
RNM-160-R15	●	●		●	1.5				
RNM-160-R20	●	●		●	2				
RNM-170-R03		●			0.3	5.3	17	12	4
RNM-170-R05		●			0.5				
RNM-170-R10		●			1				
RNM-170-R20		●			2				
RNM-200-R0		●				6.7	20	15	5
RNM-200-R03	●	●		●	0.3				
RNM-200-R05	●	●		●	0.5				
RNM-200-R10	●	●		●	1				
RNM-200-R15	●	●		●	1.5				
RNM-200-R20	●	●		●	2				
RNM-200-R30		●			3				



RNM,RNMM

型號 Cat. No.	PVD塗層 coated		金剛石塗層 Diamond Coated	硬質合金 Uncoated	尺 寸 (mm) Dimensions				
	DH103 (Z05)	JC8015 (Z10-20)	JC10000	KT9 (K10)	r	S	A	B	T
RNM-210-R03		●			0.3	6.7	21	15	5
RNM-210-R05		●			0.5				
RNM-210-R10		●			1				
RNM-210-R20		●			2				
RNM-250-R0		●				8.3	25	18.5	6
RNM-250-R03	●	●			0.3				
RNM-250-R05	●	●			0.5				
RNM-250-R10	●	●			1				
RNM-250-R15	●	●			1.5				
RNM-250-R20	●	●			2				
RNM-250-R30		●			3	8.3	26	18.5	6
RNM-260-R03		●			0.3				
RNM-260-R05		●			0.5				
RNM-260-R10		●			1				
RNM-260-R20		●			2				
RNM-300-R03	●	●			0.3	10	30	22.5	7
RNM-300-R05	●	●			0.5				
RNM-300-R10	●	●			1				
RNM-300-R15		●			1.5				
RNM-300-R20	●	●			2				
RNM-300-R30		●			3				
RNM-320-R03	●	●			0.3	10.7	32	23.5	7
RNM-320-R05	●	●			0.5				
RNM-320-R10	●	●			1				
RNM-320-R15		●			1.5				
RNM-320-R20	●	●			2				
RNM-320-R30		●			3				



RNM,RNMM

被加工材料 Work materials	推荐 刀片型號 Insert type	推荐 刀片材質 Grades	尺寸 (mm) Tool dia															
			6				8				10				12/13			
			ap (mm)	ae (mm)	n (min ⁻¹)	Vf (mm/min)	ap (mm)	ae (mm)	n (min ⁻¹)	Vf (mm/min)	ap (mm)	ae (mm)	n (min ⁻¹)	Vf (mm/min)	ap (mm)	ae (mm)	n (min ⁻¹)	Vf (mm/min)
碳素鋼 (50#,55#) 硬度250HB以下	RNM HRM FRM	JC8015	0.2	0.1	15,920	3,980	0.3	0.1	11,940	2,990	0.3	0.1	9,550	2,870	0.3	0.1	7,960	2,390
碳素鋼 (GM190,ICD5) 硬度285HB以下	RNM HRM FRM	JC8015	0.2	0.1	15,920	3,980	0.3	0.1	11,940	2,990	0.3	0.1	9,550	2,870	0.3	0.1	7,960	2,390
工具鋼 (SKD61,SKD11) 硬度255HB以下	RNM HRM FRM	JC8015	0.2	0.1	15,920	3,980	0.3	0.1	11,940	2,990	0.3	0.1	9,550	2,870	0.3	0.1	7,960	2,390
預硬鋼 (HPM7,PX5,P20) 硬度30~36HRC	RNM HRM FRM	DH103 JC8015	0.2	0.1	15,920	3,980	0.3	0.1	11,940	2,990	0.3	0.1	9,550	2,870	0.3	0.1	7,960	2,390
預硬鋼 (NAK80,HPM1,P21) 硬度38~43HRC	RNM HRM FRM	DH103 JC8015	0.2	0.1	14,850	3,710	0.2	0.1	11,140	2,790	0.3	0.1	8,910	2,670	0.3	0.1	7,430	2,230
淬火鋼 (SKD61,DAC,DHA) 硬度42~52HRC	HRM FRM	DH102 JC8015	0.2	0.1	13,260	1,330	0.2	0.1	9,950	1,000	0.3	0.1	7,960	800	0.3	0.1	6,630	660
淬火鋼 (SKD11,SLD,DC11) 硬度55~62HRC	FRM	DH102	0.2	0.1	10,610	1,060	0.2	0.1	7,960	800	0.3	0.1	6,370	640	0.3	0.1	5,310	530
高速模具鋼 (SKH,HAP) 硬度63~70HRC	FRM	DH102	0.1	0.1	7,960	320	0.1	0.1	5,970	240	0.1	0.1	4,770	290	0.1	0.1	3,980	320
灰鑄鐵 (HT250) 硬度160~260HB	RNM HRM FRM	DH102 DH103 JC8015	0.2	0.1	18,570	6,500	0.3	0.1	13,930	4,880	0.3	0.15	11,140	3,900	0.3	0.2	9,280	3,250
球墨鑄鐵 (QT700) 硬度170~300HB	RNM HRM FRM	DH102 DH103 JC8015	0.2	0.1	18,570	6,500	0.3	0.1	13,930	4,880	0.3	0.15	11,140	3,900	0.3	0.2	9,280	3,250
奧氏體不鏽鋼 (SUS304,316,317) 17Cr系	RNM HRM FRM	JC8015	0.2	0.1	14,850	4,460	0.3	0.1	11,140	3,340	0.3	0.1	8,910	2,670	0.3	0.1	7,430	2,230
馬氏體不鏽鋼 (SUS403,420J2,430) 13Cr系	RNM HRM FRM	JC8015	0.2	0.1	14,850	4,460	0.3	0.1	11,140	3,340	0.3	0.1	8,910	2,670	0.3	0.1	7,430	2,230
鋁合金 (A5052)	RNM	KT9	0.3	0.2	18,570	7,430	0.4	0.2	13,930	5,570	0.5	0.2	11,140	4,460	0.6	0.2	9,280	3,710
鋁合金 (A7075)	RNM	KT9	0.3	0.2	18,570	7,430	0.4	0.2	13,930	5,570	0.5	0.2	11,140	4,460	0.6	0.2	9,280	3,710
鋁合金鑄件 (Si 13%未満)	RNM	KT9	0.3	0.2	18,570	7,430	0.4	0.2	13,930	5,570	0.5	0.2	11,140	4,460	0.6	0.2	9,280	3,710
銅合金 (C1100)	RNM	KT9	0.2	1.5	13,260	5,300	0.25	0.15	9,950	3,980	0.3	0.15	7,960	3,180	0.4	0.15	6,630	2,650
石 墨	RNM	JC10000	0.3	0.2	18,570	7,430	0.4	0.2	13,930	5,570	0.5	0.2	11,140	4,460	0.6	0.2	9,280	3,710
鈦合金 (Ti-6Al-4V) 硬度35~43HRC	HRM FRM	JC8015	0.2	0.1	5,310	1,060	0.2	0.1	3,980	800	0.25	0.1	3,180	760	0.25	0.1	2,650	640
高溫合金 (INCO718) 硬度35~43HRC	HRM FRM	JC8015	0.2	0.1	4,240	850	0.2	0.1	3,180	640	0.25	0.1	2,550	610	0.25	0.1	2,120	510

ap:軸向切深 ae:半徑方向切深 n:主軸轉速 Vf:進給速度
ap:Depth of cut, ae:Width of cut, n:Spindle speed, Vf:Feed speed

■使用注意事項

- 1)表中資料請依照工具機和工件鋼性情況進行適當調整。
- 2)表中數據為懸長與直徑比(L/Dc)為3Dc時的建議加工參數。
請依刀具懸長適當調整主軸轉速n(min)及進給速度Vf(mm/min)。
- 3)萬一發生振動,建議降低切深,或降低進給速度。
- 4)使用風冷以吹走切屑,特別是立式機床加工深型腔時,需充分注意切屑的處理。
- 5)使用鋼製刀桿時,請把上記表中的主軸轉速n(ming)及進給速度Vf(mm/min)降低到80%。

刀具懸長(mm) L/Dc	n (min ⁻¹)	Vf (mm/min)
~3Dc	100%	100%
~3Dc以上~5Dc	70%	70%
5Dc以上~10Dc	50%	50%



RNM,RNMM

被加工材料 Work materials	推荐 刀片型號 Insert type	推荐 刀片材質 Grades	尺寸 (mm) Tool dia															
			16/17				20/21				25/26				30			
			ap (mm)	ae (mm)	n (min ⁻¹)	Vf (mm/min)	ap (mm)	ae (mm)	n (min ⁻¹)	Vf (mm/min)	ap (mm)	ae (mm)	n (min ⁻¹)	Vf (mm/min)	ap (mm)	ae (mm)	n (min ⁻¹)	Vf (mm/min)
碳素鋼 (50#,55#) 硬度250HB以下	RNM HRM FRM	JC8015	0.4	0.1	5,970	2,390	0.5	0.1	4,770	1,910	0.8	0.1	3,820	1,530	1	0.1	3,180	1,270
碳素鋼 (GM190,ICD5) 硬度285HB以下	RNM HRM FRM	JC8015	0.4	0.1	5,970	2,390	0.5	0.1	4,770	1,910	0.8	0.1	3,820	1,530	1	0.1	3,180	1,270
工具鋼 (SKD61,SKD11) 硬度255HB以下	RNM HRM FRM	JC8015	0.4	0.1	5,970	2,390	0.5	0.1	4,770	1,910	0.8	0.1	3,820	1,530	1	0.1	3,180	1,270
預硬鋼 (HPM7,PX5,P20) 硬度30~36HRC	RNM HRM FRM	DH103 JC8015	0.4	0.1	5,970	2,390	0.5	0.1	4,770	1,910	0.8	0.1	3,820	1,530	1	0.1	3,180	1,270
預硬鋼 (NAK80,HPM1,P21) 硬度38~43HRC	RNM HRM FRM	DH103 JC8015	0.4	0.1	5,570	1,670	0.5	0.1	4,460	1,340	0.8	0.1	3,570	1,070	1	0.1	2,970	890
淬火鋼 (SKD61,DAC,DHA) 硬度42~52HRC	HRM FRM	DH102 JC8015	0.4	0.1	4,970	750	0.5	0.1	3,980	600	0.6	0.1	3,180	480	0.8	0.1	2,650	400
淬火鋼 (SKD11,SLD,DC11) 硬度55~62HRC	FRM	DH102	0.4	0.1	3,980	600	0.5	0.1	3,180	480	0.6	0.1	2,550	380	0.8	0.1	2,120	320
高速模具鋼 (SKH,HAP) 硬度63~70HRC	FRM	DH102	0.2	0.1	2,980	300	0.2	0.1	2,390	240	0.3	0.1	1,910	190	0.4	0.1	1,590	160
灰鑄鐵 (HT250) 硬度160~260HB	RNM HRM FRM	DH102 DH103 JC8015	0.4	0.2	6,960	3,480	0.5	0.2	5,570	3,340	0.8	0.2	4,460	2,680	1	0.2	3,710	2,230
球墨鑄鐵 (QT700) 硬度170~300HB	RNM HRM FRM	DH102 DH103 JC8015	0.4	0.2	6,960	3,480	0.5	0.2	5,570	3,340	0.8	0.2	4,460	2,680	1	0.2	3,710	2,230
奧氏體不鏽鋼 (SUS304,316,317) 17Cr系	RNM HRM FRM	JC8015	0.4	0.1	5,570	2,230	0.5	0.1	4,460	1,780	0.8	0.1	3,570	1,430	1	0.1	2,970	1,190
馬氏體不鏽鋼 (SUS403,420J2,430) 13Cr系	RNM HRM FRM	JC8015	0.4	0.1	5,570	2,230	0.5	0.1	4,460	1,780	0.8	0.1	3,570	1,430	1	0.1	2,970	1,190
鋁合金 (A5052)	RNM	KT9	0.8	0.2	6,960	3,500	1	0.2	5,570	2,800	1.2	0.2	4,460	2,230	1.6	0.2	3,710	1,860
鋁合金 (A7075)	RNM	KT9	0.8	0.2	6,960	3,500	1	0.2	5,570	2,800	1.2	0.2	4,460	2,230	1.6	0.2	3,710	1,860
鋁合金鑄件 (Si 13%未満)	RNM	KT9	0.8	0.2	6,960	3,500	1	0.2	5,570	2,800	1.2	0.2	4,460	2,230	1.6	0.2	3,710	1,860
銅合金 (C1100)	RNM	KT9	0.5	0.15	4,970	2,500	0.7	0.15	3,980	2,000	0.8	0.15	3,180	1,590	1	0.15	2,650	1,330
石 墨	RNM	JC10000	0.8	0.2	6,960	3,500	1	0.2	5,570	2,800	1.2	0.2	4,460	2,230	1.6	0.2	3,710	1,860
鈦合金 (Ti-6Al-4V) 硬度35~43HRC	HRM FRM	JC8015	0.25	0.1	1,990	480	0.3	0.1	1,590	380	0.35	0.1	1,270	320	0.4	0.1	1,060	270
高溫合金 (INCO718) 硬度35~43HRC	HRM FRM	JC8015	0.25	0.1	1,590	380	0.3	0.1	1,270	300	0.35	0.1	1,020	260	0.4	0.1	850	210

ap:軸向切深 ae:半徑方向切深 n:主軸轉速 Vf:進給速度
ap:Depth of cut, ae:Width of cut, n:Spindle speed, Vf:Feed speed

■使用注意事項

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請依刀具懸長適當調整主軸轉速n(min)及進給速度Vf(mm/min)。
- 3)萬一發生振動,建議降低切深,或降低進給速度。
- 4)使用風冷以吹走切屑,特別是立式機床加工深型腔時,需充分注意切屑的處理。
- 5)使用鋼製刀桿時,請把上表中的主軸轉速n(ming)及進給速度Vf(mm/min)降低到80%。

刀具懸長(mm) L/Dc	n (min ⁻¹)	Vf (mm/min)
~3Dc	100%	100%
~3Dc以上~5Dc	70%	70%
5Dc以上~10Dc	50%	50%

