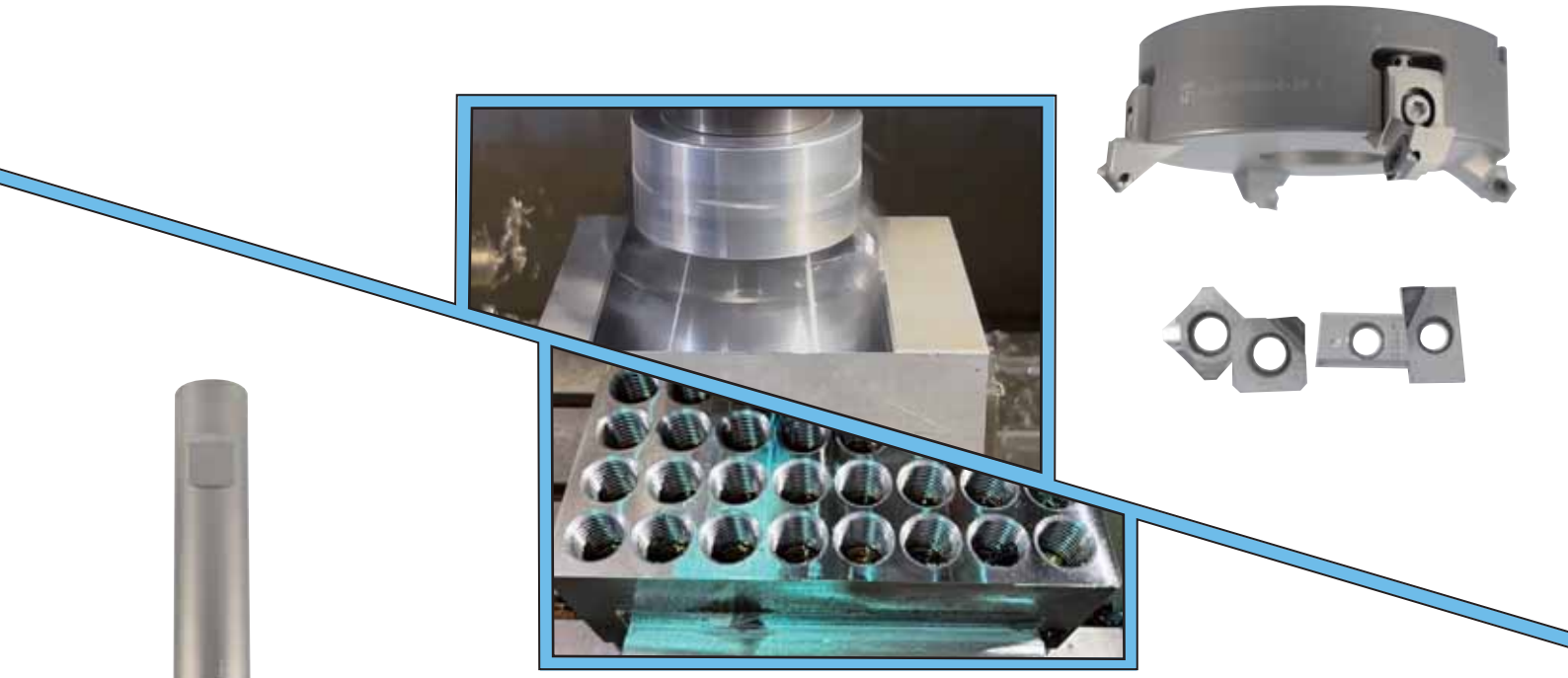
泰精超硬刀具有限公司
TAI JENG Machinery Tool Co.,Ltd

可調式鋁合金刀盤
Adjustable aluminum aolly face milling cutters



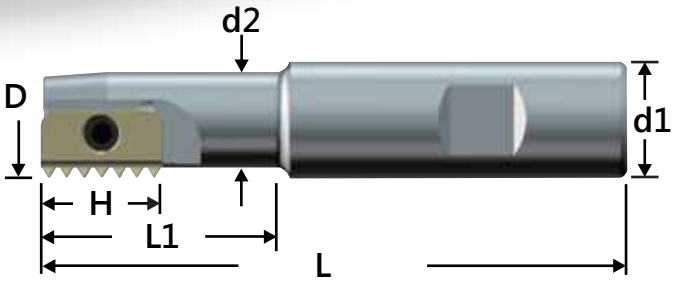


銑牙刀桿 / 銑牙刀片
Mill - Thread Toolholders / Thread inserts

SR 銑牙刀 Mill - Thread Toolholders

P M K N S

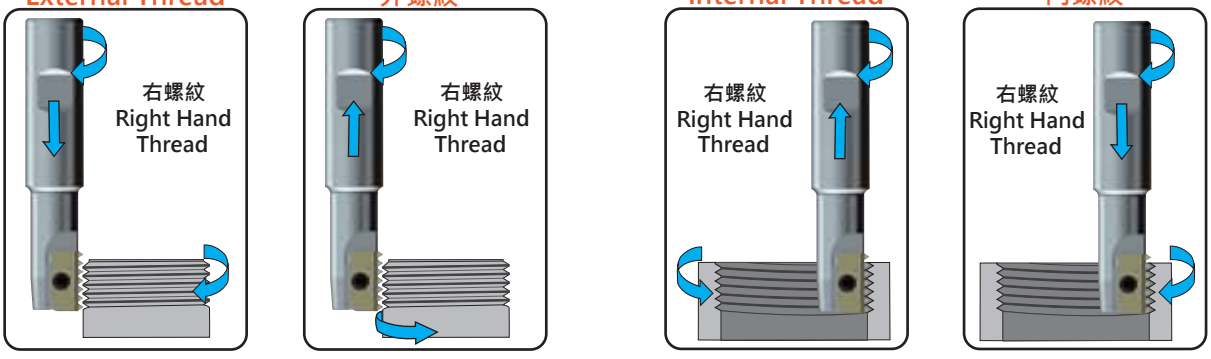


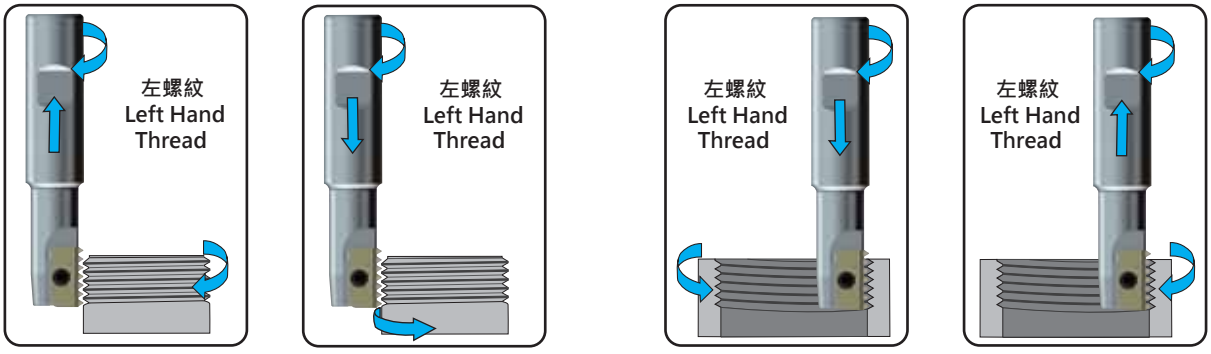


Ordering Code	Dimensions / mm						Screw	Wrench
With Coolant	D	H	L1	d2	d1	L		
12SR09.5-20E-100-C	9.5	12	14	7.5	20	100	Y-12SR M2.5-0.45	T8
12SR09.9-20E-100-C	9.9		16	7.6	20	100		
14SR12.0-20E-100-C	12	14	20	8.9	20	100	Y-14SR M3.0-0.5	T10
14SR14.5-20E-100-C	14.5		25	11.2	20	100		
14SR17.0-20E-100-C	17		30	13.4	20	100		
21SR18.0-20E-100-C	18	21	30	14.4	20	100	Y-21SR M4.0-0.7	T15
21SR21.0-20E-100-C	21		40	16.5	20	100		
21SR25.0-20E-125-C	25		-	-	20	125		
30SR29.0-25E-110-C	29	30	50	22.4	25	110	Y-30SR M5.0-0.8	T20
30SR31.0-25E-150-C	31		-	-	25	150		
30SR38.0-32E-150-C	38		-	-	32	150		
40SR48.0-40E-153-C	48	40	78	35	40	153	Y-40SR M5.0-0.8	T20
40SR48.0-40E-210-C	48		-	-	40	210		

- Not for inserts: 12-18NPT / 12-18 NPTF / 12-19BSPT ；不適用刀片為: 12-18NPT / 12-18 NPTF / 12-19BSPT
- Not for inserts: 21N-3.5 ISO / 21N-8 UN / 21N-7 UN / 21-11 BSPT / 21-11.5 NPT / 21-11.5 NPTF ;
  不適用刀片為: 21N-3.5 ISO / 21N-8 UN / 21N-7 UN / 21-11 BSPT / 21-11.5 NPT / 21-11.5 NPTF
- For long shank holders reduce the cutting speed and feed rate between 20% to 40% ；
  對於長柄刀柄，將切削速度和進給率降低 20% 至 40%

External Thread 外螺紋 Internal Thread 內螺紋

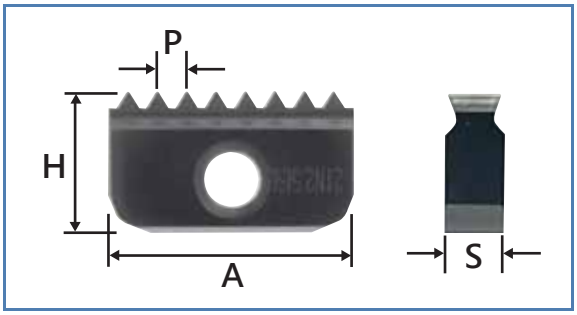




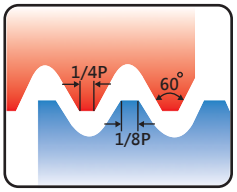
銑牙刀片訂購編號
Mill-Thread Inserts Ordering Codes

21	E	2.0	ISO	TA7
刃長 Edge Length	內外牙標示 Insert Mark	牙距 Thread Pitch	螺紋代號 Thread Profile	刀片材質 Carbide Grade
A - 12 - 14 - 21 - 30 - 40	E = Extermal (外牙) I / N = Internal (內牙) - = Ext + Int (內牙+外牙)		ISO UN WHIT NPT BSPT	TA7

Materiais	Vc (m/min)	fz (mm/T)
P	105 – 280	0.05 – 0.15
M	130 – 190	
K	70 – 80	
N	115 – 460	
S	25 - 90	



ISO M

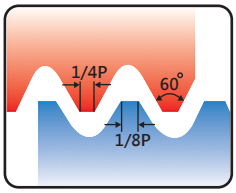


刃長 A	牙距 Pitch mm															H	S
	0.5	0.75	1.0	1.25	1.5	1.75	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0		
12	I◢	I◢	I◢	I◢	I◢											6.3	2.9
14	N	N	N	N	N		N	N								7.5	3.1
	E	E	E	E	E		E	E									
21			N	N	N	N	N	N	N	N						12	4.7
			E	E	E	E	E	E	E								
30					N		N		N	N	N	N	N	N		16	5.5
					E		E		E	E	E						
40					N		N		N	N	N	N	N	N	N	20	6.3
					E		E		E		E		E				

◢ One cutting edge / 單面使用

UNC **UNEF**

UNF **UNS**

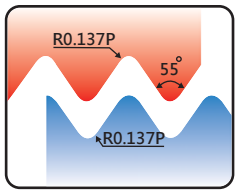


刃長 A	牙距 Pitch TPI																		H	S
	32	28	27	24	20	18	16	14	12	11	10	9	8	7	6	5	4.5	4		
12	I◢	I◢		I◢	I◢	I◢	I◢												6.3	2.9
14	N	N	N	N	N	N	N	N	N										7.5	3.1
	E	E		E	E	E	E	E	E											
21				N	N	N	N	N	N		N		N	N					12	4.7
				E	E	E	E	E	E	E	E									
30					N	N	N	N	N		N		N		N	N			16	5.5
					E	E	E	E	E		E		E		E					
40							N	N	N		N		N		N		N	N	20	6.3
							E	E	E		E		E		E					

◢ One cutting edge / 單面使用

W **BSF**

BSW **BSP**



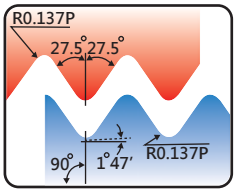
刃長 A	牙距 Pitch TPI							H	S
	24	20	19	16	14	11	8		
12			E+I◢					6.3	2.9
14	E+N◣	E+N◣	E+N◣	E+N◣	E+N◣	E+N◣		7.5	3.1
21		E+N◣	E+N◣	E+N◣	E+N◣	E+N◣		12	4.7
30				E+N◣	E+N◣	E+N◣		16	5.5
40						E+N◣	E+N◣	20	6.3

◢ One cutting edge / 單面使用

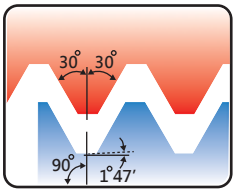
◣ Same insert for External and Internal thread / 外牙與內牙為同一刀片

PT **RC**

BSPT



NPT



刃長 A	牙距 Pitch TPI			H	S
	19	14	11		
12	E+I◣			6.3	2.9
14	E+N◣	E+N◢		7.5	3.1
21		E+N◢	E+N◢	12	4.7
30			E+N◢	16	5.5
40			E+N◢	20	6.3

刃長 A	牙距 Pitch TPI				H	S
	18	14	11.5	8		
12	E+I◣				6.3	2.9
14	E+N◣	E+N◢			7.5	3.1
21		E+N◢	E+N◢		12	4.7
30			E+N◢	E+N◢	16	5.5
40				E+N◢	20	6.3

◢ One cutting edge / 單面使用

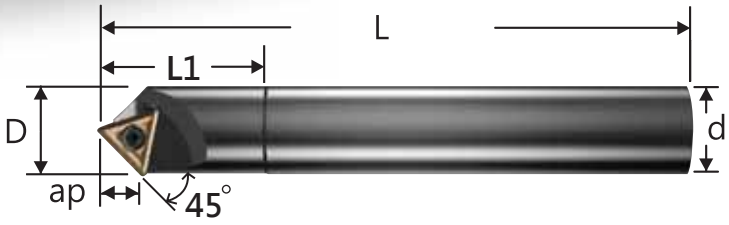
◣ Same insert for External and Internal thread / 外牙與內牙為同一刀片

中心定位倒角刀

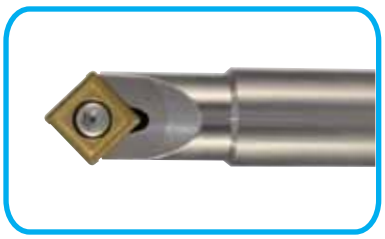
P M K

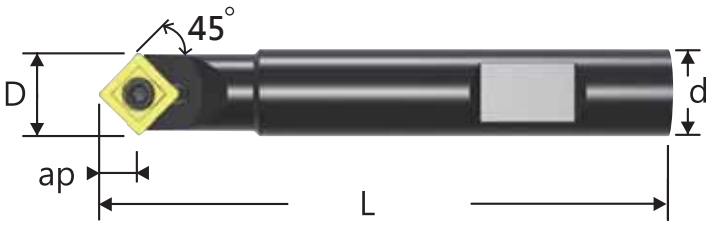
Centering & Chamfering cutters





Ordering code	Dimensions / mm					Flutes		Screw	Wrench
	D	d	L1	L	ap				
TCMX16-2001-20B-130	22.5	20	35	130	11.3	1	TCMX16T308	Y-TCR-L M4-0.7	T15



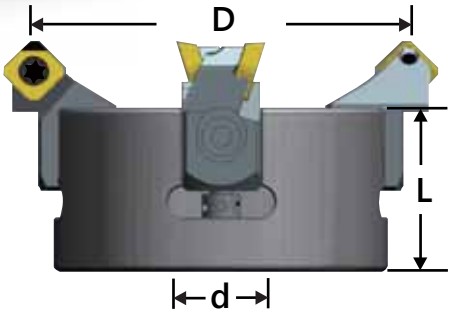


Ordering code	Dimensions / mm				Flutes		Screw	Wrench
	D	d	L	ap				
SD11-1401-16E-100	14	16	100	7	1	SD..11T3	Y-TCRD10 M4-0.7	T15

可調式鋁合金面銑刀盤 Adjustable aluminum aolly face milling cutters

N





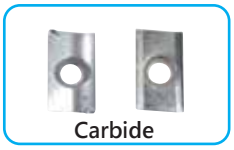
Ordering code	Dimensions			刃數 Flutes	刀片座 Insert holder	螺絲 screw	板手 Wrench	Weight (KGS)
	D	d	L					
ALU-080R04-22.0	80	22.0	42	4	ALU-AP1604 ALU-SE1204	Y-TAP400 M4-0.7 Y-EMCF M4.5-0.75	T15	0.61kg 0.59kg
ALU-100R04-25.4	100	25.4						0.86kg 0.84kg
ALU-125R04-31.75	125	31.75						1.19kg 1.17kg
ALU-160R04-38.1	160	38.1						1.74kg 1.72kg

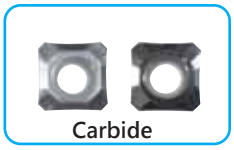


ALU-AP1604



ALU-SE1204









刀片座 Insert holder	Weight (KGS)	刀片型號 Item code	鎢鋼刀片 Uncoated carbide	刀片型號 Item code	聚晶鑽石 PCD
ALU-AP1604	0.08kg	APE(K)T1604	H1X / H01	APGW160404	PCD1
ALU-SE1204	0.075kg	SEHT1204	H1X / H01	SEGW120404	PCD1

刀盤零件 Face milling cutters accessories

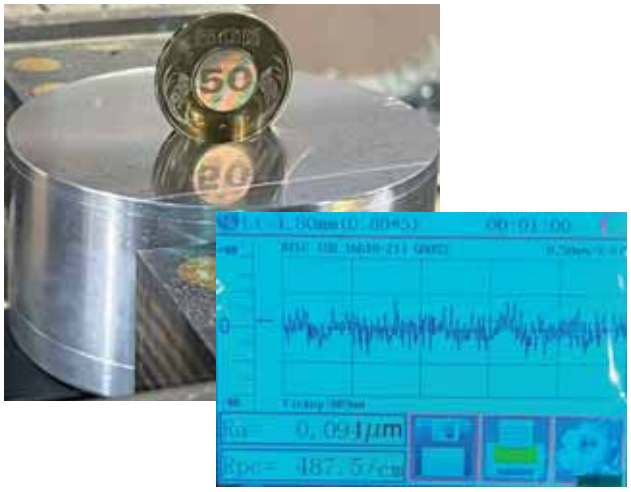
調整螺絲 Adjusting screw	固定螺絲 Clamp screw	墊片 Shim	調整板手 Adjust wrench	固定板手 Clamp wrench
				
ALU-B01	ALU-B02 (Dia-80) ALU-B03 (Dia-100~160)	ALU-B04	ALU-B05	ALU-B06 ⬡ 5.0

切削數據 Cutting data

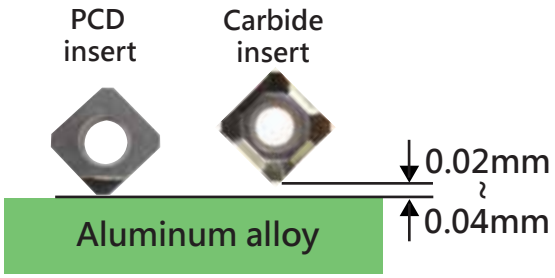
N	鎢鋼刀片 / Carbide insert			鑽石刀片 / PCD insert		
	Vc (m/min)	fz (mm/t)	ap (mm)	Vc (m/min)	fz (mm/t)	ap (mm)
	200 - 1000	0.05 – 0.3	0.5 – 6.0	1000 - 2000	0.02 – 0.1	0.05-0.1

鏡面加工 Mirror Finishing

立式加工機 ： 永進	加工材質 : 鋁合金 6061	(Vc) 切削速度 : 2000 m/min	(fz) 每刃進給 : 0.02 mm/t
Vertical M/C : YCM	Material : Aluminum 6061	(Vc) Cutting speed : 2000 m/min	(fz) Feed per tooth : 0.02 mm/t
主軸錐度 : BT40	刀 盤 : ALU-100R04-25.4	(n) 主軸轉速 : 6370 rpm	(ap) 切削深度 : 0.05 mm
Spindle taper : BT40	Face cutter : ALU-100R04-25.4	(n) Spindle speed : 6370 rpm	(ap) Axial depth : 0.05 mm
乾式切削 ： 氣冷	刀片 : SE..1204-PCDx1 + H01x3	(F) 進給 : 510 mm/min	(ae) 切削寬度 : 86 mm
Cutting Dry : Air Cooling	Insert : SE..1204-PCDx1 + H01x3	(F) Feed rate : 510 mm/min	(ae) Radial depth : 86 mm



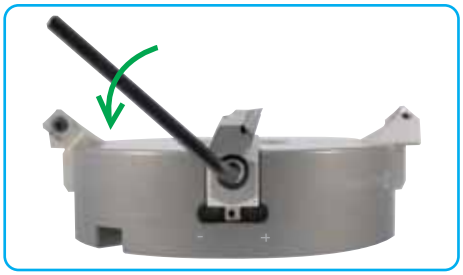
粗糙度可至Ra:0.1μm以下
Roughness can be below Ra:0.1μm



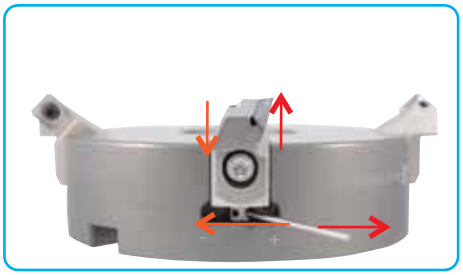
精銑 :
使用1片PCD刀片和3片鎢鋼刀片 ; PCD刀片比鎢鋼刀片高0.02mm~0.04mm
Finishing :
Used 1 pcs PCD insert with 3 pcs carbide inserts ; the PCD insert is 0.02mm~0.04mm higher than the Carbide insert

調整簡單方便 , 可快速調整刀刃高度　Simple and easy adjusting , speedily adjusts the cutting edge height

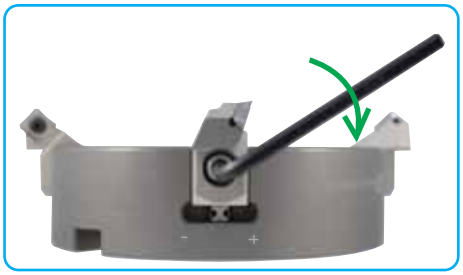
使用步驟 / Usage steps :



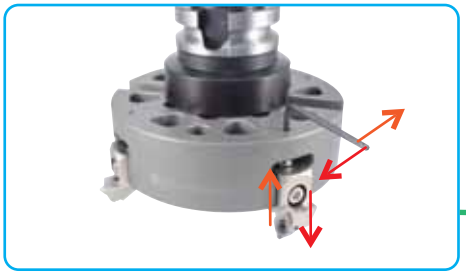
1. 放鬆固定螺絲
Loosen clamp screw



2.使用調整板手微調調整螺絲至所需的高度
Use the adjusting wrench to fine-tune the adjusting screw to the desired height.



3.鎖緊固定螺絲
Lock the clamp screw



也可以從底部調整
Adjustments can also be made from the bottom.



中心定位倒角刀

Centering & Chamfering cutters

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TEL: 02-2996-7563　FAX: 02-2997-4671　地址: 新北市新莊區復興路3段21號

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