

# ***Indexable Milling***

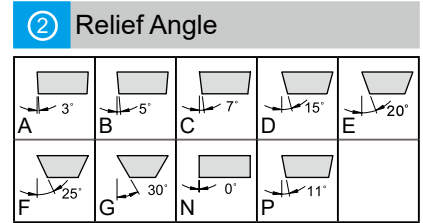
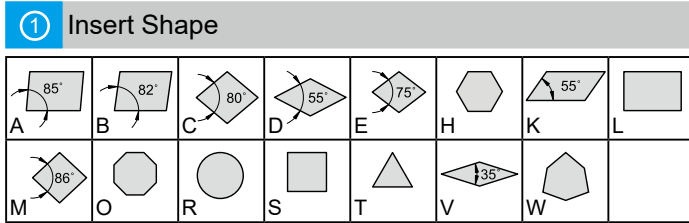
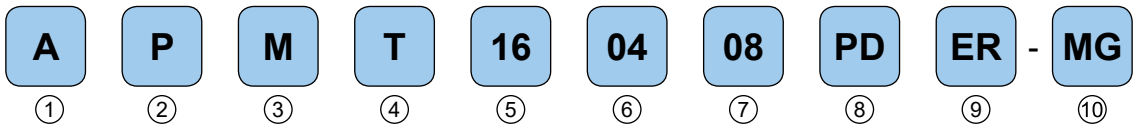
## 捨棄式銑刀



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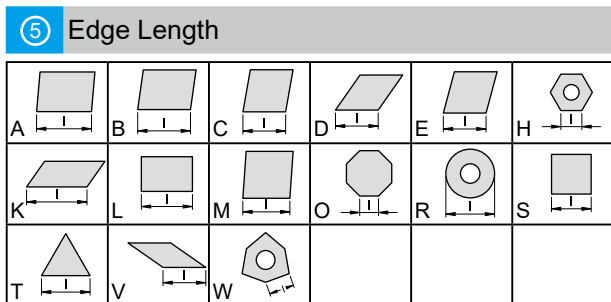
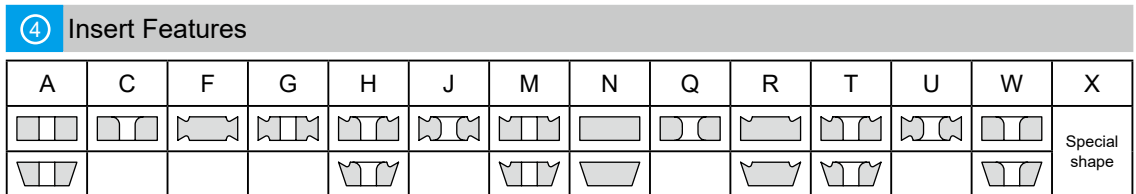
Designations for Milling Insert

銑刀片型號編碼



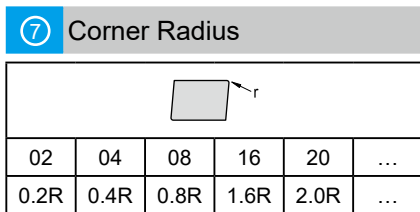
**③ Tolerance Class**

Tolerance	Range of tolerance												
	A	C	E	F	G	H	J	K	L	M	N	U	
$d \pm$	0.025	0.025	0.025	0.013	0.025	0.013	0.05-0.15	0.05-0.15	0.05-0.15	0.05-0.15	0.05-0.15	0.08-0.25	
$m \pm$	0.005	0.013	0.025	0.005	0.025	0.013	0.005	0.013	0.025	0.08-0.2	0.08-0.2	0.13-0.38	
$s \pm$	0.025	0.025	0.025	0.025	0.05-0.13	0.025	0.025	0.025	0.025	0.05-0.13	0.025	0.13	



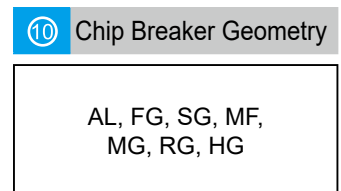
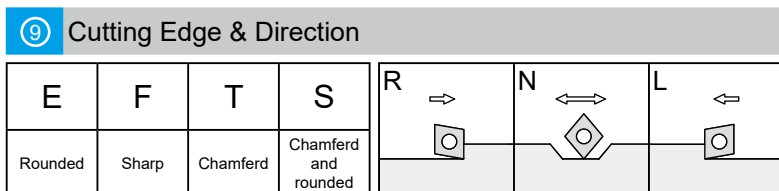
**⑥ Thickness**

Index	01	T1	02	03	T3	04	05	06	07	09
S(mm)	1.59	1.98	2.38	3.18	3.97	4.76	5.56	6.35	7.94	9.52



**⑧ Edge Clearance**

Angle	A	D	E	F	P	Z				
	45°	60°	75°	85°	90°	other				
Angle	A	B	C	D	E	F	G	N	P	Z
	3°	5°	7°	15°	20°	25°	30°	0°	11°	other

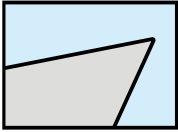
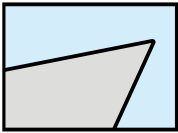
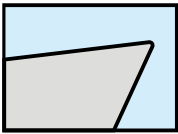
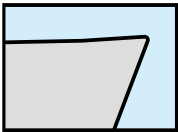
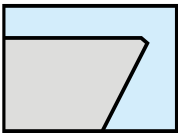
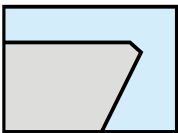


Milling Insert Grades 銑刀片材質介紹

Grade Type 刀片材質	Color 刀片顏色	Properties 屬性	Application 加工特性	Working Material 加工材質						Industry Area 產業應用範圍	Previous Grade 以前的材質	
				P	M	K	N	S	H			
CX13TX		<ul style="list-style-type: none"> <li>PVD (AlTiSiN)</li> <li>High wear resistance</li> <li>高耐磨性</li> </ul>	<ul style="list-style-type: none"> <li>Fine finishing machining</li> <li>適用於超精加工</li> </ul>	○	○	○			○	●	<ul style="list-style-type: none"> <li>Hardened parts</li> <li>硬質零件</li> </ul>	CX12HX
CX23TX		<ul style="list-style-type: none"> <li>PVD (AlTiSiN)</li> <li>Wear resistance</li> <li>耐磨性</li> </ul>	<ul style="list-style-type: none"> <li>Continuous finishing machining</li> <li>For hardened steel is 1st recommended</li> <li>適用於連續穩定精加工</li> <li>加工高硬度鋼為第一建議</li> </ul>	○	○	○			○	●	<ul style="list-style-type: none"> <li>Mold &amp; Die</li> <li>Hardened parts</li> <li>模具產業</li> <li>硬質零件</li> </ul>	CX23AX CX22HS
CX32HS		<ul style="list-style-type: none"> <li>PVD (AlTiSiN)</li> <li>Wear resistance</li> <li>Anti-corrosion</li> <li>耐磨性</li> <li>抗腐蝕</li> </ul>	<ul style="list-style-type: none"> <li>Medium to roughing</li> <li>General machining</li> <li>For carbon steel &amp; alloy steel is 1st recommended</li> <li>適合中至粗加工</li> <li>適合泛用加工</li> <li>加工碳鋼 &amp; 合金鋼為第一建議</li> </ul>	●	○	●					<ul style="list-style-type: none"> <li>Mold &amp; Die</li> <li>Automotive</li> <li>Machinery</li> <li>Aerospace</li> <li>模具產業</li> <li>汽車零件</li> <li>機械零件</li> <li>航太零件</li> </ul>	-
CX33TX		<ul style="list-style-type: none"> <li>耐磨性</li> <li>抗腐蝕</li> </ul>	<ul style="list-style-type: none"> <li>適合中至粗加工</li> <li>適合泛用加工</li> <li>加工碳鋼 &amp; 合金鋼為第一建議</li> </ul>	●	○	●			○	●	<ul style="list-style-type: none"> <li>模具產業</li> <li>汽車零件</li> <li>機械零件</li> <li>航太零件</li> </ul>	-
CX33UX		<ul style="list-style-type: none"> <li>PVD (AlTiSiCrN)</li> <li>Wear resistance</li> <li>Anti-corrosion</li> <li>Low friction</li> <li>耐磨性</li> <li>抗腐蝕</li> <li>低磨擦系數</li> </ul>	<ul style="list-style-type: none"> <li>Semi-finishing to roughing</li> <li>General machining</li> <li>For exotic materials is 1st recommended</li> <li>適合半精至粗加工</li> <li>適合泛用加工</li> <li>加工高溫合金為第一建議</li> </ul>	●	●	●			●	○	<ul style="list-style-type: none"> <li>Mold &amp; Die</li> <li>Automotive</li> <li>Machinery</li> <li>Aerospace</li> <li>模具產業</li> <li>汽車零件</li> <li>機械零件</li> <li>航太零件</li> </ul>	-
CX37TA		<ul style="list-style-type: none"> <li>CVD (TiCN-Al<sub>2</sub>O<sub>3</sub>-TiN)</li> <li>Wear resistance</li> <li>Impact resistance</li> <li>耐磨性</li> <li>抗衝擊性</li> </ul>	<ul style="list-style-type: none"> <li>Medium to rough dry machining</li> <li>For cast iron is 1st recommended</li> <li>適合乾式中至粗加工</li> <li>加工鑄鐵為第一建議</li> </ul>	●		●				○	<ul style="list-style-type: none"> <li>Automotive</li> <li>Machinery</li> <li>汽車零件</li> <li>機械零件</li> </ul>	-
CX43TX		<ul style="list-style-type: none"> <li>PVD (AlTiSiN)</li> <li>High impact resistance</li> <li>Anti-corrosion</li> <li>高抗衝擊性</li> <li>抗腐蝕</li> </ul>	<ul style="list-style-type: none"> <li>Medium to roughing</li> <li>Interrupted machining</li> <li>For exotic materials is 1st recommended</li> <li>適合中至粗加工</li> <li>適合斷續加工</li> <li>加工高溫合金為第一建議</li> </ul>	●	●					●	<ul style="list-style-type: none"> <li>Electronics</li> <li>Medical</li> <li>Aerospace</li> <li>電子零件</li> <li>醫療產業</li> <li>航太零件</li> </ul>	-
CX47TA		<ul style="list-style-type: none"> <li>CVD (TiCN-Al<sub>2</sub>O<sub>3</sub>-TiN)</li> <li>High impact resistance</li> <li>High toughness</li> <li>高抗衝擊性</li> <li>高韌性</li> </ul>	<ul style="list-style-type: none"> <li>Rough dry machining</li> <li>Interrupted machining</li> <li>For alloy steel &amp; cast iron are recommended</li> <li>適合乾式粗加工</li> <li>適合斷續加工</li> <li>加工合金鋼 &amp; 鑄鐵均可建議</li> </ul>	●	○	●			○		<ul style="list-style-type: none"> <li>Machinery</li> <li>Aerospace</li> <li>Energy</li> <li>機械零件</li> <li>航太零件</li> <li>能源產業</li> </ul>	-
CX10	-	<ul style="list-style-type: none"> <li>Uncoated</li> <li>Wear resistance</li> <li>耐磨性</li> </ul>	<ul style="list-style-type: none"> <li>Finishing and medium cutting</li> <li>For non-ferrous materials is 1st recommended</li> <li>適合精加工和中加工</li> <li>加工鋁合金為第一建議</li> </ul>							●	<ul style="list-style-type: none"> <li>Bike parts</li> <li>Automotive</li> <li>Electronics</li> <li>自行車零件</li> <li>汽車零件</li> <li>電子零件</li> </ul>	-

Indexable Milling



Chip Breaker 斷屑槽		Application 應用
	<b>AL</b>	Large positive rake angle with sharp cutting edge for Non-ferrous materials.  鋒利的大正前角刀口設計，適用於非鐵金屬加工應用
for Aluminum 適用於鋁		
	<b>FG</b>	Large positive rake angle with sharp cutting edge for finishing cutting in steel.  鋒利的大正前角刀口設計，適用於一般鋼料精加工
Finishing 精加工		
	<b>SG (SM)</b>	Sharp geometry design for semi-finishing cutting in steel, stainless steel and difficult-to-cut material.  鋒利的刀口設計，適用於鋼件、不鏽鋼，及難切削材的半精加工應用
Semi-Finishing 半精加工		
	<b>MG (MM)</b>	Low cutting force for medium cutting in steel, stainless steel and cast iron.  低切削阻力的刀口設計，適用於鋼件、不鏽鋼和鑄鐵的中加工應用
Medium 中加工		
	<b>RG</b>	Strong geometry design for rough cutting in steel, alloy steel and hardened steel.  強壯的刀口設計，適用於鋼件、合金鋼、預硬鋼的粗加工應用
Roughing 粗加工		
	<b>HG</b>	Strong, negative and big chamfering cutting edge for roughing, forging and cast skin.  粗加工的強力刀口設計，適用於鑄件及鍛件
Heavy-Roughing 重粗加工		

**Milling Insert Index - A Style** 銑刀片索引

Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page		
			PVD				CVD			A	B	S	r	d1	t1				
			CX23AX	CX32HS	CX33TX	CX33UX	CX43TX	CX37TA	CX47TA									CX10	
	<b>ANMX15T608-MG</b>	●		✓	✓	✓	✓	✓	✓			16.1	10	6.88	0.8	4.65	1.9		A031
	<b>ANMX15T616-MG</b>	●			✓		✓					16.1	10	6.88	0.8	4.65	1.9		
	<b>APKT100304PDER-MG</b>		✓	✓	✓	✓	✓					10.5	6.7	3.5	0.4	2.8	-		A036 A137
	<b>APKT100308PDER-MG</b>		✓	✓	✓	✓	✓					10.5	6.7	3.5	0.8	2.8	-		
	<b>APKT100304PDER-RG</b>			✓	✓							10.5	6.7	3.5	0.4	2.8	-		
	<b>APET160402PDFR-AL</b>									✓		16.3	9.525	4.76	0.2	4.5	-		
	<b>APET160404PDFR-AL</b>									✓		16.3	9.525	4.76	0.4	4.5	-		
	<b>APET160402PDFR-FG</b>		✓									16.3	9.525	4.76	0.2	4.5	-		
	<b>APET160404PDFR-FG</b>		✓									16.3	9.525	4.76	0.4	4.5	-		
	<b>APKT160408PDER-MG</b>		✓	✓	✓	✓	✓					16.3	9.525	5.25	0.8	4.5	-		
	<b>APKT160408PDER-RG</b>		✓	✓	✓		✓					16.3	9.525	5.25	0.8	4.5	-		
	<b>APKT170516PEER-RG</b>			✓	✓		✓					18.5	10.7	5.56	1.6	4.5	-		
	<b>APMT103508PDER-RG</b>			✓	✓		✓					10	6.6	3.5	0.8	3	-		A065
	<b>APET160508PDFR-AL</b>									✓		16	9.525	5.56	0.8	4.4	-		
	<b>APMT160508PDER-RG</b>			✓	✓							16	9.525	5.56	0.8	4.4	-		

NEW

Indexable Milling

**Milling Insert Index - A Style** 銑刀片索引

Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page
			PVD				CVD		-	A	B	S	r	d1	t1		
			CX23TX	CX32HS	CX33TX	CX33UX	CX43TX	CX37TA									
	APGT113508PDER-AL								✓	11.0	6.35	3.5	0.8	2.8	-		A053 A139
	APGT113508PDER-FG		✓							11.0	6.35	3.5	0.8	2.8	-		
	APMT113508PDER-MG		✓	✓	✓	✓	✓			11.0	6.35	3.5	0.8	2.8	-		
	APMT113516PDER-MG		✓	✓	✓	✓	✓			11.0	6.35	3.5	1.6	2.8	-		
	APMT113508PDER-RG		✓	✓	✓					11.0	6.35	3.5	0.8	2.8	-		
	APMT113508PDER-HG			✓	✓		✓			11.0	6.35	3.5	0.8	2.8	-		
	APGT160408PDER-AL								✓	16.5	9.525	4.76	0.8	4.4	-		
	APGT160408PDER-FG		✓							16.5	9.525	4.76	0.8	4.4	-		
	APMT160408PDER-MG		✓	✓	✓	✓	✓	✓		16.5	9.525	4.76	0.8	4.4	-		
	APMT160416PDER-MG			✓	✓	✓	✓			16.5	9.525	4.76	1.6	4.4	-		
	APMT160408PDER-RG		✓	✓	✓		✓			16.5	9.525	4.76	0.8	4.4	-		
	APMT160408PDER-HG		✓	✓	✓		✓			16.5	9.525	4.76	0.8	4.4	-		
	AXMT123508PEER-RG		✓	✓	✓		✓	✓		12.18	6.93	3.58	0.8	3.4	-		A063
	AXMT170508PEER-RG			✓	✓		✓			17.50	10.2	5.56	0.8	4.6	-		
	AXMT170516PEER-RG			✓	✓		✓			17.50	10.2	5.56	1.6	4.6	-		

Milling Insert Index - B ~ H Style 銑刀片索引

Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page			
			PVD				CVD		-	A	B	S	r	d1	t1					
			CX23TX	CX32HS	CX33TX	CX33UX	CX43TX	CX37TA										CX47TA	CX10	
	<b>BNMX0603-SG</b>	●	✓	✓	✓	✓	✓						9.0	6.38	3.75	-	3.2	-		A072
	<b>BNMX0603-MG</b>	●	✓	✓	✓	✓	✓	✓	✓				9.0	6.38	3.75	-	3.2	-		
	<b>BNMX0603-RG</b>	●	✓	✓	✓		✓	✓	✓				9.0	6.38	3.75	-	3.2	-		
	<b>BNMX0904-MG</b>	●	✓	✓	✓	✓	✓	✓	✓				11.9	9.18	4.8	-	4.2	-		-
	<b>CPMT090308-MG</b>			✓									9.525	-	3.18	0.8	4.4	-		
	<b>CPMT120408-MG</b>			✓									12.7	-	4.76	0.8	5.5	-		
	<b>DCEX11T301-SG</b>			✓									-	-	-	0.1	-	-		A128
	<b>DCEX11T302-SG</b>			✓									-	-	-	0.2	-	-		
	<b>DCEX11T304-SG</b>			✓									-	-	-	0.4	-	-		
	<b>DCEX11T301</b>			✓									-	-	-	0.1	-	-		A128
	<b>DCEX11T302</b>			✓									-	-	-	0.2	-	-		
	<b>DCEX11T304</b>			✓									-	-	-	0.4	-	-		
	<b>DCEX11T308</b>			✓									-	-	-	0.8	-	-		
	<b>HNMX0704-SG</b>	●		✓	✓	✓	✓		✓				6.8	12.7	4.45	1.2	4.9	1.4		A096

Indexable Milling

**Milling Insert Index - I ~ O Style** 銑刀片索引

Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page			
			PVD				CVD		-	A	B	S	r	d1	t1					
			CX23TX	CX32HS	CX33TX	CX33UX	CX43TX	CX37TA										CX47TA		
	JDMT150508R-MG			✓	✓		✓						15.1	9.12	5.0	0.8	4.5	-		-
	JDMW120420ZDSR-MG			✓	✓		✓						2.5	12.0	4.76	2.0	4.75	-		A088
	JDMW120420ZDSR-RG			✓	✓		✓	✓					2.5	12.0	4.76	2.0	4.75	-		
	JDMW140520ZDSR-MG			✓	✓								2.8	14.0	5.56	2.0	5.75	-		
	JDMW140520ZDSR-RG			✓	✓								2.8	14.0	5.56	2.0	5.75	-		
	JDMT140520ZDSR-MG			✓	✓		✓						2.8	14.0	5.56	2.0	5.75	-		
	LNMX0303-SG	●	✓	✓	✓		✓						11.59	6.0	4.29	-	2.85	-		
	LNMX0303-MG	●	✓	✓	✓		✓						11.59	6.0	4.29	-	2.85	-		
	LOGX030310-SG	●		✓	✓	✓	✓						11.9	6.2	3.96	-	3.45	-		A079
	LOGX030310-MG	●		✓	✓	✓	✓						11.9	6.2	3.96	-	3.45	-		
	LPGX0102-SG				✓	✓	✓						6.26	4.19	2.19	1.0	2.2	-		A085
	LPGX0102-MG				✓	✓	✓						6.26	4.19	2.19	1.0	2.2	-		
	OFMT05T3TN-SG			✓	✓	✓							12.7	-	3.8	0.6	4.6	-		A101
	OFMT05T3TN-MG			✓	✓	✓							12.7	-	3.8	0.6	4.6	-		
	OFMT05T3TN-RG			✓	✓	✓							12.7	-	3.8	0.6	4.6	-		

Milling Insert Index - O ~ R Style 銑刀片索引

Inserts	Designation	Double Sided	Grade No.						Dimensions (mm)						Drawing	Cutter Page		
			PVD			CVD		-	A	B	S	r	d1	t1				
			CX23TX	CX32HS	CX33TX	CX33UX	CX43TX										CX37TA	CX47TA
	ONMX0505-MG	●	✓	✓	✓	✓					12.7	5.0	6.4	-	6	-		A098
	ONMX0505-RG	●	✓	✓	✓		✓	✓			12.7	5.0	6.4	-	6	-		
	RCMT1204MOE-FG		✓	✓		✓					12	-	4.76	6	4.2	-		-
	RCMT1204MOT-FG		✓	✓							12	-	4.76	6	4.2	-		
	RCMT1204MO-RG								✓		12	-	4.76	6	4.2	-		
	RDKW0501MOE		✓	✓	✓						5	-	1.59	2.5	2.2	-		
	RDKW0620MOE			✓	✓						6	-	1.99	3	2.6	-		
	RDKW0702MOE		✓	✓	✓	✓	✓				7	-	2.38	3.5	2.8	-		
	RDMT1003MOE		✓	✓	✓	✓	✓				10	-	3.18	5	3.9	-		
	RDMT1003MOT		✓	✓	✓		✓				10	-	3.18	5	3.9	-		
	RDMX1003MOE		✓	✓	✓	✓	✓				10	-	3.18	5	4.15	-		
	RDMX1003MOT		✓	✓	✓		✓				10	-	3.18	5	4.15	-		A110
	RDMT10T3MOE		✓	✓	✓		✓				10	-	3.97	5	4.5	-		
	RDMT10T3MOT		✓	✓	✓		✓				10	-	3.97	5	4.5	-		
	RDMW10T3MOE			✓	✓						10	-	3.97	5	4.5	-		
	RDMW10T3MOT			✓	✓						10	-	3.97	5	4.5	-		
	RDMT12T3MOE		✓	✓	✓	✓		✓			12	-	3.97	6	4.1	-		
	RDMT12T3MOT		✓	✓	✓						12	-	3.97	6	4.1	-		



**Milling Insert Index - R Style** 銑刀片索引

Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page		
			PVD				CVD		-	A	B	S	r	d1	t1				
			CX23TX	CX32HS	CX33TX	CX33UX	CX43TX	CX37TA										CX47TA	CX10
	RDMX12T3MOE		✓	✓	✓		✓					12	-	3.97	6	4.1	-		A110
	RDMX12T3MOT		✓	✓	✓		✓					12	-	3.97	6	4.1	-		
	RDHT1204MOE			✓	✓	✓						12	-	4.76	6	4.4	-		
	RDHT1204MOT			✓	✓							12	-	4.76	6	4.4	-		
	RDMT1204MOE		✓	✓	✓		✓					12	-	4.76	6	4.4	-		
	RDMT1204MOT		✓	✓	✓		✓					12	-	4.76	6	4.4	-		
	RDMW1204MOE			✓	✓		✓					12	-	4.76	6	4.4	-		
	RDMW1204MOT		✓	✓	✓		✓	✓				12	-	4.76	6	4.4	-		
	RDMT1604MOT		✓	✓	✓		✓					16	-	4.76	8	5.5	-		
	RDMW1604MOT		✓	✓	✓		✓	✓				16	-	4.76	8	5.5	-		
	RPMT08T2MOE			✓	✓	✓	✓					8	-	2.78	4	3.2	-		A116
	RPMT08T2MOT			✓	✓		✓					8	-	2.78	4	3.2	-		
	RPMW1003MOE			✓	✓		✓					10	-	3.18	5	4.6	-		
	RPMW1003MOT		✓	✓	✓		✓					10	-	3.18	5	4.6	-		
	RPHT10T3MOE						✓					10	-	3.97	5	4.5	-		

**Milling Insert Index - R ~ S Style** 銑刀片索引

Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page				
			PVD				CVD		-	A	B	S	r	d1	t1						
			CX131TX	CX231TX	CX32HS	CX33TX	CX33UX	CX43TX										CX37TA	CX47TA	CX10	
	RPMT10T3MOE				✓	✓	✓	✓					10	-	3.97	5	4.5	-		A116	
	RPMT10T3MOT				✓	✓		✓					10	-	3.97	5	4.5	-			
	RPHT1204MOE				✓	✓	✓						12	-	4.76	6	4.3	-			
	RPHT1204MOT				✓	✓							12	-	4.76	6	4.3	-			
	RPMT1204MOE			✓	✓	✓	✓	✓					12	-	4.76	6	4.3	-			
	RPMT1204MOT			✓	✓	✓		✓					12	-	4.76	6	4.3	-			
	RPMW1204MOE				✓	✓		✓					12	-	4.76	6	4.3	-			
	RPMW1204MOT				✓	✓		✓					12	-	4.76	6	4.3	-			
	SCGX09T304-AG									✓				-	-	-	0.4	-			-
	SCGX09T304-FG		✓											-	-	-	0.4	-			-
	SCMX09T304-SM				✓									-	-	-	0.4	-	-		
	SDMX05T104-FG		✓			✓								-	-	-	0.4	-	-		
	SDMX11T308-SG					✓								-	-	-	0.8	-	-		

Indexable Milling

**Milling Insert Index - S Style** 銑刀片索引

Inserts	Designation	Double Sided	Grade No.						Dimensions (mm)						Drawing	Cutter Page		
			PVD			CVD			A	B	S	r	d1	t1				
			CX23TX	CX32HS	CX33TX	CX33UX	CX43TX	CX37TA									CX47TA	CX10
	<b>SDMT1205ZDEN-SG</b>		✓	✓	✓	✓	✓				12.7	-	5.56	15	4.6	-		A090
	<b>SDMT1205ZDTN-MG</b>		✓	✓	✓	✓	✓				12.7	-	5.56	15	4.6	-		
	<b>SDMT1205ZDTN-RG</b>		✓	✓	✓		✓				12.7	-	5.56	15	4.6	-		
	<b>SDNW1205ZDTN-MG</b>			✓	✓						12.7	-	5.56	15	4.6	-		
	<b>SDNW1205ZDTN-RG</b>		✓	✓	✓		✓	✓			12.7	-	5.56	15	4.6	-		
	<b>SEET1204AFFN-AL</b>									✓	12.7	-	4.76	0.8	5.5	-		A103
	<b>SEET1204AFFN-FG</b>		✓								12.7	-	4.76	0.8	5.5	-		
	<b>SEKT1204AFEN-MG</b>			✓	✓	✓					12.7	-	4.76	0.8	5.5	-		
	<b>SEKT1204AFTN-RG</b>			✓	✓		✓				12.7	-	4.76	0.8	5.5	-		
	<b>SEKW1204AFEN</b>			✓	✓		✓				12.7	-	4.76	0.8	5.5	-		
	<b>SEKW1204AFTN</b>			✓	✓			✓			12.7	-	4.76	0.8	5.5	-		
	<b>SEMR1203AFSN-RG</b>			✓	✓						12.7	1.6	3.18	1	2	-	-	-
	<b>SEET13T3AGFN-AL</b>									✓	13.4	1.9	3.97	1.5	4.2	-		A105
	<b>SEET13T3AGFN-FG</b>		✓								13.4	1.9	3.97	1.5	4.2	-		
	<b>SEMT13T3AGEN-SG</b>		✓	✓	✓	✓	✓				13.4	1.9	3.97	1.5	4.2	-		
	<b>SEMT13T3AGTN-MG</b>		✓	✓	✓	✓	✓				13.4	1.9	3.97	1.5	4.2	-		
	<b>SEMT13T3AGTN-RG</b>			✓	✓		✓				13.4	1.9	3.97	1.5	4.2	-		

**Milling Insert Index - S ~ T Style** 銑刀片索引

Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page
			PVD				CVD			A	B	S	r	d1	t1		
			CX23TX	CX32HS	CX33TX	CX33UX	CX43TX	CX37TA	CX47TA								
	<b>SNMX1205-MG</b>	●	✓	✓	✓	✓	✓	✓	✓	12.7	1.5	6.4	-	6	-		A098
	<b>SNMX1205-RG</b>	●	✓	✓	✓	✓	✓	✓	12.7	1.5	6.4	-	6	-	A098		
<b>NEW</b>	<b>SPGG050204-SG</b>				✓					5.00	-	2.38	0.4	2.30	-		A041 A134 A145 A149
<b>NEW</b>	<b>SPGG060204-SG</b>				✓					6.00	-	2.38	0.4	2.65	-		
<b>NEW</b>	<b>SPGG07T308-SG</b>				✓					7.94	-	3.97	0.8	2.85	-		
<b>NEW</b>	<b>SPGG090408-SG</b>				✓					9.80	-	4.3	0.8	4.05	-		
<b>NEW</b>	<b>SPGG110408-SG</b>				✓					11.50	-	4.8	0.8	4.45	-		
	<b>SPMG050204-MG</b>			✓	✓	✓	✓			5.00	-	2.38	0.4	2.30	-		
	<b>SPMG060204-MG</b>			✓	✓	✓	✓			6.00	-	2.38	0.4	2.65	-		
	<b>SPMG07T308-MG</b>			✓	✓	✓	✓			7.94	-	3.97	0.8	2.85	-		
	<b>SPMG090408-MG</b>			✓	✓	✓	✓			9.80	-	4.3	0.8	4.05	-		
	<b>SPMG110408-MG</b>			✓	✓	✓	✓			11.50	-	4.8	0.8	4.45	-		
	<b>SPMN120308</b>			✓						12.7	-	3.18	0.8	2	-		
	<b>TCMX16T308-SM</b>			✓						-	-	-	0.8	-	-		
	<b>TPKR1603PPR-MG</b>			✓	✓					16.5	9.525	3.1	-	2.2	1.423		-
	<b>TPKR1603PPR-RG</b>			✓	✓	✓				16.5	9.525	3.1	-	2.2	1.423		
	<b>TPMX100404-SG</b>			✓	✓	✓				6.9	-	4	0.4	3	-		A045
	<b>TPMX100408-SG</b>			✓	✓	✓				6.9	-	4	0.8	3	-		
	<b>TPMX100408-MG</b>		✓	✓	✓	✓	✓			6.9	-	4	0.8	3	-		
	<b>TPMX150508-MG</b>		✓	✓	✓	✓	✓			10.7	-	5	0.8	4.85	-		

Indexable Milling

**Milling Insert Index - T ~ W Style** 銑刀片索引

Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page
			PVD				CVD		-	A	B	S	r	d1	t1		
			CX23TX	CX32HS	CX33TX	CX33UX	CX43TX	CX37TA	CX47TA								
	<b>W245-12T3-AL</b>								✓	13.4	1.9	3.97	1.5	4.2	-		A107
	<b>W245-12T3-FG</b>		✓							13.4	1.9	3.97	1.5	4.2	-		
	<b>W245-12T3-MG</b>		✓	✓	✓	✓	✓	✓	✓	13.4	1.9	3.97	1.5	4.2	-		
	<b>W245-12T3-HG</b>			✓	✓		✓	✓	✓	13.4	1.9	3.97	1.5	4.2	-		
	<b>W39011T308-SG</b>		✓	✓	✓	✓	✓			11	6.9	3.59	0.8	2.8	-		A057 A142
	<b>W39011T308-MG</b>		✓	✓	✓	✓	✓	✓	✓	11	6.9	3.59	0.8	2.8	-		
	<b>W39011T320-MG</b>		✓	✓	✓	✓	✓	✓	✓	11	6.9	3.59	2.0	2.8	-		
	<b>W390170408-MG</b>			✓	✓	✓	✓	✓	✓	15.7	9.6	4.76	0.8	4.1	-		
	<b>W390180612-SG</b>			✓	✓	✓	✓	✓	✓	15.4	11	6.33	1.2	4.2	-		
	<b>W49008T308-SG</b>			✓	✓	✓	✓	✓		5.6	8.5	3.3	0.8	2.8	1.2		A061
	<b>W490140408-SG</b>				✓	✓	✓	✓		10.3	13.8	3.9	0.8	4.1	2.0		
	<b>W490140408-MG</b>			✓	✓	✓	✓	✓	✓	10.3	13.8	3.9	0.8	4.1	2.0		
	<b>WNMX09T316-MG</b>	●		✓	✓	✓	✓	✓	✓	9.525	-	3.97	1.6	3.6	-		A082
	<b>WNMX09T316-RG</b>	●		✓	✓	✓	✓	✓	✓	9.525	-	3.97	1.6	3.6	-		
	<b>WNMX130516-MG</b>	●		✓	✓	✓	✓	✓	✓	12.7	-	6.02	1.6	4.7	-		

**Milling Insert Index - W Style** 銑刀片索引

Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page				
			PVD					CVD		A	B	S	r	d1	t1						
			CX13TX	CX23TX	CX32HS	CX33TX	CX43TX	CX37TA	CX47TA									CX10			
	<b>WP26339R14-RG</b>			✓	✓	✓		✓						-	9.52	3.97	1.2	4.4	-		A092
	<b>WP26379R25-RG</b>			✓	✓	✓		✓						1.1	13	5.56	2.0	5.5	-		A123
	<b>WP3210-SM</b>		✓	✓										10	5	2.5	-	4	-		A120
	<b>WP3212-SM</b>		✓	✓										12	6	2.5	-	5	-		
	<b>WP3216-SM</b>		✓	✓										16	6	3	-	5	-		
	<b>WP3220-SM</b>		✓	✓										20	6	3	-	5	-		
	<b>WP3225-SM</b>		✓	✓										25	9	4	-	6	-		
	<b>WP3230-SM</b>		✓	✓										30	10	5	-	8	-		
	<b>WP3232-SM</b>		✓	✓										32	10	5	-	8	-		
	<b>WP3210-MM</b>		✓	✓										10	5	2.5	-	4	-		
	<b>WP3212-MM</b>		✓	✓										12	6	2.5	-	5	-		
	<b>WP3216-MM</b>		✓	✓										16	6	3	-	5	-		
	<b>WP3220-MM</b>		✓	✓										20	6	3	-	5	-		
	<b>WP3225-MM</b>		✓	✓										25	9	4	-	6	-		
	<b>WP3230-MM</b>		✓	✓										30	10	5	-	8	-		
	<b>WP3232-MM</b>		✓	✓										32	10	5	-	8	-		

Indexable Milling



Milling Insert Index - W ~ X Style 銑刀片索引

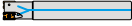





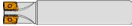




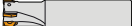




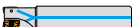
Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page	
			PVD				CVD		-	A	B	S	r	d1	t1			
			CX23TX	CX32HS	CX33TX	CX33UX	CX43TX	CX37TA	CX47TA									CX10
	WPBC1605-MM				✓	✓					16	6	3	0.5	5	16		A125
	WPBC1610-MM				✓	✓					16	6	3	1.0	5	16		
	WPBC1613-MM				✓	✓					16	6	3	1.3	5	16		
	WPBC1620-MM				✓	✓					16	6	3	2.0	5	16		
	WPBC1630-MM				✓	✓					16	6	3	3.0	5	16		
	WPMW080615ZPSR-MG			✓	✓						8	12.87	6.35	1.5	5.5	-		-
	WPMW080615ZPSR-RG			✓	✓		✓				8	12.87	6.35	1.5	5.5	-		
	WRT070204-RG		✓	✓	✓		✓				4.30	6.4	2.38	0.4	2.2	1.3		A039
	WRT100308-MG		✓	✓	✓	✓	✓				6.35	9.3	3.4	0.8	2.9	1.8		
	WRT100308-RG		✓	✓	✓		✓				6.35	9.3	3.4	0.8	2.9	1.8		
	XDMT11T308-MG				✓	✓	✓				10.6	6.8	3.8	0.8	2.8	1.4		-
	XNMX040304-SG	●	✓	✓	✓	✓					6.7	-	3.285	0.4	3.15	-		A033
	XNMX040304-MG	●	✓	✓	✓	✓					6.7	-	3.285	0.4	3.15	-		
	XNMX040308-MG	●	✓	✓	✓	✓	✓				6.7	-	3.285	0.8	3.15	-		
	XNMX080608-MG	●	✓	✓	✓	✓	✓	✓			12.53	-	6.5	0.8	4.5	-		
	XNMX080608-RG	●		✓	✓		✓	✓			12.53	-	6.5	0.8	4.5	-		




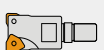








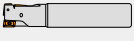


**Milling Insert Index - X Style** 銑刀片索引

Inserts	Designation	Double Sided	Grade No.							Dimensions (mm)						Drawing	Cutter Page	
			PVD				CVD			A	B	S	r	d1	t1			
			CX23TX	CX32HS	CX33TX	CX33UX	CX43TX	CX37TA	CX47TA									CX10
	<b>XOMT060208-SG</b>			✓	✓	✓					7	4.09	2.45	0.8	2	-		A050
	<b>XOMT060204-MG</b>		✓	✓	✓	✓					7	4.09	2.45	0.4	2	-		
	<b>XOMT060208-MG</b>		✓	✓	✓	✓	✓				7	4.09	2.45	0.8	2	-		
	<b>XOMT060216-MG</b>		✓	✓	✓	✓	✓				7	4.09	2.45	1.6	2	-		
	<b>XOMT10T308-SG</b>			✓	✓	✓					11.08	6.86	3.8	0.8	3	-		
	<b>XOMT120408-MG</b>			✓	✓		✓	✓	✓		11.6	8.2	5.07	0.8	3.9	-		
	<b>XOMT120412-SG</b>				✓	✓	✓				11.6	8.2	5.07	1.2	3.9	-		










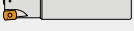





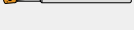

NEW







Indexable Milling

Cutter Series		Cutter Range	Inserts	Page
NEW	 <b>CXANE</b>	Ø25	ANMX15T6	A031
	 <b>CXANF</b>	Ø40 ~ Ø100		
	 <b>CXSNE</b>	Ø50 ~ Ø80	SNMX1205	A099
	 <b>CXXNE</b>	Ø20 ~ Ø32	XNMX0403	A033
	 <b>CXXNM</b>	Ø17 ~ Ø32	XNMX0403	
	 <b>CXXNF</b>	Ø50 ~ Ø125	XNMX0403 / XNMX0806	
	 <b>CAPKE</b>	Ø16 ~ Ø32	APKT1003 / APET1604 / APKT1604	A036
	 <b>CAPKM</b>	Ø16 ~ Ø32		
	 <b>CAPKF</b>	Ø50 ~ Ø125		
	 <b>CARTE</b>	Ø10 ~ Ø26	WRT0702 / WRT1003	A039
	 <b>CARTM</b>	Ø10 ~ Ø21		
	 <b>CASPE</b>	Ø12 ~ Ø40	SPMG..	A041
	 <b>CASPF</b>	Ø50 ~ Ø80		
	 <b>CATPE</b>	Ø20 ~ Ø40	TPMX1004 / TPMX1505	A045
	 <b>CATPM</b>	Ø20 ~ Ø33	TPMX1004	
	 <b>CATPF</b>	Ø50 ~ Ø80		
NEW	 <b>CAXDE</b>	Ø16 ~ Ø32	XDMT11T3	A048










Cutter Series		Cutter Range	Inserts	Page
	<b>CAXOE</b>	Ø6 ~ Ø32	XOMT0602 / XOMT10T3	A050
	<b>CAXOM</b>	Ø10 ~ Ø20	XOMT0602	
	<b>CBAPE</b>	Ø16 ~ Ø32	APGT1135 / APMT1135 APGT1604 / APMT1604	A053
	<b>CBAPM</b>	Ø16 ~ Ø33		
	<b>CBAPF</b>	Ø50 ~ Ø80		
	<b>CR39E</b>	Ø16 ~ Ø32	W39011T3	A057
	<b>CR39M</b>	Ø16 ~ Ø32		
	<b>CR39F</b>	Ø40 ~ Ø125		
	<b>CR49E</b>	Ø20 ~ Ø25	W49008T3	A061
	<b>CR49F</b>	Ø40 ~ Ø80	W49008T3 / W4901404	
	<b>CWEXE</b>	Ø16 ~ Ø32	AXMT1235 / AXMT1705	A063
	<b>CWEXF</b>	Ø50 ~ Ø100		
	<b>CWMMD</b>	Ø20 ~ Ø40	APMT1035 / APMT1605	A065
	<b>CWMME</b>	Ø10 ~ Ø50	APMT1035 / APMT1605	
	<b>CWMMF</b>	Ø50 ~ Ø80	APMT1035 / APMT1605	

NEW





Cutter Series		Cutter Range	Inserts	Page
	<b>CXBNE</b>	Ø15 ~ Ø32	BNMX0603 / BNMX0904	A072
	<b>CXBNM</b>	Ø16 ~ Ø42		
	<b>CXBNF</b>	Ø40 ~ Ø100		
	<b>CXLNE</b>	Ø16 ~ Ø32	LNMX0303	A076
	<b>CXLNM</b>	Ø17 ~ Ø32		
	<b>CXLNF</b>	Ø50		
	<b>CXLOE</b>	Ø16 ~ Ø35	LOGX0303	A079
	<b>CXLNM</b>	Ø17 ~ Ø35		
	<b>CXLOF</b>	Ø50		
	<b>CXWNE</b>	Ø25 ~ Ø32	WNMX09T3	A082
	<b>CXWNF</b>	Ø50 ~ Ø160	WNMX09T3 / WNMX1305	
	<b>CALPE</b>	Ø8 ~ Ø16	LPGX0102	A085
	<b>CAJXE</b>	Ø32	JDMW1204	A088
	<b>CAJXF</b>	Ø50 ~ Ø100	JDMW1204 / JDMW1405	
	<b>CASRF</b>	Ø50 ~ Ø80	SDNW1205 / SDMT1205	A090
	<b>CF23E</b>	Ø32 ~ Ø50	WP26339 / WP26379	A092
	<b>CF23F</b>	Ø50 ~ Ø160	WP26379	

Cutter Series		Cutter Range	Inserts	Page
	<b>CXHNF</b>	Ø50 ~ Ø100	HNMX0704	A096
	<b>CXSNF</b>	Ø50 ~ Ø202.9	SNMX1205 / ONMX0505	A098
	<b>CAOFF</b>	Ø50 ~ Ø100	OFMT05T3	A101
	<b>CASEF</b>	Ø50 ~ Ø100	SEKT1204 / SEKW1204	A103
	<b>CASXF</b>	Ø50 ~ Ø315	SEET13T3 / SEMT13T3	A105
	<b>CR24F</b>	Ø50 ~ Ø315	W245-12T3	A107



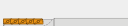




Cutter Series		Cutter Range	Inserts	Page
	<b>CARDE</b>	Ø10 ~ Ø35	RDKW0501 / RDKW0702 RDMT1003 / RDMX1003 RDMT10T3 / RDMW10T3 RDMT1204 / RDMW1204	A110
	<b>CARDM</b>	Ø12 ~ Ø35	RDKW0501 / RDKW0702 RDMT1003 / RDMX1003 RDMT10T3 / RDMW10T3	
	<b>CARDF</b>	Ø50 ~ Ø100	RDMT1003 / RDMX1003 RDMT10T3 / RDMW10T3 RDMT1204 / RDMW1204 RDMT1604 / RDMW1604	
	<b>CARPE</b>	Ø16 ~ Ø35	RPMT08T2 RPMW1003 RPHT10T3 / RPMT10T3 RPHT1204 / RPMT1204 / RPMW1204	A116
	<b>CARPF</b>	Ø50 ~ Ø80	RPHT10T3 / RPMT10T3 RPHT1204 / RPMT1204 / RPMW1204	
	<b>CF21E</b>	Ø10 ~ Ø32	WP32..	A120
	<b>CF21M</b>	Ø10 ~ Ø32		
	<b>CF22M</b>	Ø25 ~ Ø50	WP26339 / WP26379	A123
	<b>CGWV</b>	Ø16	WPBC16..	A125


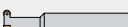


## Engraving / Chamfering 雕刻倒角銑刀

Cutter Series		Cutter Range	Inserts	Page
	<b>DTS60</b>	Ø0.2 ~ Ø3	DCEX11T3	A128
	<b>DTS90</b>	Ø0.8 ~ Ø20	SCGX09T3 / SCMX09T3 SDMX0501 / SDMX11T3 TCGX16T3 / TCMX16T3	A130
	<b>DTS90</b>	Ø0.8 ~ Ø11		
	<b>CSPC</b>	Ø11 ~ Ø50	SPMG...	A134









## Helical Milling 玉米粗銑刀

Cutter Series		Cutter Range	Inserts	Page
	<b>CAPHE</b>	Ø20 ~ Ø32	APKT1003	A137
	<b>CAPHM</b>	Ø50 ~ Ø63	APET1604 / APKT1604	
	<b>CBAHE</b>	Ø20 ~ Ø50	APGT1135 / APMT1135 APGT1604 / APMT1604	A139
	<b>CBAHM</b>	Ø50 ~ Ø63	APGT1604 / APMT1604	
	<b>C39HE</b>	Ø25 ~ Ø32	W39011T3	A142









## Disc Milling 三面刃銑刀

Cutter Series		Cutter Range	Inserts	Page
	<b>CSPTE</b>	Ø19 ~ Ø40	SPMG...	A145
	<b>CRDTE</b>	Ø26 ~ Ø50	RDKW0501 / RDKW0620 / RDKW0702 / RPMT10T3	A147
	<b>CSPDE</b>	Ø80 ~ Ø200	SPMG...	A149
	<b>CSPDF</b>	Ø80 ~ Ø125		

**P Steel** 鋼



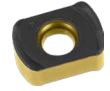





Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CAPK · APKT-MG · CX33TX 	CXXN · XNMX-MG · CX33TX 
High Feed Milling 高進給銑削	CXBN · BNMX-MG · CX33TX 	CXWN · WNMX-MG · CX33TX 
Face Milling 面銑削	CXSN · SNMX-MG · CX33TX 	CASX · SEMT-MG · CX33TX 
Copy Milling 仿形銑削	CF21 · WP32-MM · CX23TX 	CF21 · WP32-MM · CX22HX 

**M Stainless Steel** 不鏽鋼


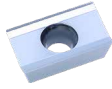
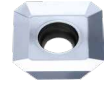

Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CR49 · W490-SG · CX43TX 	CAPK · APKT-SG · CX43TX 
High Feed Milling 高進給銑削	CXBN · BNMX-SG · CX33UX 	CXLO · LOGX-SG · CX33UX 
Face Milling 面銑削	CXHN · HNMX-SG · CX43TX 	CASX · SEMT-MG · CX43TX 
Copy Milling 仿形銑削	CF21 · WP32-SM · CX23TX 	CF21 · WP32-MM · CX22HX 

**Selection Guide** 選擇指南

**K Cast Iron** 鑄鐵









Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CAPK · APKT-RG · CX37TA 	CXXN · XNMX-RG · CX37TA 
High Feed Milling 高進給銑削	CXBN · BNMX-RG · CX37TA 	CXWN · WNMX-RG · CX37TA 
Face Milling 面銑削	CXSN · SNMX-RG · CX37TA 	CASX · SEMT-RG · CX37TA 
Copy Milling 仿形銑削	CF21 · WP32-MM · CX23TX 	CF21 · WP32-MM · CX22HX 

**N Aluminum alloy & Brass** 鋁合金與銅









Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CBAP · APGT-AL · CX10 	CAPK · APET-AL · CX10 
High Feed Milling 高進給銑削	-	-
Face Milling 面銑削	CASX · SEET-AL · CX10 	CASE · SEET-AL · CX10 
Copy Milling 仿形銑削	-	-

Indexable Milling

**S High Temperature Alloy** 高溫合金

Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CAXO · XOMT-SG · CX43TX 	CR39 · W390-SG · CX43TX 
High Feed Milling 高進給銑削	CXBN · BNMX-SG · CX33UX 	CXLO · LOGX-SG · CX33UX 
Face Milling 面銑削	CXHN · HNMX-SG · CX43TX 	CAOF · OFMT-SG · CX43TX 
Copy Milling 仿形銑削	CF21 · WP32-SM · CX23TX 	CF21 · WP32-MM · CX23TX 

**H Hardened Steel** 高硬度鋼

Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CAPK · APKT-RG · CX33TX 	CART · WRT-RG · CX33TX 
High Feed Milling 高進給銑削	CXBN · BNMX-RG · CX33TX 	CASR · SDNW-RG · CX33TX 
Face Milling 面銑削	CASE · SEKW · CX33TX 	CXSN · SNMX-RG · CX33TX 
Copy Milling 仿形銑削	CF21 · WP32-MM · CX23TX 	CF21 · WP32-SM · CX23TX 

**CXAN Series**

- Use ANMX double-sided inserts with 4 cutting edges.
- Positive rake angle design for lower side cutting forces.
- Max. 15mm depth of cut, cutter diameter 25~100mm.
- 使用 ANMX 雙面銑刀片，4 個可用切削角
- 正前角設計可降低切削力
- 每次最大切深可達 15mm，刀桿直徑 25~100mm

→ Page A031

**CXXN Series**

- Use XNMX double-sided inserts with 6 cutting edges.
- Economic and high performance shoulder milling application.
- 17~125mm cutter diameter, max. 7mm depth of cut.
- 使用 XNMX 雙面銑刀片，6 個可用切削角
- 經濟與高性能方肩銑應用的最佳解決方案
- 17~125mm 刀桿直徑，最大切削深度可達 7mm

→ Page A033

**CAPK Series**

- Use APKT inserts with 2 cutting edges.
- Optimized chip breaker for various applications and materials.
- 16~125mm cutter diameter, max. 11mm depth of cut.
- 使用 APKT 銑刀片，2 個可用切削角
- 優化的刀口設計適用於各種加工應用和材料
- 16~125mm 刀桿直徑，最大切削深度可達 11mm

→ Page A036

**CART Series**

- Use WRT inserts with 2 cutting edges.
- Strong chip breaker provides well ramping and slotting capabilities.
- 10~26mm cutter diameter, max. 7mm depth of cut.
- 使用 WRT 銑刀片，2 個可用切削角
- 強化的刀口設計提供了極佳的斜坡銑削及開槽能力
- 10~26mm 刀桿直徑，最大切削深度可達 7mm

→ Page A039



### CASP Series



- Use SPMG inserts with 4 cutting edges.
- Cost effective shoulder milling tools.
- 12~80mm cutter diameter, max. 6mm depth of cut.
- 使用 SPMG 單面銑刀片，4 個可用切削角
- 經濟實惠的方肩銑刀
- 12~80mm 刀桿直徑，最大切削深度可達 6mm

→ Page A041

### CATP Series



- Use TPMX inserts with 3 cutting edges.
- Sharp cutting edges for various low milling force applications.
- 20~80mm cutter diameter, max. 11mm depth of cut.
- 使用 TPMX 銑刀片，3 個可用切削角
- 出色的銳利刀口設計適用於各種低銑削阻力的應用
- 20~80mm 刀桿直徑，最大切削深度可達 11mm

→ Page A045

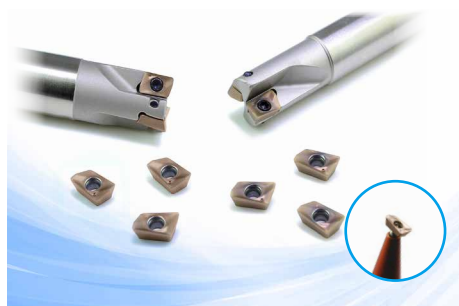
### CAXD Series



- Use XDMT inserts with 2 cutting edges.
- Cutter dia. : 16~32mm, max. depth of cut : 10mm.
- Cutting edge design provides stable machining and reduces vibration during machining.
- 使用 XDMT 銑刀片，2 個可用切削刀口
- 刀桿尺寸：16~32mm，最大切削深度：10mm
- 刀口設計提供切削穩定性，減少加工時的震動

→ Page A048

### CAXO Series



- Use XOMT inserts with 2 cutting edges.
- Optimized chip breaker reduces heat generation and cutting forces.
- 6~32mm cutter diameter, max. 7mm depth of cut.
- 使用 XOMT 銑刀片，2 個可用切削角
- 泛優化的刀口設計降低熱能產生及切削力，能維持長時間高效率加工
- 6~32mm 刀桿直徑，最大切削深度可達 7mm

→ Page A050

## CBAP Series



- Use APMT inserts with 2 cutting edges.
- Low cost and various geometric designs for versatile applications.
- 16~80mm cutter diameter, max. 11mm depth of cut.
- 使用 APMT 銑刀片，2 個可用切削角
- 低成本和多樣化的幾何設計適用於多種加工應用
- 16~80mm 刀桿直徑，最大切削深度可達 11mm

→ Page A053

## CR39 Series



- Use W390 inserts with 2 cutting edges.
- Optimized chip breaker for high efficient shoulder and side milling.
- 16~125mm cutter diameter, max. 11mm depth of cut.
- 使用 W390 銑刀片，2 個可用切削角
- 優化的刀口設計適用於各種加工材料的高移除率的方肩銑和側銑
- 16~125mm 刀桿直徑，最大切削深度可達 11mm

→ Page A057

## CR49 Series



- Use W490 inserts with 4 cutting edges.
- Great repeat side milling capability to reduce burs and get good surface finishing.
- 20~80mm cutter diameter, max. 9mm depth of cut.
- 使用 W490 單面銑刀片，4 個可用切削角
- 出色的重複側銑能力可減少毛刺產生並獲得良好的表面光潔度
- 20~80mm 刀盤直徑，最大切削深度可達 9mm

→ Page A061

## CWEX Series



- Use AXMT inserts with 2 cutting edges.
- Strong cutting edges for high removal rate shoulder milling.
- 16~100mm cutter diameter, max. 11mm depth of cut.
- 使用 AXMT 銑刀片，2 個可用切削角
- 堅固的切削刃提供高移除率的方肩銑刀
- 16~100mm 刀桿直徑，最大切削深度可達 11mm

→ Page A063

CWMM Series



- Use APMT inserts with 2 cutting edges.
- Cutter with over-center design for drilling and milling.
- 10~80mm cutter diameter, max. 11mm depth of cut.
- 使用 APMT 銑刀片，2 個可用切削角
- 刀桿過中心設計，適用於鑽孔、方肩、開槽、斜坡、挖槽、及螺旋銑削
- 10~80mm 刀桿直徑，最大端銑切削深度可達 11mm

→ Page A065

**Shoulder Milling - CXAN** 方肩銑刀

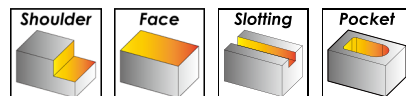
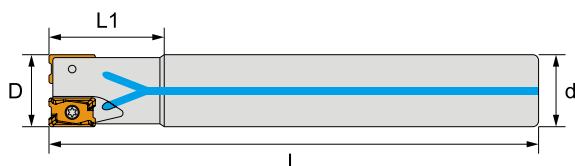
**CXAN Series**



- Use ANMX double-sided inserts with 4 cutting edges.
- Positive rake angle design for lower side cutting forces.
- Max. 15mm depth of cut, cutter diameter 40~100mm.
- 使用 ANMX 雙面銑刀片，4 個可用切削角
- 正前角設計可降低切削力
- 每次最大切深可達 15mm，刀桿直徑 25~100mm

Indexable Milling

**CXANE - Milling Tools 方肩銑刀**

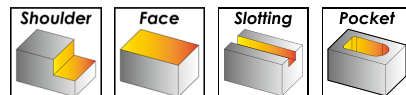
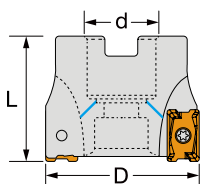


Insert Brand : Winstar, Widia, ...

Order No.	D	L1	L	d	T	Coolant	Inserts	Screw	Wrench	Stock
ICXANE502025170	25	40	170	25	2		ANMX15T6	ITS4004	ITK15	●
ICXANE502025171	25	40	170	25	2	✓				●

● stock ○ by inquiry

**CXANF - Milling Tools 方肩銑刀**



Insert Brand : Winstar, Widia, ...

Order No.	D	L	d	T	Coolant	Inserts	Screw	Wrench	Stock
ICXANF504040161	40	40	16	4	✓	ANMX15T6	ITS4006	ITK15	●
ICXANF505050221	50	40	22	5	✓				●
ICXANF506063221	63	40	22	6	✓				●
ICXANF507080271	80	50	27	7	✓				●
ICXANF508100321	100	50	32	8	✓				●

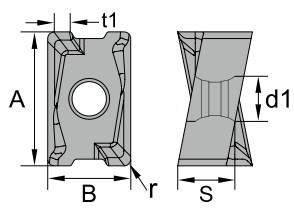
● stock ○ by inquiry

## Recommended Cutting Conditions 建議切削數據



Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	110 ~ 260	0.09 ~ 0.27	0.3 ~ 15
Stainless Steel	100 ~ 180	0.08 ~ 0.18	0.3 ~ 15
Cast Iron	110 ~ 260	0.09 ~ 0.27	0.3 ~ 15
High Temperature Alloy	40 ~ 70	0.07 ~ 0.14	0.3 ~ 15

## Insert Specifications 刀片規格

Insert	Dimensions (mm)					
	A	B	S	r	d1	t1
ANMX15T608	16.1	10	6.88	0.8	4.65	1.9
ANMX15T616	16.1	10	6.88	1.6	4.65	1.9



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IANMX15T608MG32HS	ANMX15T608-MG-CX32HS	●	○	●			
	IANMX15T608MG33TX	ANMX15T608-MG-CX33TX	●	○	●		○	●
	IANMX15T608MG33UX	ANMX15T608-MG-CX33UX	●	●	●		●	○
	IANMX15T608MG43TX	ANMX15T608-MG-CX43TX	●	●			●	
	IANMX15T608MG37TA	ANMX15T608-MG-CX37TA	●		●			○
	IANMX15T608MG47TA	ANMX15T608-MG-CX47TA	●	○	●		○	
	IANMX15T616MG33TX	ANMX15T616-MG-CX33TX	●	●	●		●	○
	IANMX15T616MG43TX	ANMX15T616-MG-CX43TX	●	●			●	

**Shoulder Milling - CXXN** 方肩銑刀

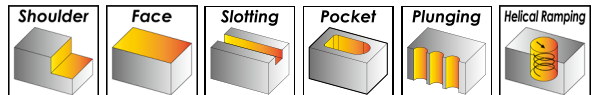
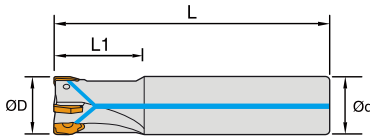
Indexable Milling

**CXXN Series**



- Use XNMX double-sided inserts with 6 cutting edges.
- Economic and high performance shoulder milling application.
- 17~125mm cutter diameter, max. 7mm depth of cut.
- 使用 XNMX 雙面銑刀片，6 個可用切削角
- 經濟與高性能方肩銑應用的最佳解決方案
- 17~125mm 刀桿直徑，最大切削深度可達 7mm

**CXXNE - Milling Tools** 方肩銑刀



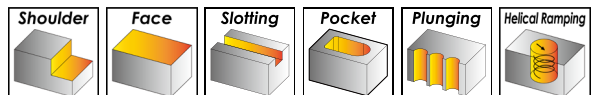
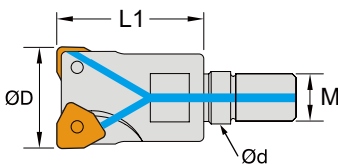
Insert Brand : Winstar, Seco, ...

Order No.	D	L1	L	d	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICXXNE403020111	20	28	110	20	3	✓	XNMX0403	ITS2512	ITK08	●
ICXXNE403020150	20	40	150	20	3					●
ICXXNE403020200	20	100	200	20	3					●
ICXXNE404025121	25	28	120	25	4	✓				●
ICXXNE404025150	25	40	150	25	4					●
ICXXNE405032131	32	30	130	32	5	✓				●
ICXXNE405032200	32	45	200	32	5					●

● stock ○ by inquiry

Customize available.

**CXXNM - Modular Milling Heads** 方肩銑刀頭



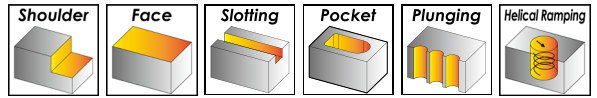
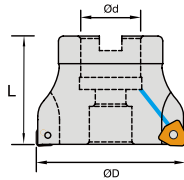
Insert Brand : Winstar, Seco, ...

Order No.	D	L1	d	M	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICXXNM402017081	17	26	8.5	M08	2	✓	XNMX0403	ITS2512	ITK08	●
ICXXNM403021101	21	32	10.5	M10	3	✓				●
ICXXNM404026121	26	38	12.5	M12	4	✓				●
ICXXNM405032161	32	41	17	M16	5	✓				○

● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System

CXXNF - Milling Tools 方肩銑刀



Insert Brand : Winstar, Seco, ...

Order No.	D	L	d	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICXXNF406050220	50	50	22	6		XNMX0403	ITS2512	ITK08	●
ICXXNF407063220	63	50	22	7					●
ICXXNF407063250	63	50	25.4	7					●
ICXXNF407040161	40	40	16	7	✓				●
ICXXNF409050221	50	40	22	9	✓				●
ICXXNF805050221	50	40	22	5	✓	XNMX0806	ITS4006	ITK15	●
ICXXNF806063221	63	40	22	6	✓				●
ICXXNF807080271	80	50	27	7	✓				●
ICXXNF811100321	100	50	32	11	✓				○
ICXXNF811125401	125	63	40	11	✓				○

● stock ○ by inquiry

Customize available.

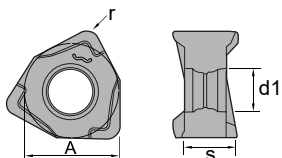
Recommended Cutting Conditions 建議切削數據

Working Material	XNMX0403			XNMX0806		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.16	0.3 ~ 3.0	120 ~ 250	0.1 ~ 0.3	0.3 ~ 7.0
Stainless Steel	100 ~ 180	0.08 ~ 0.12	0.3 ~ 1.6	100 ~ 180	0.08 ~ 0.25	0.3 ~ 4.5
Cast Iron	120 ~ 250	0.10 ~ 0.16	0.3 ~ 3.0	120 ~ 250	0.1 ~ 0.3	0.3 ~ 7.0
High Temperature Alloy	40 ~ 100	0.08 ~ 0.12	0.3 ~ 1.5	40 ~ 100	0.08 ~ 0.18	0.3 ~ 4.0
Hardened Steel	50 ~ 100	0.09 ~ 0.13	0.3 ~ 1.5	50 ~ 100	0.09 ~ 0.19	0.3 ~ 4.0








## Insert Specifications 刀片規格

Insert	Dimensions (mm)			
	A	S	r	d1
XNMX040304	6.7	3.285	0.4	3.15
XNMX040308	6.7	3.285	0.8	3.15
XNMX080608	12.53	6.5	0.8	4.5



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IXNMX040304SG23TX	XNMX040304-SG-CX23TX	○	○	○		○	●
	IXNMX040304SG32HS	XNMX040304-SG-CX32HS	●	○	●			
	IXNMX040304SG33TX	XNMX040304-SG-CX33TX	●	○	●		○	●
	IXNMX040304SG33UX	XNMX040304-SG-CX33UX	●	●	●		●	○
	IXNMX040304MG23TX	XNMX040304-MG-CX23TX	○	○	○		○	●
	IXNMX040304MG32HS	XNMX040304-MG-CX32HS	●	○	●			
	IXNMX040304MG33TX	XNMX040304-MG-CX33TX	●	○	●		○	●
	IXNMX040304MG33UX	XNMX040304-MG-CX33UX	●	●	●		●	○
	IXNMX040308MG23TX	XNMX040308-MG-CX23TX	○	○	○		○	●
	IXNMX040308MG32HS	XNMX040308-MG-CX32HS	●	○	●			
	IXNMX040308MG33TX	XNMX040308-MG-CX33TX	●	○	●		○	●
	IXNMX040308MG33UX	XNMX040308-MG-CX33UX	●	●	●		●	○
	IXNMX040308MG43TX	XNMX040308-MG-CX43TX	●	●			●	
	IXNMX080608MG23TX	XNMX080608-MG-CX23TX	○	○	○		○	●
	IXNMX080608MG32HS	XNMX080608-MG-CX32HS	●	○	●			
	IXNMX080608MG33TX	XNMX080608-MG-CX33TX	●	○	●		○	●
	IXNMX080608MG33UX	XNMX080608-MG-CX33UX	●	●	●		●	○
	IXNMX080608MG43TX	XNMX080608-MG-CX43TX	●	●			●	
	IXNMX080608MG37TA	XNMX080608-MG-CX37TA	●		●			○
	IXNMX080608MG47TA	XNMX080608-MG-CX47TA	●	○	●		○	
	IXNMX080608RG32HS	XNMX080608-RG-CX32HS	●	○	●			
	IXNMX080608RG33TX	XNMX080608-RG-CX33TX	●	○	●		○	●
	IXNMX080608RG43TX	XNMX080608-RG-CX43TX	●	●			●	
	IXNMX080608RG37TA	XNMX080608-RG-CX37TA	●		●			○
	IXNMX080608RG47TA	XNMX080608-RG-CX47TA	●	○	●		○	



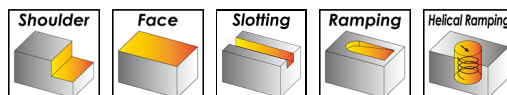
**Shoulder Milling - CAPK** 方肩銑刀

**CAPK Series**



- Use APKT inserts with 2 cutting edges.
- Optimized chip breaker for various applications and materials.
- 16~125mm cutter diameter, max. 11mm depth of cut.
- 使用 APKT 銑刀片，2 個可用切削角
- 優化的刀口設計適用於各種加工應用和材料
- 16~125mm 刀桿直徑，最大切削深度可達 11mm

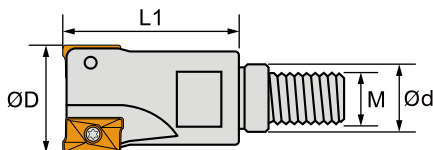
**CAPKE - Milling Tools 方肩銑刀**



Insert Brand : Winstar, Iscar, Ceratizit, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICAPKE302016120	16	25	120	16	2	APKT1003	ITS2515	ITK08	●
ICAPKE302020120	20	30	120	20	2				●
ICAPKE302020150	20	30	150	20	2				●
ICAPKE304025150	25	35	150	25	4				●
ICAPKE305032150	32	35	150	32	5				○
ICAPKE402025150	25	40	150	25	2	APET1604 APKT1604	ITS4004	ITK15	●
ICAPKE402032150	32	45	150	32	2				○

**CAPKM - Modular Milling Heads 方肩銑刀頭**



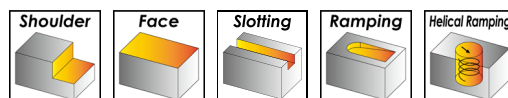
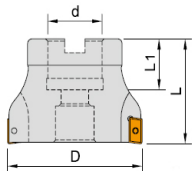
Insert Brand : Winstar, Iscar, Ceratizit, ...

Order No.	D	L1	d	M	T	Inserts	Screw	Wrench	Stock
ICAPKM302016080	16	26	8.5	M8	2	APKT1003	ITS2515	ITK08	●
ICAPKM303020100	20	32	10.5	M10	3				○
ICAPKM304025120	25	38	12.5	M12	4				●
ICAPKM305032160	32	41	17	M16	5				○
ICAPKM402025120	25	38	12.5	M12	2	APET1604 APKT1604	ITS4004	ITK15	○
ICAPKM403032160	32	41	17	M16	3				○

● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System

## CAPKF - Milling Tools 方肩銑刀



Insert Brand : Winstar, Iscar, Ceratizit, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICAPKF306050220	50	20	40	22	6	APKT1003	ITS2515	ITK08	●
ICAPKF306063220	63	21	45	22	6				●
ICAPKF307080270	80	23	50	27	7				●
ICAPKF404050220	50	23	50	22	4	APET1604 APKT1604	ITS4004	ITK15	●
ICAPKF405063220	63	23	50	22	5				●
ICAPKF405063250	63	23	50	25.4	5				●
ICAPKF406080250	80	32	55	25.4	6				●
ICAPKF406080270	80	32	55	27	6				●
ICAPKF408100310	100	32	55	31.75	8				●
ICAPKF408100320	100	32	55	32	8				●
ICAPKF408125380	125	38	63	38.1	8				●

● stock ○ by inquiry

Customize available.

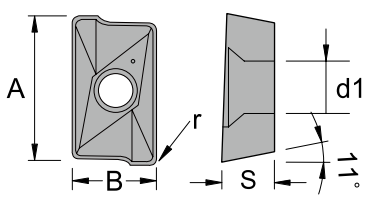
## Recommended Cutting Conditions 建議切削數據

Working Material	APKT1003			APKT1604 / APET1604		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.22	0.3 ~ 7.0	120 ~ 250	0.12 ~ 0.28	0.5 ~ 11.0
Stainless Steel	100 ~ 180	0.08 ~ 0.18	0.3 ~ 4.0	100 ~ 180	0.10 ~ 0.22	0.5 ~ 7.0
Cast Iron	120 ~ 250	0.10 ~ 0.22	0.3 ~ 6.0	120 ~ 250	0.12 ~ 0.28	0.5 ~ 10.0
Aluminum Alloy	-	-	-	300 ~ 1000	0.18 ~ 0.40	0.3 ~ 11.0
High Temperature Alloy	40 ~ 100	0.07 ~ 0.14	0.3 ~ 4.0	40 ~ 100	0.10 ~ 0.18	0.5 ~ 7.0
Hardened Steel	50 ~ 100	0.07 ~ 0.15	0.3 ~ 4.0	50 ~ 100	0.10 ~ 0.20	0.5 ~ 7.0

**Shoulder Milling - CAPK** 方肩銑刀

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
APKT100304	10.5	6.7	3.5	0.4	2.8
APKT100308	10.5	6.7	3.5	0.8	2.8
APET160402	16.3	9.525	4.76	0.2	4.5
APET160404	16.3	9.525	4.76	0.4	4.5
APKT160408	16.3	9.525	5.25	0.8	4.5



**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IAPKT100304EMG23TX	APKT100304PDER-MG-CX23TX	○	○	○		○	●
	IAPKT100304EMG32HS	APKT100304PDER-MG-CX32HS	●	○	●			
	IAPKT100304EMG33TX	APKT100304PDER-MG-CX33TX	●	○	●		○	●
	IAPKT100304EMG33UX	APKT100304PDER-MG-CX33UX	●	●	●		●	○
	IAPKT100304EMG43TX	APKT100304PDER-MG-CX43TX	●	●			●	
	IAPKT100308EMG23TX	APKT100308PDER-MG-CX23TX	○	○	○		○	●
	IAPKT100308EMG32HS	APKT100308PDER-MG-CX32HS	●	○	●			
	IAPKT100308EMG33TX	APKT100308PDER-MG-CX33TX	●	○	●		○	●
	IAPKT100308EMG33UX	APKT100308PDER-MG-CX33UX	●	●	●		●	○
	IAPKT100308EMG43TX	APKT100308PDER-MG-CX43TX	●	●			●	
	IAPKT100304ERG32HS	APKT100304PDER-RG-CX32HS	●	○	●			
	IAPKT100304ERG33TX	APKT100304PDER-RG-CX33TX	●	○	●		○	●
	IAPET160402FAL10	APET160402PDFR-AL-CX10				●		
	IAPET160404FAL10	APET160404PDFR-AL-CX10				●		
	IAPET160402FFG23TX	APET160402PDFR-FG-CX23TX	○	○	○		○	●
	IAPET160404FFG23TX	APET160404PDFR-FG-CX23TX	○	○	○		○	●
	IAPKT160408EMG23TX	APKT160408PDER-MG-CX23TX	○	○	○		○	●
	IAPKT160408EMG32HS	APKT160408PDER-MG-CX32HS	●	○	●			
	IAPKT160408EMG33TX	APKT160408PDER-MG-CX33TX	●	○	●		○	●
	IAPKT160408EMG33UX	APKT160408PDER-MG-CX33UX	●	●	●		●	○
	IAPKT160408EMG43TX	APKT160408PDER-MG-CX43TX	●	●			●	
	IAPKT160408ERG23TX	APKT160408PDER-RG-CX23TX	○	○	○		○	●
	IAPKT160408ERG32HS	APKT160408PDER-RG-CX32HS	●	○	●			
	IAPKT160408ERG33TX	APKT160408PDER-RG-CX33TX	●	○	●		○	●
	IAPKT160408ERG43TX	APKT160408PDER-RG-CX43TX	●	●			●	

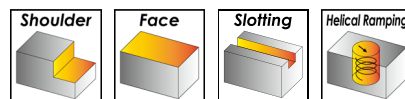
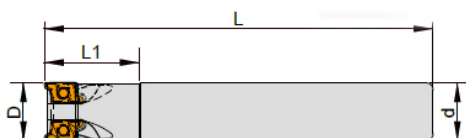
**Shoulder Milling - CART** 方肩銑刀

**CART Series**



- Use WRT inserts with 2 cutting edges.
- Strong chip breaker provides well ramping and slotting capabilities.
- 10~26mm cutter diameter, max. 7mm depth of cut.
- 使用 WRT 銑刀片, 2 個可用切削角
- 強化的刀口設計提供了極佳的斜坡銑削及開槽能力
- 10~26mm 刀桿直徑, 最大切削深度可達 7mm

**CARTE - Milling Tools** 方肩銑刀



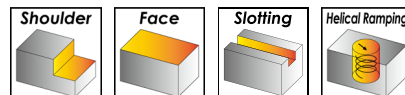
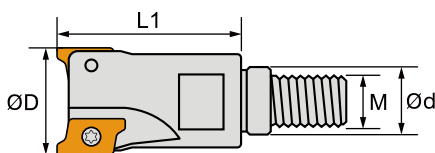
Insert Brand : Winstar, Safety, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICARTE702010100	10	18	100	10	2	WRT0702	ITS2003	ITK06	○
ICARTE702011100	11	18	100	10	2				●
ICARTE702013100	13	20	100	12	2				●
ICARTE703016150	16	30	150	16	3				○
ICARTE102017150	17	30	150	16	2	WRT1003	ITS2515	ITK08	●
ICARTE103021150	21	30	150	20	3				●
ICARTE104026150	26	40	150	25	4				●

● stock ○ by inquiry

Customize available.

**CARTM - Modular Milling Heads** 方肩銑刀頭



Insert Brand : Winstar, Safety, ...

Order No.	D	L1	M	d	T	Inserts	Screw	Wrench	Stock
ICARTM702010050	10	18	M5	5.5	2	WRT0702	ITS2003	ITK06	●
ICARTM702011050	11	18	M5	5.5	2				●
ICARTM702012060	12	20	M6	6.5	2				●
ICARTM702013060	13	20	M6	6.5	2				●
ICARTM103017080	17	30	M8	8.5	3	WRT1003	ITS2515	ITK08	●
ICARTM103021100	21	32	M10	10.5	3				●

● stock ○ by inquiry

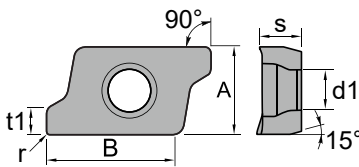
※ For screw-in type adapter, please refer to Tooling System

## Recommended Cutting Conditions 建議切削數據




Working Material	WRT0702			WRT1003		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.08 ~ 0.20	0.3 ~ 5.0	120 ~ 250	0.10 ~ 0.22	0.5 ~ 7.0
Stainless Steel	100 ~ 180	0.05 ~ 0.15	0.3 ~ 3.0	100 ~ 180	0.08 ~ 0.18	0.5 ~ 4.0
Cast Iron	120 ~ 250	0.08 ~ 0.20	0.3 ~ 4.0	120 ~ 250	0.10 ~ 0.22	0.5 ~ 6.0
High Temperature Alloy	40 ~ 100	0.05 ~ 0.12	0.3 ~ 3.0	40 ~ 100	0.07 ~ 0.14	0.5 ~ 4.0
Hardened Steel	50 ~ 100	0.05 ~ 0.13	0.3 ~ 3.0	50 ~ 100	0.07 ~ 0.15	0.5 ~ 4.0

## Insert Specifications 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
WRT070204	4.30	6.4	2.38	0.4	2.2
WRT100308	6.35	9.3	3.4	0.8	2.9



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IWRT070204RG23TX	WRT070204-RG-CX23TX	○	○	○		○	●
	IWRT070204RG32HS	WRT070204-RG-CX32HS	●	○	●			
	IWRT070204RG33TX	WRT070204-RG-CX33TX	●	○	●		○	●
	IWRT070204RG43TX	WRT070204-RG-CX43TX	●	●			●	
	IWRT100308MG23TX	WRT100308-MG-CX23TX	○	○	○		○	●
	IWRT100308MG32HS	WRT100308-MG-CX32HS	●	○	●			
	IWRT100308MG33TX	WRT100308-MG-CX33TX	●	○	●		○	●
	IWRT100308MG33UX	WRT100308-MG-CX33UX	●	●	●		●	○
	IWRT100308MG43TX	WRT100308-MG-CX43TX	●	●			●	
	IWRT100308RG23TX	WRT100308-RG-CX23TX	○	○	○		○	●
	IWRT100308RG32HS	WRT100308-RG-CX32HS	●	○	●			
	IWRT100308RG33TX	WRT100308-RG-CX33TX	●	○	●		○	●
	IWRT100308RG43TX	WRT100308-RG-CX43TX	●	●			●	

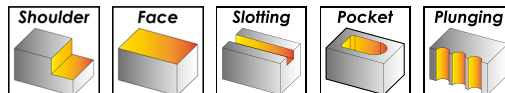
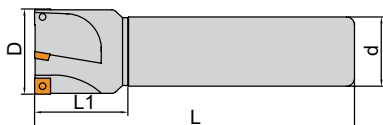
**Shoulder Milling - CASP** 方肩銑刀

**CASP Series**



- Use SPMG inserts with 4 cutting edges.
- Cost effective shoulder milling tools.
- 12~80mm cutter diameter, max. 6mm depth of cut.
- 使用 SPMG 單面銑刀片, 4 個可用切削角
- 經濟實惠的方肩銑刀
- 12~80mm 刀桿直徑, 最大切削深度可達 6mm

**CASPE - Milling Tools** 方肩銑刀



Insert Brand : Winstar, Taegutec, ...

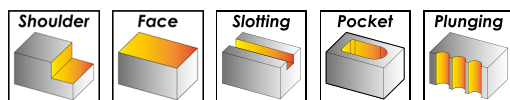
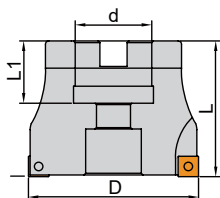
Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICASPE502012100	12	20	100	12	2	SPMG0502	ITS2003	ITK06	●
ICASPE502013100	13	20	100	12	2				●
ICASPE502014100	14	20	100	12	2				●
ICASPE602016120	16	25	120	16	2	SPMG0602	ITS2205	ITK06	●
ICASPE603020120	20	30	120	20	3				●
ICASPE604025120	25	30	120	25	4				●
ICASPE604030120	30	30	120	25	4				●
ICASPE605032120	32	30	120	25	5				●
ICASPE904032150	32	40	150	32	4	SPMG0904	ITS3504	ITK15	●
ICASPE904040150	40	40	150	32	4				●

● stock ○ by inquiry

Customize available.

**Shoulder Milling - CASP** 方肩銑刀

**CASPF - Milling Tools** 方肩銑刀



Insert Brand : Winstar, Taegutec, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICASPF607050220	50	20	45	22	7	SPMG0602	ITS2205	ITK06	●
ICASPF607050250	50	20	45	25.4	7				○
ICASPF609063220	63	20	45	22	9				●
ICASPF609063250	63	20	45	25.4	9				●
ICASPF611080270	80	23	50	27	11				○
ICASPF611080250	80	23	50	25.4	11				●
ICASPF905050220	50	20	45	22	5	SPMG0904	ITS3504	ITK15	●
ICASPF905050250	50	20	45	25.4	5				○
ICASPF906063220	63	20	45	22	6				●
ICASPF906063250	63	20	45	25.4	6				○
ICASPF907080270	80	23	50	27	7				●
ICASPF907080250	80	23	50	25.4	7				○

● stock ○ by inquiry

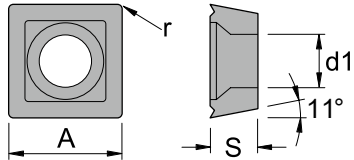
Customize available.

**Recommended Cutting Conditions** 建議切削數據






Working Material	SPMG050204 & SPMG060204			SPMT07T308 & SPMG090408		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.22	0.3 ~ 3.0	120 ~ 250	0.10 ~ 0.22	0.5 ~ 6.0
Stainless Steel	100 ~ 180	0.08 ~ 0.18	0.3 ~ 2.0	100 ~ 180	0.08 ~ 0.18	0.5 ~ 4.0
Cast Iron	120 ~ 250	0.10 ~ 0.22	0.3 ~ 3.0	120 ~ 250	0.10 ~ 0.22	0.5 ~ 6.0
High Temperature Alloy	40 ~ 100	0.07 ~ 0.14	0.3 ~ 2.0	40 ~ 100	0.07 ~ 0.14	0.5 ~ 4.0
Hardened Steel	50 ~ 100	0.07 ~ 0.15	0.3 ~ 2.0	50 ~ 100	0.07 ~ 0.15	0.5 ~ 4.0

## Insert Specifications 刀片規格

Insert	Dimensions (mm)			
	A	S	r	d1
SPGG050204	5.00	2.38	0.4	2.30
SPGG060204	6.00	2.38	0.4	2.65
SPGG07T308	7.94	3.97	0.8	2.85
SPGG090408	9.80	4.3	0.8	4.05
SPGG110408	11.50	4.8	0.8	4.45
SPMG050204	5.00	2.38	0.4	2.30
SPMG060204	6.00	2.38	0.4	2.65
SPMG07T308	7.94	3.97	0.8	2.85
SPMG090408	9.80	4.3	0.8	4.05
SPMG110408	11.50	4.8	0.8	4.45








## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ISPGG050204SG33TX	SPGG050204-SG-CX33TX	○	●	○	●	○	
	ISPGG060204SG33TX	SPGG060204-SG-CX33TX	○	●	○	●	○	
	ISPGG07T304SG33TX	SPGG070304-SG-CX33TX	○	●	○	●	○	
	ISPGG090408SG33TX	SPGG090408-SG-CX33TX	○	●	○	●	○	
	ISPGG110408SG33TX	SPGG110408-SG-CX33TX	○	●	○	●	○	



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ISPMG050204MG32HS	SPMG050204-MG-CX32HS	●	○	●			
	ISPMG050204MG33TX	SPMG050204-MG-CX33TX	●	○	●		○	●
	ISPMG050204MG33UX	SPMG050204-MG-CX33UX	●	●	●		●	○
	ISPMG050204MG43TX	SPMG050204-MG-CX43TX	●	●	○		●	
	ISPMG060204MG32HS	SPMG060204-MG-CX32HS	●	○	●			
	ISPMG060204MG33TX	SPMG060204-MG-CX33TX	●	○	●		○	●
	ISPMG060204MG33UX	SPMG060204-MG-CX33UX	●	●	●		●	○
	ISPMG060204MG43TX	SPMG060204-MG-CX43TX	●	●	○		●	
	ISPMG07T308MG32HS	SPMG07T308-MG-CX32HS	●	○	●			
	ISPMG07T308MG33TX	SPMG07T308-MG-CX33TX	●	○	●		○	●
	ISPMG07T308MG33UX	SPMG07T308-MG-CX33UX	●	●	●		●	○
	ISPMG07T308MG43TX	SPMG07T308-MG-CX43TX	●	●	○		●	
	ISPMG090408MG32HS	SPMG090408-MG-CX32HS	●	○	●			
	ISPMG090408MG33TX	SPMG090408-MG-CX33TX	●	○	●		○	●
	ISPMG090408MG33UX	SPMG090408-MG-CX33UX	●	●	●		●	○
	ISPMG090408MG43TX	SPMG090408-MG-CX43TX	●	●	○		●	
	ISPMG110408MG32HS	SPMG110408-MG-CX32HS	●	○	●			
	ISPMG110408MG33TX	SPMG110408-MG-CX33TX	●	○	●		○	●
	ISPMG110408MG33UX	SPMG110408-MG-CX33UX	●	●	●		●	○
	ISPMG110408MG43TX	SPMG110408-MG-CX43TX	●	●	○		●	

Shoulder Milling - CATP

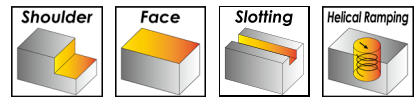
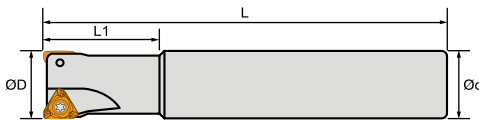
方肩銑刀

CATP Series



- Use TPMX inserts with 3 cutting edges.
- Sharp cutting edges for various low milling force applications.
- 20~80mm cutter diameter, max. 11mm depth of cut.
- 使用 TPMX 銑刀片，3 個可用切削角
- 出色的銳利刀口設計適用於各種低銑削阻力的應用
- 20~80mm 刀桿直徑，最大切削深度可達 11mm

CATPE - Milling Tools 方肩銑刀



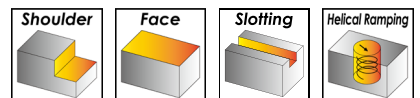
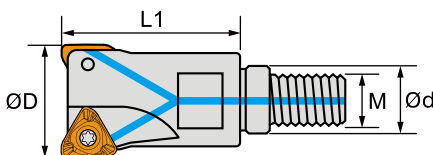
Insert Brand : Winstar, Taegutec, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICATPE102020130	20	50	130	20	2	TPMX1004	ITS2517	ITK08	●
ICATPE103025150	25	55	150	25	3				●
ICATPE503033200	33	45	200	32	3	TPMX1505	ITS4014	ITK15	●
ICATPE504040200	40	45	200	32	4				○

● stock ○ by inquiry

Customize available.

CATPM - Modular Milling Heads 方肩銑刀頭



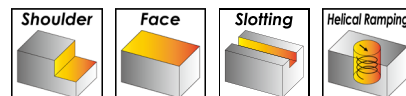
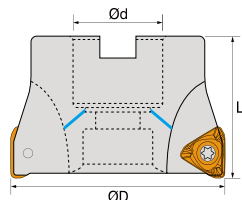
Insert Brand : Winstar, Taegutec, ...

Order No.	D	L1	d	M	T	Coolant	Inserts	Screw	Wrench	Stock
ICATPM102020100	20	35	10.5	M10	2		TPMX1004	ITS2517	ITK08	○
ICATPM102020101	20	35	18	M10	2	✓				●
ICATPM102021100	21	35	10.5	M10	2					●
ICATPM103025120	25	35	12.5	M12	3					○
ICATPM103025121	25	35	21	M12	3	✓				●
ICATPM103026120	26	35	12.5	M12	3					●
ICATPM105032160	32	43	29	M16	5					●
ICATPM105032161	32	43	17	M16	5	✓				●
ICATPM105033160	33	43	17	M16	5					●
ICATPM105033161	33	43	17	M16	5	✓				●

● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System

## CATPF - Milling Tools 方肩銑刀



Insert Brand : Winstar, Taegutec, ...

Order No.	D	L	d	T	Coolant	Inserts	Screw	Wrench	Stock
ICATPF106050221	50	50	22	6	✓	TPMX1004	ITS2517	ITK08	●
ICATPF107050220	50	50	22	7					●
ICATPF107063221	63	50	22	7	✓				●
ICATPF109063220	63	50	22	9					●
ICATPF504040161	40	40	16	4	✓	TPMX1505	ITS4004	ITK15	●
ICATPF505050221	50	40	22	5	✓				●
ICATPF506063221	63	40	22	6	✓				●
ICATPF508080271	80	50	27	8	✓				●

● stock ○ by inquiry

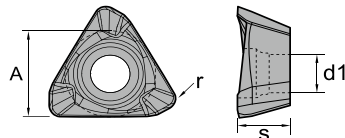
Customize available.

## Recommended Cutting Conditions 建議切削數據





Working Material	TPMX1004			TPMX1505		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.08 ~ 0.20	0.3 ~ 7.0	120 ~ 250	0.12 ~ 0.28	0.5 ~ 11.0
Stainless Steel	100 ~ 180	0.05 ~ 0.15	0.3 ~ 4.0	100 ~ 180	0.10 ~ 0.22	0.5 ~ 7.0
Cast Iron	120 ~ 250	0.08 ~ 0.20	0.3 ~ 6.0	120 ~ 250	0.12 ~ 0.28	0.5 ~ 10.0
High Temperature Alloy	40 ~ 100	0.05 ~ 0.12	0.3 ~ 4.0	40 ~ 100	0.10 ~ 0.18	0.5 ~ 7.0
Hardened Steel	50 ~ 100	0.05 ~ 0.13	0.3 ~ 4.0	50 ~ 100	0.10 ~ 0.20	0.5 ~ 7.0

## Insert Specifications 刀片規格

Insert	Dimensions (mm)			
	A	S	r	d1
TPMX100404	6.9	4	0.4	3
TPMX100408	6.9	4	0.8	3
TPMX150508	10.7	5	0.8	4.85



## Insert Designation 刀片型號

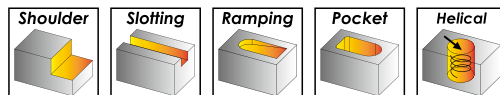
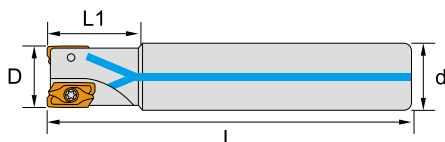
Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ITPMX100404SG32HS	TPMX100404-SG-CX32HS	●	○	●			
	ITPMX100404SG33TX	TPMX100404-SG-CX33TX	●	○	●		○	●
	ITPMX100404SG33UX	TPMX100404-SG-CX33UX	●	●	●		●	○
	ITPMX100408SG32HS	TPMX100408-SG-CX32HS	●	○	●			
	ITPMX100408SG33TX	TPMX100408-SG-CX33TX	●	○	●		○	●
	ITPMX100408SG33UX	TPMX100408-SG-CX33UX	●	●	●		●	○
	ITPMX100408MG23TX	TPMX100408-MG-CX23TX	○	○	○		○	●
	ITPMX100408MG32HS	TPMX100408-MG-CX32HS	●	○	●			
	ITPMX100408MG33TX	TPMX100408-MG-CX33TX	●	○	●		○	●
	ITPMX100408MG33UX	TPMX100408-MG-CX33UX	●	●	●		●	○
	ITPMX100408MG43TX	TPMX100408-MG-CX43TX	●	●			●	
	ITPMX150508MG23TX	TPMX150508-MG-CX23TX	○	○	○		○	●
	ITPMX150508MG32HS	TPMX150508-MG-CX32HS	●	○	●			
	ITPMX150508MG33TX	TPMX150508-MG-CX33TX	●	○	●		○	●
	ITPMX150508MG33UX	TPMX150508-MG-CX33UX	●	●	●		●	○
	ITPMX150508MG43TX	TPMX150508-MG-CX43TX	●	●			●	

**CAXD Series**



- Use XDMT inserts with 2 cutting edges.
- Cutter dia. : 16~32mm, max. depth of cut : 10mm.
- Cutting edge design provides stable machining and reduces vibration during machining.
- 使用 XDMT 銑刀片 , 2 個可用切削刀口
- 刀桿尺寸 : 16~32mm, 最大切削深度 : 10mm
- 刃口設計提供切削穩定性 , 減少加工時的震動

**CAXDE - Milling tools 方肩銑刀**



Insert Brand : Winstar, Ceratizit, ...

Order No.	D	L1	L	d	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICAXDE102016120	16	30	120	16	2		XDMT11T3	ITS2515	ITK08	○
ICAXDE103020120	20	30	120	20	3					●
ICAXDE103020151	20	35	150	20	3	✓				●
ICAXDE104025150	25	45	150	25	4					●
ICAXDE104025151	25	45	150	25	4	✓				●
ICAXDE105032150	32	45	150	32	5					●
ICAXDE105032151	32	45	150	32	5	✓				●

● stock ○ by inquiry

**Recommended Cutting Conditions 建議切削數據**

Working Material	XDMT11T3		
	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.22	0.3 ~ 10.0
Stainless Steel	100 ~ 180	0.08 ~ 0.18	0.3 ~ 8.0
Cast Iron	120 ~ 250	0.10 ~ 0.22	0.3 ~ 10.0
High Temperature Alloy	40 ~ 100	0.07 ~ 0.14	0.3 ~ 4.0
Hardened Steel	50 ~ 100	0.07 ~ 0.15	0.3 ~ 4.0

**Shoulder Milling - CAXD** 方肩銑刀

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)					
	A	B	S	r	d1	t1
XDMT11T308	10.6	6.8	3.8	0.8	2.8	1.4

Indexable Milling

**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IXDMT11T308MG33TX	XDMT11T308-MG-CX33TX	●	○	●		○	●
	IXDMT11T308MG33UX	XDMT11T308-MG-CX33UX	●	●	●		●	○
	IXDMT11T308MG43TX	XDMT11T308-MG-CX43TX	●	●			●	

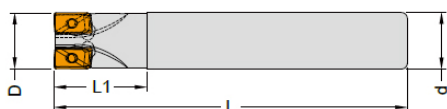
**Shoulder Milling - CAXO** 方肩銑刀

**CAXO Series**



- Use XOMT inserts with 2 cutting edges.
- Optimized chip breaker reduces heat generation and cutting forces.
- 6~32mm cutter diameter, max. 7mm depth of cut.
- 使用 XOMT 銑刀片, 2 個可用切削角
- 泛優化的刀口設計降低熱能產生及切削力, 能維持長時間高效率加工
- 6~32mm 刀桿直徑, 最大切削深度可達 7mm

**CAXOE - Milling Tools** 方肩銑刀



Insert Brand : Winstar, Seco, ...

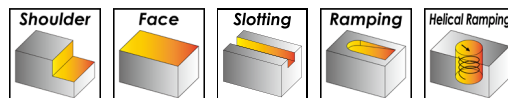
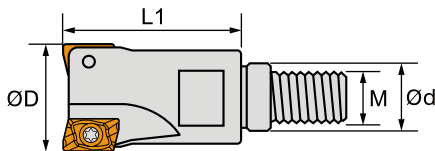
Order No.	D	L1	L	d	T	Coolant Hole	Inserts	Screw	Wrench	Stock		
ICAXOE601006080	6	10	80	6	1		XOMT0602	ITS1610	ITK06	●		
ICAXOE601008090	8	10	90	8	1							●
ICAXOE602010100	10	20	100	10	2							●
ICAXOE602012100	12	20	100	12	2					●		
ICAXOE603012100	12	20	100	12	3					●		
ICAXOE602013100	13	20	100	12	2			ITS1801	ITK06	●		
ICAXOE603013100	13	20	100	12	3							●
ICAXOE604016100	16	30	100	16	4							●
ICAXOE605020120	20	30	120	20	5					●		
ICAXOE102016150	16	22	150	16	2		XOMT10T3	ITS2515	ITK08	○		
ICAXOE102020150	20	28	150	20	2							○
ICAXOE104025150	25	35	150	25	4							○
ICAXOE105032150	32	40	150	32	5							○
ICAXOE203025151	25	36	150	25	3	✓	XOMT1204	ITS3501	ITK15	●		
ICAXOE204032150	32	40	150	32	4							●

● stock ○ by inquiry

Customize available.

**Shoulder Milling - CAXO** 方肩銑刀

**CAXOM - Modular Milling Heads** 方肩銑刀頭



Insert Brand : Winstar, Seco, ...

Order No.	D	L1	d	M	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICAXOM602010050	10	16	5.5	M5	2		XOMT0602	ITS1801	ITK06	○
ICAXOM603012060	12	18	6.5	M6	3					●
ICAXOM604016080	16	20	8.5	M8	4					●
ICAXOM605020100	20	30	10.5	M10	5					●
ICAXOM102016080	16	26	8.5	M8	2		XOMT10T3	TS2515	ITK08	●
ICAXOM102016081	16	26	8.5	M8	2	✓				●
ICAXOM103020100	20	30	10.5	M10	3					●
ICAXOM103020101	20	30	10.5	M10	3	✓				●

● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System

**Recommended Cutting Conditions** 建議切削數據

Working Material	XOMT0602			XOMT10T3		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.08 ~ 0.20	0.3 ~ 3.0	120 ~ 250	0.10 ~ 0.22	0.3 ~ 7.0
Stainless Steel	100 ~ 180	0.05 ~ 0.15	0.3 ~ 2.5	100 ~ 180	0.08 ~ 0.18	0.3 ~ 4.0
Cast Iron	120 ~ 250	0.08 ~ 0.13	0.3 ~ 3.0	120 ~ 250	0.10 ~ 0.22	0.3 ~ 7.0
High Temperature Alloy	40 ~ 100	0.05 ~ 0.12	0.3 ~ 2.5	40 ~ 100	0.07 ~ 0.14	0.3 ~ 5.0
Hardened Steel	50 ~ 100	0.05 ~ 0.13	0.3 ~ 2.5	50 ~ 100	0.07 ~ 0.15	0.3 ~ 5.0

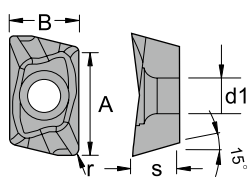
Indexable Milling



**Shoulder Milling - CAXO** 方肩銑刀

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
XOMT060204	5.5	4.1	2.45	0.4	2
XOMT060208	5.5	4.1	2.45	0.8	2
XOMT060216	5.5	4.1	2.45	1.6	2
XOMT10T308	9.3	6.9	3.83	0.8	3
XOMT120408	11.6	8.2	5.07	0.8	3.9
XOMT120412	11.6	8.2	5.07	1.2	3.9



A = Effective Cutting length

**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IXOMT060208SG32HS	XOMT060208-SG-CX32HS	●	○	●			
	IXOMT060208SG33TX	XOMT060208-SG-CX33TX	●	○	●		○	●
	IXOMT060208SG33UX	XOMT060208-SG-CX33UX	●	●	●		●	○
	IXOMT060204MG23TX	XOMT060204-MG-CX23TX	○	○	○		○	●
	IXOMT060204MG32HS	XOMT060204-MG-CX32HS	●	○	●			
	IXOMT060204MG33TX	XOMT060204-MG-CX33TX	●	○	●		○	●
	IXOMT060204MG33UX	XOMT060204-MG-CX33UX	●	●	●		●	○
	IXOMT060208MG23TX	XOMT060208-MG-CX23TX	○	○	○		○	●
	IXOMT060208MG32HS	XOMT060208-MG-CX32HS	●	○	●			
	IXOMT060208MG33TX	XOMT060208-MG-CX33TX	●	○	●		○	●
	IXOMT060208MG33UX	XOMT060208-MG-CX33UX	●	●	●		●	○
	IXOMT060208MG43TX	XOMT060208-MG-CX43TX	●	●			●	
	IXOMT060216MG23TX	XOMT060216-MG-CX23TX	○	○	○		○	●
	IXOMT060216MG32HS	XOMT060216-MG-CX32HS	●	○	●			
	IXOMT060216MG33TX	XOMT060216-MG-CX33TX	●	○	●		○	●
	IXOMT060216MG33UX	XOMT060216-MG-CX33UX	●	●	●		●	○
	IXOMT060216MG43TX	XOMT060216-MG-CX43TX	●	●			●	
	IXOMT10T308SG32HS	XOMT10T308-SG-CX32HS	●	○	●			
	IXOMT10T308SG33TX	XOMT10T308-SG-CX33TX	●	○	●		○	●
	IXOMT10T308SG33UX	XOMT10T308-SG-CX33UX	●	●	●		●	○
	IXOMT120408MG32HS	XOMT120408-MG-CX32HS	●	○	●			
	IXOMT120408MG33TX	XOMT120408-MG-CX33TX	●	○	●		○	●
	IXOMT120408MG43TX	XOMT120408-MG-CX43TX	●	●			●	
	IXOMT120408MG37TA	XOMT120408-MG-CX37TA	●		●			○
	IXOMT120408MG47TA	XOMT120408-MG-CX47TA	●	○	●		○	
	IXOMT120412SG33TX	XOMT120412-SG-CX33TX	●	○	●		○	●
	IXOMT120412SG33UX	XOMT120412-SG-CX33UX	●	●	●		●	○
	IXOMT120412SG43TX	XOMT120412-SG-CX43TX	●	●			●	

**Shoulder Milling - CBAP** 方肩銑刀

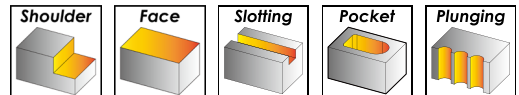
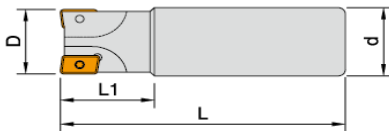
**CBAP Series**



- Use APMT inserts with 2 cutting edges.
- Low cost and various geometric designs for versatile applications.
- 16~80mm cutter diameter, max. 11mm depth of cut.
- 使用 APMT 銑刀片, 2 個可用切削角
- 低成本和多樣化的幾何設計適用於多種加工應用
- 16~80mm 刀桿直徑, 最大切削深度可達 11mm

Indexable Milling

**CBAPE - Milling Tools** 方肩銑刀



Insert Brand : Winstar, Mitsubishi, ...

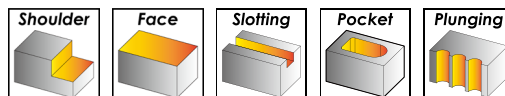
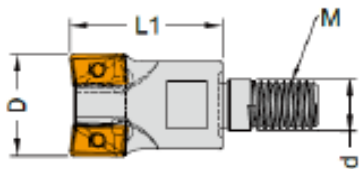
Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICBAPE302016100	16	25	100	16	2	APGT1135 APMT1135	ITS2515	ITK08	●
ICBAPE302016160	16	35	160	16	2				●
ICBAPE302020150	20	35	150	20	2				●
ICBAPE303020100	20	30	100	20	3				●
ICBAPE303020150	20	35	150	20	3				●
ICBAPE304025100	25	35	100	25	4				○
ICBAPE304030120	30	40	120	25	4				○
ICBAPE305032120	32	40	120	32	5				○
ICBAPE402025150	25	40	150	25	2				APGT1604 APMT1604
ICBAPE402025200	25	70	200	25	2	○			
ICBAPE403032150	32	45	150	32	3	●			
ICBAPE403032200	32	80	200	32	3	●			

● stock ○ by inquiry

Customize available.

**Shoulder Milling - CBAP** 方肩銑刀

**CBAPM - Modular Milling Heads** 方肩銑刀頭



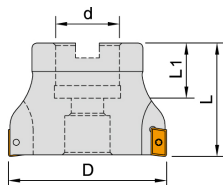
Insert Brand : Winstar, Mitsubishi, ...

Order No.	D	L1	d	M	T	Inserts	Screw	Wrench	Stock
ICBAPM302016080	16	26	8.5	M8	2	APGT1135 APMT1135	ITS2515	ITK08	●
ICBAPM302020100	20	30	10.5	M10	2				●
ICBAPM303020100	20	30	10.5	M10	3				○
ICBAPM304025120	25	35	12.5	M12	4				●
ICBAPM305032160	32	40	17	M16	5				●
ICBAPM305033160	33	40	17	M16	5				○
ICBAPM402025120	25	35	12.5	M12	2	APGT1604 APMT1604	ITS4023	ITK15	●
ICBAPM403032160	32	40	17	M16	3				●

● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System

**CBAPF - Milling Tools** 方肩銑刀



Insert Brand 建議刀片 : Winstar, Mitsubishi, ...

Order No.	D	L	L1	d	T	Inserts	Screw	Wrench	Stock
ICBAPF306050250	50	18	45	25.4	6	APGT1135 APMT1135	ITS2515	ITK08	●
ICBAPF307050250	50	18	45	25.4	7				●
ICBAPF307063220	63	22	45	22	7				●
ICBAPF307063254	63	22	45	25.4	7				●
ICBAPF308080250	80	26	50	25.4	8				●
ICBAPF308080270	80	26	50	27	8				●
ICBAPF405050220	50	22	45	22	5	APGT1604 APMT1604	ITS4023	ITK15	●
ICBAPF405050250	50	18	45	25.4	5				●
ICBAPF406063220	63	22	45	22	6				●
ICBAPF406063250	63	22	45	25.4	6				●
ICBAPF407080250	80	26	26	25.4	7				●
ICBAPF407080270	80	26	26	27	7				●

● stock ○ by inquiry

Customize available.

**Shoulder Milling - CBAP** 方肩銑刀

**Recommended Cutting Conditions** 建議切削數據

· For Shoulder Milling

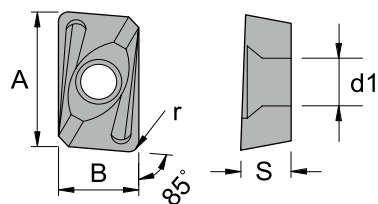
Working Material	APMT1135			APMT1604		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.22	0.5 ~ 7.0	120 ~ 250	0.12 ~ 0.28	0.5 ~ 11.0
Stainless Steel	100 ~ 180	0.08 ~ 0.18	0.5 ~ 4.0	100 ~ 180	0.10 ~ 0.22	0.5 ~ 7.0
Cast Iron	120 ~ 250	0.10 ~ 0.22	0.5 ~ 6.0	120 ~ 250	0.12 ~ 0.28	0.5 ~ 11.0
Aluminum Alloy	-	-	-	300 ~ 1000	0.10 ~ 0.40	0.5 ~ 11.0
High Temperature Alloy	40 ~ 100	0.07 ~ 0.14	0.5 ~ 4.0	40 ~ 100	0.10 ~ 0.22	0.5 ~ 7.0
Hardened Steel	50 ~ 100	0.07 ~ 0.15	0.5 ~ 4.0	50 ~ 100	0.10 ~ 0.22	0.5 ~ 7.0

· For High Feed Face Milling (use APMT113516 or APMT160416 insert)

Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.25 ~ 0.55	0.2 ~ 0.5
Stainless Steel	100 ~ 180	0.2 ~ 0.45	0.2 ~ 0.5
Cast Iron	120 ~ 250	0.25 ~ 0.55	0.2 ~ 0.5
High Temperature Alloy	40 ~ 100	0.175 ~ 0.35	0.2 ~ 0.5
Hardened Steel	50 ~ 100	0.175 ~ 0.375	0.2 ~ 0.5

**Insert Specifications** 刀片規格










Insert	Dimensions (mm)				
	A	B	S	r	d1
APGT113508	11.0	6.35	3.5	0.8	2.8
APMT113508	11.0	6.35	3.5	0.8	2.8
APMT113516	11.0	6.35	3.5	1.6	2.8
APGT160408	16.5	9.525	4.76	0.8	4.4
APMT160408	16.5	9.525	4.76	0.8	4.4
APMT160416	16.5	9.525	4.76	1.6	4.4



**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IAPGT113508EAL10	APGT113508PDER-AL-CX10				●		
	IAPGT113508EFG23TX	APGT113508PDER-FG-CX23TX	○	○	○		○	●
	IAPMT113508EMG23TX	APMT113508PDER-MG-CX23TX	○	○	○		○	●
	IAPMT113508EMG32HS	APMT113508PDER-MG-CX32HS	●	○	●			
	IAPMT113508EMG33TX	APMT113508PDER-MG-CX33TX	●	○	●		○	●
	IAPMT113508EMG33UX	APMT113508PDER-MG-CX33UX	●	●	●		●	○
	IAPMT113508EMG43TX	APMT113508PDER-MG-CX43TX	●	●			●	

## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IAPMT113516EMG23TX	APMT113516PDER-MG-CX23TX	○	○	○		○	●
	IAPMT113516EMG32HS	APMT113516PDER-MG-CX32HS	●	○	●			
	IAPMT113516EMG33TX	APMT113516PDER-MG-CX33TX	●	○	●		○	●
	IAPMT113516EMG33UX	APMT113516PDER-MG-CX33UX	●	●	●		●	○
	IAPMT113516EMG43TX	APMT113516PDER-MG-CX43TX	●	●			●	
	IAPMT113508ERG23TX	APMT113508PDER-RG-CX23TX	○	○	○		○	●
	IAPMT113508ERG32HS	APMT113508PDER-RG-CX32HS	●	○	●			
	IAPMT113508ERG33TX	APMT113508PDER-RG-CX33TX	●	○	●		○	●
	IAPMT113508EHG32HS	APMT113508PDER-HG-CX32HS	●	○	●			
	IAPMT113508EHG33TX	APMT113508PDER-HG-CX33TX	●	○	●		○	●
	IAPMT113508EHG43TX	APMT113508PDER-HG-CX43TX	●	●			●	
	IAPGT160408EAL10	APGT160408PDER-AL-CX10				●		
	IAPGT160408EFG23TX	APGT160408PDER-FG-CX23TX	○	○	○		○	●
	IAPMT160408EMG23TX	APMT160408PDER-MG-CX23TX	○	○	○		○	●
	IAPMT160408EMG32HS	APMT160408PDER-MG-CX32HS	●	○	●			
	IAPMT160408EMG33TX	APMT160408PDER-MG-CX33TX	●	○	●		○	●
	IAPMT160408EMG33UX	APMT160408PDER-MG-CX33UX	●	●	●		●	○
	IAPMT160408EMG43TX	APMT160408PDER-MG-CX43TX	●	●			●	
	IAPMT160408EMG47TA	APMT160408PDER-MG-CX47TA	●	○	●		○	
	IAPMT160416EMG32HS	APMT160416PDER-MG-CX32HS	●	○	●			
	IAPMT160416EMG33TX	APMT160416PDER-MG-CX33TX	●	○	●		○	●
	IAPMT160416EMG33UX	APMT160416PDER-MG-CX33UX	●	●	●		●	○
	IAPMT160416EMG43TX	APMT160416PDER-MG-CX43TX	●	●			●	
	IAPMT160408ERG23TX	APMT160408PDER-RG-CX23TX	○	○	○		○	●
	IAPMT160408ERG32HS	APMT160408PDER-RG-CX32HS	●	○	●			
	IAPMT160408ERG33TX	APMT160408PDER-RG-CX33TX	●	○	●		○	●
	IAPMT160408ERG43TX	APMT160408PDER-RG-CX43TX	●	●			●	
	IAPMT160408EHG23TX	APMT160408PDER-HG-CX23TX	○	○	○		○	●
	IAPMT160408EHG32HS	APMT160408PDER-HG-CX32HS	●	○	●			
	IAPMT160408EHG33TX	APMT160408PDER-HG-CX33TX	●	○	●		○	●
	IAPMT160408EHG43TX	APMT160408PDER-HG-CX43TX	●	●			●	

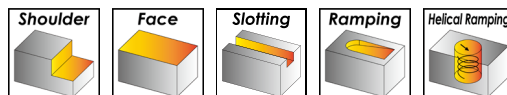
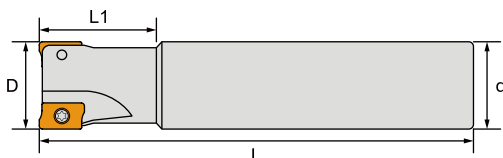
**Shoulder Milling - CR39** 方肩銑刀

**CR39 Series**



- Use W390 inserts with 2 cutting edges.
- Optimized chip breaker for high efficient shoulder and side milling.
- 16~125mm cutter diameter, max. 11mm depth of cut.
- 使用 W390 銑刀片, 2 個可用切削角
- 優化的刀口設計適用於各種加工材料的高移除率的方肩銑和側銑
- 16~125mm 刀桿直徑, 最大切削深度可達 11mm

**CR39E - Milling Tools 方肩銑刀**



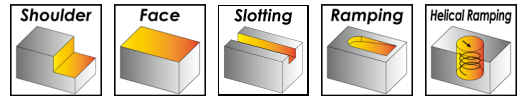
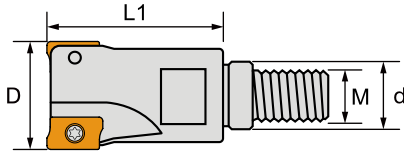
Insert Brand : Winstar, Sandvik, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock			
ICR39E302016150	16	30	150	16	2	W39011T3	ITS2509	ITK08	●			
ICR39E303020150	20	30	150	20	3				○			
ICR39E303025150	25	30	150	25	3				●			
ICR39E303032150	32	35	150	32	3				○			
ICR39E702025150	25	32	150	25	2	W3901704	IMS3507A	ITK15	●			
ICR39E702025200	25	32	200	25	2				●			
ICR39E702026150	26	32	150	25	2				●			
ICR39E702026200	26	32	200	25	2				●			
ICR39E703032150	32	35	150	32	3				●			
ICR39E703032200	32	35	200	32	3				●			
ICR39E703033150	33	35	150	32	3				●			
ICR39E703033200	33	35	200	32	3				●			
ICR39E802025150	25	35	150	25	2				W3901806	ITS4005	ITK15	○
ICR39E803032150	32	40	150	32	3							○

● stock ○ by inquiry

Customize available.

CR39M - Modular Milling Heads 方肩銑刀頭



Insert Brand : Winstar, Sandvik, ...

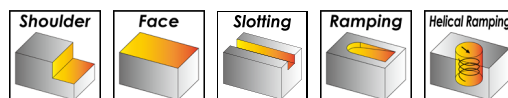
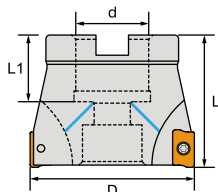
Order No.	D	L1	d	M	T	Inserts	Screw	Wrench	Stock
ICR39M302016080	16	26	8.5	M8	2	W39011T3	ITS2509	ITK08	○
ICR39M303020100	20	32	10.5	M10	3				○
ICR39M303025120	25	38	12.5	M12	3				○
ICR39M303032160	32	41	17	M16	3				○
ICR39M702025120	25	35	12.5	M12	2	W3901704	IMS3507A	ITK15	●
ICR39M702026120	26	35	12.5	M12	2				●
ICR39M703032160	32	43	17	M16	3				●
ICR39M703033160	33	43	17	M16	3				●

● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System

**Shoulder Milling - CR39** 方肩銑刀

**CR39F - Milling Tools** 方肩銑刀



Insert Brand : Winstar, Sandvik, ...

Order No.	D	L	d	T	Coolant	Inserts	Screw	Wrench	Stock
ICR39F305040161	40	40	16	5	✓	W39011T3	ITS2509	ITK08	●
ICR39F304050220	50	40	22	4					○
ICR39F306050221	50	40	22	6	✓				●
ICR39F305063220	63	40	22	5					○
ICR39F307063221	63	50	22	7	✓				●
ICR39F308080270	80	50	27	8		W3901704	ITS3505	ITK15	○
ICR39F704040161	40	40	16	4	✓				●
ICR39F705050221	50	40	22	5	✓				●
ICR39F706063221	63	40	22	6	✓				●
ICR39F707080271	80	50	27	7	✓				●
ICR39F708100321	100	50	32	8	✓	●			
ICR39F709125400	125	63	40	9		●			
ICR39F805050221	50	40	22	5	✓	W3901806	ITS4005	ITK15	●
ICR39F806063221	63	40	22	6	✓				●
ICR39F807080271	80	50	27	7	✓				●
ICR39F808100321	100	50	32	8	✓				●

● stock ○ by inquiry

Customize available.

**Recommended Cutting Conditions** 建議切削數據

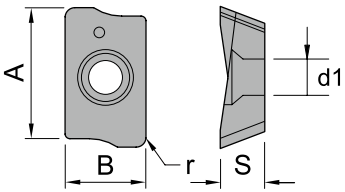
Working Material	W39011T3		
	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.22	0.3 ~ 7.0
Stainless Steel	100 ~ 180	0.08 ~ 0.18	0.3 ~ 4.0
Cast Iron	120 ~ 250	0.10 ~ 0.22	0.3 ~ 7.0
High Temperature Alloy	40 ~ 100	0.07 ~ 0.14	0.3 ~ 4.0
Hardened Steel	50 ~ 100	0.07 ~ 0.15	0.3 ~ 4.0

Working Material	W3901704 / W3901806		
	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.12 ~ 0.28	0.5 ~ 10.0
Stainless Steel	100 ~ 180	0.10 ~ 0.22	0.5 ~ 6.0
Cast Iron	120 ~ 250	0.12 ~ 0.28	0.5 ~ 10.0
High Temperature Alloy	40 ~ 100	0.10 ~ 0.18	0.5 ~ 6.0
Hardened Steel	50 ~ 100	0.10 ~ 0.20	0.5 ~ 6.0







## Insert Specifications 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
W39011T308	10	6.8	3.59	0.8	2.8
W39011T320	10	6.8	3.59	2.0	2.8
W390170408	15.7	9.6	4.76	0.8	4.1
W390180612	15.4	11	6.33	1.2	4.15



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IW39011T308SG23TX	W39011T308-SG-CX23TX	○	○	○		○	●
	IW39011T308SG32HS	W39011T308-SG-CX32HS	●	○	●			
	IW39011T308SG33TX	W39011T308-SG-CX33TX	●	○	●		○	●
	IW39011T308SG33UX	W39011T308-SG-CX33UX	●	●	●		●	○
	IW39011T308SG43TX	W39011T308-SG-CX43TX	●	●			●	
	IW39011T308MG23TX	W39011T308-MG-CX23TX	○	○	○		○	●
	IW39011T308MG32HS	W39011T308-MG-CX32HS	●	○	●			
	IW39011T308MG33TX	W39011T308-MG-CX33TX	●	○	●		○	●
	IW39011T308MG33UX	W39011T308-MG-CX33UX	●	●	●		●	○
	IW39011T308MG43TX	W39011T308-MG-CX43TX	●	●			●	
	IW39011T308MG37TA	W39011T308-MG-CX37TA	●		●			○
	IW39011T308MG47TA	W39011T308-MG-CX47TA	●	○	●		○	
	IW39011T320MG23TX	W39011T320-MG-CX23TX	○	○	○		○	●
	IW39011T320MG32HS	W39011T320-MG-CX32HS	●	○	●			
	IW39011T320MG33TX	W39011T320-MG-CX33TX	●	○	●		○	●
	IW39011T320MG33UX	W39011T320-MG-CX33UX	●	●	●		●	○
	IW39011T320MG43TX	W39011T320-MG-CX43TX	●	●			●	
	IW39011T320MG37TA	W39011T320-MG-CX37TA	●		●			○
IW39011T320MG47TA	W39011T320-MG-CX47TA	●	○	●		○		
	IW390170408MG32HS	W390170408-MG-CX32HS	●	○	●			
	IW390170408MG33TX	W390170408-MG-CX33TX	●	○	●		○	●
	IW390170408MG33UX	W390170408-MG-CX33UX	●	●	●		●	○
	IW390170408MG43TX	W390170408-MG-CX43TX	●	●			●	
	IW390170408MG37TA	W390170408-MG-CX37TA	●		●			○
	IW390170408MG47TA	W390170408-MG-CX47TA	●	○	●		○	
	IW390180612SG32HS	W390180612-SG-CX32HS	●	○	●			
	IW390180612SG33TX	W390180612-SG-CX33TX	●	○	●		○	●
	IW390180612SG33UX	W390180612-SG-CX33UX	●	●	●		●	○
	IW390180612SG43TX	W390180612-SG-CX43TX	●	●			●	
	IW390180612SG37TA	W390180612-SG-CX37TA	●		●			○
	IW390180612SG47TA	W390180612-SG-CX47TA	●	○	●		○	

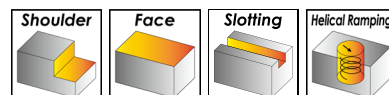
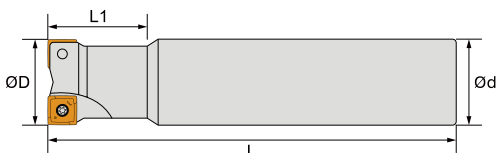
**Shoulder Milling - CR49** 方肩銑刀

**CR49 Series**



- Use W490 inserts with 4 cutting edges.
- Great repeat side milling capability to reduce burs and get good surface finishing.
- 20~80mm cutter diameter, max. 9mm depth of cut.
- 使用 W490 單面銑刀片，4 個可用切削角
- 出色的重複側銑能力可減少毛刺產生並獲得良好的表面光潔度
- 20~80mm 刀盤直徑，最大切削深度可達 9mm

**CR49E - Milling Tools** 方肩銑刀

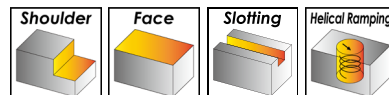
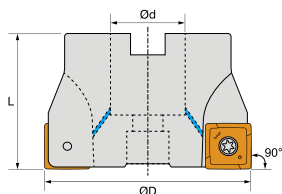


Insert Brand : Winstar, Sandvik, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICR49E802020100	20	25	100	20	2	W49008T3	ITS2507	ITK08	●
ICR49E802020150	20	25	150	20	2				●
ICR49E803025100	25	32	100	20	3				●
ICR49E803025150	25	32	150	20	3				●

● stock ○ by inquiry

**CR49F - Milling Tools** 方肩銑刀



Insert Brand : Winstar, Sandvik, ...

Order No.	D	L	d	T	Coolant	Inserts	Screw	Wrench	Stock
ICR49F804040161	40	40	16	4	✓	W49008T3	ITS2507	ITK08	●
ICR49F805050221	50	40	22	5	✓				●
ICR49F806063221	63	40	22	6	✓				●
ICR49F404050221	50	40	22	4	✓	W4901404	ITS3505	ITK15	●
ICR49F405063221	63	40	22	5	✓				●
ICR49F407080271	80	50	27	7	✓				●

● stock ○ by inquiry

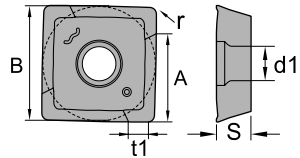
Indexable Milling

## Recommended Cutting Conditions 建議切削數據




Working Material	Vc	W49008T3		W4901404	
		fz	ap	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.05 ~ 0.12	0.3 ~ 5.5	0.06 ~ 0.15	0.3 ~ 9
Stainless Steel	100 ~ 180	0.04 ~ 0.10	0.3 ~ 4.5	0.05 ~ 0.12	0.3 ~ 8
Cast Iron	120 ~ 250	0.05 ~ 0.12	0.3 ~ 5.5	0.06 ~ 0.15	0.3 ~ 9
Aluminum Alloy	300 ~ 1000	-	-	0.05 ~ 0.15	0.3 ~ 9
High Temperature Alloy	40 ~ 100	0.03 ~ 0.09	0.3 ~ 4.5	0.04 ~ 0.11	0.3 ~ 8
Hardened Steel	50 ~ 100	0.03 ~ 0.09	0.3 ~ 4.5	0.04 ~ 0.11	0.3 ~ 8

## Insert Specifications 刀片規格

Insert	Dimensions (mm)					
	A	B	S	r	d1	t1
W49008T308	5.6	8.5	3.3	0.8	2.8	1.2
W490140408	10.3	13.8	3.9	0.8	4.1	2.0



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IW49008T308SG23TX	W49008T308-SG-CX23TX	○	○	○		○	●
	IW49008T308SG32HS	W49008T308-SG-CX32HS	●	○	●			
	IW49008T308SG33TX	W49008T308-SG-CX33TX	●	○	●		○	●
	IW49008T308SG33UX	W49008T308-SG-CX33UX	●	●	●		●	○
	IW49008T308SG43TX	W49008T308-SG-CX43TX	●	●			●	
	IW490140408SG33TX	W490140408-SG-CX33TX	●	○	●		○	●
	IW490140408SG33UX	W490140408-SG-CX33UX	●	●	●		●	○
	IW490140408SG43TX	W490140408-SG-CX43TX	●	●			●	
	IW490140408SG37TA	W490140408-SG-CX37TA	●		●			○
	IW490140408MG32HS	W490140408-MG-CX32HS	●	○	●			
	IW490140408MG33TX	W490140408-MG-CX33TX	●	○	●		○	●
	IW490140408MG33UX	W490140408-MG-CX33UX	●	●	●		●	○
	IW490140408MG43TX	W490140408-MG-CX43TX	●	●			●	
	IW490140408MG37TA	W490140408-MG-CX37TA	●		●			○
	IW490140408MG47TA	W490140408-MG-CX47TA	●	○	●		○	

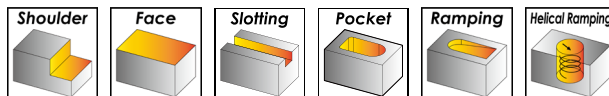
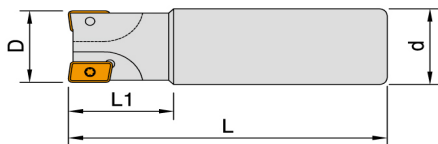
**Shoulder Milling - CWEX** 方肩銑刀

**CWEX Series**



- Use AXMT inserts with 2 cutting edges.
- Strong cutting edges for high removal rate shoulder milling.
- 16~100mm cutter diameter, max. 11mm depth of cut.
- 使用 AXMT 銑刀片, 2 個可用切削角
- 堅固的切削刃提供高移除率的方肩銑刀
- 16~100mm 刀桿直徑, 最大切削深度可達 11mm

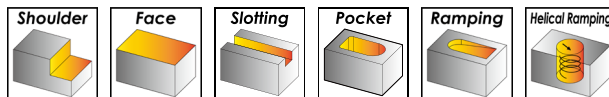
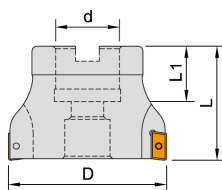
**CWEXE - Milling Tools** 方肩銑刀



Insert Brand : Winstar, Sumitomo, Nachi, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICWEXE202016120	16	35	120	16	2	AXMT1235	ITS3002	ITK09	●
ICWEXE203020120	20	40	120	20	3				●
ICWEXE204025150	25	45	150	25	4				●
ICWEXE205032150	32	45	150	32	5				●
ICWEXE702025150	25	40	150	25	2	AXMT1705	ITS4004	ITK15	●
ICWEXE703032150	32	45	150	32	3				●

**CWEXF - Milling Tools** 方肩銑刀



Insert Brand : Winstar, Sumitomo, Nachi, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICWEXF206050220	50	20	45	22	6	AXMT1235	ITS3002	ITK09	●
ICWEXF207063220	63	20	45	22	7				●
ICWEXF208080270	80	26	50	27	8				●
ICWEXF704050220	50	20	45	22	4	AXMT1705	ITS4004	ITK15	●
ICWEXF705063220	63	20	45	22	5				●
ICWEXF707080270	80	26	50	27	7				●
ICWEXF707100320	100	26	50	32	7				○

● stock ○ by inquiry

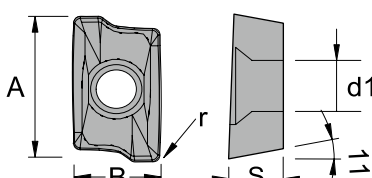
Customize available.

## Recommended Cutting Conditions 建議切削數據



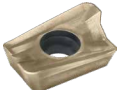
Working Material	AXMT1235			AXMT1705		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.22	0.3 ~ 7.0	120 ~ 250	0.12 ~ 0.28	0.5 ~ 11.0
Stainless Steel	100 ~ 180	0.08 ~ 0.18	0.3 ~ 4.0	100 ~ 180	0.10 ~ 0.22	0.5 ~ 7.0
Cast Iron	120 ~ 250	0.10 ~ 0.22	0.3 ~ 6.0	120 ~ 250	0.12 ~ 0.28	0.5 ~ 10.0
High Temperature Alloy	40 ~ 100	0.07 ~ 0.14	0.3 ~ 4.0	40 ~ 100	0.10 ~ 0.18	0.5 ~ 7.0
Hardened Steel	50 ~ 100	0.07 ~ 0.15	0.3 ~ 4.0	50 ~ 100	0.10 ~ 0.20	0.5 ~ 7.0

## Insert Specifications 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
AXMT123508	12.18	6.93	3.58	0.8	3.4
AXMT170508	17.50	10.2	5.56	0.8	4.6
AXMT170516	17.50	10.2	5.56	1.6	4.6



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IAXMT123508ERG23TX	AXMT123508PEER-RG-CX23TX	○	○	○		○	●
	IAXMT123508ERG32HS	AXMT123508PEER-RG-CX32HS	●	○	●			
	IAXMT123508ERG33TX	AXMT123508PEER-RG-CX33TX	●	○	●		○	●
	IAXMT123508ERG43TX	AXMT123508PEER-RG-CX43TX	●	●			●	
	IAXMT123508ERG37TA	AXMT123508PEER-RG-CX37TA	●		●			○
	IAXMT170508ERG32HS	AXMT170508PEER-RG-CX32HS	●	○	●			
	IAXMT170508ERG33TX	AXMT170508PEER-RG-CX33TX	●	○	●		○	●
	IAXMT170508ERG43TX	AXMT170508PEER-RG-CX43TX	●	●			●	
	IAXMT170516ERG32HS	AXMT170516PEER-RG-CX32HS	●	○	●			
	IAXMT170516ERG33TX	AXMT170516PEER-RG-CX33TX	●	○	●		○	●
	IAXMT170516ERG43TX	AXMT170516PEER-RG-CX43TX	●	●			●	

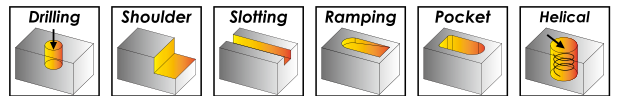
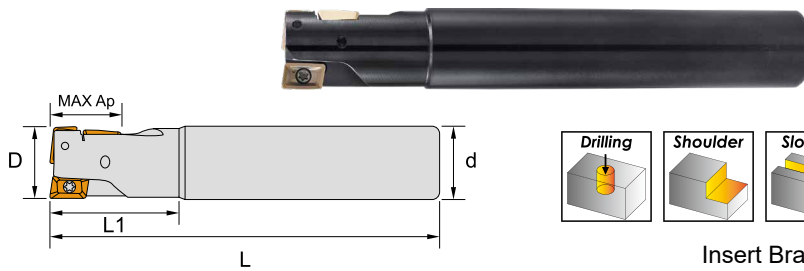
**CWMM Series**



- Use APMT inserts with 2 cutting edges.
- Cutter with over-center design for drilling and milling.
- 10~80mm cutter diameter, max. 11mm depth of cut.
- 使用 APMT 銑刀片, 2 個可用切削角
- 刀桿過中心設計, 適用於鑽孔、方肩、開槽、斜坡、挖槽、及螺旋銑削
- 10~80mm 刀桿直徑, 最大端銑切削深度可達 11mm

Indexable Milling

**CWMMD - Drilling & Milling Tools 鑽銑刀**



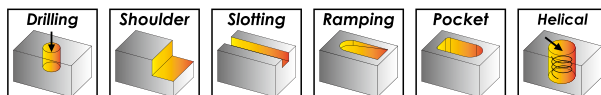
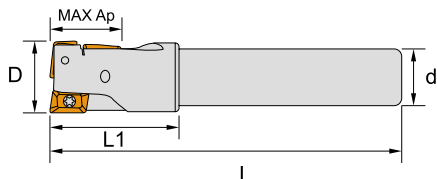
Insert Brand : Winstar, Sumitomo, Nachi, ...

Order No.	D	L1	L	d	Insert Number	Max Ap	Inserts	Screw	Wrench	Stock
ICWMMD303020120	20	35	125	20	3	16	APMT1035	ITS2515	ITK08	●
ICWMMD303020180	20	35	185	20	3	16				●
ICWMMD304025140	25	35	140	25	4	24				●
ICWMMD304025220	25	35	220	25	4	24				●
ICWMMD604032150	32	50	150	32	4	40	APMT1605	ITS4004	ITK15	●
ICWMMD604032230	32	60	230	32	4	40				●

● stock ○ by inquiry

**Drilling & Milling - CWMM** 鑽銑刀

**CWMMD - Drilling & Milling Tools** 鑽銑刀



Insert Brand : Winstar, Sumitomo, Nachi, ...

Order No.	D	L1	L	d	Insert Number	Max Ap	Inserts	Screw	Wrench	Stock
ICWMMD303021120	21	35	125	20	3	16	APMT1035	ITS2515	ITK08	●
ICWMMD304026140	26	35	140	25	4	24				●
ICWMMD305030150	30	50	150	25	5	32				●
ICWMMD604033150	33	50	150	32	4	40	APMT1605	ITS4004	ITK15	●
ICWMMD604040160	40	60	160	32	4	40				●
ICWMMD604040240	40	60	240	32	4	40				●

● stock ○ by inquiry

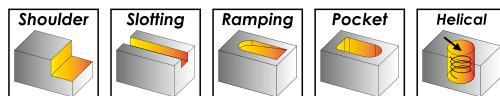
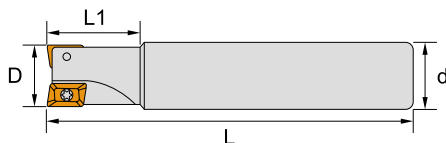
**Recommended Cutting Conditions** 建議切削數據

Working Material	Vc	fz					
		APMT1035			APMT1605		
		Shoulder	Slotting	Drilling	Shoulder	Slotting	Drilling
Carbon Steel / Alloy Steel	100 ~ 160	0.06 ~ 0.20	0.06 ~ 0.12	0.06 ~ 0.18	0.06 ~ 0.25	0.06 ~ 0.15	0.06 ~ 0.20
Stainless Steel	80 ~ 120	0.05 ~ 0.15	0.05 ~ 0.10	0.05 ~ 0.12	0.05 ~ 0.20	0.05 ~ 0.12	0.05 ~ 0.18
Cast Iron	90 ~ 180	0.06 ~ 0.20	0.06 ~ 0.12	0.06 ~ 0.18	0.06 ~ 0.25	0.06 ~ 0.15	0.06 ~ 0.20
High Temperature Alloy	60 ~ 100	0.05 ~ 0.12	0.05 ~ 0.08	0.05 ~ 0.10	0.05 ~ 0.17	0.05 ~ 0.10	0.05 ~ 0.15
Hardened Steel	60 ~ 100	0.05 ~ 0.12	0.05 ~ 0.08	0.05 ~ 0.10	0.05 ~ 0.17	0.05 ~ 0.10	0.05 ~ 0.15

※ Use step feed in drilling, per step Ap 0.5 ~ 1.0mm.

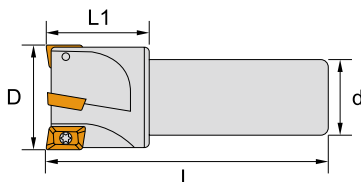
**Shoulder Milling - CWMM** 方肩銑刀

**CWMME - Milling Tools** 方肩銑刀



Insert Brand : Winstar, Sumitomo, Nachi, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICWMME301010100	10	20	100	12	1	APMT1035	ITS2515	ITK08	●
ICWMME301012100	12	25	100	12	1				●
ICWMME302016120	16	25	120	16	2				●
ICWMME303020120	20	30	120	20	3				●
ICWMME304025150	25	35	150	25	4				●
ICWMME305032150	32	45	150	32	5				●
ICWMME602025150	25	40	150	25	2	APMT1605	ITS4004	ITK15	●
ICWMME602032150	32	45	150	32	2				●
ICWMME602032250	32	45	250	32	2				●
ICWMME603032150	32	45	150	32	3				●



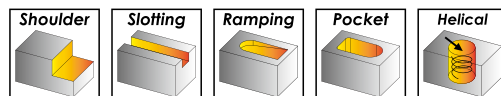
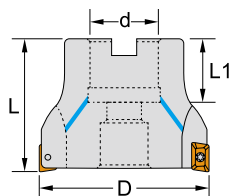
Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICWMME306040130	40	45	135	32	6	APMT1035	ITS2515	ITK08	○
ICWMME306050130	50	45	135	32	6				○
ICWMME306063130	63	45	135	32	6				○
ICWMME603035150	35	45	150	32	3	APMT1605	ITS4004	ITK15	○
ICWMME603035250	35	45	250	32	3				○
ICWMME603040130	40	45	135	32	3				○
ICWMME604050130	50	45	135	32	4				○

● stock ○ by inquiry

Indexable Milling



## CWMMF - Milling Tools 方肩銑刀



Insert Brand : Winstar, Sumitomo, Nachi, ...

Order No.	D	L1	L	d	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICWMMF306050221	50	20	45	22	6	✓	APMT1035	ITS2515	ITK08	●
ICWMMF306050250	50	20	45	25.4	6					●
ICWMMF306063220	63	20	45	22	6					●
ICWMMF306063250	63	20	45	25.4	6		APMT1605	ITS4004	ITK15	●
ICWMMF604050221	50	20	45	22	4	✓				●
ICWMMF604050251	50	20	45	25.4	4	✓				●
ICWMMF605063220	63	20	45	22	5					○
ICWMMF605063251	63	20	45	25.4	5	✓				●
ICWMMF606080250	80	26	50	25.4	6					●
ICWMMF606080270	80	26	50	27	6					○

● stock ○ by inquiry

## Recommended Cutting Conditions 建議切削數據

Working Material	APMT1035			APMT1605		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.22	0.3 ~ 7.0	120 ~ 250	0.12 ~ 0.28	0.5 ~ 11.0
Stainless Steel	100 ~ 180	0.08 ~ 0.18	0.3 ~ 4.0	100 ~ 180	0.10 ~ 0.22	0.5 ~ 7.0
Cast Iron	120 ~ 250	0.10 ~ 0.22	0.3 ~ 6.0	120 ~ 250	0.12 ~ 0.28	0.5 ~ 10.0
High Temperature Alloy	40 ~ 100	0.07 ~ 0.14	0.3 ~ 4.0	40 ~ 100	0.10 ~ 0.18	0.5 ~ 7.0
Hardened Steel	50 ~ 100	0.07 ~ 0.15	0.3 ~ 4.0	50 ~ 100	0.10 ~ 0.20	0.5 ~ 7.0

**Shoulder Milling - CWMM** 方肩銑刀

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
APMT103508	10	6.6	3.5	0.8	3
APMT160508	16	9.525	5.56	0.8	4.4

Indexable Milling

**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IAPMT103508ERG32HS	APMT103508PDER-RG-CX32HS	●	○	●			
	IAPMT103508ERG33TX	APMT103508PDER-RG-CX33TX	●	○	●		○	●
	IAPMT103508ERG43TX	APMT103508PDER-RG-CX43TX	●	●			●	
	IAPET160508FAL10	APET160508PDFR-AL-CX10				●		
	IAPMT160508ERG32HS	APMT160508PDER-RG-CX32HS	●	○	●			
	IAPMT160508ERG33TX	APMT160508PDER-RG-CX33TX	●	○	●		○	●

### CXBN Series



- Use BNMX double-sided inserts with 4 cutting edges.
- High feed and low cutting force offers better productivity.
- 15~100mm cutter diameter, max. 1.4mm depth of cut.

- 使用 BNMX 雙面銑刀片，4 個可用切削角
- 高進給及低切削阻力設計確保較大的生產率，適用於各種應用及材料
- 15~100mm 刀桿直徑，最大切削深度可達 1.4mm

→ Page A072

### CXLN Series



- Use LNMX double-sided inserts with 4 cutting edges.
- High feed and sharp cutting edges for low cutting force applications.
- 16~50mm cutter diameter, max. 0.9mm depth of cut.

- 使用 LNMX 雙面銑刀片，4 個可用切削角
- 高進給及大前角設計的切削刃可實現極低切削阻力，並達成高金屬移除率
- 16~50mm 刀桿直徑，最大切削深度可達 0.9mm

→ Page A076

### CXLO Series



- Use LOGX double-sided inserts with 4 cutting edges.
- High feed and high precision cutting edges for good surface finishing.
- 16~50mm cutter diameter, max. 0.9mm depth of cut.

- 使用 LOGX 雙面銑刀片，4 個可用切削角
- 高進給及高精度切削刃適用於高溫合金加工，並可達到優良的表面光潔度
- 16~50mm 刀桿直徑，最大切削深度可達 0.9mm

→ Page A079

### CXWN Series



- Use WNMX double-sided inserts with 6 cutting edges.
- High feed and low cost for multi-functional applications.
- 25~160mm cutter diameter, max. 1.35mm depth of cut.

- 使用 WNMX 雙面銑刀片，6 個可用切削角
- 高進給及低成本適用於面銑、斜坡銑和插銑等多功能加工
- 25~160mm 刀桿直徑，最大切削深度可達 1.35mm

→ Page A082

**CALP Series**



- Use LPGX inserts with 2 cutting edges.
- High feed and small size cutter for replacing solid carbide tools.
- 8~16mm cutter diameter, max. 0.5mm depth of cut.
- 使用 LPGX 銑刀片, 2 個可用切削角
- 高進給及小尺寸刀具可取代全鎢鋼刀具, 適用於廣泛的加工及材質應用
- 8~16mm 刀桿直徑, 最大切削深度可達 0.5mm

→ Page A085

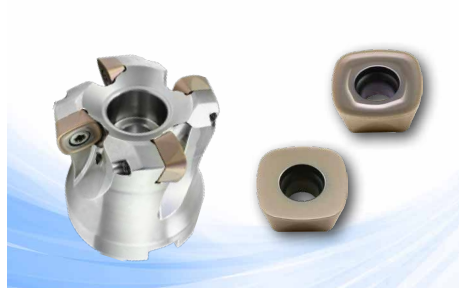
**CAJX Series**



- Use JDMT or JDMW inserts with 3 cutting edges.
- High feed and high rigidity cutting edge for wide range applications.
- 32~100mm cutter diameter, max. 2mm depth of cut.
- 使用 JDMT 或 JDMW 銑刀片, 3 個可用切削角
- 高進給及高剛性切削刀口適用於各種材料和應用
- 32~100mm 刀桿直徑, 最大切削深度可達 2mm

→ Page A088

**CASR Series**



- Use SDMT or SDNW inserts with 4 cutting edges.
- High feed and more economical for wide range applications.
- 50~80mm cutter diameter, max. 1.5mm depth of cut.
- 使用 SDMT 或 SDNW 銑刀片, 4 個可用切削角
- 高進給、高經濟及高剛性切削刀口適用於各種材料和應用
- 50~80mm 刀盤直徑, 最大切削深度可達 1.5mm

→ Page A090

**CF23 Series**



- Use WP26 inserts with 3 cutting edges.
- High feed and high rigidity negative designed for hardened steel.
- 32~160mm cutter diameter, max. 2mm depth of cut.
- 使用 WP26 銑刀片, 3 個可用切削角
- 高進給及高剛性負角設計, 適用於較硬材料加工
- 32~160mm 刀桿直徑, 最大切削深度可達 2mm

→ Page A092

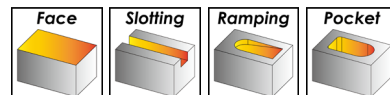
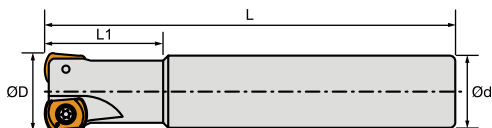
High Feed Milling - CXBN 高進給銑刀

**CXBN Series**



- Use BNMX double-sided inserts with 4 cutting edges.
- High feed and low cutting force offers better productivity.
- 15~100mm cutter diameter, max. 1.4mm depth of cut.
- 使用 BNMX 雙面銑刀片，4 個可用切削角
- 高進給及低切削阻力設計確保較大的生產率，適用於各種應用及材料
- 15~100mm 刀桿直徑，最大切削深度可達 1.4mm

**CXBN E - Milling Tools** 高進給銑刀



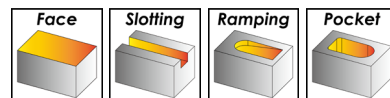
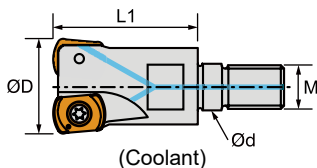
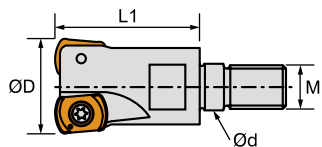
Insert Brand : Winstar, Taegutec, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICXBNE602015130	15	26	130	16	2	BNMX0603	ITS3004	ITK08	●
ICXBNE602016130	16	26	130	16	2				●
ICXBNE602017130	17	26	130	16	2				●
ICXBNE602018130	18	25	130	20	2				●
ICXBNE603020150	20	40	150	20	3				●
ICXBNE603021150	21	40	150	20	3				●
ICXBNE604025150	25	40	150	25	4				●
ICXBNE604026150	26	30	150	25	4				●
ICXBNE604032200	32	45	200	32	4				●
ICXBNE903025150	25	40	150	25	3	BNMX0904	ITS4009	ITK15	●
ICXBNE903032150	32	40	150	32	3				●

● stock ○ by inquiry

Customize available.

**CXBNM - Modular Milling Heads 高進給銑刀頭**



Insert Brand : Winstar, Taegutec, ...

Order No.	D	L1	d	M	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICXBNM602016080	16	26	8.5	M8	2		BNMX0603	ITS3004	ITK08	●
ICXBNM602016081	16	26	8.5	M8	2	✓				●
ICXBNM603020100	20	30	10.5	M10	3					●
ICXBNM603020101	20	30	10.5	M10	3	✓				●
ICXBNM603021100	21	30	10.5	M10	3					●
ICXBNM603025120	25	35	12.5	M12	3					●
ICXBNM604025120	25	35	12.5	M12	4					●
ICXBNM604025121	25	35	12.5	M12	4	✓				●
ICXBNM603026120	26	35	12.5	M12	3					●
ICXBNM604032161	32	40	17.0	M16	4	✓				●
ICXBNM605032161	32	40	17.0	M16	5	✓				●
ICXBNM606040161	40	43	17.0	M16	6	✓				●
ICXBNM903025121	25	35	12.5	M12	3	✓	BNMX0904	ITS4009	ITK15	●
ICXBNM904032161	32	40	17.0	M16	4	✓				●
ICXBNM904035161	35	43	17.0	M16	4	✓				○
ICXBNM905042161	42	43	17.0	M16	5	✓				●

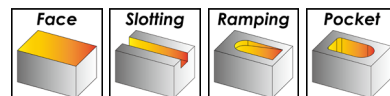
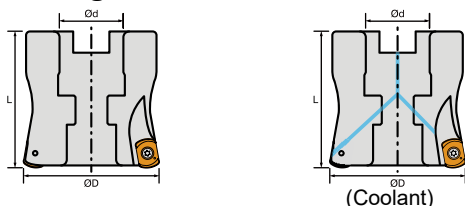
● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System

Indexable Milling

**High Feed Milling - CXBN** 高進給銑刀

**CXBNF - Milling Tools** 高進給銑刀



Insert Brand : Winstar, Taegutec, ...

Order No.	D	L	d	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICXBNF606040220	40	50	22	6		BNMX0603	ITS3004	ITK08	●
ICXBNF606040221	40	50	22	6	✓				●
ICXBNF607050220	50	50	22	7					●
ICXBNF607050221	50	50	22	7	✓				●
ICXBNF607052221	52	50	22	7	✓				○
ICXBNF607063220	63	50	22	7		BNMX0904	ITS3504	ITK15	●
ICXBNF906050221	50	50	22	6	✓				●
ICXBNF906052221	52	50	22	6	✓		●		
ICXBNF907063220	63	50	22	7			●		
ICXBNF907063271	63	50	27	7	✓		●		
ICXBNF907066271	66	50	27	7	✓		○		
ICXBNF908080271	80	50	27	8	✓		●		
ICXBNF910100321	100	50	32	10	✓	●			

● stock ○ by inquiry

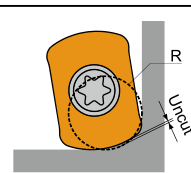
Customize available.

**Recommended Cutting Conditions** 建議切削數據

Working Material	BNMX0603			BNMX0904		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.4 ~ 1.6	0.3 ~ 0.9	120 ~ 250	0.4 ~ 2.0	0.3 ~ 1.4
Stainless Steel	100 ~ 180	0.3 ~ 1.2	0.3 ~ 0.7	100 ~ 180	0.3 ~ 1.6	0.3 ~ 1.2
Cast Iron	120 ~ 250	0.4 ~ 1.6	0.3 ~ 0.9	120 ~ 250	0.4 ~ 2.0	0.3 ~ 1.4
High Temperature Alloy	40 ~ 100	0.3 ~ 0.8	0.3 ~ 0.6	40 ~ 100	0.3 ~ 1.2	0.3 ~ 1.2
Hardened Steel	50 ~ 100	0.3 ~ 1.0	0.3 ~ 0.6	50 ~ 100	0.3 ~ 1.4	0.3 ~ 1.2

**Corner R Programming** R角軟體模擬設定

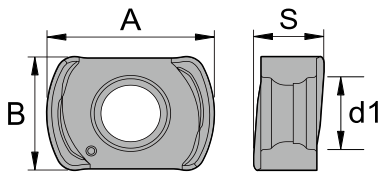
Designation	Approx. R (mm)	
	Input. R	Uncut
BNMX0603	2.0	0.42
BNMX0904	2.5	0.61









## Insert Specifications 刀片規格

Insert	Dimensions (mm)			
	A	B	S	d1
BNMX0603	9.0	6.38	3.75	3.2
BNMX0904	11.9	9.18	4.8	4.2



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IBNMX0603SG23TX	BNMX0603-SG-CX23TX	○	○	○		○	●
	IBNMX0603SG32HS	BNMX0603-SG-CX32HS	●	○	●			
	IBNMX0603SG33TX	BNMX0603-SG-CX33TX	●	○	●		○	●
	IBNMX0603SG33UX	BNMX0603-SG-CX33UX	●	●	●		●	○
	IBNMX0603SG43TX	BNMX0603-SG-CX43TX	●	●			●	
	IBNMX0603MG23TX	BNMX0603-MG-CX23TX	○	○	○		○	●
	IBNMX0603MG32HS	BNMX0603-MG-CX32HS	●	○	●			
	IBNMX0603MG33TX	BNMX0603-MG-CX33TX	●	○	●		○	●
	IBNMX0603MG33UX	BNMX0603-MG-CX33UX	●	●	●		●	○
	IBNMX0603MG43TX	BNMX0603-MG-CX43TX	●	●			●	
	IBNMX0603MG37TA	BNMX0603-MG-CX37TA	●		●			○
	IBNMX0603RG23TX	BNMX0603-RG-CX23TX	○	○	○		○	●
	IBNMX0603RG32HS	BNMX0603-RG-CX32HS	●	○	●			
	IBNMX0603RG33TX	BNMX0603-RG-CX33TX	●	○	●		○	●
	IBNMX0603RG43TX	BNMX0603-RG-CX43TX	●	●			●	
	IBNMX0603RG37TA	BNMX0603-RG-CX37TA	●		●			○
	IBNMX0603RG47TA	BNMX0603-RG-CX47TA	●	○	●		○	
	IBNMX0904MG23TX	BNMX0904-MG-CX23TX	○	○	○		○	●
	IBNMX0904MG32HS	BNMX0904-MG-CX32HS	●	○	●			
	IBNMX0904MG33TX	BNMX0904-MG-CX33TX	●	○	●		○	●
	IBNMX0904MG33UX	BNMX0904-MG-CX33UX	●	●	●		●	○
	IBNMX0904MG43TX	BNMX0904-MG-CX43TX	●	●			●	
	IBNMX0904MG37TA	BNMX0904-MG-CX37TA	●		●			○
	IBNMX0904MG47TA	BNMX0904-MG-CX47TA	●	○	●		○	



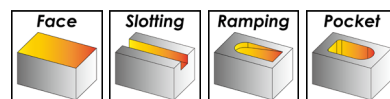
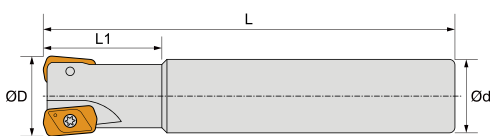
**High Feed Milling - CXLN** 高進給銑刀

**CXLN Series**



- Use LNMX double-sided inserts with 4 cutting edges.
- High feed and sharp cutting edges for low cutting force applications.
- 16~50mm cutter diameter, max. 0.9mm depth of cut.
- 使用 LNMX 雙面銑刀片，4 個可用切削角
- 高進給及大前角設計的切削刃可實現極低切削阻力，並達成高金屬移除率
- 16~50mm 刀桿直徑，最大切削深度可達 0.9mm

**CXLNE - Milling Tools** 高進給銑刀



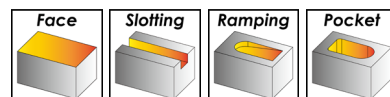
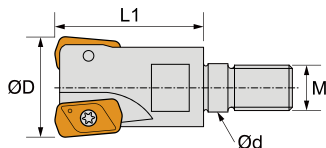
Insert Brand : Winstar, Tungaloy, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICXLNE302016100	16	30	100	16	2	LNMX0303	ITS2535	ITK07	●
ICXLNE302016150	16	30	150	16	2				●
ICXLNE303020150	20	50	150	20	3				●
ICXLNE304020130	20	50	130	20	4				○
ICXLNE304025150	25	60	150	25	4				●
ICXLNE305025140	25	60	140	25	5				○
ICXLNE306032150	32	70	150	32	6				●

● stock ○ by inquiry

Customize available.

**CXLNM - Modular Milling Heads** 高進給銑刀頭



Insert Brand : Winstar, Tungaloy, ...

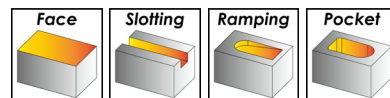
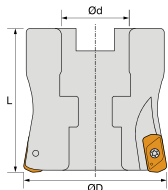
Order No.	D	L1	d	M	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICXLNM302017080	17	26	8.5	M8	2		LNMX0303	ITS2535	ITK07	●
ICXLNM303021100	21	32	10.5	M10	3					●
ICXLNM303021101	21	32	10.5	M10	3	✓				●
ICXLNM304026120	26	38	12.5	M12	4					●
ICXLNM304032160	32	41	17	M16	4					●

● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System

**High Feed Milling - CXLN** 高進給銑刀

**CXLNF - Milling Tools** 高進給銑刀



Insert Brand : Winstar, Tungaloy, ...

Order No.	D	L	d	T	Inserts	Screw	Wrench	Stock
ICXLNF308050220	50	50	22	8	LNMX0303	ITS2535	ITK07	○

● stock ○ by inquiry

Customize available.

**Recommended Cutting Conditions** 建議切削數據

Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.4 ~ 1.6	0.3 ~ 0.9
Stainless Steel	100 ~ 180	0.3 ~ 1.2	0.3 ~ 0.7
Cast Iron	120 ~ 250	0.4 ~ 1.6	0.3 ~ 0.9
High Temperature Alloy	40 ~ 100	0.3 ~ 0.8	0.3 ~ 0.6
Hardened Steel	50 ~ 100	0.3 ~ 1.0	0.3 ~ 0.6

**Corner R Programming** R角軟體模擬設定

Designation	Approx. R (mm)		
	Input. R	Uncut	
LNMX0303	1.5	0.5	

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)				
	A	B	S	d1	
LNMX0303	11.59	6.0	4.29	2.85	

**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ILNMX0303SG23TX	LNMX0303-SG-CX23TX	○	○	○		○	●
	ILNMX0303SG32HS	LNMX0303-SG-CX32HS	●	○	●			
	ILNMX0303SG33TX	LNMX0303-SG-CX33TX	●	○	●		○	●
	ILNMX0303SG43TX	LNMX0303-SG-CX43TX	●	●			●	
	ILNMX0303MG23TX	LNMX0303-MG-CX23TX	○	○	○		○	●
	ILNMX0303MG32HS	LNMX0303-MG-CX32HS	●	○	●			
	ILNMX0303MG33TX	LNMX0303-MG-CX33TX	●	○	●		○	●
	ILNMX0303MG43TX	LNMX0303-MG-CX43TX	●	●			●	

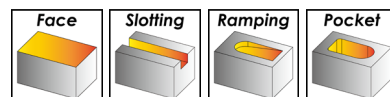
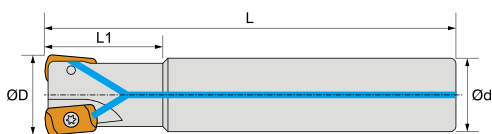
**High Feed Milling - CXLO** 高進給銑刀

**CXLO Series**



- Use LOGX double-sided inserts with 4 cutting edges.
- High feed and high precision cutting edges for good surface finishing.
- 16~50mm cutter diameter, max. 0.9mm depth of cut.
- 使用 LOGX 雙面銑刀片，4 個可用切削角
- 高進給及高精度切削刀適用於高溫合金加工，並可達到優良的表面光潔度
- 16~50mm 刀桿直徑，最大切削深度可達 0.9mm

**CXLOE - Milling Tools** 高進給銑刀



Insert Brand : Winstar, Kyocera, ...

Order No.	D	L1	L	d	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICXLOE302016150	16	30	150	16	2		LOGX0303	ITS3004	ITK08	●
ICXLOE302016151	16	30	150	16	2	✓				●
ICXLOE302017150	17	20	150	16	2					●
ICXLOE302018150	18	20	150	16	2					●
ICXLOE303020150	20	50	150	20	3					●
ICXLOE303020151	20	50	150	20	3	✓				●
ICXLOE303021150	21	30	150	20	3					●
ICXLOE303022150	22	20	150	20	3					●
ICXLOE304025150	25	60	150	25	4					●
ICXLOE304025151	25	50	150	25	4	✓				●
ICXLOE304026150	26	35	150	25	4					●
ICXLOE304026151	26	35	150	25	4	✓				●
ICXLOE304026200	26	45	200	25	4					●
ICXLOE304028150	28	20	150	25	4					●
ICXLOE305028150	28	20	150	25	5					●
ICXLOE304030150	30	46	150	32	4					●
ICXLOE305032150	32	70	150	32	5					●
ICXLOE305033151	33	20	150	32	5	✓				●
ICXLOE305033200	33	20	200	32	5					●
ICXLOE305035200	35	20	200	32	5					●

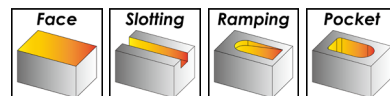
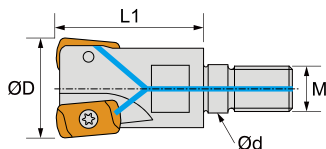
● stock ○ by inquiry

Customize available.

Indexable Milling

**High Feed Milling - CXLO 高進給銑刀**

**CXL0M - Modular Milling Heads 高進給銑刀頭**



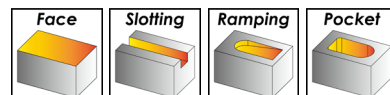
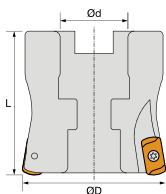
Insert Brand : Winstar, Kyocera, ...

Order No.	D	L1	d	M	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICXL0M302017081	17	25	8.5	M8	2	✓	LOGX0303	ITS3004	ITK08	●
ICXL0M303021101	21	30	10.5	M10	3	✓				●
ICXL0M304026121	26	35	12.5	M12	4	✓				●
ICXL0M304035161	35	40	17	M16	4	✓				●
ICXL0M305035161	35	40	17	M16	5	✓				●

● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System

**CXL0F - Milling Tools 高進給銑刀**



Insert Brand : Winstar, Kyocera, ...

Order No.	D	L	d	T	Inserts	Screw	Wrench	Stock
ICXL0F307050220	50	50	22	7	LOGX0303	ITS3004	ITK08	●

● stock ○ by inquiry

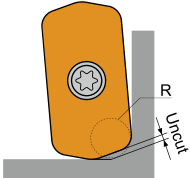
Customize available.

**Recommended Cutting Conditions 建議切削數據**

Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.4 ~ 1.6	0.3 ~ 0.9
Stainless Steel	100 ~ 180	0.3 ~ 1.2	0.3 ~ 0.7
Cast Iron	120 ~ 250	0.4 ~ 1.6	0.3 ~ 0.9
High Temperature Alloy	40 ~ 100	0.3 ~ 0.8	0.3 ~ 0.6
Hardened Steel	50 ~ 100	0.3 ~ 1.0	0.3 ~ 0.6

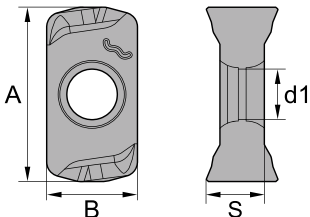
**Corner R Programming** R角軟體模擬設定

Designation	Approx. R (mm)	
	Input. R	Uncut
LOGX030310	1.6	0.39



**Insert Specifications** 刀片規格

Insert	Dimensions (mm)			
	A	B	S	d1
LOGX030310	11.9	6.2	3.96	3.45



**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ILOGX030310SG32HS	LOGX030310-SG-CX32HS	●	○	●			
	ILOGX030310SG33TX	LOGX030310-SG-CX33TX	●	○	●		○	●
	ILOGX030310SG33UX	LOGX030310-SG-CX33UX	●	●	●		●	○
	ILOGX030310SG43TX	LOGX030310-SG-CX43TX	●	●			●	
	ILOGX030310MG32HS	LOGX030310-MG-CX32HS	●	○	●			
	ILOGX030310MG33TX	LOGX030310-MG-CX33TX	●	○	●		○	●
	ILOGX030310MG33UX	LOGX030310-MG-CX33UX	●	●	●		●	○
	ILOGX030310MG43TX	LOGX030310-MG-CX43TX	●	●			●	

Indexable Milling

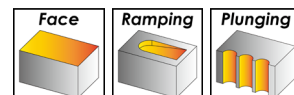
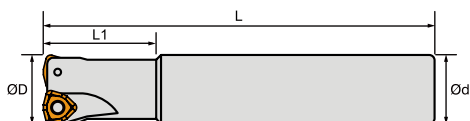
**High Feed Milling - CXWN** 高進給銑刀

**CXWN Series**



- Use WNMX double-sided inserts with 6 cutting edges.
- High feed and low cost for multi-functional applications.
- 25~160mm cutter diameter, max. 1.35mm depth of cut.
- 使用 WNMX 雙面銑刀片，6 個可用切削角
- 高進給及低成本適用於面銑、斜坡銑和插銑等多功能加工
- 25~160mm 刀桿直徑，最大切削深度可達 1.35mm

**CXWNE - Milling Tools 高進給銑刀**



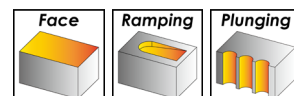
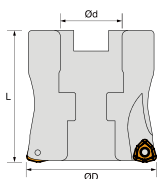
Insert Brand : Winstar, Korloy, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICXWNE902025150	25	40	150	25	2	WNMX09T3	ITS3006	ITK10	●
ICXWNE903032150	32	40	150	32	3				●

● stock ○ by inquiry

Customize available.

**CXWNF - Milling Tools 高進給銑刀**



Insert Brand : Winstar, Korloy, ...

Order No.	D	L	d	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICXWNF905050220	50	50	22	5		WNMX09T3	ITS3006	ITK10	●
ICXWNF905050221	50	50	22	5	✓				●
ICXWNF905063220	63	50	22	5					●
ICXWNF905063221	63	50	22	5	✓				●
ICXWNF305063220	63	50	22	5		WNMX1305	ITS4006	ITK15	●
ICXWNF307080270	80	50	27	7					●
ICXWNF310160400	160	63	40	10					●

● stock ○ by inquiry

Customize available.

## Recommended Cutting Conditions 建議切削數據

## WNMX09T3

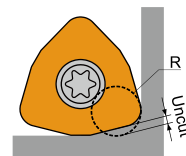
Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.4 ~ 1.5	0.4 ~ 1.35
Stainless Steel	100 ~ 180	0.4 ~ 1.2	0.4 ~ 1.0
Cast Iron	120 ~ 250	0.4 ~ 1.5	0.4 ~ 1.35
High Temperature Alloy	40 ~ 100	0.4 ~ 1.0	0.4 ~ 1.0
Hardened Steel	50 ~ 100	0.4 ~ 1.1	0.4 ~ 1.0

## WNMX1305

Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.4 ~ 3.0	0.4 ~ 1.7
Stainless Steel	100 ~ 180	0.3 ~ 2.0	0.4 ~ 1.4
Cast Iron	120 ~ 250	0.4 ~ 3.0	0.4 ~ 1.7
High Temperature Alloy	40 ~ 100	0.3 ~ 1.6	0.4 ~ 1.3
Hardened Steel	50 ~ 100	0.3 ~ 2.0	0.4 ~ 1.3

## Corner R Programming R角軟體模擬設定

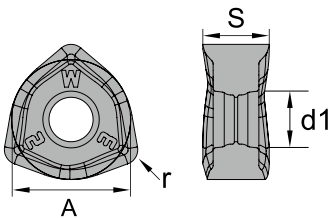
Designation	Approx. R (mm)	
	Input. R	Uncut
WNMX09T3	2.5	0.6
WNMX1305	3.0	1.0








## Insert Specifications 刀片規格

Insert	Dimensions (mm)			
	A	S	r	d1
WNMX09T3	9.525	3.97	1.6	3.6
WNMX1305	12.7	6.0	1.6	4.7



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IWNMX09T316MG32HS	WNMX09T316-MG-CX32HS	●	○	●			
	IWNMX09T316MG33TX	WNMX09T316-MG-CX33TX	●	○	●		○	●
	IWNMX09T316MG33UX	WNMX09T316-MG-CX33UX	●	●	●		●	○
	IWNMX09T316MG43TX	WNMX09T316-MG-CX43TX	●	●			●	
	IWNMX09T316MG37TA	WNMX09T316-MG-CX37TA	●		●			○
	IWNMX09T316MG47TA	WNMX09T316-MG-CX47TA	●	○	●		○	
	IWNMX09T316RG32HS	WNMX09T316-RG-CX32HS	●	○	●			
	IWNMX09T316RG33TX	WNMX09T316-RG-CX33TX	●	○	●		○	●
	IWNMX09T316RG43TX	WNMX09T316-RG-CX43TX	●	●			●	
	IWNMX09T316RG37TA	WNMX09T316-RG-CX37TA	●		●			○
	IWNMX09T316RG47TA	WNMX09T316-RG-CX47TA	●	○	●		○	
	IWNMX130516MG32HS	WNMX130516-MG-CX32HS	●	○	●			
	IWNMX130516MG33TX	WNMX130516-MG-CX33TX	●	○	●		○	●
	IWNMX130516MG33UX	WNMX130516-MG-CX33UX	●	●	●		●	○
	IWNMX130516MG43TX	WNMX130516-MG-CX43TX	●	●			●	
	IWNMX130516MG37TA	WNMX130516-MG-CX37TA	●		●			○
	IWNMX130516MG47TA	WNMX130516-MG-CX47TA	●	○	●		○	

**High Feed Milling - CALP** 高進給銑刀

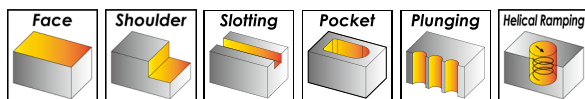
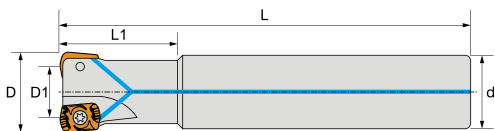
**CALP Series**



- Use LPGX inserts with 2 cutting edges.
- High feed and small size cutter for replacing solid carbide tools.
- 8~16mm cutter diameter, max. 0.5mm depth of cut.
- 使用 LPGX 銑刀片，2 個可用切削角
- 高進給及小尺寸刀具可取代全鎢鋼刀具，適用於廣泛的加工及材質應用
- 8~16mm 刀桿直徑，最大切削深度可達 0.5mm

Indexable Milling

**CALPE - Milling Tools** 高進給銑刀



Insert Brand : Winstar, Kyocera, ...

Order No.	D	D1	L1	L	d	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICALPE101008080	8	4.2	16	80	10	1		LPGX0102	IMS1804A	ITK06	●
ICALPE101008081	8	4.2	16	80	10	1	✓				●
ICALPE102010080	10	6.2	20	80	10	2					●
ICALPE102010081	10	6.2	20	80	10	2	✓				●
ICALPE103012080	12	8.2	20	80	12	3					●
ICALPE103012081	12	8.2	20	80	12	3	✓				●
ICALPE104016090	16	12.2	20	90	16	4					●
ICALPE104016091	16	12.2	20	90	16	4	✓				●

● stock ○ by inquiry

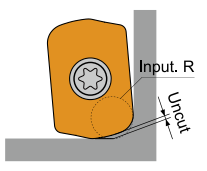
Customize available.

**Recommended Cutting Conditions** 建議切削數據

Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.2 ~ 0.8	0.2 ~ 0.5
Stainless Steel	100 ~ 180	0.2 ~ 0.6	0.2 ~ 0.4
Cast Iron	120 ~ 250	0.2 ~ 0.8	0.2 ~ 0.5
High Temperature Alloy	40 ~ 100	0.2 ~ 0.4	0.2 ~ 0.3
Hardened Steel	50 ~ 100	0.2 ~ 0.5	0.2 ~ 0.3

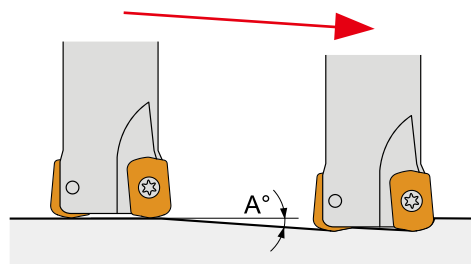
**Corner R Programming** R角軟體模擬設定

Designation	Approx. R (mm)	
	Input. R	Uncut
LPGX0102	1.2	0.17



**For Ramping** 斜坡加工

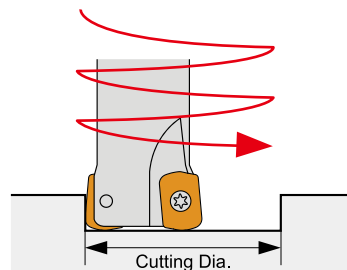
Cutter Dia. (mm)	Max. ramping angle (A°)	tan (A°)
10	3.0°	0.052
11	2.5°	0.044
12	2.0°	0.035
16	1.2°	0.021
17	1.0°	0.017



**For Helical Milling** 螺旋加工

Mini Cutting Dia.	Max Cutting Dia.
2 × Cutter Dia. - 3.5	2 × Cutter Dia. - 2

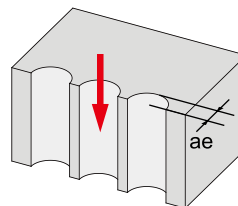
※Do not exceed the Max Cutting Dia and lower than the Mini Cutting Dia.



**For Plunging** 垂直加工

Max. ae
1.7mm

※Reduce feed rate to fz=0.2mm/t or less.



Insert Specifications 刀片規格

Insert	Dimensions (mm)					
	A	B	S	r	d1	
LPGX0102	6.26	4.19	2.19	1.0	2.2	

※ Suitable for M2.0 or M1.8 screw.

Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ILPGX0102SG33TX	LPGX0102-SG-CX33TX	●	○	●		○	●
	ILPGX0102SG33UX	LPGX0102-SG-CX33UX	●	●	●		●	○
	ILPGX0102SG43TX	LPGX0102-SG-CX43TX	●	●			●	
	ILPGX0102MG33TX	LPGX0102-MG-CX33TX	●	○	●		○	●
	ILPGX0102MG33UX	LPGX0102-MG-CX33UX	●	●	●		●	○
	ILPGX0102MG43TX	LPGX0102-MG-CX43TX	●	●			●	

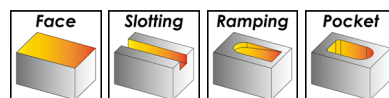
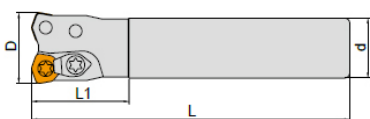
**High Feed Milling - CAJX 高進給銑刀**

**CAJX Series**



- Use JDMT or JDMW inserts with 3 cutting edges.
- High feed and high rigidity cutting edge for wide range applications.
- 32~100mm cutter diameter, max. 2mm depth of cut.
- 使用 JDMT 或 JDMW 銑刀片, 3 個可用切削角
- 高進給及高剛性切削刀口適用於各種材料和應用
- 32~100mm 刀桿直徑, 最大切削深度可達 2mm

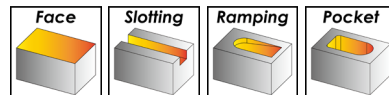
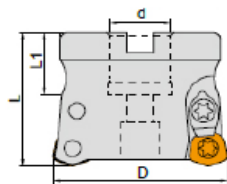
**CAJXE - Milling Tools 高進給銑刀**



Insert Brand : Winstar, Mitsubishi, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Clamp	Clamp Screw	Stock
ICAJXE202032150	32	35	150	32	2	JDMW1204	ITS4008	ITK15	IAS04	IAJ4012	●

**CAJXF - Milling Tools 高進給銑刀**



Insert Brand : Winstar, Mitsubishi, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Clamp	Clamp Screw	Stock
ICAJXF204050220	50	23	45	22	4	JDMW1204	ITS4008	ITK15	IAS04	IAJ4012	●
ICAJXF205063220	63	23	50	22	5						●
ICAJXF206080270	80	26	55	27	6						●
ICAJXF404063220	63	23	50	22	4	JDMW1405 JDMT1405	ITS5001	ITK20	IAS05	IAJ5014	●
ICAJXF405080270	80	26	55	27	5						●
ICAJXF406100320	100	32	55	32	6						●

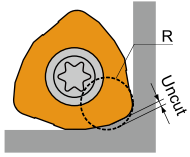
● stock ○ by inquiry

**Recommended Cutting Conditions 建議切削數據**

Working Material	JDMW1204			JDMW1405		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.8 ~ 1.3	0.3 ~ 1.5	120 ~ 250	0.8 ~ 1.8	0.5 ~ 2.0
Stainless Steel	100 ~ 180	0.6 ~ 1.0	0.3 ~ 1.0	100 ~ 180	0.6 ~ 1.2	0.5 ~ 1.5
Cast Iron	120 ~ 250	0.8 ~ 1.3	0.3 ~ 1.5	120 ~ 250	0.8 ~ 1.8	0.5 ~ 2.0
High Temperature Alloy	40 ~ 100	0.5 ~ 1.0	0.3 ~ 1.0	40 ~ 100	0.5 ~ 1.2	0.5 ~ 1.5
Hardened Steel	50 ~ 100	0.5 ~ 1.0	0.3 ~ 1.0	50 ~ 100	0.5 ~ 1.2	0.5 ~ 1.5

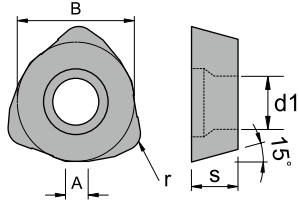
**Corner R Programming** R角軟體模擬設定

Designation	Approx. R (mm)	
	Input. R	Uncut
JDMW1204	3.0	0.63
JDMW / JDMT1405	3.0	0.64



**Insert Specifications** 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
JDMW1204	2.5	12.0	4.76	2.0	4.75
JDMW1405	2.8	14.0	5.56	2.0	5.75
JDMT1405	2.8	14.0	5.56	2.0	5.75

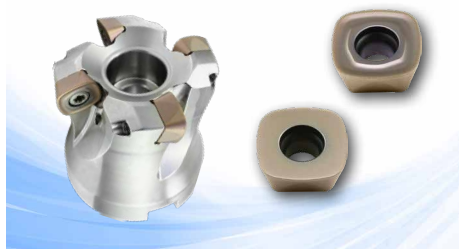


**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IJDMW120420SMG32HS	JDMW120420ZDSR-MG-CX32HS	●	○	●			
	IJDMW120420SMG33TX	JDMW120420ZDSR-MG-CX33TX	●	○	●		○	●
	IJDMW120420SMG43TX	JDMW120420ZDSR-MG-CX43TX	●	●			●	
	IJDMW120420SRG32HS	JDMW120420ZDSR-RG-CX32HS	●	○	●			
	IJDMW120420SRG33TX	JDMW120420ZDSR-RG-CX33TX	●	○	●		○	●
	IJDMW120420SRG43TX	JDMW120420ZDSR-RG-CX43TX	●	●			●	
	IJDMW120420SRG37TA	JDMW120420ZDSR-RG-CX37TA	●		●			○
	IJDMW140520SMG32HS	JDMW140520ZDSR-MG-CX32HS	●	○	●			
	IJDMW140520SMG33TX	JDMW140520ZDSR-MG-CX33TX	●	○	●		○	●
	IJDMW140520SRG32HS	JDMW140520ZDSR-RG-CX32HS	●	○	●			
	IJDMW140520SRG33TX	JDMW140520ZDSR-RG-CX33TX	●	○	●		○	●
	IJDMT140520SMG32HS	JDMT140520ZDSR-MG-CX32HS	●	○	●			
	IJDMT140520SMG33TX	JDMT140520ZDSR-MG-CX33TX	●	○	●		○	●
	IJDMT140520SMG43TX	JDMT140520ZDSR-MG-CX43TX	●	●			●	

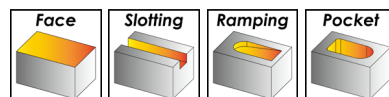
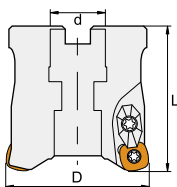
**High Feed Milling - CASR** 高進給銑刀

**CASR Series**



- Use SDMT or SDNW inserts with 4 cutting edges.
- High feed and more economical for wide range applications.
- 50~80mm cutter diameter, max. 1.5mm depth of cut.
- 使用 SDMT 或 SDNW 銑刀片，4 個可用切削角
- 高進給、高經濟及高剛性切削刀口適用於各種材料和應用
- 50~80mm 刀盤直徑，最大切削深度可達 1.5mm

**CASRF - Milling Tools** 高進給銑刀



Insert Brand : Winstar, Hitachi, ...

Order No.	D	L	d	T	Inserts	Screw	Wrench	Clamp	Clamp Screw	Stock
ICASRF203050220	50	22	50	3	SDMT1205 SDNW1205	IMS4011A	ITF15	IYR-06	IMS4008ES	●
ICASRF204050220	50	22	50	4						●
ICASRF203063220	63	22	50	3						●
ICASRF204063220	63	22	50	4						●
ICASRF204080310	80	31.75	55	4						●
ICASRF204080320	80	32	55	4						●
ICASRF205080310	80	31.75	55	5						●
ICASRF205080320	80	32	55	5						●

● stock ○ by inquiry

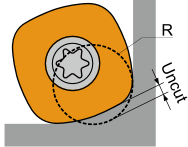
**Recommended Cutting Conditions** 建議切削數據

Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.8 ~ 1.8	0.3 ~ 1.5
Stainless Steel	100 ~ 180	0.6 ~ 1.2	0.3 ~ 1.0
Cast Iron	120 ~ 250	0.8 ~ 1.8	0.3 ~ 1.5
High Temperature Alloy	40 ~ 100	0.5 ~ 1.2	0.3 ~ 1.0
Hardened Steel	50 ~ 100	0.5 ~ 1.2	0.3 ~ 1.0

**High Feed Milling - CASR** 高進給銑刀

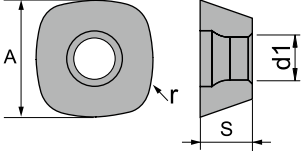
**Corner R Programming** R角軟體模擬設定

Designation	Approx. R (mm)	
	Input. R	Uncut
SDMT1205 / SDNW1205	4.5	0.83



**Insert Specifications** 刀片規格

Insert	Dimensions (mm)			
	A	S	r	d1
SDMT1205	12.7	5.56	15	4.6
SDNW1205	12.7	5.56	15	4.6



**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ISDMT1205ZDENSG23TX	SDMT1205ZDEN-SG-CX23TX	○	○	○		○	●
	ISDMT1205ZDENSG32HS	SDMT1205ZDEN-SG-CX32HS	●	○	●			
	ISDMT1205ZDENSG33TX	SDMT1205ZDEN-SG-CX33TX	●	○	●		○	●
	ISDMT1205ZDENSG33UX	SDMT1205ZDEN-SG-CX33UX	●	●	●		●	○
	ISDMT1205ZDTNMG23TX	SDMT1205ZDTN-MG-CX23TX	○	○	○		○	●
	ISDMT1205ZDTNMG32HS	SDMT1205ZDTN-MG-CX32HS	●	○	●			
	ISDMT1205ZDTNMG33TX	SDMT1205ZDTN-MG-CX33TX	●	○	●		○	●
	ISDMT1205ZDTNMG33UX	SDMT1205ZDTN-MG-CX33UX	●	●	●		●	○
	ISDMT1205ZDTNRG23TX	SDMT1205ZDTN-RG-CX23TX	○	○	○		○	●
	ISDMT1205ZDTNRG32HS	SDMT1205ZDTN-RG-CX32HS	●	○	●			
	ISDMT1205ZDTNRG33TX	SDMT1205ZDTN-RG-CX33TX	●	○	●		○	●
	ISDMT1205ZDTNRG43TX	SDMT1205ZDTN-RG-CX43TX	●	●			●	
	ISDNW1205ZDTNMG32HS	SDNW1205ZDTN-MG-CX32HS	●	○	●			
	ISDNW1205ZDTNMG33TX	SDNW1205ZDTN-MG-CX33TX	●	○	●		○	●
	ISDNW1205ZDTNRG23TX	SDNW1205ZDTN-RG-CX23TX	○	○	○		○	●
	ISDNW1205ZDTNRG32HS	SDNW1205ZDTN-RG-CX32HS	●	○	●			
	ISDNW1205ZDTNRG33TX	SDNW1205ZDTN-RG-CX33TX	●	○	●		○	●
	ISDNW1205ZDTNRG43TX	SDNW1205ZDTN-RG-CX43TX	●	●			●	
	ISDNW1205ZDTNRG37TA	SDNW1205ZDTN-RG-CX37TA	●		●			○

Indexable Milling



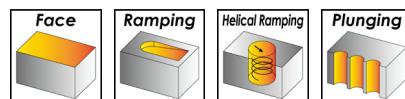
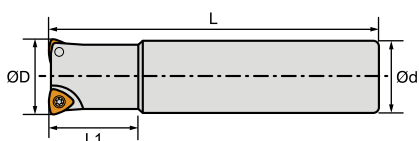
**High Feed Milling - CF23** 高進給銑刀

**CF23 Series**



- Use WP26 inserts with 3 cutting edges.
- High feed and high rigidity negative designed for hardened steel.
- 32~160mm cutter diameter, max. 2mm depth of cut.
- 使用 WP26 銑刀片，3 個可用切削角
- 高進給及高剛性負角設計，適用於較硬材料加工
- 32~160mm 刀桿直徑，最大切削深度可達 2mm

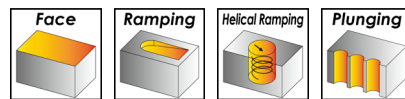
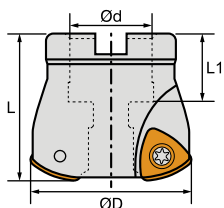
**CF23E - Milling Tools** 高進給銑刀



Insert Brand : Winstar, Walter, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICF23E203032150	32	28	150	32	3	WP26339R14	ITS4005	ITK15	○
ICF23E203035180	35	40	180	32	3				○
ICF23E203035230	35	40	230	32	3				●
ICF23E204040200	40	40	200	32	4				○
ICF23E202040200	40	45	200	32	2	WP26379R25	ITS5002	ITK20	○
ICF23E203050200	50	45	200	32	3				○

**CF23F - Milling Tools** 高進給銑刀



Insert Brand : Winstar, Walter, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICF23F203050220	50	21	50	22	3	WP26379R25	ITS5002	ITK20	●
ICF23F204063220	63	21	50	22	4				○
ICF23F205080270	80	23	50	27	5				○
ICF23F206100320	100	26	50	32	6				●
ICF23F207125400	125	38	63	40	7				○
ICF23F208160400	160	38	63	40	8				●

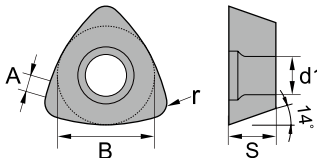
● stock ○ by inquiry

Customize available.



## Recommended Cutting Conditions 建議切削數據

Working Material	WP26339R14			WP26379R25		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.4 ~ 1.5	0.4 ~ 1.5	120 ~ 250	0.4 ~ 3.0	0.4 ~ 2.0
Stainless Steel	100 ~ 180	0.4 ~ 1.2	0.4 ~ 1.0	100 ~ 180	0.4 ~ 2.0	0.4 ~ 1.4
Cast Iron	120 ~ 250	0.4 ~ 1.5	0.4 ~ 1.5	120 ~ 250	0.4 ~ 3.0	0.4 ~ 2.0
High Temperature Alloy	40 ~ 100	0.4 ~ 1.0	0.4 ~ 1.0	40 ~ 100	0.4 ~ 1.6	0.4 ~ 1.2

## Insert Specifications 刀片規格

Insert	Dimensions (mm)					
	A	B	S	r	d1	
WP26339R14	-	9.52	3.97	1.2	4.4	
WP26379R25	1.1	13	5.56	2.0	5.5	

## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IWP26314RG23TX	WP26339R14-RG-CX23TX	○	○	○		○	●
	IWP26314RG32HS	WP26339R14-RG-CX32HS	●	○	●			
	IWP26314RG33TX	WP26339R14-RG-CX33TX	●	○	●		○	●
	IWP26314RG43TX	WP26339R14-RG-CX43TX	●	●			●	
	IWP26725RG23TX	WP26379R25-RG-CX23TX	○	○	○		○	●
	IWP26725RG32HS	WP26379R25-RG-CX32HS	●	○	●			
	IWP26725RG33TX	WP26379R25-RG-CX33TX	●	○	●		○	●
	IWP26725RG43TX	WP26379R25-RG-CX43TX	●	●			●	

**CXHN Series**



- Use HNMX double-sided inserts with 12 cutting edges.
- Sharp cutting edge design for low depth-of-cut face milling.
- 50~100mm cutter diameter, max. 3.5mm depth of cut.

- 使用 HNMX 雙面銑刀片，12 個可用切削角
- 鋒利切削刃設計適用於淺切面銑加工
- 50~100mm 刀盤直徑，最大切削深度可達 3.5mm

→ Page A096

**CXSN Series**



- Use SNMX or ONMX double-sided inserts with 8 or 16 cutting edges.
- 2 type inserts can fit in same cutter for multiple applications.
- 50~202.9mm cutter diameter, max. 6mm depth of cut.

- 使用 SNMX 或 ONMX 雙面銑刀片，8 或 16 個可用切削角
- 兩種刀片可鎖附在相同刀盤上，可應用於不同的深淺加工
- 50~202.9mm 刀盤直徑，最大切削深度可達 6mm

→ Page A098

**CAOF Series**

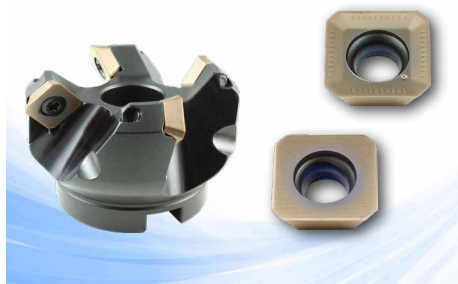


- Use OFMT inserts with 8 cutting edges.
- Cost effective for low depth-of-cut face milling.
- 50~100mm cutter diameter, max. 2.8mm depth of cut.

- 使用 OFMT 銑刀片，8 個可用切削角
- 經濟實惠的較淺面銑加工
- 50~100mm 刀盤直徑，最大切削深度可達 2.8mm

→ Page A101

**CASE Series**



- Use SEKT or SEKW inserts with 4 cutting edges.
- Cost effective for wide range face milling applications.
- 50~100mm cutter diameter, max. 5.5mm depth of cut.

- 使用 SEKT 或 SEKW 銑刀片，4 個可用切削角
- 經濟實惠的不同切深面銑應用
- 50~100mm 刀盤直徑，最大切削深度可達 5.5mm

→ Page A103

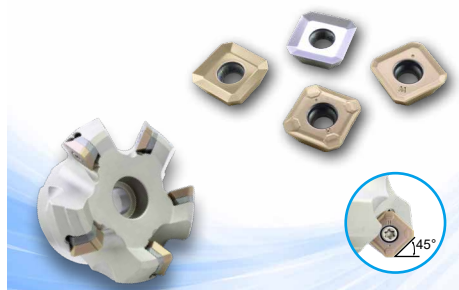
**CASX Series**



- Use SEMT inserts with 4 cutting edges.
- Cost effective for wide range face milling applications.
- 50~315mm cutter diameter, max. 5.5mm depth of cut.
- 使用 SEMT 銑刀片，4 個可用切削角
- 經濟實惠的不同切深面銑應用
- 50~315mm 刀盤直徑，最大切削深度可達 5.5mm

→ Page A105

**CR24 Series**



- Use W245-12T3 inserts with 4 cutting edges.
- High performance face milling tools for general purpose.
- 50~315mm cutter diameter, max. 5.5mm depth of cut.
- 使用 W245-12T3 銑刀片，4 個可用切削角
- 高效率的泛用型面銑刀具
- 50~315mm 刀盤直徑，最大切削深度可達 5.5mm

→ Page A107

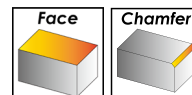
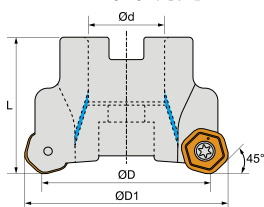
Face Milling - CXHN 面銑刀

**CXHN Series**



- Use HNMX double-sided inserts with 12 cutting edges.
- Sharp cutting edge design for low depth-of-cut face milling.
- 50~100mm cutter diameter, max. 3.5mm depth of cut.
- 使用 HNMX 雙面銑刀片，12 個可用切削角
- 鋒利切削刃設計適用於淺切面銑加工
- 50~100mm 刀盤直徑，最大切削深度可達 3.5mm

**CXHNF - Milling Tools 面銑刀**



Insert Brand : Winstar, Widia, ...

Order No.	D	D1	L	d	T	Coolant Hole	Inserts	Screw	Wrench	Stock
ICXHNF705050224	50	58.7	40	22	5	✓	HNMX0704	ITS4005	ITK15	●
ICXHNF706063224	63	71.7	40	22	6	✓				●
ICXHNF708080274	80	88.7	50	27	8	✓				●
ICXHNF709100324	100	108.7	50	32	9	✓				●

● stock ○ by inquiry

**Recommended Cutting Conditions 建議切削數據**

Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	140 ~ 250	0.10 ~ 0.3	0.3 ~ 3.5
Stainless Steel	60 ~ 140	0.08 ~ 0.2	0.3 ~ 2.0
High Temperature Alloy	30 ~ 70	0.08 ~ 0.2	0.3 ~ 2.0

**Face Milling - CXHN** 面銑刀

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)						
	A	B	S	r	d1	t1	
HNMX0704	6.8	12.7	4.45	1.2	4.9	1.4	

**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IHNMX0704SG32HS	HNMX0704-SG-CX32HS	●	○	●			
	IHNMX0704SG33TX	HNMX0704-SG-CX33TX	●	○	●		○	●
	IHNMX0704SG33UX	HNMX0704-SG-CX33UX	●	●	●		●	○
	IHNMX0704SG43TX	HNMX0704-SG-CX43TX	●	●			●	
	IHNMX0704SG47TA	HNMX0704-SG-CX47TA	●	○	●		○	

Indexable Milling

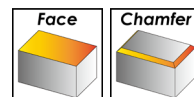
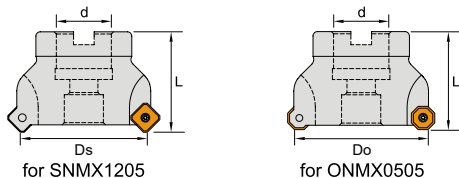
Face Milling - CXSN 面銑刀

**CXSN Series**



- Use SNMX or ONMX double-sided inserts with 8 or 16 cutting edges.
- 2 type inserts can fit in same cutter for multiple applications.
- 50~202.9mm cutter diameter, max. 6mm depth of cut.
- 使用 SNMX 或 ONMX 雙面銑刀片，8 或 16 個可用切削角
- 兩種刀片可鎖附在相同刀盤上，可應用於不同的深淺加工
- 50~202.9mm 刀盤直徑，最大切削深度可達 6mm

**CXSNF - Milling Tools 面銑刀**



Insert Brand : Winstar, Walter, ...

Order No.	D		L	d	T	Inserts	Screw	Wrench	Stock
	Ds	Do							
ICXSNF504050220	50	52.9	40	22	4	SNMX1205 ONMX0505	ITS4015	ITK15	●
ICXSNF505063220	63	65.9	40	22	5				●
ICXSNF506080270	80	82.9	50	27	6				●
ICXSNF508100320	100	102.9	50	32	8				●
ICXSNF510125400	125	127.9	63	40	10				●
ICXSNF512160400	160	162.9	63	40	12				●
ICXSNF514200600	200	202.9	63	60	14				●

● stock ○ by inquiry

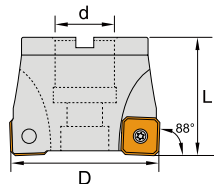
Customize available.

**Recommended Cutting Conditions 建議切削數據**

Working Material	SNMX1205			ONMX0505		
	Vc	fz	ap	Vc	fz	ap
Carbon Steel / Alloy Steel	80 ~ 200	0.1 ~ 0.3	0.3 ~ 6.0	80 ~ 200	0.1 ~ 0.3	0.3 ~ 2.0
Stainless Steel	50 ~ 110	0.08 ~ 0.25	0.3 ~ 3.6	50 ~ 110	0.08 ~ 0.25	0.3 ~ 1.5
Cast Iron	80 ~ 180	0.1 ~ 0.3	0.3 ~ 6.0	80 ~ 180	0.1 ~ 0.3	0.3 ~ 2.0
High Temperature Alloy	30 ~ 60	0.08 ~ 0.2	0.3 ~ 3.6	30 ~ 60	0.08 ~ 0.2	0.3 ~ 1.5
Hardened Steel	35 ~ 70	0.08 ~ 0.23	0.3 ~ 3.6	35 ~ 70	0.08 ~ 0.23	0.3 ~ 1.5

**Shoulder Milling - CXSN** 方肩銑刀

**CXSNE - Milling Tools** 方肩銑刀



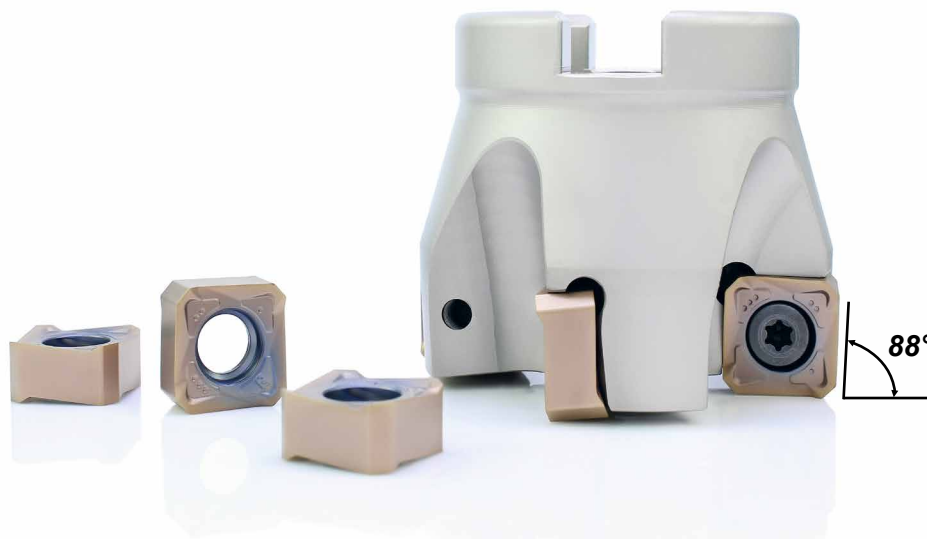
Insert Brand : Winstar, Walter, ...

Order No.	D	L	d	T	Inserts	Screw	Wrench	Stock
ICXSNE504050220	50	40	22	4	SNMX1205	ITS4015	ITK15	●
ICXSNE505063220	63	40	22	5				●
ICXSNE506080270	80	50	27	6				●

● stock ○ by inquiry

**Recommended Cutting Conditions** 建議切削數據

Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	80 ~ 200	0.1 ~ 0.2	0.3 ~ 11
Stainless Steel	50 ~ 110	0.08 ~ 0.18	0.3 ~ 5
Cast Iron	80 ~ 180	0.1 ~ 0.2	0.3 ~ 11
High Temperature Alloy	30 ~ 60	0.08 ~ 0.14	0.3 ~ 5
Hardened Steel	35 ~ 70	0.08 ~ 0.16	0.3 ~ 5





**Face Milling - CXSN** 面銑刀

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)				
	A	B	S	d1	
SNMX1205	12.7	1.5	6.4	6	
ONMX0505	12.7	5.0	6.4	6	

**Insert Designation** 刀片型號

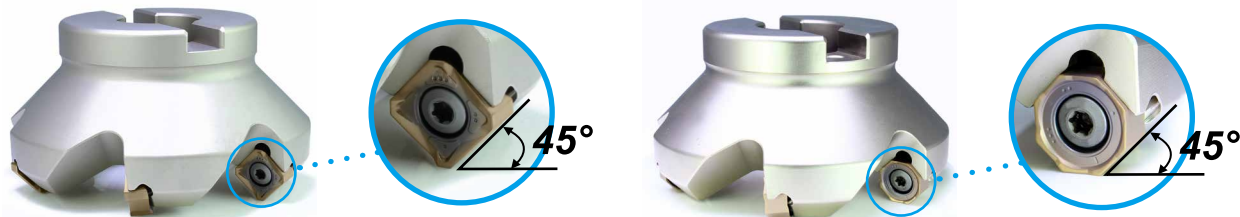
Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ISNMX1205MG23TX	SNMX1205-MG-CX23TX	○	○	○		○	●
	ISNMX1205MG32HS	SNMX1205-MG-CX32HS	●	○	●			
	ISNMX1205MG33TX	SNMX1205-MG-CX33TX	●	○	●		○	●
	ISNMX1205MG33UX	SNMX1205-MG-CX33UX	●	●	●		●	○
	ISNMX1205MG43TX	SNMX1205-MG-CX43TX	●	●			●	
	ISNMX1205MG37TA	SNMX1205-MG-CX37TA	●		●			○
	ISNMX1205RG23TX	SNMX1205-RG-CX23TX	○	○	○		○	●
	ISNMX1205RG32HS	SNMX1205-RG-CX32HS	●	○	●			
	ISNMX1205RG33TX	SNMX1205-RG-CX33TX	●	○	●		○	●
	ISNMX1205RG43TX	SNMX1205-RG-CX43TX	●	●			●	
	ISNMX1205RG37TA	SNMX1205-RG-CX37TA	●		●			○
	ISNMX1205RG47TA	SNMX1205-RG-CX47TA	●	○	●		○	
	IONMX0505MG32HS	ONMX0505-MG-CX32HS	●	○	●			
	IONMX0505MG33TX	ONMX0505-MG-CX33TX	●	○	●		○	●
	IONMX0505MG33UX	ONMX0505-MG-CX33UX	●	●	●		●	○
	IONMX0505MG43TX	ONMX0505-MG-CX43TX	●	●			●	
	IONMX0505RG23TX	ONMX0505-RG-CX23TX	○	○	○		○	●
	IONMX0505RG32HS	ONMX0505-RG-CX32HS	●	○	●			
	IONMX0505RG33TX	ONMX0505-RG-CX33TX	●	○	●		○	●
	IONMX0505RG43TX	ONMX0505-RG-CX43TX	●	●			●	
	IONMX0505RG37TA	ONMX0505-RG-CX37TA	●		●			○

**Tools Features** 刀具特性

**2 types of double sided inserts fit in same pocket !**

· Depth of cutting > 2mm  
use Square insert - SNMX1205 (Total 8 cutting edges)

· Depth of cutting <= 2mm  
use Octagonal insert - ONMX0505 (Total 16 cutting edges)



**43° Face Milling - CAOF** 43° 面銑刀

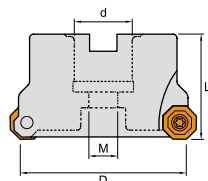
**CAOF Series**



- Use OFMT inserts with 8 cutting edges.
- Cost effective for low depth-of-cut face milling.
- 50~100mm cutter diameter, max. 2.8mm depth of cut.
- 使用 OFMT 銑刀片，8 個可用切削角
- 經濟實惠的較淺面銑加工
- 50~100mm 刀盤直徑，最大切削深度可達 2.8mm

Indexable Milling

**CAOFF - Milling Tools 面銑刀**



Insert Brand : Winstar, Taegutec, ...

Order No.	D	d	L	M	T	Inserts	Screw	Wrench	Stock
ICAOFF505050220	50	22	40	11	5	OFMT05T3...	IMS4011A	ITK15	●
ICAOFF506063220	63	22	40	11	6				●
ICAOFF506063250	63	25.4	50	13	6				●
ICAOFF507080250	80	25.4	50	13	7				●
ICAOFF507080270	80	27	50	38	7				●
ICAOFF508100310	100	31.75	50	46	8				●
ICAOFF508100320	100	32	50	46	8				●

● stock ○ by inquiry

**Recommended Cutting Conditions 建議切削數據**

Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.30	0.3 ~ 2.8
Stainless Steel	100 ~ 180	0.08 ~ 0.25	0.3 ~ 1.7
Cast Iron	120 ~ 250	0.10 ~ 0.30	0.3 ~ 2.8
High Temperature Alloy	40 ~ 100	0.08 ~ 0.25	0.3 ~ 1.7
Hardened Steel	50 ~ 100	0.08 ~ 0.25	0.3 ~ 1.7

Face Milling - CAOF 面銑刀

Insert Specifications 刀片規格

Insert	Dimensions (mm)				
	A	S	r	d1	
OFMT05T3	12.7	3.8	0.6	4.6	

Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IOFMT05T3TNSG32HS	OFMT05T3TN-SG-CX32HS	●	○	●			
	IOFMT05T3TNSG33TX	OFMT05T3TN-SG-CX33TX	●	○	●		○	●
	IOFMT05T3TNSG33UX	OFMT05T3TN-SG-CX33UX	●	●	●		●	○
	IOFMT05T3TNMG32HS	OFMT05T3TN-MG-CX32HS	●	○	●			
	IOFMT05T3TNMG33TX	OFMT05T3TN-MG-CX33TX	●	○	●		○	●
	IOFMT05T3TNMG33UX	OFMT05T3TN-MG-CX33UX	●	●	●		●	○
	IOFMT05T3TNRG32HS	OFMT05T3TN-RG-CX32HS	●	○	●			
	IOFMT05T3TNRG33TX	OFMT05T3TN-RG-CX33TX	●	○	●		○	●
	IOFMT05T3TNRG43TX	OFMT05T3TN-RG-CX43TX	●	●			●	



Face Milling - CASE 面銑刀

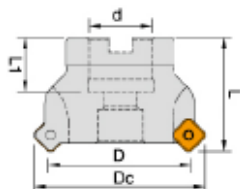
CASE Series



- Use SEKT or SEKW inserts with 4 cutting edges.
- Cost effective for wide range face milling applications.
- 50~100mm cutter diameter, max. 5.5mm depth of cut.
- 使用 SEKT 或 SEKW 銑刀片，4 個可用切削角
- 經濟實惠的不同切深面銑應用
- 50~100mm 刀盤直徑，最大切削深度可達 5.5mm

Indexable Milling

CASEF - Milling Tools 面銑刀



Insert Brand : Winstar, Kennametal, LMT, ...

Order No.	D	L	L1	d	Dc	T	Inserts	Screw	Wrench	Stock
ICASEF204050220	50	40	20	22	64	4	SEKT1204 SEKW1204 SEET1204	ITS5006	ITK20	●
ICASEF205063220	63	45	21	22	77	5				●
ICASEF205063250	63	45	21	25.4	77	5				○
ICASEF206080270	80	50	26	27	94	6				●
ICASEF206080310	80	50	26	31.75	94	6				○
ICASEF206100310	100	32	32	31.75	114	6				○
ICASEF206100320	100	32	32	32	114	6				○

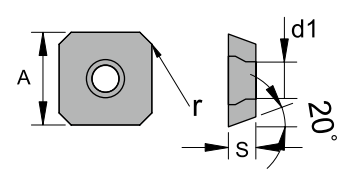
● stock ○ by inquiry

Recommended Cutting Conditions 建議切削數據







Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.30	0.3 ~ 5.5
Stainless Steel	100 ~ 180	0.08 ~ 0.25	0.3 ~ 3.0
Cast Iron	120 ~ 250	0.10 ~ 0.30	0.3 ~ 5.0
Aluminum Alloy	300 ~ 1000	0.10 ~ 0.40	0.3 ~ 5.5
High Temperature Alloy	40 ~ 100	0.08 ~ 0.25	0.3 ~ 3.0
Hardened Steel	50 ~ 100	0.08 ~ 0.25	0.3 ~ 3.0

## Insert Specifications 刀片規格

Insert	Dimensions (mm)			
	A	S	r	d1
SEKT1204	12.7	4.76	0.8	5.5
SEKW1204				
SEET1204				



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ISEET1204AFFNAL10	SEET1204AFFN-AL-CX10				●		
	ISEET1204AFFNFG23TX	SEET1204AFFN-FG-CX23TX	○	○	○		○	●
	ISEKT1204AFENMG32HS	SEKT1204AFEN-MG-CX32HS	●	○	●			
	ISEKT1204AFENMG33TX	SEKT1204AFEN-MG-CX33TX	●	○	●		○	●
	ISEKT1204AFENMG33UX	SEKT1204AFEN-MG-CX33UX	●	●	●		●	○
	ISEKT1204AFTNRG32HS	SEKT1204AFTN-RG-CX32HS	●	○	●			
	ISEKT1204AFTNRG33TX	SEKT1204AFTN-RG-CX33TX	●	○	●		○	●
	ISEKT1204AFTNRG43TX	SEKT1204AFTN-RG-CX43TX	●	●			●	
	ISEKW1204AFEN32HS	SEKW1204AFEN-CX32HS	●	○	●			
	ISEKW1204AFEN33TX	SEKW1204AFEN-CX33TX	●	○	●		○	●
	ISEKW1204AFEN43TX	SEKW1204AFEN-CX43TX	●	●			●	
	ISEKW1204AFTN32HS	SEKW1204AFTN-CX32HS	●	○	●			
	ISEKW1204AFTN33TX	SEKW1204AFTN-CX33TX	●	○	●		○	●
	ISEKW1204AFTN37TA	SEKW1204AFTN-CX37TA	●		●			○

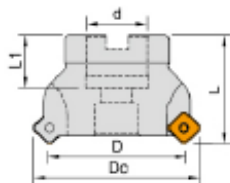
Face Milling - CASX 面銑刀

CASX Series



- Use SEMT inserts with 4 cutting edges.
- Cost effective for wide range face milling applications.
- 50~315mm cutter diameter, max. 5.5mm depth of cut.
- 使用 SEMT 銑刀片，4 個可用切削角
- 經濟實惠的不同切深面銑應用
- 50~315mm 刀盤直徑，最大切削深度可達 5.5mm

CASXF - Milling Tools 面銑刀



Insert Brand : Winstar, Mitsubishi, Sandvik, ...

Order No.	D	L	L1	d	Dc	T	Inserts	Stock
ICASXF304050220	50	40	20	22	63	4	SEMT13T3	●
ICASXF304050250	50	40	20	25.4	63	4		●
ICASXF305063220	63	40	20	22	75.9	5		●
ICASXF305063250	63	40	20	25.4	75.9	5		●
ICASXF306080250	80	50	26	25.4	93.2	6		●
ICASXF306080270	80	50	26	27	93.2	6		●
ICASXF307100310	100	50	32	31.75	113.2	7		●
ICASXF307100320	100	50	32	32	113.2	7		●
ICASXF308125380	125	63	38	38.1	138	8		●
ICASXF308125400	125	63	38	40	138	8		●
ICASXF310160400	160	63	38	40	173	10		●
ICASXF310160500	160	63	38	50.8	173	10		●
ICASXF312200470	200	63	38	47.625	212.9	12		●
ICASXF314250470	250	63	38	47.625	262.9	14		●
ICASXF314315470	315	63	40	47.625	327.9	14		●

● stock ○ by inquiry

Spare parts 配件

Shim	Screw	Wrench	Screw	Wrench
IAS445N	IPS35T	IPL20	ITS3505	ITK15

Indexable Milling

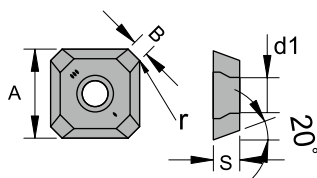
## Recommended Cutting Conditions 建議切削數據

Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.30	0.3 ~ 5.5
Stainless Steel	100 ~ 180	0.08 ~ 0.25	0.3 ~ 3.0
Cast Iron	120 ~ 250	0.10 ~ 0.30	0.3 ~ 5.0
Aluminum Alloy	300 ~ 1000	0.10 ~ 0.40	0.3 ~ 5.5
High Temperature Alloy	40 ~ 100	0.08 ~ 0.25	0.3 ~ 3.0
Hardened Steel	50 ~ 100	0.08 ~ 0.25	0.3 ~ 3.0






※ Max ap of 6mm.

## Insert Specifications 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
SEMT13T3	13.4	1.9	3.97	1.5	4.2
SEET13T3	13.4	1.9	3.97	1.5	4.2



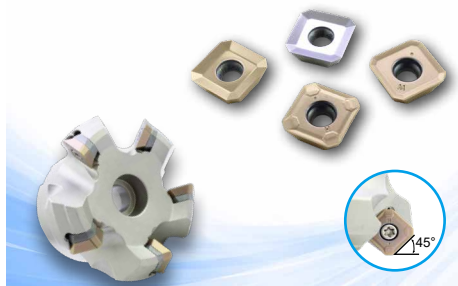
## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ISEET13T3AGFNAL10	SEET13T3AGFN-AL-CX10				●		
	ISEET13T3AGFNFG23TX	SEET13T3AGFN-FG-CX23TX	○	○	○		○	●
	ISEMT13T3AGENMG23TX	SEMT13T3AGEN-MG-CX23TX	○	○	○		○	●
	ISEMT13T3AGENMG32HS	SEMT13T3AGEN-MG-CX32HS	●	○	●			
	ISEMT13T3AGENMG33TX	SEMT13T3AGEN-MG-CX33TX	●	○	●		○	●
	ISEMT13T3AGENMG33UX	SEMT13T3AGEN-MG-CX33UX	●	●	●		●	○
	ISEMT13T3AGENMG43TX	SEMT13T3AGEN-MG-CX43TX	●	●			●	
	ISEMT13T3AGTNMG23TX	SEMT13T3AGTN-MG-CX23TX	○	○	○		○	●
	ISEMT13T3AGTNMG32HS	SEMT13T3AGTN-MG-CX32HS	●	○	●			
	ISEMT13T3AGTNMG33TX	SEMT13T3AGTN-MG-CX33TX	●	○	●		○	●
	ISEMT13T3AGTNMG33UX	SEMT13T3AGTN-MG-CX33UX	●	●	●		●	○
	ISEMT13T3AGTNMG43TX	SEMT13T3AGTN-MG-CX43TX	●	●			●	
	ISEMT13T3AGTNRG32HS	SEMT13T3AGTN-RG-CX32HS	●	○	●			
	ISEMT13T3AGTNRG33TX	SEMT13T3AGTN-RG-CX33TX	●	○	●		○	●
	ISEMT13T3AGTNRG43TX	SEMT13T3AGTN-RG-CX43TX	●	●			●	



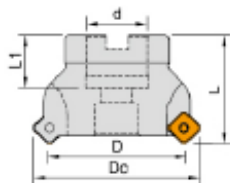
Face Milling - CR24 面銑刀

CR24 Series



- Use W245-12T3 inserts with 4 cutting edges.
- High performance face milling tools for general purpose.
- 50~315mm cutter diameter, max. 5.5mm depth of cut.
- 使用 W245-12T3 銑刀片, 4 個可用切削角
- 高效率的泛用型面銑刀具
- 50~315mm 刀盤直徑, 最大切削深度可達 5.5mm

CR24F - Milling Tools 面銑刀



Insert Brand : Winstar, Sandvik, Mitsubishi, ...

Order No.	D	L	L1	d	Dc	T	Inserts	Stock
ICR24F304050220	50	40	20	22	63	4	W245-12T3	●
ICR24F304050250	50	40	20	25.4	63	4		●
ICR24F305063220	63	40	20	22	75.9	5		●
ICR24F305063250	63	40	20	25.4	75.9	5		●
ICR24F306080250	80	50	26	25.4	93.2	6		●
ICR24F306080270	80	50	26	27	93.2	6		●
ICR24F307100310	100	50	32	31.75	113.2	7		●
ICR24F307100320	100	50	32	32	113.2	7		●
ICR24F308125380	125	63	38	38.1	138	8		●
ICR24F308125400	125	63	38	40	138	8		●
ICR24F310160400	160	63	38	40	173	10		●
ICR24F310160500	160	63	38	50.8	173	10		●
ICR24F312200470	200	63	38	47.625	212.9	12		●
ICR24F314250470	250	63	38	47.625	262.9	14		●
ICR24F314315470	315	63	40	47.625	327.9	14		●

● stock ○ by inquiry

Spare parts 配件

Shim	Screw	Wrench	Screw	Wrench
IAS445N	IPS35T	IPL20	ITS3505	ITK15

Indexable Milling

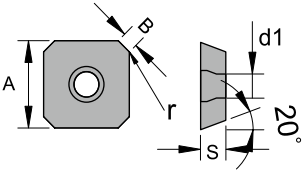


## Recommended Cutting Conditions 建議切削數據





Working Material	Vc	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.30	0.3 ~ 5.5
Stainless Steel	100 ~ 180	0.08 ~ 0.25	0.3 ~ 3.0
Cast Iron	120 ~ 250	0.10 ~ 0.30	0.3 ~ 5.0
Aluminum Alloy	300 ~ 1000	0.10 ~ 0.40	0.3 ~ 5.5
High Temperature Alloy	40 ~ 100	0.08 ~ 0.25	0.3 ~ 3.0
Hardened Steel	50 ~ 100	0.08 ~ 0.25	0.3 ~ 3.0

※ Max ap of 6mm.

## Insert Specifications 刀片規格

Insert	Dimensions (mm)					
	A	B	S	r	d1	
W245-12T3	13.4	1.9	3.97	1.5	4.2	

## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IW24512T3AL10	W245-12T3-AL-CX10				●		
	IW24512T3FG23TX	W245-12T3-FG-CX23TX	○	○	○		○	●
	IW24512T3MG23TX	W245-12T3-MG-CX23TX	○	○	○		○	●
	IW24512T3MG32HS	W245-12T3-MG-CX32HS	●	○	●			
	IW24512T3MG33TX	W245-12T3-MG-CX33TX	●	○	●		○	●
	IW24512T3MG33UX	W245-12T3-MG-CX33UX	●	●	●		●	○
	IW24512T3MG43TX	W245-12T3-MG-CX43TX	●	●			●	
	IW24512T3MG37TA	W245-12T3-MG-CX37TA	●		●			○
	IW24512T3HG32HS	W245-12T3-HG-CX32HS	●	○	●			
	IW24512T3HG33TX	W245-12T3-HG-CX33TX	●	○	●		○	●
	IW24512T3HG43TX	W245-12T3-HG-CX43TX	●	●			●	
	IW24512T3HG37TA	W245-12T3-HG-CX37TA	●		●			○
	IW24512T3HG47TA	W245-12T3-HG-CX47TA	●	○	●		○	

**CARD Series**

- Use RDMT or RDMW 2.5R, 3R, 3.5R, 5R, 6R and 8R round inserts.
- Suitable for mould & die machining and steel profiling.
- 10~100mm cutter diameter.

- 使用 RDMT 或 RDMW 2.5R, 3R, 3.5R, 5R, 6R 或 8R 圓形銑刀片
- 適用於模具與各類型鋼料仿形加工
- 10~100mm 刀桿直徑

→ Page A110

**CARP Series**

- Use RPMT or RPMW 4R, 5R and 6R round inserts.
- Suitable for mould & die machining and steel profiling.
- 16~80mm cutter diameter.

- 使用 RPMT 或 RPMW 4R, 5R 或 6R 圓形銑刀片
- 適用於模具與各類型鋼料仿形加工
- 16~80mm 刀桿直徑

→ Page A116

**CF21 Series**

- Use WP32 5R, 6R, 8R, 10R, 12.5R and 16R ball nose inserts.
- Suitable for mould & die finish or medium copy milling.
- 10~32mm cutter diameter.

- 使用 WP32 5R, 6R, 8R, 10R, 12.5R 或 16R 球形銑刀片
- 適用於模具中加工或精加工應用的仿形銑削
- 10~32mm 刀桿直徑

→ Page A120

**CF22 Series**

- Use WP26 inserts.
- Ball nose cutters are suitable for mould & die copy roughing.
- 25~50mm cutter diameter.

- 使用 WP26 銑刀片
- 適用於粗加工應用的仿形銑削
- 25~50mm 刀桿直徑

→ Page A123

**CGWV Series**

- Use WPBC16 inserts.
- Various corner radii available for copy or shoulder milling.
- 16mm cutter diameter.

- 使用 WPBC16 銑刀片
- 提供各種圓角，用於仿形或方肩銑削
- 16mm 刀桿直徑

→ Page A125 A109

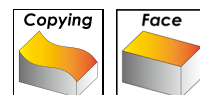
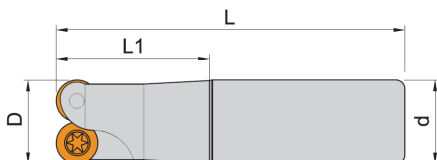
**Copy Milling - CARD** 仿形銑刀

**CARD Series**



- Use RDMT or RDMW 2.5R, 3R, 3.5R, 5R, 6R and 8R round inserts.
- Suitable for mould & die machining and steel profiling.
- 10~100mm cutter diameter.
- 使用 RDMT 或 RDMW 2.5R, 3R, 3.5R, 5R, 6R 或 8R 圓形銑刀片
- 適用於模具與各類型鋼料仿形加工
- 10~100mm 刀桿直徑

**CARDE - Milling Tools** 仿形銑刀



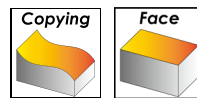
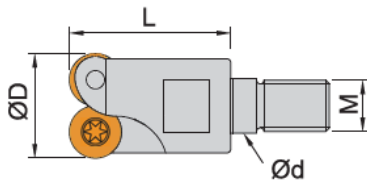
Insert Brand : Winstar, Safety, Hitachi, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICARDE502010100	10	25	100	10	2	RDKW0501	ITS2003	ITK06	●
ICARDE502012100	12	25	100	12	2				○
ICARDE503016130	16	35	130	16	3				○
ICARDE703016130	16	40	130	16	3	RDKW0702	ITS2515	ITK08	○
ICARDE704020150	20	40	150	20	4				●
ICARDE704025150	25	40	150	25	4				○
ICARDE102025150	25	45	150	25	2	RDMT10T3 RDMW10T3	ITS3504	ITK15	●
ICARDE102030150	30	45	150	25	2				●
ICARDE103032150	32	45	150	32	3				○
ICARDE202032150	32	50	150	32	2	RDMT1204 RDMW1204	ITS4008	ITK15	○
ICARDE302020150	20	40	150	20	2	RDMT1003 RDMX1003	IMS3507A	ITK15	●
ICARDE303025150	25	40	150	25	3				●
ICARDE303026150	26	25	150	25	3		●		
ICARDE303030150	30	25	150	25	3		●		
ICARDE304035150	35	40	150	32	4		IMS3509A		●

● stock ○ by inquiry

**Copy Milling - CARD** 仿形銑刀

**CARDM - Modular Milling Heads** 仿形銑刀頭



Insert Brand : Winstar, Safety, Hitachi, ...

Order No.	D	L1	d	M	T	Inserts	Screw	Wrench	Stock
ICARDM502012060	12	21	6.5	M06	2	RDKW0501	ITS2003	ITK06	●
ICARDM503012060	12	21	6.5	M06	3				○
ICARDM504016080	16	26	8.5	M08	4				○
ICARDM703016080	16	26	8.5	M08	3	RDKW0702	ITS2515	ITK08	○
ICARDM704020100	20	32	10.5	M10	4				○
ICARDM705025120	25	38	12.5	M12	5				○
ICARDM103025120	25	38	12.5	M12	3	RDMT10T3 RDMW10T3	ITS3504	ITK10	●
ICARDM104030120	30	38	12.5	M12	4				●
ICARDM105035120	35	38	12.5	M12	5				○
ICARDM302020100	20	30	10.5	M10	2	RDMT1003 RDMX1003	IMS3507A	ITK15	●
ICARDM302021100	21	30	10.5	M10	2				●
ICARDM303025120	25	35	12.5	M12	3				●
ICARDM303026120	26	35	12.5	M12	3				●
ICARDM303030120	30	35	12.5	M12	3		IMS3509A	●	

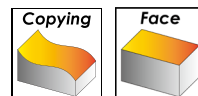
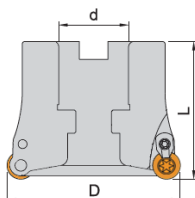
● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System 搭配鎖牙式刀桿，請參考刀具系統

Indexable Milling

**Copy Milling - CARD** 仿形銑刀

**CARDF - Milling Tools** 仿形銑刀



Insert Brand : Winstar, Hitachi, Kennametal, ...

Order No.	D	L	d	T	Inserts	Screw	Wrench	Clamp	Clamp Screw	Stock
ICARDF104050220	50	45	22	4	RDMT10T3 RDMW10T3	ITS3504	ITK15	IRD-45	ITS4009	●
ICARDF105063220	63	45	22	5						●
ICARDF204050220	50	45	22	4	RDMT1204 RDMW1204	ITS4008	ITK15	IRD-6R	ITS5004	●
ICARDF205050220	50	45	22	5						●
ICARDF205063220	63	45	22	5						●
ICARDF206063220	63	45	22	6						●
ICARDF207080270	80	50	27	7						○
ICARDF208100320	100	50	32	8						○
ICARDF604063220	63	45	22	4	RDMT1604 RDMW1604	ITS5007	ITK20	IRD-68	ITS5009	●
ICARDF605063220	63	45	22	5						●
ICARDF606080270	80	50	27	6						○
ICARDF607100320	100	50	32	7						○
ICARDF305050220	50	40	22	5	RDMT1003 RDMX1003	IMS3509A	ITK15	IMC35-3V	-	●
ICARDF305050250	50	50	25.4	5						●
ICARDF306063250	63	50	25.4	6						●

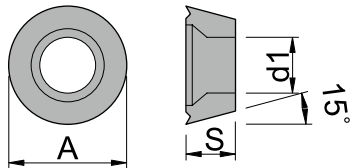
● stock ○ by inquiry

**Recommended Cutting Conditions** 建議切削數據





Working Material	Vc	Dia ≤ 10		Dia > 10	
		fz	ap	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.1 ~ 0.6	0.3 ~ 1.5	0.2 ~ 0.8	0.5 ~ 2.5
Stainless Steel	100 ~ 180	0.08 ~ 0.4	0.3 ~ 1.2	0.15 ~ 0.4	0.5 ~ 2.0
Cast Iron	120 ~ 250	0.1 ~ 0.6	0.3 ~ 1.5	0.2 ~ 0.8	0.5 ~ 2.5
High Temperature Alloy	40 ~ 100	0.08 ~ 0.3	0.3 ~ 1.0	0.15 ~ 0.3	0.3 ~ 2.0
Hardened Steel	50 ~ 100	0.08 ~ 0.3	0.3 ~ 1.0	0.15 ~ 0.3	0.3 ~ 2.0

## Insert Specifications 刀片規格

Insert	Dimensions (mm)		
	A	S	d1
RDKW0501	5	1.59	2.2
RDKW0702	7	2.38	2.8
RDMT1003	10	3.18	3.9
RDMX1003	10	3.18	4.15
RDMT10T3	10	3.97	4.5
RDMW10T3	10	3.97	4.5
RDMT12T3	12	3.97	4.1
RDMX12T3	12	3.97	4.1
RDMT1204	12	4.76	4.4
RDMW1204	12	4.76	4.4
RDMT1604	16	4.76	5.5
RDMW1604	16	4.76	5.5



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IRDKW0501MOE23TX	RDKW0501MOE-CX23TX	○	○	○		○	●
	IRDKW0501MOE32HS	RDKW0501MOE-CX32HS	●	○	●			
	IRDKW0501MOE33TX	RDKW0501MOE-CX33TX	●	○	●		○	●
	IRDKW0702MOE23TX	RDKW0702MOE-CX23TX	○	○	○		○	●
	IRDKW0702MOE32HS	RDKW0702MOE-CX32HS	●	○	●			
	IRDKW0702MOE33TX	RDKW0702MOE-CX33TX	●	○	●		○	●
	IRDKW0702MOE33UX	RDKW0702MOE-CX33UX	●	●	●		●	○
	IRDKW0702MOE43TX	RDKW0702MOE-CX43TX	●	●			●	
	IRDMT1003MOE23TX	RDMT1003MOE-CX23TX	○	○	○		○	●
	IRDMT1003MOE32HS	RDMT1003MOE-CX32HS	●	○	●			
	IRDMT1003MOE33TX	RDMT1003MOE-CX33TX	●	○	●		○	●
	IRDMT1003MOE33UX	RDMT1003MOE-CX33UX	●	●	●		●	○
	IRDMT1003MOE43TX	RDMT1003MOE-CX43TX	●	●			●	
	IRDMT1003MOT23TX	RDMT1003MOT-CX23TX	○	○	○		○	●
	IRDMT1003MOT32HS	RDMT1003MOT-CX32HS	●	○	●			
	IRDMT1003MOT33TX	RDMT1003MOT-CX33TX	●	○	●		○	●
	IRDMT1003MOT43TX	RDMT1003MOT-CX43TX	●	●			●	

Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IRDMX1003MOE23TX	RDMX1003MOE-CX23TX	○	○	○		○	●
	IRDMX1003MOE32HS	RDMX1003MOE-CX32HS	●	○	●			
	IRDMX1003MOE33TX	RDMX1003MOE-CX33TX	●	○	●		○	●
	IRDMX1003MOE33UX	RDMX1003MOE-CX33UX	●	●	●		●	○
	IRDMX1003MOT23TX	RDMX1003MOT-CX23TX	○	○	○		○	●
	IRDMX1003MOT32HS	RDMX1003MOT-CX32HS	●	○	●			
	IRDMX1003MOT33TX	RDMX1003MOT-CX33TX	●	○	●		○	●
	IRDMX1003MOT43TX	RDMX1003MOT-CX43TX	●	●			●	
	IRDMT10T3MOE23TX	RDMT10T3MOE-CX23TX	○	○	○		○	●
	IRDMT10T3MOE32HS	RDMT10T3MOE-CX32HS	●	○	●			
	IRDMT10T3MOE33TX	RDMT10T3MOE-CX33TX	●	○	●		○	●
	IRDMT10T3MOE43TX	RDMT10T3MOE-CX43TX	●	●			●	
	IRDMT10T3MOT23TX	RDMT10T3MOT-CX23TX	○	○	○		○	●
	IRDMT10T3MOT32HS	RDMT10T3MOT-CX32HS	●	○	●			
	IRDMT10T3MOT33TX	RDMT10T3MOT-CX33TX	●	○	●		○	●
	IRDMT10T3MOT43TX	RDMT10T3MOT-CX43TX	●	●			●	
	IRDMW10T3MOE32HS	RDMW10T3MOE-CX32HS	●	○	●			
	IRDMW10T3MOE33TX	RDMW10T3MOE-CX33TX	●	○	●		○	●
	IRDMW10T3MOT32HS	RDMW10T3MOT-CX32HS	●	○	●			
	IRDMW10T3MOT33TX	RDMW10T3MOT-CX33TX	●	○	●		○	●
	IRDMT12T3MOE23TX	RDMT12T3MOE-CX23TX	○	○	○		○	●
	IRDMT12T3MOE32HS	RDMT12T3MOE-CX32HS	●	○	●			
	IRDMT12T3MOE33TX	RDMT12T3MOE-CX33TX	●	○	●		○	●
	IRDMT12T3MOE33UX	RDMT12T3MOE-CX33UX	●	●	●		●	○
	IRDMT12T3MOE37TA	RDMT12T3MOE-CX37TA	●		●			○
	IRDMT12T3MOT23TX	RDMT12T3MOT-CX23TX	○	○	○		○	●
	IRDMT12T3MOT32HS	RDMT12T3MOT-CX32HS	●	○	●			
	IRDMT12T3MOT33TX	RDMT12T3MOT-CX33TX	●	○	●		○	●
	IRDMX12T3MOE23TX	RDMX12T3MOE-CX23TX	○	○	○		○	●
	IRDMX12T3MOE32HS	RDMX12T3MOE-CX32HS	●	○	●			
	IRDMX12T3MOE33TX	RDMX12T3MOE-CX33TX	●	○	●		○	●
	IRDMX12T3MOE43TX	RDMX12T3MOE-CX43TX	●	●			●	
	IRDMX12T3MOT23TX	RDMX12T3MOT-CX23TX	○	○	○		○	●
	IRDMX12T3MOT32HS	RDMX12T3MOT-CX32HS	●	○	●			
	IRDMX12T3MOT33TX	RDMX12T3MOT-CX33TX	●	○	●		○	●
	IRDMX12T3MOT43TX	RDMX12T3MOT-CX43TX	●	●			●	



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Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IRDHT1204MOE32HS	RDHT1204MOE-CX32HS	●	○	●			
	IRDHT1204MOE33TX	RDHT1204MOE-CX33TX	●	○	●		○	●
	IRDHT1204MOE33UX	RDHT1204MOE-CX33UX	●	●	●		●	○
	IRDHT1204MOE32HS	RDHT1204MOE-CX32HS	●	○	●			
	IRDHT1204MOE33TX	RDHT1204MOE-CX33TX	●	○	●		○	●
	IRDMT1204MOE23TX	RDMT1204MOE-CX23TX	○	○	○		○	●
	IRDMT1204MOE32HS	RDMT1204MOE-CX32HS	●	○	●			
	IRDMT1204MOE33TX	RDMT1204MOE-CX33TX	●	○	●		○	●
	IRDMT1204MOE43TX	RDMT1204MOE-CX43TX	●	●			●	
	IRDMT1204MOT23TX	RDMT1204MOT-CX23TX	○	○	○		○	●
	IRDMT1204MOT32HS	RDMT1204MOT-CX32HS	●	○	●			
	IRDMT1204MOT33TX	RDMT1204MOT-CX33TX	●	○	●		○	●
	IRDMT1204MOT43TX	RDMT1204MOT-CX43TX	●	●			●	
	IRDMW1204MOE32HS	RDMW1204MOE-CX32HS	●	○	●			
	IRDMW1204MOE33TX	RDMW1204MOE-CX33TX	●	○	●		○	●
	IRDMW1204MOE43TX	RDMW1204MOE-CX43TX	●	●			●	
	IRDMW1204MOT23TX	RDMW1204MOT-CX23TX	○	○	○		○	●
	IRDMW1204MOT32HS	RDMW1204MOT-CX32HS	●	○	●			
	IRDMW1204MOT33TX	RDMW1204MOT-CX33TX	●	○	●		○	●
	IRDMW1204MOT43TX	RDMW1204MOT-CX43TX	●	●			●	
	IRDMW1204MOT37TA	RDMW1204MOT-CX37TA	●		●			○
	IRDMT1604MOT23TX	RDMT1604MOT-CX23TX	○	○	○		○	●
	IRDMT1604MOT32HS	RDMT1604MOT-CX32HS	●	○	●			
	IRDMT1604MOT33TX	RDMT1604MOT-CX33TX	●	○	●		○	●
	IRDMT1604MOT43TX	RDMT1604MOT-CX43TX	●	●			●	
	IRDMW1604MOT23TX	RDMW1604MOT-CX23TX	○	○	○		○	●
	IRDMW1604MOT32HS	RDMW1604MOT-CX32HS	●	○	●			
	IRDMW1604MOT33TX	RDMW1604MOT-CX33TX	●	○	●		○	●
	IRDMW1604MOT43TX	RDMW1604MOT-CX43TX	●	●			●	
	IRDMW1604MOT37TA	RDMW1604MOT-CX37TA	●		●			○

Indexable Milling



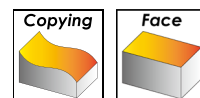
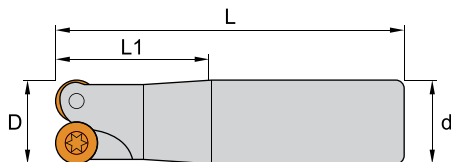
**Copy Milling - CARP** 仿形銑刀

**CARP Series**



- Use RPMT or RPMW 4R, 5R and 6R round inserts.
- Suitable for mould & die machining and steel profiling.
- 16~80mm cutter diameter.
- 使用 RPMT 或 RPMW 4R, 5R 或 6R 圓形銑刀片
- 適用於模具與各類型鋼料仿形加工
- 16~80mm 刀桿直徑

**CARPE - Milling Tools** 仿形銑刀



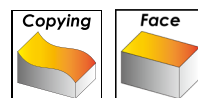
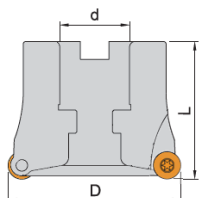
Insert Brand : Winstar, Mitsubishi, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICARPE802016150	16	50	150	16	2	RPMT08T2	ITS3004	ITK09	●
ICARPE802020150	20	50	150	20	2				●
ICARPE803025150	25	40	150	25	3				●
ICARPE102025150	25	40	150	25	2	RPHT10T3 RPMT10T3	ITS3503	ITK15	●
ICARPE103030150	30	40	150	25	3				●
ICARPE103032150	32	40	150	32	3				●
ICARPE202032170	32	45	170	32	2	RPHT1204 RPMT1204 RPMW1204	ITS4006	ITK15	●

Order No.	D	L1	L	d	T	Inserts	Screw	Clamp	Wrench	Stock
ICARPE302025150	25	50	150	25	2	RPMW1003	ITS4004	IAS5	ITK15	●
ICARPE302025180	25	50	180	25	2					●
ICARPE302025200	25	50	200	25	2					●
ICARPE302025250	25	50	250	25	2					●
ICARPE302026150	26	30	150	25	2					●
ICARPE302030150	30	35	150	25	2					●
ICARPE302030200	30	35	200	25	2					●
ICARPE302030300	30	35	300	25	2					●
ICARPE303032120	32	55	125	32	3					●
ICARPE303035150	35	55	150	32	3					●
ICARPE303035250	35	55	250	32	3					●
ICARPE303035300	35	55	300	32	3					●

● stock ○ by inquiry

## CARPF - Milling Tools 仿形銑刀



Insert Brand : Winstar, Mitsubishi, ...

Order No.	D	L	d	T	Inserts	Screw	Wrench	Stock
ICARPF305050220	50	45	22	5	RPHT10T3 RPMT10T3	ITS3503	ITK15	●
ICARPF305050250	50	45	25.4	5				●
ICARPF306063220	63	45	22	6				○
ICARPF306063250	63	45	25.4	6				○
ICARPF204050250	50	45	25.4	4	RPHT1204 RPMT1204 RPMW1204	ITS4006	ITK15	●
ICARPF205063220	63	45	22	5				●
ICARPF205063250	63	45	25.4	5				●
ICARPF206080250	80	50	25.4	6				●
ICARPF206080270	80	50	27	6				●

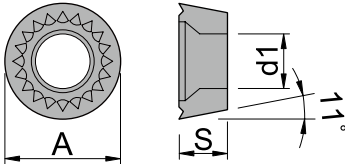
● stock ○ by inquiry

## Recommended Cutting Conditions 建議切削數據





Working Material	Vc	Dia ≤ 10		Dia > 10	
		fz	ap	fz	ap
Carbon Steel / Alloy Steel	120 ~ 250	0.1 ~ 0.6	0.3 ~ 1.5	0.2 ~ 0.8	0.5 ~ 2.5
Stainless Steel	100 ~ 180	0.08 ~ 0.4	0.3 ~ 1.2	0.15 ~ 0.4	0.5 ~ 2.0
Cast Iron	120 ~ 250	0.1 ~ 0.6	0.3 ~ 1.5	0.2 ~ 0.8	0.5 ~ 2.5
High Temperature Alloy	40 ~ 100	0.08 ~ 0.3	0.3 ~ 1.0	0.15 ~ 0.3	0.3 ~ 2.0
Hardened Steel	50 ~ 100	0.08 ~ 0.3	0.3 ~ 1.0	0.15 ~ 0.3	0.3 ~ 2.0

## Insert Specifications 刀片規格

Insert	Dimensions (mm)		
	A	S	d1
RPMT08T2	8	2.78	3.2
RPMW1003	10	3.18	4.6
RPHT10T3	10	3.97	4.5
RPMT10T3	10	3.97	4.5
RPHT1204	12	4.76	4.3
RPMT1204	12	4.76	4.3
RPMW1204	12	4.76	4.3



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IRPMT08T2MOE32HS	RPMT08T2MOE-CX32HS	●	○	●			
	IRPMT08T2MOE33TX	RPMT08T2MOE-CX33TX	●	○	●		○	●
	IRPMT08T2MOE33UX	RPMT08T2MOE-CX33UX	●	●	●		●	○
	IRPMT08T2MOE43TX	RPMT08T2MOE-CX43TX	●	●			●	
	IRPMT08T2MOT32HS	RPMT08T2MOT-CX32HS	●	○	●			
	IRPMT08T2MOT33TX	RPMT08T2MOT-CX33TX	●	○	●		○	●
	IRPMT08T2MOT43TX	RPMT08T2MOT-CX43TX	●	●			●	
	IRPMW1003MOE32HS	RPMW1003MOE-CX32HS	●	○	●			
	IRPMW1003MOE33TX	RPMW1003MOE-CX33TX	●	○	●		○	●
	IRPMW1003MOE43TX	RPMW1003MOE-CX43TX	●	●			●	
	IRPMW1003MOT23TX	RPMW1003MOT-CX23TX	○	○	○		○	●
	IRPMW1003MOT32HS	RPMW1003MOT-CX32HS	●	○	●			
	IRPMW1003MOT33TX	RPMW1003MOT-CX33TX	●	○	●		○	●
	IRPMW1003MOT43TX	RPMW1003MOT-CX43TX	●	●			●	

Copy Milling - CARP 仿形銑刀

Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IRPHT10T3MOE43TX	RPHT10T3MOE-CX43TX	●	●			●	
	IRPMT10T3MOE32HS	RPMT10T3MOE-CX32HS	●	○	●			
	IRPMT10T3MOE33TX	RPMT10T3MOE-CX33TX	●	○	●		○	●
	IRPMT10T3MOE33UX	RPMT10T3MOE-CX33UX	●	●	●		●	○
	IRPMT10T3MOE43TX	RPMT10T3MOE-CX43TX	●	●			●	
	IRPMT10T3MOT32HS	RPMT10T3MOT-CX32HS	●	○	●			
	IRPMT10T3MOT33TX	RPMT10T3MOT-CX33TX	●	○	●		○	●
	IRPMT10T3MOT43TX	RPMT10T3MOT-CX43TX	●	●			●	
	IRPHT1204MOE32HS	RPHT1204MOE-CX32HS	●	○	●			
	IRPHT1204MOE33TX	RPHT1204MOE-CX33TX	●	○	●		○	●
	IRPHT1204MOE33UX	RPHT1204MOE-CX33UX	●	●	●		●	○
	IRPHT1204MOT32HS	RPHT1204MOT-CX32HS	●	○	●			
	IRPHT1204MOT33TX	RPHT1204MOT-CX33TX	●	○	●		○	●
	IRPMT1204MOE23TX	RPMT1204MOE-CX23TX	○	○	○		○	●
	IRPMT1204MOE32HS	RPMT1204MOE-CX32HS	●	○	●			
	IRPMT1204MOE33TX	RPMT1204MOE-CX33TX	●	○	●		○	●
	IRPMT1204MOE33UX	RPMT1204MOE-CX33UX	●	●	●		●	○
	IRPMT1204MOE43TX	RPMT1204MOE-CX43TX	●	●			●	
	IRPMT1204MOT23TX	RPMT1204MOT-CX23TX	○	○	○		○	●
	IRPMT1204MOT32HS	RPMT1204MOT-CX32HS	●	○	●			
	IRPMT1204MOT33TX	RPMT1204MOT-CX33TX	●	○	●		○	●
	IRPMT1204MOT43TX	RPMT1204MOT-CX43TX	●	●			●	
	IRPMW1204MOE32HS	RPMW1204MOE-CX32HS	●	○	●			
	IRPMW1204MOE33TX	RPMW1204MOE-CX33TX	●	○	●		○	●
	IRPMW1204MOE43TX	RPMW1204MOE-CX43TX	●	●			●	
	IRPMW1204MOT32HS	RPMW1204MOT-CX32HS	●	○	●			
	IRPMW1204MOT33TX	RPMW1204MOT-CX33TX	●	○	●		○	●
	IRPMW1204MOT43TX	RPMW1204MOT-CX43TX	●	●			●	

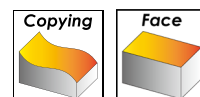
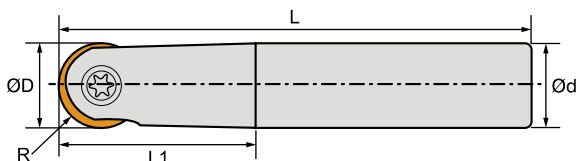
Indexable Milling

**CF21 Series**



- Use WP32 5R, 6R, 8R, 10R, 12.5R and 16R ball nose inserts.
- Suitable for mould & die finish or medium copy milling.
- 10~32mm cutter diameter.
- 使用 WP32 5R, 6R, 8R, 10R, 12.5R 或 16R 球形銑刀片
- 適用於模具中加工或精加工應用的仿形銑削
- 10~32mm 刀桿直徑

**CF21E - Milling Tools** 仿形銑刀



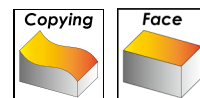
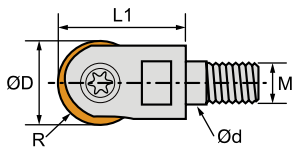
Insert Brand : Winstar, Walter, ...

Order No.	R	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICF21E302010100	5R	10	25	100	10	2	WP3210..	IMGR4010	IETL15	●
ICF21E302010150	5R	10	25	150	10	2				
ICF21E302012150	6R	12	32	150	12	2	WP3212..	IMGR5012	IETL20	●
ICF21E302012200	6R	12	58	200	16	2				
ICF21E302016150	8R	16	36	150	16	2	WP3216..	IMGR5016	IETL20	●
ICF21E302016200	8R	16	36	200	16	2				
ICF21E302016201	8R	16	65	200	20	2				
ICF21E302020150	10R	20	45	150	20	2	WP3220..	IMGR5020	IETL20	●
ICF21E302020200	10R	20	45	200	20	2				
ICF21E302020201	10R	20	76	200	25	2				
ICF21E302020250	10R	20	76	250	25	2				
ICF21E302025200	12.5R	25	45	200	25	2	WP3225..	IMGR6025	IETL30	●
ICF21E302025250	12.5R	25	45	250	25	2				
ICF21E302025201	12.5R	25	98	200	32	2				
ICF21E302025251	12.5R	25	98	250	32	2				
ICF21E302025300	12.5R	25	98	300	32	2				
ICF21E302032200	16R	32	50	200	32	2	WP3232..	IMGR8030	IETL30	●
ICF21E302032250	16R	32	50	250	32	2				
ICF21E302032300	16R	32	50	300	32	2				

● stock ○ by inquiry

**Copy Milling - CF21** 仿形銑刀

**CF21M - Modular Milling Heads** 仿形銑刀頭



Insert Brand : Winstar, Walter, ...

Order No.	R	D	L1	d	M	T	Inserts	Screw	Wrench	Stock
ICF21M302010050	5R	10	20	5.5	M5	2	WP3210..	IMGR4010	IETL15	●
ICF21M302012060	6R	12	22	6.5	M6	2	WP3212..	IMGR5012	IETL20	●
ICF21M302012080	6R	12	30	8.5	M8	2				
ICF21M302016080	8R	16	28	8.5	M8	2	WP3216 ..	IMGR5016	IETL20	●
ICF21M302020100	10R	20	30	10.5	M10	2	WP3220 ..	IMGR5020	IETL20	●
ICF21M302025120	12.5R	25	40	12.5	M12	2	WP3225 ..	IMGR6025	IETL30	●
ICF21M302032160	16R	32	43	17	M16	2	WP3232 ..	IMGR8030	IETL30	●

● stock ○ by inquiry

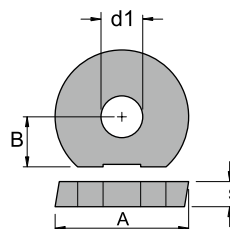
※ For screw-in type adapter, please refer to Tooling System

**Recommended Cutting Conditions** 建議切削數據















Working Material	Vc	fz					ap
		WP3212	WP3216	WP3220	WP3225	WP3232	
Carbon Steel / Alloy Steel	150 ~ 300	0.20	0.20	0.25	0.25	0.30	$\leq 0.03 \times \text{ØD}$
Stainless Steel	100 ~ 250	0.20	0.20	0.25	0.25	0.30	$\leq 0.03 \times \text{ØD}$
Cast Iron	90 ~ 350	0.25	0.30	0.30	0.35	0.40	$\leq 0.04 \times \text{ØD}$
Hardened Steel	100 ~ 350	0.10	0.125	0.15	0.20	0.25	$\leq 0.02 \times \text{ØD}$

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)			
	A	B	S	d1
WP3210	10	5	2.5	4
WP3212	12	6	2.5	5
WP3216	16	6	3	5
WP3220	20	6	3	5
WP3225	25	9	4	6
WP3230	30	10	5	8
WP3232	32	10	5	8



## Insert Designation 刀片型號

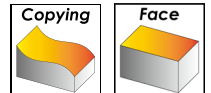
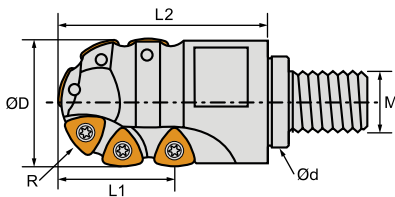
Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IWP3210SM13TX	WP3210-SM-CX13TX	○	○	○		○	●
	IWP3210SM23TX	WP3210-SM-CX23TX	○	○	○		○	●
	IWP3212SM13TX	WP3212-SM-CX13TX	○	○	○		○	●
	IWP3212SM23TX	WP3212-SM-CX23TX	○	○	○		○	●
	IWP3216SM13TX	WP3216-SM-CX13TX	○	○	○		○	●
	IWP3216SM23TX	WP3216-SM-CX23TX	○	○	○		○	●
	IWP3220SM13TX	WP3220-SM-CX13TX	○	○	○		○	●
	IWP3220SM23TX	WP3220-SM-CX23TX	○	○	○		○	●
	IWP3225SM13TX	WP3225-SM-CX13TX	○	○	○		○	●
	IWP3225SM23TX	WP3225-SM-CX23TX	○	○	○		○	●
	IWP3230SM13TX	WP3230-SM-CX13TX	○	○	○		○	●
	IWP3230SM23TX	WP3230-SM-CX23TX	○	○	○		○	●
	IWP3232SM13TX	WP3232-SM-CX13TX	○	○	○		○	●
	IWP3232SM23TX	WP3232-SM-CX23TX	○	○	○		○	●
	IWP3210MM13TX	WP3210-MM-CX13TX	○	○	○		○	●
	IWP3210MM23TX	WP3210-MM-CX23TX	○	○	○		○	●
	IWP3212MM13TX	WP3212-MM-CX13TX	○	○	○		○	●
	IWP3212MM23TX	WP3212-MM-CX23TX	○	○	○		○	●
	IWP3216MM13TX	WP3216-MM-CX13TX	○	○	○		○	●
	IWP3216MM23TX	WP3216-MM-CX23TX	○	○	○		○	●
	IWP3220MM13TX	WP3220-MM-CX13TX	○	○	○		○	●
	IWP3220MM23TX	WP3220-MM-CX23TX	○	○	○		○	●
	IWP3225MM13TX	WP3225-MM-CX13TX	○	○	○		○	●
	IWP3225MM23TX	WP3225-MM-CX23TX	○	○	○		○	●
	IWP3230MM13TX	WP3230-MM-CX13TX	○	○	○		○	●
	IWP3230MM23TX	WP3230-MM-CX23TX	○	○	○		○	●
	IWP3232MM13TX	WP3232-MM-CX13TX	○	○	○		○	●
	IWP3232MM23TX	WP3232-MM-CX23TX	○	○	○		○	●

**CF22 Series**



- Use WP26 inserts.
- Ball nose cutters are suitable for mould & die copy roughing.
- 25~50mm cutter diameter.
- 使用 WP26 銑刀片
- 適用於粗加工應用的仿形銑削
- 25~50mm 刀桿直徑

**CF22M - Modular Milling Heads 仿形銑刀頭**



Insert Brand : Winstar, Walter, ...

Order No.	R	D	L1	L2	d	M	T	Inserts	Screw	Wrench	Stock
ICF22M202025120	12.5R	25	21	42	12.5	M12	2	WP26339R14	ITS4023	ITK15	●
ICF22M202030120	15R	30	23	50	12.5	M12	2				●
ICF22M202032160	16R	32	23	50	17.0	M16	2				●
ICF22M202040180	20R	40	38	65	28.0	M18	2	WP26379R25	ITS5002	ITK20	○
ICF22M202050250	25R	50	45	80	36.0	M25	2				●

● stock ○ by inquiry

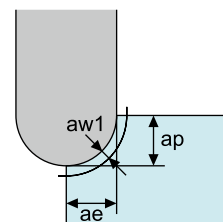
※ For screw-in type adapter, please refer to Tooling System



**Recommended Cutting Conditions** 建議切削數據

**WP26339R14**

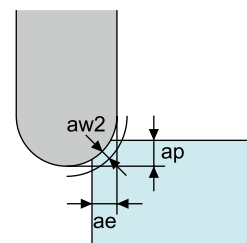
Working Material	Vc	aw1 = (0.5D, 0.5D)	aw2 = (0.25D, 0.25D)
		fz	
Carbon Steel / Alloy Steel	120 ~ 250	0.16 ~ 0.30	0.2 ~ 0.39
Stainless Steel	100 ~ 180	0.08 ~ 0.14	0.1 ~ 0.18
Cast Iron	120 ~ 250	0.16 ~ 0.30	0.2 ~ 0.39
High Temperature Alloy	40 ~ 100	0.08 ~ 0.12	0.1 ~ 0.18



aw1 = (ap, ae)

**WP26379R25**

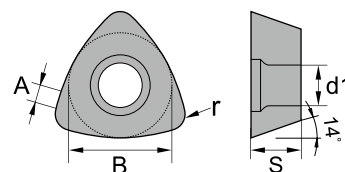
Working Material	Vc	aw1 = (0.5D, 0.5D)	aw2 = (0.25D, 0.25D)
		fz	
Carbon Steel / Alloy Steel	120 ~ 250	0.20 ~ 0.36	0.26 ~ 0.46
Stainless Steel	100 ~ 180	0.08 ~ 0.14	0.10 ~ 0.18
Cast Iron	120 ~ 250	0.20 ~ 0.36	0.26 ~ 0.46
High Temperature Alloy	40 ~ 100	0.08 ~ 0.12	0.10 ~ 0.18



aw2 = (ap, ae)

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
WP26339R14	-	9.52	3.97	1.2	4.4
WP26379R25	1.1	13	5.56	2.0	5.5



**Insert Designation** 刀片型號

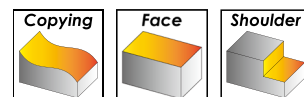
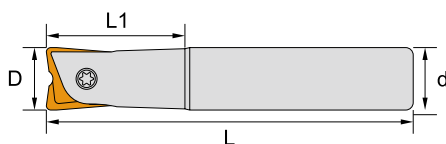
Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IWP26314RG23TX	WP26339R14-RG-CX23TX	○	○	○		○	●
	IWP26314RG32HS	WP26339R14-RG-CX32HS	●	○	●			
	IWP26314RG33TX	WP26339R14-RG-CX33TX	●	○	●		○	●
	IWP26314RG43TX	WP26339R14-RG-CX43TX	●	●			●	
	IWP26725RG23TX	WP26379R25-RG-CX23TX	○	○	○		○	●
	IWP26725RG32HS	WP26379R25-RG-CX32HS	●	○	●			
	IWP26725RG33TX	WP26379R25-RG-CX33TX	●	○	●		○	●
	IWP26725RG43TX	WP26379R25-RG-CX43TX	●	●			●	

## CGVV Series



- Use WPBC16 inserts.
- Various corner radii available for copy or shoulder milling.
- 16mm cutter diameter.
- 使用 WPBC16 銑刀片
- 提供各種圓角，用於仿形或方肩銑削
- 16mm 刀桿直徑

## CGVV - Milling tools 仿形銑刀



Insert Brand : Winstar, LMT tools, ...

Order No.	D	L1	L	d	T	Inserts	Screw	Wrench	Stock
ICGWVE016150	16	35	150	16	2	WPBC16..	MGR5016	ETL20	●
ICGWVE016200	16	35	200	16	2				●

● stock ○ by inquiry

## Recommended Cutting Conditions 建議切削數據

## for Copy milling 適用於仿形銑削

Working Material	Vc	fz	ap	ae
Carbon Steel / Alloy Steel	170 ~ 270	0.20 ~ 0.25	≤ 0.03D	≤ 0.03D
Stainless Steel	170 ~ 190	0.20 ~ 0.25	≤ 0.03D	≤ 0.03D
Cast Iron	170 ~ 230	0.20 ~ 0.25	≤ 0.04D	≤ 0.04D
High Temperature Alloy	50 ~ 80	0.20 ~ 0.25	≤ 0.02D	≤ 0.02D
Hardened Steel	80 ~ 210	0.15 ~ 0.25	≤ 0.02D	≤ 0.02D

## for Shoulder milling 適用於方肩銑削

Working Material	Vc	fz	ap	ae
Carbon Steel / Alloy Steel	120 ~ 190	0.20 ~ 0.25	0.1 ~ 3	0.1D ~ 1D
Stainless Steel	120 ~ 135	0.20 ~ 0.25	0.1 ~ 3	0.1D ~ 1D
Cast Iron	120 ~ 160	0.20 ~ 0.25	0.1 ~ 3	0.1D ~ 1D
High Temperature Alloy	35 ~ 55	0.20 ~ 0.25	0.1 ~ 0.5	0.1D ~ 1D
Hardened Steel	55 ~ 145	0.15 ~ 0.25	0.1 ~ 0.5	0.1D ~ 1D

※ D = cutter cutting diameter

**Copy Milling - CGVV** 仿形銑刀

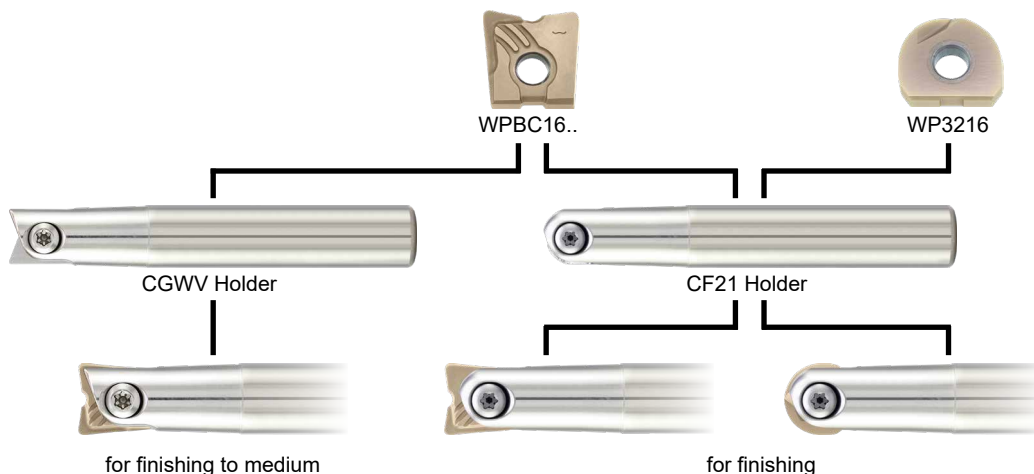
**Insert Specifications 刀片規格**

Insert	Dimensions (mm)						
	A	B	t1	st	S	r	d1
WPBC1605	16	6	16	3	3	0.5	5
WPBC1610	16	6	16	3	3	1.0	5
WPBC1613	16	6	16	3	3	1.3	5
WPBC1620	16	6	16	3	3	2.0	5
WPBC1630	16	6	16	3	3	3.0	5

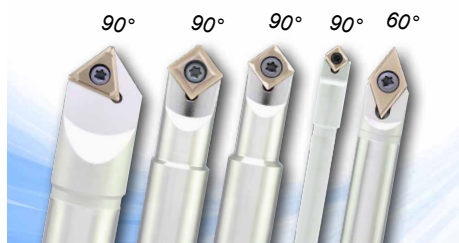
**Insert Designation 刀片型號**

Insert	Order No.	Code-Chipbreaker-Grade	Continuous	Interrupted	Working Material					
					P	M	K	N	S	H
	IWPBC1605MM33TX	WPBC1605-MM-CX33TX	✓		●	○	●		○	●
	IWPBC1605MM43TX	WPBC1605-MM-CX43TX		✓	●	●			●	
	IWPBC1610MM33TX	WPBC1610-MM-CX33TX	✓		●	○	●		○	●
	IWPBC1610MM43TX	WPBC1610-MM-CX43TX		✓	●	●			●	
	IWPBC1613MM33TX	WPBC1613-MM-CX33TX	✓		●	○	●		○	●
	IWPBC1613MM43TX	WPBC1613-MM-CX43TX		✓	●	●			●	
	IWPBC1620MM33TX	WPBC1620-MM-CX33TX	✓		●	○	●		○	●
	IWPBC1620MM43TX	WPBC1620-MM-CX43TX		✓	●	●			●	
	IWPBC1630MM33TX	WPBC1630-MM-CX33TX	✓		●	○	●		○	●
	IWPBC1630MM43TX	WPBC1630-MM-CX43TX		✓	●	●			●	

**CF21 holder can be use WPBC16 or WP3216 inserts** CF21 刀桿可使用 WPBC16 或 WP3216 刀片



### DTS Series



- Use DCEX, SCGX, SCMX, SDMX, TCMX inserts.
- Engraving, chamfering, countersinking, grooving and spotting functions in one tool.
- 使用 DCEX, SCMX 或 TCMX 銑刀片
- 一種刀具搞定雕刻、倒角、開槽和定位等功能

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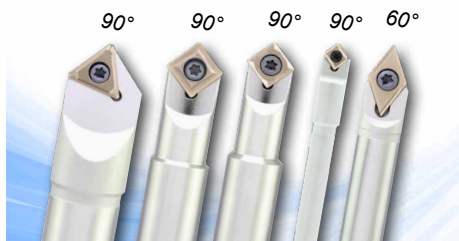
### CSPC Series



- Use SPMG inserts with 4 cutting edges.
- T-slot cutter with up and down chamfering applications.
- 11~50mm cutter diameter.
- 使用 SPMG 銑刀片，4 個可用切削角
- T 型刀桿適用於上下倒角加工應用
- 11~50mm 刀桿直徑

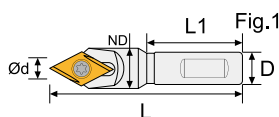
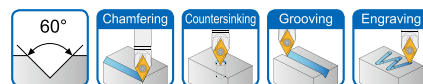
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**DTS Series**



- Use DCEX, SCGX, SCMX, SDMX, TCMX inserts.
- Engraving, chamfering, countersinking, grooving and spotting functions in one tool.
- 使用 DCEX, SCMX 或 TCMX 銑刀片
- 一種刀具搞定雕刻、倒角、開槽和定位等功能

**DTS60 - Milling Tools** 雕刻倒角銑刀



DTS 60 - DCEX11T3

Insert Brand : Winstar

Order No.	D	ND	L	L1	Fig	Insert	Screw	Wrench	Stock
IDTS1006006011	10	12	60	30	1	DCEX11T3	ITS3520	ITK15	●
IDTS1210006011	12	12	100	-	2				●

● stock ○ by inquiry

**Recommended Cutting Conditions** 建議切削數據

**DTS 60 Chamfering / Countersinking**

Material	Vc (m/min)	fr (mm/rev)
Carbon steel	12 ~ 180	0.05 ~ 0.15
Alloy steel	12 ~ 180	0.05 ~ 0.15
Stainless steel	12 ~ 180	0.05 ~ 0.15
Cast iron	12 ~ 180	0.05 ~ 0.15
Aluminum	12 ~ 180	0.10 ~ 0.20
Hardened steel	12 ~ 180	0.03 ~ 0.10

**DTS 60 Grooving / Engraving**



Material	Vc (m/min)	fr (mm/rev)
Carbon steel	10 ~ 170	0.005 ~ 0.05
Alloy steel	10 ~ 170	0.005 ~ 0.03
Stainless steel	10 ~ 170	0.005 ~ 0.05
Cast iron	10 ~ 170	0.005 ~ 0.03
Aluminum	10 ~ 170	0.005 ~ 0.08
Hardened steel	10 ~ 170	0.005 ~ 0.02

**DTS 60 Cutting Depth of Passes**

No. of Passes	ap of one pass (mm)					
	Aluminum	Cast iron	Carbon steel	Alloy steel	Stainless steel	Hardened steel
1	1.0	0.8	0.8	0.6	0.5	0.2
2	0.8	0.7	0.6	0.5	0.4	0.2
3	0.2	0.3	0.3	0.3	0.3	0.15
4		0.2	0.2	0.3	0.3	0.15
5			0.1	0.2	0.2	0.1
6				0.1	0.2	0.1
7					0.1	0.1

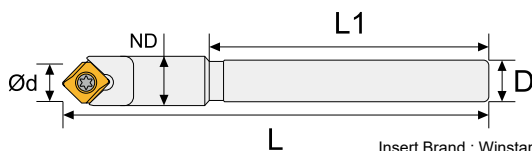
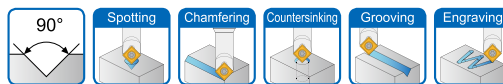
※ Max ap is 2mm

**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	r	Engraving Ød	P	M	K	N	S	H
	IDCEX11T301SG32HS	DCEX11T301-SG-CX32HS	0.1	0.2 ~ 1	●	●	●	●	●	
	IDCEX11T302SG32HS	DCEX11T302-SG-CX32HS	0.2	0.4 ~ 2	●	●	●	●	●	
	IDCEX11T304SG32HS	DCEX11T304-SG-CX32HS	0.4	0.8 ~ 3	●	●	●	●	●	
	IDCEX11T30132HS	DCEX11T301-CX32HS	0.1	0.8 ~ 3	●	●	●		●	●
	IDCEX11T30232HS	DCEX11T302-CX32HS	0.2	0.8 ~ 3	●	●	●		●	●
	IDCEX11T30432HS	DCEX11T304-CX32HS	0.4	0.8 ~ 3	●	●	●		●	●
	IDCEX11T30832HS	DCEX11T308-CX32HS	0.8	0.8 ~ 3	●	●	●		●	●

Indexable Milling

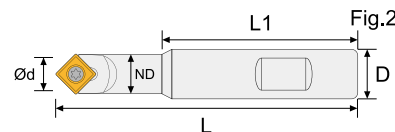
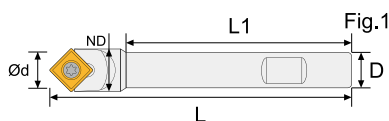
**DTS90 - Milling Tools** 雕刻倒角銑刀



DTS90 - SDMX05T1 (for small lathe)

Insert Brand : Winstar

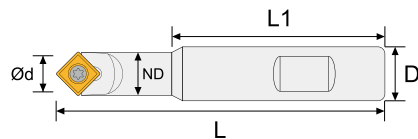
Order No.	D	L	ND	L1	Spotting Ød	Engraving Ød	Insert	Screw	Wrench	Stock
IDTS0604009005	6	40	7	20	1 ~ 5	0.8 ~ 1.5	SDMX05T1	ITS1801	ITK06	●
IDTS0606009005	6	60	7	40						●



DTS90 - SCGX09T3, SCMX09T3

Insert Brand : Winstar

Order No.	D	L	ND	L1	Fig	Spotting Ød	Engraving Ød	Insert	Screw	Wrench	Stock
IDTS1010009009	10	100	12.2	71	1	2 ~ 11	0.8 ~ 2.5	SCGX09T3 SCMX09T3	ITS3520	ITK15	●
IDTS1210009009	12	100	12.2	71							●
IDTS1610009009	16	100	12.2	71	2						●
IDTS1613009009	16	130	12.2	101							●

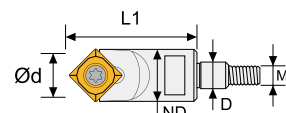


DTS90 - SDMX11T3

Insert Brand : Winstar

Order No.	D	L	ND	L1	Spotting Ød	Engraving Ød	Insert	Screw	Wrench	Stock
IDTS1610009011	16	100	14.1	71	3 ~ 14	1.6 ~ 4.0	SDMX11T3	ITS3521	ITK15	●

**DTS90 - Modular Milling Heads** 雕刻倒角銑刀頭



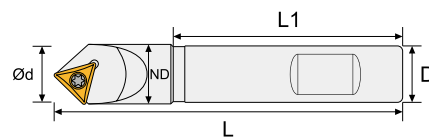
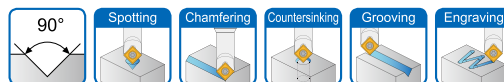
Insert Brand : Winstar

Order No.	L1	ND	D	M	Spotting Ød	Engraving Ød	Insert	Screw	Wrench	Stock
IDTSM603009009	30	12.4	6.5	M6	2 ~ 11	0.8 ~ 2.5	SCMX09T3	ITS3520	ITK15	○

● stock ○ by inquiry

※ For screw-in type adapter, please refer to Tooling System

## DTS90 - Milling Tools 雕刻倒角銑刀



DTS90 - TCMX16T3

Insert Brand : Winstar

Order No.	D	L	ND	L1	Spotting Ød	Engraving Ød	Insert	Screw	Wrench	Stock
IDTS2012009016	20	120	21.2	78	3 ~ 20	1.6 ~ 4.0	TCMX16T3	ITS3521	ITK15	●

● stock ○ by inquiry

## Recommended Cutting Conditions 建議切削數據

## DTS 90 Spotting

Material	Vc (m/min)		Fr (mm/rev)	
	Ød = 2 ~ 4.9 mm	Ød ≥ 5 mm	Ød = 2 ~ 4.9 mm	Ød ≥ 5 mm
Carbon steel	60 ~ 120	90 ~ 220	0.04 ~ 0.08	0.06 ~ 0.10
Alloy steel	50 ~ 100	75 ~ 180	0.03 ~ 0.06	0.05 ~ 0.08
Stainless steel	30 ~ 60	45 ~ 120	0.02 ~ 0.04	0.04 ~ 0.06
Cast iron	40 ~ 80	60 ~ 130	0.04 ~ 0.08	0.06 ~ 0.10
Hardened steel	20 ~ 40	30 ~ 60	0.02 ~ 0.04	0.04 ~ 0.08

## DTS 90 Chamfering / Countersinking








Material	Vc (m/min)	Fr (mm/rev)
Carbon steel	60 ~ 270	0.15 ~ 0.24
Alloy steel	50 ~ 220	0.12 ~ 0.20
Stainless steel	35 ~ 120	0.10 ~ 0.20
Cast iron	60 ~ 220	0.15 ~ 0.25
Hardened steel	20 ~ 60	0.03 ~ 0.08

## DTS 90 Grooving / Engraving

Material	Vc (m/min)	Fr (mm/rev)
Carbon steel	40 ~ 140	0.12 ~ 0.18
Alloy steel	35 ~ 120	0.10 ~ 0.14
Stainless steel	25 ~ 70	0.08 ~ 0.12
Cast iron	30 ~ 100	0.12 ~ 0.18
Hardened steel	20 ~ 50	0.02 ~ 0.04



**Insert Designation** 刀片型號

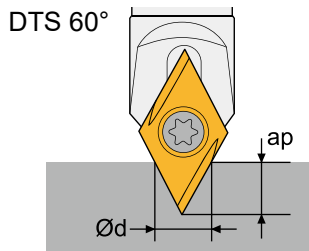
Insert	Order No.	Code-Chipbreaker-Grade	r	Spotting Ød	Engraving Ød	P	M	K	N	S	H
	ISCX09T304AG10	SCGX09T304-AG-CX10	0.4	2 ~ 11	0.8 ~ 2.5				●		
	ISCG09T304FG13TX	SCGX09T304-FG-CX13TX	0.4	2 ~ 11	0.8 ~ 2.5	●	●	●	○	●	●
	ISCMX09T304SM32HS	SCMX09T304-SM-CX32HS	0.4	2 ~ 11	0.8 ~ 2.5	●	●	●	○	●	○
	ISDMX05T104FG13TX	SDMX05T104-FG-CX13TX	0.4	1 ~ 5	0.8 ~ 1.5	●	●	●	○	●	●
	ISDMX05T104FG33TX	SDMX05T104-FG-CX33TX	0.4	1 ~ 5	0.8 ~ 1.5	●	●	●	○	●	●
	ISDMX11T308SG33TX	SDMX11T308-SG-CX33TX	0.8	3 ~ 14	1.6 ~ 4.0	●	●	●		●	●
	ITCMX16T308SM32HS	TCMX16T308-SM-CX32HS	0.8	3 ~ 20	1.6 ~ 4.0	●	●	●	○	●	●

**How to calculate Ød ,RPM and Feed** 如何計算 Ød ,RPM 和 Feed

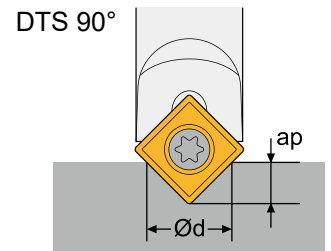
Formula :

$$RPM = \frac{V_c \times 1000}{\varnothing d \times \pi}$$

$$Feed = RPM \times fr$$



$$\varnothing d \approx (0.577 \times (ap + r) + 0.05) \times 2$$



$$\varnothing d \approx (0.4r + ap + 0.05) \times 2$$

EX :

Working Material : Cast iron  
 Insert : SCGX09T304  
 Application : 90° Spotting  
 ap : 2.5mm

$$\varnothing d = (0.4r + ap + 0.05) \times 2 = (0.4 \times 0.4 + 2.5 + 0.05) \times 2 = 5.42 \text{ mm}$$

Reference conditions table get  $V_c \approx 85 \text{ m/min}$  and  $fr \approx 0.075 \text{ mm/rev}$

$$RPM = (V_c \times 1000) / (\varnothing d \times \pi) = (85 \times 1000) / (5.42 \times \pi) \approx 5000$$

$$Feed = RPM \times fr = 5000 \times 0.075 = 375 \text{ mm/min}$$

**Working Demonstration** 加工實例



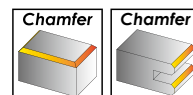
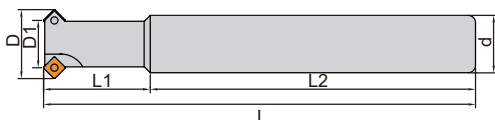
Cutting parameter	
Tools	DTS 90° with SCMX09T304-SP CX32HS
Material	Cast Iron
Coolant	Dry
Application	Spotting
Vc	85 m/min
S	4800 rpm
Feed	360 mm/min
ap	2.5 mm

## CSPC Series





- Use SPMG inserts with 4 cutting edges.
- T-slot cutter with up and down chamfering applications.
- 11~50mm cutter diameter.
- 使用 SPMG 銑刀片，4 個可用切削角
- T 型刀桿適用於上下倒角加工應用
- 11~50mm 刀桿直徑

## CSPCE - Milling Tools 倒角銑刀



Insert Brand : Winstar, Taegutec, ...

Order No.	D	D1	d	L1	L2	L	T	Inserts	 Screw	 Wrench	Stock
ICSPCE501011100	11	6	10	17	83	100	1	SPMG0502	ITS2003	ITK06	●
ICSPCE502015120	15	10	12	20	100	120	2				●
ICSPCE503017150	17	11	16	25	125	150	3				●
ICSPCE503019150	19	13	16	30	120	150	3				●
ICSPCE504024150	24	18	20	35	115	150	4				●
ICSPCE603022120	22	16	16	30	90	120	3	SPMG0602	ITS2205	ITK06	●
ICSPCE703027120	27	17	20	30	90	120	3	SPMG07T3	ITS2511	ITK08	●
ICSPCE902030150	30	19	20	40	110	150	2	SPMG0904	ITS3504	ITK15	●
ICSPCE903040150	40	29	25	40	110	150	3				●
ICSPCE904050150	50	39	25	40	110	150	4				●

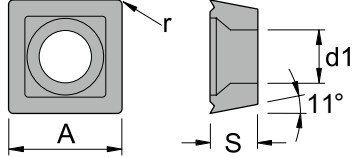
● stock ○ by inquiry

## Recommended Cutting Conditions 建議切削數據









Working Material	Vc	fz				
		Ø11 ~ Ø15	Ø16 ~ Ø22	Ø23 ~ Ø33	Ø34 ~ Ø41	Ø42 ~ Ø50
Carbon Steel / Alloy Steel	120 ~ 250	0.06 ~ 0.12	0.06 ~ 0.12	0.06 ~ 0.12	0.12 ~ 0.24	0.12 ~ 0.25
Stainless Steel	100 ~ 180	0.05 ~ 0.10	0.05 ~ 0.10	0.05 ~ 0.10	0.10 ~ 0.17	0.10 ~ 0.17
Cast Iron	120 ~ 250	0.06 ~ 0.12	0.06 ~ 0.12	0.06 ~ 0.12	0.12 ~ 0.24	0.12 ~ 0.25
High Temperature Alloy	40 ~ 100	0.03 ~ 0.06	0.03 ~ 0.06	0.03 ~ 0.06	0.05 ~ 0.10	0.05 ~ 0.10
Hardened Steel	50 ~ 100	0.03 ~ 0.06	0.03 ~ 0.06	0.03 ~ 0.06	0.05 ~ 0.10	0.05 ~ 0.10

## Insert Specifications 刀片規格

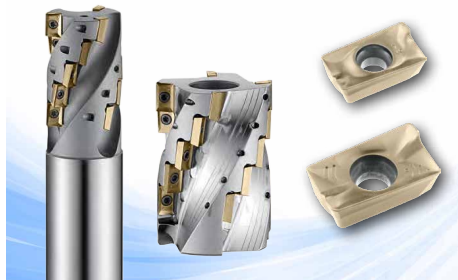
Insert	Dimensions (mm)			
	A	S	r	d1
SPGG050204	5.00	2.38	0.4	2.30
SPGG060204	6.00	2.38	0.4	2.65
SPGG07T308	7.94	3.97	0.8	2.85
SPGG090408	9.80	4.3	0.8	4.05
SPMG050204	5.00	2.38	0.4	2.30
SPMG060204	6.00	2.38	0.4	2.65
SPMG07T308	7.94	3.97	0.8	2.85
SPMG090408	9.80	4.3	0.8	4.05



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ISPGG050204SG33TX	SPGG050204-SG-CX33TX	○	●	○	●	○	
	ISPGG060204SG33TX	SPGG060204-SG-CX33TX	○	●	○	●	○	
	ISPGG07T304SG33TX	SPGG070304-SG-CX33TX	○	●	○	●	○	
	ISPGG090408SG33TX	SPGG090408-SG-CX33TX	○	●	○	●	○	
	ISPMG050204MG32HS	SPMG050204-MG-CX32HS	●	○	●			
	ISPMG050204MG33TX	SPMG050204-MG-CX33TX	●	○	●		○	●
	ISPMG050204MG33UX	SPMG050204-MG-CX33UX	●	●	●		●	○
	ISPMG050204MG43TX	SPMG050204-MG-CX43TX	●	●	○		●	
	ISPMG060204MG32HS	SPMG060204-MG-CX32HS	●	○	●			
	ISPMG060204MG33TX	SPMG060204-MG-CX33TX	●	○	●		○	●
	ISPMG060204MG33UX	SPMG060204-MG-CX33UX	●	●	●		●	○
	ISPMG060204MG43TX	SPMG060204-MG-CX43TX	●	●	○		●	
	ISPMG07T308MG32HS	SPMG07T308-MG-CX32HS	●	○	●			
	ISPMG07T308MG33TX	SPMG07T308-MG-CX33TX	●	○	●		○	●
	ISPMG07T308MG33UX	SPMG07T308-MG-CX33UX	●	●	●		●	○
	ISPMG07T308MG43TX	SPMG07T308-MG-CX43TX	●	●	○		●	
	ISPMG090408MG32HS	SPMG090408-MG-CX32HS	●	○	●			
	ISPMG090408MG33TX	SPMG090408-MG-CX33TX	●	○	●		○	●
	ISPMG090408MG33UX	SPMG090408-MG-CX33UX	●	●	●		●	○
	ISPMG090408MG43TX	SPMG090408-MG-CX43TX	●	●	○		●	

**CAPH Series**



- Use APKT inserts with 2 cutting edges.
- Offers large depth of cut in rough contouring applications.
- 20~63mm cutter diameter.
- 使用 APKT 銑刀片，2 個可用切削角
- 適用於較大切削深度的輪廓粗加工應用
- 20~63mm 刀桿直徑

→ Page A137

**CBAH Series**



- Use APMT inserts with 2 cutting edges.
- Offers large depth of cut in rough contouring applications.
- 20~63mm cutter diameter.
- 使用 APMT 銑刀片，2 個可用切削角
- 適用於較大切削深度的輪廓粗加工應用
- 20~63mm 刀桿直徑

→ Page A139

**C39H Series**



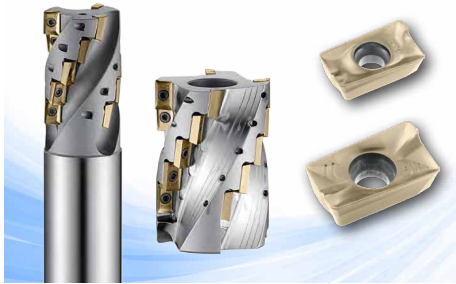
- Use W390 inserts with 2 cutting edges.
- High efficient and large depth of cut in rough contouring applications.
- 25~32mm cutter diameter.
- 使用 W390 銑刀片，2 個可用切削角
- 適用於高效率及較大切削深度的輪廓粗加工應用
- 25~32mm 刀桿直徑

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Helical Milling - CAPH 玉米粗銑刀

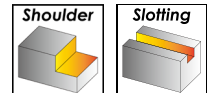
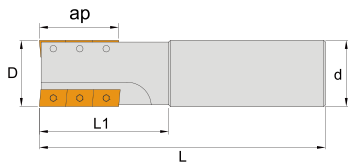
Indexable Milling

CAPH Series



- Use APKT inserts with 2 cutting edges.
- Offers large depth of cut in rough contouring applications.
- 20~63mm cutter diameter.
- 使用 APKT 銑刀片，2 個可用切削角
- 適用於較大切削深度的輪廓粗加工應用
- 20~63mm 刀桿直徑

CAPHE - Milling Tools 玉米粗銑刀

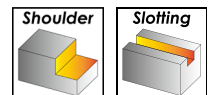
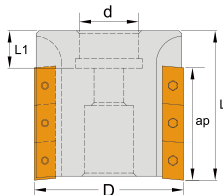


Insert Brand : Winstar, Iscar, Ceratizit, ...

Order No.	D	ap	L1	L	d	T × Pcs	Inserts	Screw	Wrench	Stock
ICAPHE305020100	20	28	42	107	20	1 × 5	APKT1003	ITS2515	ITK08	●
ICAPHE308025120	25	35	50	125	25	2 × 4				●
ICAPHE315032130	32	44	60	135	32	3 × 5				●

● stock ○ by inquiry

CAPHF - Milling Tools 玉米粗銑刀



Insert Brand : Winstar, Iscar, Ceratizit, ...

Order No.	D	ap	L2	L	d	T × Pcs	Inserts	Screw	Wrench	Stock
ICAPHF409050220	50	42	21	69	22	3 × 3	APET1604 APKT1604	ITS4023	ITK15	●
ICAPHF412063250	63	42	38	69	25.4	4 × 3				●
ICAPHF420063252	63	68	38	97	25.4	4 × 5				●

● stock ○ by inquiry

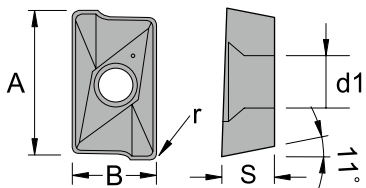
**Helical Milling - CAPH** 玉米粗銑刀

**Recommended Cutting Conditions** 建議切削數據

Working Material	APKT1003		APKT1604	
	Vc	fz	Vc	fz
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.22	120 ~ 250	0.12 ~ 0.28
Stainless Steel	100 ~ 180	0.08 ~ 0.18	100 ~ 180	0.10 ~ 0.22
Cast Iron	120 ~ 250	0.10 ~ 0.22	120 ~ 250	0.12 ~ 0.28
Aluminum Alloy	-	-	300 ~ 1000	0.10 ~ 0.40
High Temperature Alloy	40 ~ 100	0.07 ~ 0.14	40 ~ 100	0.10 ~ 0.18

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
APKT100304	10.5	6.7	3.5	0.4	2.8
APKT100308	10.5	6.7	3.5	0.8	2.8
APET160402	16.3	9.525	4.76	0.2	4.5
APET160404	16.3	9.525	4.76	0.4	4.5
APKT160408	16.3	9.525	5.25	0.8	4.5



**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IAPKT100304EMG23TX	APKT100304PDER-MG-CX23TX	○	○	○		○	●
	IAPKT100304EMG32HS	APKT100304PDER-MG-CX32HS	●	○	●			
	IAPKT100304EMG33TX	APKT100304PDER-MG-CX33TX	●	○	●		○	●
	IAPKT100304EMG33UX	APKT100304PDER-MG-CX33UX	●	●	●		●	○
	IAPKT100304EMG43TX	APKT100304PDER-MG-CX43TX	●	●			●	
	IAPKT100308EMG23TX	APKT100308PDER-MG-CX23TX	○	○	○		○	●
	IAPKT100308EMG32HS	APKT100308PDER-MG-CX32HS	●	○	●			
	IAPKT100308EMG33TX	APKT100308PDER-MG-CX33TX	●	○	●		○	●
	IAPKT100308EMG33UX	APKT100308PDER-MG-CX33UX	●	●	●		●	○
	IAPKT100308EMG43TX	APKT100308PDER-MG-CX43TX	●	●			●	
	IAPKT100304ERG32HS	APKT100304PDER-RG-CX32HS	●	○	●			
	IAPKT100304ERG33TX	APKT100304PDER-RG-CX33TX	●	○	●		○	●
	IAPET160402FAL10	APET160402PDFR-AL-CX10				●		
	IAPET160404FAL10	APET160404PDFR-AL-CX10				●		
	IAPET160402FFG23TX	APET160402PDFR-FG-CX23TX	○	○	○		○	●
	IAPET160404FFG23TX	APET160404PDFR-FG-CX23TX	○	○	○		○	●
	IAPKT160408EMG23TX	APKT160408PDER-MG-CX23TX	○	○	○		○	●
	IAPKT160408EMG32HS	APKT160408PDER-MG-CX32HS	●	○	●			
	IAPKT160408EMG33TX	APKT160408PDER-MG-CX33TX	●	○	●		○	●
	IAPKT160408EMG33UX	APKT160408PDER-MG-CX33UX	●	●	●		●	○
	IAPKT160408EMG43TX	APKT160408PDER-MG-CX43TX	●	●			●	
	IAPKT160408ERG23TX	APKT160408PDER-RG-CX23TX	○	○	○		○	●
	IAPKT160408ERG32HS	APKT160408PDER-RG-CX32HS	●	○	●			
	IAPKT160408ERG33TX	APKT160408PDER-RG-CX33TX	●	○	●		○	●
	IAPKT160408ERG43TX	APKT160408PDER-RG-CX43TX	●	●			●	



**Helical Milling - CBAH** 玉米粗銑刀

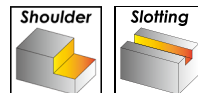
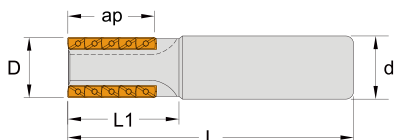
**CBAH Series**



- Use APMT inserts with 2 cutting edges.
- Offers large depth of cut in rough contouring applications.
- 20~63mm cutter diameter.
- 使用 APMT 銑刀片 , 2 個可用切削角
- 適用於較大切削深度的輪廓粗加工應用
- 20~63mm 刀桿直徑

Indexable Milling

**CBAHE - Milling Tools** 玉米粗銑刀



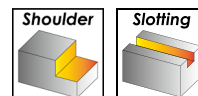
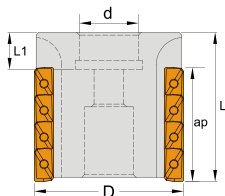
Insert Brand : Winstar, Mitsubishi, ...

Order No.	D	ap	L1	L	d	T × Pcs	Inserts	Screw	Wrench	Stock
ICBAHE305020100	20	28	42	107	20	1 x 5	APGT1135 APMT1135	ITS2515	ITK08	●
ICBAHE308025120	25	35	50	125	25	2 x 4				●
ICBAHE315032130	32	44	60	135	32	3 x 5				●
ICBAHE324040170	40	72	94	175	32	3 x 8				●
ICBAHE406032130	32	42	55	135	32	2 x 3	APGT1604 APMT1604	ITS4023	ITK15	●
ICBAHE410040170	40	68	94	175	32	2 x 5				●
ICBAHE415040170	40	68	94	175	32	3 x 5				●
ICBAHE424050220	50	100	128	224	50.8	3 x 8				●
ICBAHE436050280	50	158	188	284	50.8	3 x 12				●



**Helical Milling - CBAH** 玉米粗銑刀

**CBAHF - Milling Tools** 玉米粗銑刀



Insert Brand : Winstar, Mitsubishi, ...

Order No.	D	ap	L1	L	d	T × Pcs	Inserts	Screw	Wrench	Stock
ICBAHF409050220	50	42	21	69	22	3 × 3	APGT1604 APMT1604	ITS4023	ITK15	●
ICBAHF412063250	63	42	38	69	25.4	4 × 3				●
ICBAHF420063250	63	68	38	97	25.4	4 × 5				●

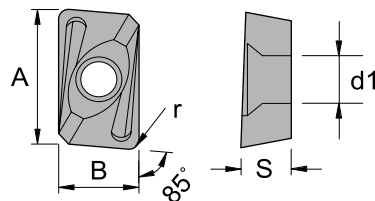
● stock ○ by inquiry

**Recommended Cutting Conditions** 建議切削數據

Working Material	APMT1135		APMT1604	
	Vc	fz	Vc	fz
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.22	120 ~ 250	0.12 ~ 0.28
Stainless Steel	100 ~ 180	0.08 ~ 0.18	100 ~ 180	0.10 ~ 0.22
Cast Iron	120 ~ 250	0.10 ~ 0.22	120 ~ 250	0.12 ~ 0.28
Aluminum Alloy	-	-	300 ~ 1000	0.10 ~ 0.40
High Temperature Alloy	40 ~ 100	0.07 ~ 0.14	40 ~ 100	0.10 ~ 0.22

**Insert Specifications** 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
APGT113508	11.0	6.35	3.5	0.8	2.8
APMT113508	11.0	6.35	3.5	0.8	2.8
APMT113516	11.0	6.35	3.5	1.6	2.8
APGT160408	16.5	9.525	4.76	0.8	4.4
APMT160408	16.5	9.525	4.76	0.8	4.4
APMT160416	16.5	9.525	4.76	1.6	4.4



**Helical Milling - CBAH** 玉米粗銑刀

**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IAPGT113508EAL10	APGT113508PDER-AL-CX10				●		
	IAPGT113508EFG23TX	APGT113508PDER-FG-CX23TX	○	○	○		○	●
	IAPMT113508EMG23TX	APMT113508PDER-MG-CX23TX	○	○	○		○	●
	IAPMT113508EMG32HS	APMT113508PDER-MG-CX32HS	●	○	●			
	IAPMT113508EMG33TX	APMT113508PDER-MG-CX33TX	●	○	●		○	●
	IAPMT113508EMG33UX	APMT113508PDER-MG-CX33UX	●	●	●		●	○
	IAPMT113508EMG43TX	APMT113508PDER-MG-CX43TX	●	●			●	
	IAPMT113516EMG23TX	APMT113516PDER-MG-CX23TX	○	○	○		○	●
	IAPMT113516EMG32HS	APMT113516PDER-MG-CX32HS	●	○	●			
	IAPMT113516EMG33TX	APMT113516PDER-MG-CX33TX	●	○	●		○	●
	IAPMT113516EMG33UX	APMT113516PDER-MG-CX33UX	●	●	●		●	○
	IAPMT113516EMG43TX	APMT113516PDER-MG-CX43TX	●	●			●	
	IAPMT113508ERG23TX	APMT113508PDER-RG-CX23TX	○	○	○		○	●
	IAPMT113508ERG32HS	APMT113508PDER-RG-CX32HS	●	○	●			
	IAPMT113508ERG33TX	APMT113508PDER-RG-CX33TX	●	○	●		○	●
	IAPMT113508EHG32HS	APMT113508PDER-HG-CX32HS	●	○	●			
	IAPMT113508EHG33TX	APMT113508PDER-HG-CX33TX	●	○	●		○	●
	IAPMT113508EHG43TX	APMT113508PDER-HG-CX43TX	●	●			●	
	IAPGT160408EAL10	APGT160408PDER-AL-CX10				●		
	IAPGT160408EFG23TX	APGT160408PDER-FG-CX23TX	○	○	○		○	●
	IAPMT160408EMG23TX	APMT160408PDER-MG-CX23TX	○	○	○		○	●
	IAPMT160408EMG32HS	APMT160408PDER-MG-CX32HS	●	○	●			
	IAPMT160408EMG33TX	APMT160408PDER-MG-CX33TX	●	○	●		○	●
	IAPMT160408EMG33UX	APMT160408PDER-MG-CX33UX	●	●	●		●	○
	IAPMT160408EMG43TX	APMT160408PDER-MG-CX43TX	●	●			●	
	IAPMT160408EMG47TA	APMT160408PDER-MG-CX47TA	●	○	●		○	
	IAPMT160416EMG32HS	APMT160416PDER-MG-CX32HS	●	○	●			
	IAPMT160416EMG33TX	APMT160416PDER-MG-CX33TX	●	○	●		○	●
	IAPMT160416EMG33UX	APMT160416PDER-MG-CX33UX	●	●	●		●	○
	IAPMT160416EMG43TX	APMT160416PDER-MG-CX43TX	●	●			●	
	IAPMT160408ERG23TX	APMT160408PDER-RG-CX23TX	○	○	○		○	●
	IAPMT160408ERG32HS	APMT160408PDER-RG-CX32HS	●	○	●			
	IAPMT160408ERG33TX	APMT160408PDER-RG-CX33TX	●	○	●		○	●
	IAPMT160408ERG43TX	APMT160408PDER-RG-CX43TX	●	●			●	
	IAPMT160408EHG23TX	APMT160408PDER-HG-CX23TX	○	○	○		○	●
	IAPMT160408EHG32HS	APMT160408PDER-HG-CX32HS	●	○	●			
	IAPMT160408EHG33TX	APMT160408PDER-HG-CX33TX	●	○	●		○	●
	IAPMT160408EHG43TX	APMT160408PDER-HG-CX43TX	●	●			●	

Indexable Milling

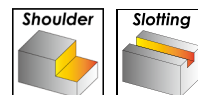
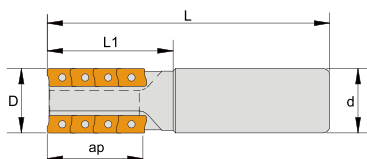
**Helical Milling - C39H** 玉米粗銑刀

**C39H Series**



- Use W390 inserts with 2 cutting edges.
- High efficient and large depth of cut in rough contouring applications.
- 25~32mm cutter diameter.
- 使用 W390 銑刀片 , 2 個可用切削角
- 適用於高效率及較大切削深度的輪廓粗加工應用
- 25~32mm 刀桿直徑

**C39HE - Milling Tools** 玉米粗銑刀



Insert Brand : Winstar, Sandvik, ...

Order No.	D	ap	L1	L	d	T × Pcs	Inserts	Screw	Wrench	Stock
IC39HE308025110	25	36	50	110	25	2 x 4	W39011T3	ITS2509	ITK08	●
IC39HE308032120	32	36	50	125	32	2 x 4				●

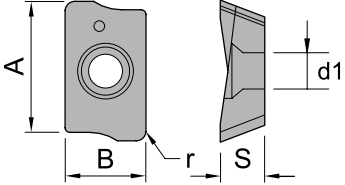
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**Recommended Cutting Conditions** 建議切削數據



Working Material	Vc	fz
Carbon Steel / Alloy Steel	120 ~ 250	0.10 ~ 0.22
Stainless Steel	100 ~ 180	0.08 ~ 0.18
Cast Iron	120 ~ 250	0.10 ~ 0.22
High Temperature Alloy	40 ~ 100	0.07 ~ 0.14

## Insert Specifications 刀片規格

Insert	Dimensions (mm)				
	A	B	S	r	d1
W39011T308	11	6.9	3.59	0.8	2.8
W39011T320	11	6.9	3.59	2.0	2.8



## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IW39011T308SG23TX	W39011T308-SG-CX23TX	○	○	○		○	●
	IW39011T308SG32HS	W39011T308-SG-CX32HS	●	○	●			
	IW39011T308SG33TX	W39011T308-SG-CX33TX	●	○	●		○	●
	IW39011T308SG33UX	W39011T308-SG-CX33UX	●	●	●		●	○
	IW39011T308SG43TX	W39011T308-SG-CX43TX	●	●			●	
	IW39011T308MG23TX	W39011T308-MG-CX23TX	○	○	○		○	●
	IW39011T308MG32HS	W39011T308-MG-CX32HS	●	○	●			
	IW39011T308MG33TX	W39011T308-MG-CX33TX	●	○	●		○	●
	IW39011T308MG33UX	W39011T308-MG-CX33UX	●	●	●		●	○
	IW39011T308MG43TX	W39011T308-MG-CX43TX	●	●			●	
	IW39011T308MG37TA	W39011T308-MG-CX37TA	●		●			○
	IW39011T308MG47TA	W39011T308-MG-CX47TA	●	○	●		○	
	IW39011T320MG23TX	W39011T320-MG-CX23TX	○	○	○		○	●
	IW39011T320MG32HS	W39011T320-MG-CX32HS	●	○	●			
	IW39011T320MG33TX	W39011T320-MG-CX33TX	●	○	●		○	●
	IW39011T320MG33UX	W39011T320-MG-CX33UX	●	●	●		●	○
	IW39011T320MG43TX	W39011T320-MG-CX43TX	●	●			●	
	IW39011T320MG37TA	W39011T320-MG-CX37TA	●		●			○
IW39011T320MG47TA	W39011T320-MG-CX47TA	●	○	●		○		

**CSPT Series**



- Use SPMG inserts with 4 cutting edges.
- For side slotting and T-slotting applications.
- 19~40mm cutter diameter.
- 使用 SPMG 銑刀片，4 個可用切削角
- 適用於側溝和 T 型槽加工應用
- 19~40mm 刀桿直徑

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**CRDT Series**



- Use RDKW or RPMT round inserts.
- For side R slotting and T-slotting applications.
- 26~50mm cutter diameter.
- 使用 RDKW 或 RPMT 圓形刀片
- 適用於 R 底側溝和 T 型槽加工應用
- 26~50mm 刀桿直徑

→ Page A147

**CSPD Series**



- Use SPMG inserts with 4 cutting edges.
- Economical and versatile disc cutting solution.
- 80~200mm cutter diameter.
- 使用 SPMG 銑刀片，4 個可用切削角
- 經濟且多功能三面刃適用於側邊較深加工
- 80~200mm 刀桿直徑

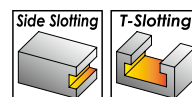
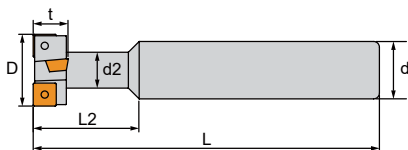
→ Page A149

## CSPT Series





- Use SPMG inserts with 4 cutting edges.
- For side slotting and T-slotting applications.
- 19~40mm cutter diameter.
- 使用 SPMG 銑刀片，4 個可用切削角
- 適用於側溝和 T 型槽加工應用
- 19~40mm 刀桿直徑

## CSPT - T-Slot Milling Tools T 型銑刀



Insert Brand : Winstar, Taegutec, ...

Order No.	D	t	d2	L2	L	d	T	Inserts	 Screw	 Wrench	Stock
ICSPTE504019090	19	8	9.5	25	95	16	4	SPMG0502	ITS2003	ITK06	●
ICSPTE604021100	21	9	11	27	100	16	4	SPMG0602	ITS2205	ITK06	●
ICSPTE504022090	22	6.3	15	15	90	20	4	SPMG0502	ITS2003	ITK06	●
ICSPTE704025110	25	11	12	31	110	20	4	SPMG07T3	ITS2511	ITK08	●
ICSPTE504032110	32	7.8	19	9.5	110	20	4	SPMG0502	ITS2003	ITK06	●
ICSPTE504032112	32	8	19	9.5	110	20	4	SPMG0502	ITS2003	ITK06	●
ICSPTE904032110	32	14	17	39	110	25	4	SPMG0904	ITS3504	ITK15	●
ICSPTE104040120	40	18	21	49	125	25	4	SPMG1104	ITS4006	ITK15	●

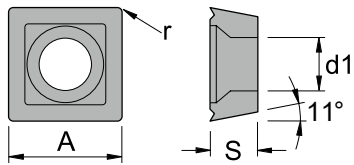
● stock ○ by inquiry

## Recommended Cutting Conditions 建議切削數據






Working Material	Vc	fz
Carbon Steel / Alloy Steel	120 ~ 250	0.08 ~ 0.12
Stainless Steel	100 ~ 180	0.07 ~ 0.10
Cast Iron	120 ~ 250	0.08 ~ 0.12
High Temperature Alloy	40 ~ 100	0.05 ~ 0.08
Hardened Steel	50 ~ 100	0.05 ~ 0.08

## Insert Specifications 刀片規格

Insert	Dimensions (mm)			
	A	S	r	d1
SPMG050204	5.00	2.38	0.4	2.30
SPMG060204	6.00	2.38	0.4	2.65
SPMG07T308	7.94	3.97	0.8	2.85
SPMG090408	9.80	4.3	0.8	4.05



## Insert Designation 刀片型號

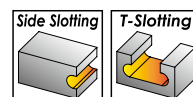
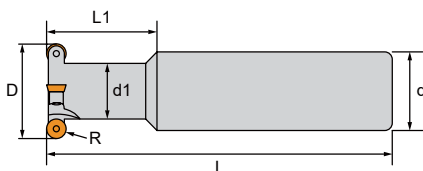
Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ISPMG050204MG32HS	SPMG050204-MG-CX32HS	●	○	●			
	ISPMG050204MG33TX	SPMG050204-MG-CX33TX	●	○	●		○	●
	ISPMG050204MG33UX	SPMG050204-MG-CX33UX	●	●	●		●	○
	ISPMG050204MG43TX	SPMG050204-MG-CX43TX	●	●			●	
	ISPMG060204MG32HS	SPMG060204-MG-CX32HS	●	○	●			
	ISPMG060204MG33TX	SPMG060204-MG-CX33TX	●	○	●		○	●
	ISPMG060204MG33UX	SPMG060204-MG-CX33UX	●	●	●		●	○
	ISPMG060204MG43TX	SPMG060204-MG-CX43TX	●	●			●	
	ISPMG07T308MG32HS	SPMG07T308-MG-CX32HS	●	○	●			
	ISPMG07T308MG33TX	SPMG07T308-MG-CX33TX	●	○	●		○	●
	ISPMG07T308MG33UX	SPMG07T308-MG-CX33UX	●	●	●		●	○
	ISPMG07T308MG43TX	SPMG07T308-MG-CX43TX	●	●			●	
	ISPMG090408MG32HS	SPMG090408-MG-CX32HS	●	○	●			
	ISPMG090408MG33TX	SPMG090408-MG-CX33TX	●	○	●		○	●
	ISPMG090408MG33UX	SPMG090408-MG-CX33UX	●	●	●		●	○
	ISPMG090408MG43TX	SPMG090408-MG-CX43TX	●	●			●	
	ISPMG090408RG32HS	SPMG090408-RG-CX32HS	●	○	●			
	ISPMG090408RG33TX	SPMG090408-RG-CX33TX	●	○	●		○	●
	ISPMG090408RG43TX	SPMG090408-RG-CX43TX	●	●			●	

## CRDT Series





- Use RDKW or RPMT round inserts.
- For side R slotting and T-slotting applications.
- 26~50mm cutter diameter.
- 使用 RDKW 或 RPMT 圓形刀片
- 適用於 R 底側溝和 T 型槽加工應用
- 26~50mm 刀桿直徑

## CRDTE - T-Slot Milling Tools 圓頭 T 型銑刀



Insert Brand : Winstar, Safety, Mitsubishi, ...

Order No.	D	R	d1	L1	L	d	T	Inserts	 Screw	 Wrench	Stock
ICRDTE505026100	26	2.5	18	21	105	25	5	RDKW0501	ITS2001	ITK06	●
ICRDTE506033110	33	2.5	23	25	110	32	6	RDKW0501	ITS2001	ITK06	●
ICRDTE604030110	30	3	18	35	110	25	4	RDKW0620	ITS2205	ITK06	●
ICRDTE606050110	50	3	32	30	110	32	6	RDKW0620	ITS2504	ITK08	●
ICRDTE705039110	39.3	3.5	26	26	110	32	5	RDKW0702	ITS2515	ITK08	●
ICRPE104050150	50	5	28	35	150	32	4	RPMT10T3	ITS3503	ITK15	○

● stock ○ by inquiry

## Recommended Cutting Conditions 建議切削數據

Working Material	Vc	fz
Carbon Steel / Alloy Steel	120 ~ 250	0.08 ~ 0.12
Stainless Steel	100 ~ 180	0.07 ~ 0.10
Cast Iron	120 ~ 250	0.08 ~ 0.12
High Temperature Alloy	40 ~ 100	0.05 ~ 0.08
Hardened Steel	50 ~ 100	0.05 ~ 0.08



**Disc Milling - CRDT** 圓頭 T 型銑刀

**Insert Specifications** 刀片規格

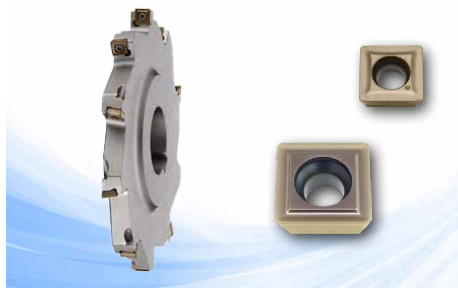
Insert	Dimensions (mm)				RD..	RP..
	A	r	S	d1		
RDKW0501	5	2.5	1.59	2.2		
RDMW0620	6	3.0	1.99	2.6		
RDKW0702	7	3.5	2.38	2.8		
RPMT10T3	10	5.0	3.97	4.5		

**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	IRDKW0501MOE23TX	RDKW0501MOE-CX23TX	○	○	○		○	●
	IRDKW0501MOE32HS	RDKW0501MOE-CX32HS	●	○	●			
	IRDKW0501MOE33TX	RDKW0501MOE-CX33TX	●	○	●		○	●
	IRDKW0620MOE32HS	RDKW0620MOE-CX32HS	●	○	●			
	IRDKW0620MOE33TX	RDKW0620MOE-CX33TX	●	○	●		○	●
	IRDKW0702MOE23TX	RDKW0702MOE-CX23TX	○	○	○		○	●
	IRDKW0702MOE32HS	RDKW0702MOE-CX32HS	●	○	●			
	IRDKW0702MOE33TX	RDKW0702MOE-CX33TX	●	○	●		○	●
	IRDKW0702MOE33UX	RDKW0702MOE-CX33UX	●	●	●		●	○
	IRDKW0702MOE43TX	RDKW0702MOE-CX43TX	●	●			●	
	IRPMT10T3MOE32HS	RPMT10T3MOE-CX32HS	●	○	●			
	IRPMT10T3MOE33TX	RPMT10T3MOE-CX33TX	●	○	●		○	●
	IRPMT10T3MOE33UX	RPMT10T3MOE-CX33UX	●	●	●		●	○
	IRPMT10T3MOE43TX	RPMT10T3MOE-CX43TX	●	●			●	
	IRPMT10T3MOT32HS	RPMT10T3MOT-CX32HS	●	○	●			
	IRPMT10T3MOT33TX	RPMT10T3MOT-CX33TX	●	○	●		○	●
	IRPMT10T3MOT43TX	RPMT10T3MOT-CX43TX	●	●			●	

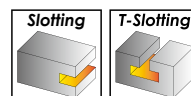
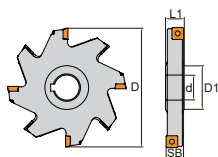
**Disc Milling - CSPD** 三面刃銑刀

**CSPD Series**



- Use SPMG inserts with 4 cutting edges.
- Economical and versatile disc cutting solution.
- 80~200mm cutter diameter.
- 使用 SPMG 銑刀片，4 個可用切削角
- 經濟且多功能三面刃適用於側邊較深加工
- 80~200mm 刀桿直徑

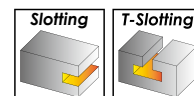
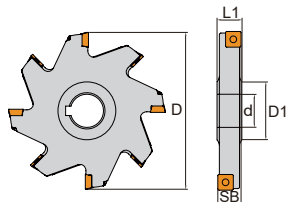
**CSPDE - Milling Tools 三面刃銑刀**





Insert Brand : Winstar, Taegutec, ...

Order No.	D	L1	SB	d	D1	T	Inserts	Screw	Wrench	Stock
ICSPDE506080220	80	12	6	22	44	2 × 4	SPMG0502	ITS2003	ITK06	●
ICSPDE507080220	80	12	7	22	44	2 × 4	SPMG0502	ITS2003	ITK06	○
ICSPDE608080220	80	12	8	22	44	2 × 4	SPMG0602	ITS2205	ITK06	●
ICSPDE609080220	80	12	9	22	44	2 × 4	SPMG0602	ITS2205	ITK06	○
ICSPDE610080220	80	12	10	22	44	2 × 4	SPMG0602	ITS2205	ITK06	●
ICSPDE711080220	80	12	11	22	44	2 × 4	SPMG07T3	ITS2511	ITK08	○
ICSPDE712080220	80	12	12	22	44	2 × 4	SPMG07T3	ITS2511	ITK08	●
ICSPDE506100270	100	12	6	27	50	2 × 5	SPMG0502	ITS2003	ITK06	●
ICSPDE507100270	100	12	7	27	50	2 × 5	SPMG0502	ITS2003	ITK06	●
ICSPDE608100270	100	12	8	27	50	2 × 5	SPMG0602	ITS2205	ITK06	●
ICSPDE609100270	100	12	9	27	50	2 × 5	SPMG0602	ITS2205	ITK06	○
ICSPDE710100270	100	12	10	27	50	2 × 5	SPMG07T3	ITS2511	ITK08	●
ICSPDE711100270	100	12	11	27	50	2 × 5	SPMG07T3	ITS2511	ITK08	○
ICSPDE712100270	100	12	12	27	50	2 × 5	SPMG07T3	ITS2511	ITK08	●
ICSPDE914100270	100	16	14	27	50	2 × 5	SPMG0904	ITS3504	ITK15	○
ICSPDE916100270	100	16	16	27	50	2 × 5	SPMG0904	ITS3504	ITK15	●
ICSPDE711125320	125	12	11	32	65	2 × 6	SPMG07T3	ITS2511	ITK08	○
ICSPDE712125320	125	12	12	32	65	2 × 6	SPMG07T3	ITS2511	ITK08	○
ICSPDE914125320	125	16	14	32	65	2 × 6	SPMG0904	ITS3504	ITK15	○
ICSPDE916125320	125	16	16	32	65	2 × 6	SPMG0904	ITS3504	ITK15	●
ICSPDE118125320	125	20	18	32	65	2 × 5	SPMG1104	ITS4006	ITK15	○
ICSPDE120125320	125	20	20	32	65	2 × 5	SPMG1104	ITS4006	ITK15	○
ICSPDE711160400	160	12	11	40	75	2 × 8	SPMG07T3	ITS2511	ITK08	○
ICSPDE712160400	160	12	12	40	75	2 × 8	SPMG07T3	ITS2511	ITK08	●
ICSPDE914160400	160	16	14	40	75	2 × 8	SPMG0904	ITS3504	ITK15	○
ICSPDE916160400	160	16	16	40	75	2 × 8	SPMG0904	ITS3504	ITK15	●
ICSPDE118160400	160	20	18	40	75	2 × 6	SPMG1104	ITS4006	ITK15	○
ICSPDE120160400	160	20	20	40	75	2 × 6	SPMG1104	ITS4006	ITK15	●
ICSPDE914200400	200	16	14	40	80	2 × 9	SPMG0904	ITS3504	ITK15	○
ICSPDE915200400	200	16	16	40	80	2 × 9	SPMG0904	ITS3504	ITK15	●
ICSPDE118200400	200	20	18	40	80	2 × 9	SPMG1104	ITS4006	ITK15	○
ICSPDE120200400	200	20	20	40	80	2 × 7	SPMG1104	ITS4006	ITK15	○

## CSPDE - Milling Tools 三面刃銑刀

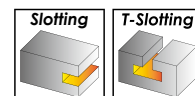
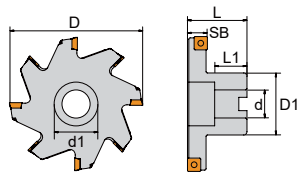


Insert Brand : Winstar, Taegutec, ...



Order No.	D	L1	SB	d	D1	T	Inserts	 Screw	 Wrench	Stock
ICSPDE506080250	80	12	6	25.4	44	2 × 4	SPMG0502	ITS2003	ITK06	●
ICSPDE507080250	80	12	7	25.4	44	2 × 4	SPMG0502	ITS2003	ITK06	●
ICSPDE608080250	80	12	8	25.4	44	2 × 4	SPMG0602	ITS2205	ITK06	●
ICSPDE609080250	80	12	9	25.4	44	2 × 4	SPMG0602	ITS2205	ITK06	●
ICSPDE610080250	80	12	10	25.4	44	2 × 4	SPMG0602	ITS2205	ITK06	●
ICSPDE711080250	80	12	11	25.4	44	2 × 4	SPMG07T3	ITS2511	ITK08	●
ICSPDE712080250	80	12	12	25.4	44	2 × 4	SPMG07T3	ITS2511	ITK08	●
ICSPDE608100250	100	12	8	25.4	50	2 × 5	SPMG0602	ITS2205	ITK06	○
ICSPDE609100250	100	12	9	25.4	50	2 × 5	SPMG0602	ITS2205	ITK06	●
ICSPDE610100250	100	12	10	25.4	50	2 × 5	SPMG0602	ITS2205	ITK06	●
ICSPDE711100250	100	12	11	25.4	50	2 × 5	SPMG07T3	ITS2511	ITK08	○
ICSPDE712100250	100	12	12	25.4	50	2 × 5	SPMG07T3	ITS2511	ITK08	●
ICSPDE914100250	100	16	14	25.4	50	2 × 5	SPMG0904	ITS3504	ITK15	○
ICSPDE916100250	100	16	16	25.4	50	2 × 5	SPMG0904	ITS3504	ITK15	○
ICSPDE506125310	125	12	6	31.75	65	2 × 6	SPMG0502	ITS2003	ITK06	●
ICSPDE507125310	125	12	7	31.75	65	2 × 6	SPMG0502	ITS2003	ITK06	○
ICSPDE608125310	125	12	8	31.75	65	2 × 6	SPMG0602	ITS2205	ITK06	○
ICSPDE610125310	125	12	10	31.75	65	2 × 6	SPMG0602	ITS2205	ITK06	○
ICSPDE711125310	125	12	11	31.75	65	2 × 6	SPMG07T3	ITS2511	ITK08	○
ICSPDE712125310	125	12	12	31.75	65	2 × 6	SPMG07T3	ITS2511	ITK08	○
ICSPDE914125310	125	16	14	31.75	65	2 × 6	SPMG0904	ITS3504	ITK15	●
ICSPDE916125310	125	16	16	31.75	65	2 × 6	SPMG0904	ITS3504	ITK15	○
ICSPDE118125310	125	20	18	31.75	65	2 × 5	SPMG1104	ITS4006	ITK15	○
ICSPDE120125310	125	20	20	31.75	65	2 × 5	SPMG1104	ITS4006	ITK15	○

● stock ○ by inquiry

## CSPDF - Milling Tools 三面刃銑刀



Insert Brand : Winstar, Taegutec, ...

Order No.	D	L1	L	SB	d	D1	T	Inserts	 Screw	 Wrench	Stock
ICSPDF506080220	80	22	40	6	22	42	2 × 4	SPMG0502	ITS2003	ITK06	●
ICSPDF507080220	80	22	40	7	22	42	2 × 4	SPMG0502	ITS2003	ITK06	●
ICSPDF608080220	80	22	40	8	22	42	2 × 4	SPMG0602	ITS2205	ITK06	●
ICSPDF609080220	80	22	40	9	22	42	2 × 4	SPMG0602	ITS2205	ITK06	○
ICSPDF610080220	80	22	40	10	22	42	2 × 4	SPMG0602	ITS2205	ITK06	●
ICSPDF711080220	80	22	40	11	22	42	2 × 4	SPMG07T3	ITS2511	ITK08	○
ICSPDF712080220	80	22	40	12	22	42	2 × 4	SPMG07T3	ITS2511	ITK08	●
ICSPDF506100270	100	22	40	6	27	50	2 × 5	SPMG0502	ITS2003	ITK06	○
ICSPDF507100270	100	22	40	7	27	50	2 × 5	SPMG0502	ITS2003	ITK06	○
ICSPDF608100270	100	22	40	8	27	50	2 × 5	SPMG0602	ITS2205	ITK06	●
ICSPDF609100270	100	22	40	9	27	50	2 × 5	SPMG0602	ITS2205	ITK06	●
ICSPDF610100270	100	22	40	10	27	50	2 × 5	SPMG0602	ITS2511	ITK08	●
ICSPDF711100270	100	22	40	11	27	50	2 × 5	SPMG07T3	ITS2511	ITK08	○
ICSPDF712100270	100	22	40	12	27	50	2 × 5	SPMG07T3	ITS2511	ITK08	●
ICSPDF914100270	100	22	40	14	27	50	2 × 5	SPMG0904	ITS3504	ITK15	○
ICSPDF916100270	100	22	40	16	27	50	2 × 5	SPMG0904	ITS3504	ITK15	○
ICSPDF608125320	125	25	45	8	32	70	2 × 6	SPMG0602	ITS2205	ITK06	○
ICSPDF610125320	125	25	45	10	32	70	2 × 6	SPMG0602	ITS2205	ITK06	●
ICSPDF711125320	125	25	45	11	32	70	2 × 6	SPMG07T3	ITS2511	ITK08	●
ICSPDF712125320	125	25	45	12	32	70	2 × 6	SPMG07T3	ITS2511	ITK08	●
ICSPDF914125320	125	25	45	14	32	70	2 × 6	SPMG0904	ITS3504	ITK15	○
ICSPDF916125320	125	25	45	16	32	70	2 × 6	SPMG0904	ITS3504	ITK15	○

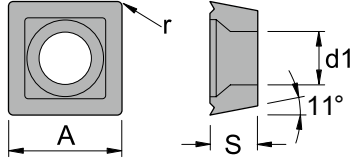
● stock ○ by inquiry






**Recommended Cutting Conditions** 建議切削數據

Working Material	Vc	fz
Carbon Steel / Alloy Steel	100 ~ 220	0.10 ~ 0.35
Stainless Steel	130 ~ 200	0.12 ~ 0.30
Cast Iron	100 ~ 210	0.10 ~ 0.20






**Insert Specifications** 刀片規格

Insert	Dimensions (mm)			
	A	S	r	d1
SPGG050204	5.00	2.38	0.4	2.30
SPGG060204	6.00	2.38	0.4	2.65
SPGG07T308	7.94	3.97	0.8	2.85
SPGG090408	9.80	4.3	0.8	4.05
SPGG110408	11.50	4.8	0.8	4.45
SPMG050204	5.00	2.38	0.4	2.30
SPMG060204	6.00	2.38	0.4	2.65
SPMG07T308	7.94	3.97	0.8	2.85
SPMG090408	9.80	4.3	0.8	4.05
SPMG110408	11.50	4.8	0.8	4.45

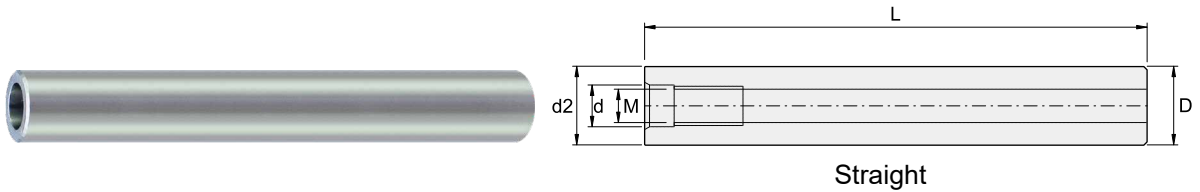

**Insert Designation** 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ISPGG050204SG33TX	SPGG050204-SG-CX33TX	○	●	○	●	○	
	ISPGG060204SG33TX	SPGG060204-SG-CX33TX	○	●	○	●	○	
	ISPGG07T304SG33TX	SPGG070304-SG-CX33TX	○	●	○	●	○	
	ISPGG090408SG33TX	SPGG090408-SG-CX33TX	○	●	○	●	○	
	ISPGG110408SG33TX	SPGG110408-SG-CX33TX	○	●	○	●	○	

## Insert Designation 刀片型號

Insert	Order No.	Code-Chipbreaker-Grade	Working Material					
			P	M	K	N	S	H
	ISPMG050204MG32HS	SPMG050204-MG-CX32HS	●	○	●			
	ISPMG050204MG33TX	SPMG050204-MG-CX33TX	●	○	●		○	●
	ISPMG050204MG33UX	SPMG050204-MG-CX33UX	●	●	●		●	○
	ISPMG050204MG43TX	SPMG050204-MG-CX43TX	●	●	○		●	
	ISPMG060204MG32HS	SPMG060204-MG-CX32HS	●	○	●			
	ISPMG060204MG33TX	SPMG060204-MG-CX33TX	●	○	●		○	●
	ISPMG060204MG33UX	SPMG060204-MG-CX33UX	●	●	●		●	○
	ISPMG060204MG43TX	SPMG060204-MG-CX43TX	●	●	○		●	
	ISPMG07T308MG32HS	SPMG07T308-MG-CX32HS	●	○	●			
	ISPMG07T308MG33TX	SPMG07T308-MG-CX33TX	●	○	●		○	●
	ISPMG07T308MG33UX	SPMG07T308-MG-CX33UX	●	●	●		●	○
	ISPMG07T308MG43TX	SPMG07T308-MG-CX43TX	●	●	○		●	
	ISPMG090408MG32HS	SPMG090408-MG-CX32HS	●	○	●			
	ISPMG090408MG33TX	SPMG090408-MG-CX33TX	●	○	●		○	●
	ISPMG090408MG33UX	SPMG090408-MG-CX33UX	●	●	●		●	○
	ISPMG090408MG43TX	SPMG090408-MG-CX43TX	●	●	○		●	
	ISPMG110408MG32HS	SPMG110408-MG-CX32HS	●	○	●			
	ISPMG110408MG33TX	SPMG110408-MG-CX33TX	●	○	●		○	●
	ISPMG110408MG33UX	SPMG110408-MG-CX33UX	●	●	●		●	○
	ISPMG110408MG43TX	SPMG110408-MG-CX43TX	●	●	○		●	

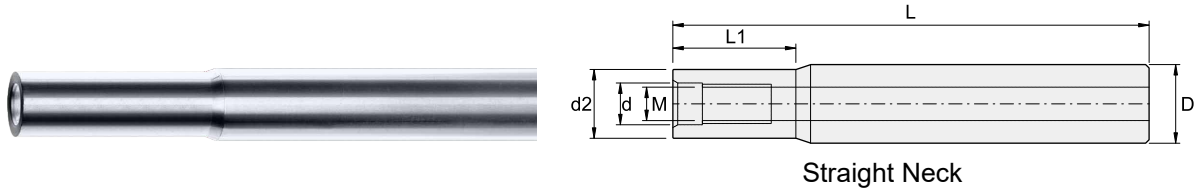
## SWMEA - Carbide Adapter (Straight)



Order No.	Dimensions (mm)				
	d2	d	L	D	M
ISWMEA10075050	10	5.5	75	10	M5
ISWMEA10100050	10	5.5	100	10	M5
ISWMEA10150050	10	5.5	150	10	M5
ISWMEA10100060	10	5.5	100	10	M6
ISWMEA10150060	10	5.5	150	10	M6
ISWMEA11100060	11	6.5	100	11	M6
ISWMEA11150060	11	6.5	150	11	M6
ISWMEA12075060	12	6.5	75	12	M6
ISWMEA12100060	12	6.5	100	12	M6
ISWMEA12150060	12	6.5	150	12	M6
ISWMEA12200060	12	6.5	200	12	M6
ISWMEA15100080	15	8.5	100	15	M8
ISWMEA15150080	15	8.5	150	15	M8
ISWMEA15200080	15	8.5	200	15	M8
ISWMEA16100080	16	8.5	100	16	M8
ISWMEA16150080	16	8.5	150	16	M8
ISWMEA16200080	16	8.5	200	16	M8
ISWMEA16250080	16	8.5	250	16	M8
ISWMEA20100100	20	10.5	100	20	M10
ISWMEA20150100	20	10.5	150	20	M10
ISWMEA20200100	20	10.5	200	20	M10
ISWMEA20250100	20	10.5	250	20	M10
ISWMEA20300100	20	10.5	300	20	M10
ISWMEA25100120	25	12.5	100	25	M12
ISWMEA25150120	25	12.5	150	25	M12
ISWMEA25200120	25	12.5	200	25	M12
ISWMEA25250120	25	12.5	250	25	M12
ISWMEA25300120	25	12.5	300	25	M12
ISWMEA32200160	32	17.0	200	32	M16
ISWMEA32300160	32	17.0	300	32	M16

Customize available.

**SWMEB - Carbide Adapter (Straight Neck)**



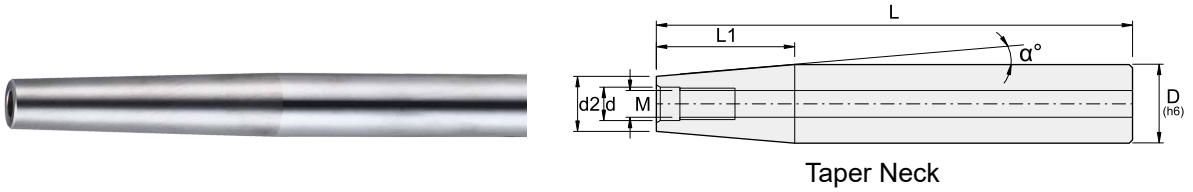
Straight Neck

Order No.	Dimensions (mm)					
	d2	d	L1	L	D	M
ISWMEB12100060	11.5	6.5	24	100	12	M6
ISWMEB12100061	11.5	6.5	40	100	12	M6
ISWMEB12100062	11.5	6.5	60	100	12	M6
ISWMEB12150060	11.5	6.5	24	150	12	M6
ISWMEB12150061	11.5	6.5	100	150	12	M6
ISWMEB16150082	13.0	8.5	32	150	16	M8
ISWMEB16150080	15.0	8.5	30	150	16	M8
ISWMEB16150081	15.0	8.5	100	150	16	M8
ISWMEB16200080	15.0	8.5	40	200	16	M8
ISWMEB16200081	15.0	8.5	120	200	16	M8
ISWMEB20150102	17.0	10.5	40	150	20	M10
ISWMEB20150100	19.0	10.5	40	150	20	M10
ISWMEB20150101	19.0	10.5	100	150	20	M10
ISWMEB20200100	19.0	10.5	40	200	20	M10
ISWMEB20200101	19.0	10.5	120	200	20	M10
ISWMEB25150120	24.0	12.5	48	150	25	M12
ISWMEB25150121	24.0	12.5	100	150	25	M12
ISWMEB25200120	24.0	12.5	48	200	25	M12
ISWMEB25200121	24.0	12.5	100	200	25	M12

Customize available.



**SWMET - Carbide Adapter (Taper Neck)**



Taper Neck

Order No.	Dimensions (mm)						
	d2	d	$\alpha^\circ$	L1	L	D	M
ISWMET12150050	9.8	5.5	1°	60	150	12	M5
ISWMET12150060	9.8	5.5	1°	60	150	12	M6
ISWMET16150060	11.8	6.5	1.5°	70	150	16	M6
ISWMET20200080	15.5	8.5	1.5°	90	200	20	M8
ISWMET25200100	19.8	10.5	1.5°	90	200	25	M10
ISWMET32200120	24.5	12.5	2°	90	200	32	M12

Customize available.

**How to install the Modular Milling Head** 如何安裝銑刀頭至抗震刀桿

1. Screw the adapter to the holder and clean.  
將抗震刀桿鎖在刀把上



2. Screw the Milling Head to the adapter.  
將銑刀頭鎖在抗震刀桿上



3. Use the spanner to screw the Milling Head.  
使用板手鎖緊銑刀頭



4. Complete installation.  
完成安裝

**How to uninstall the Modular Milling Head** 如何拆卸銑刀頭

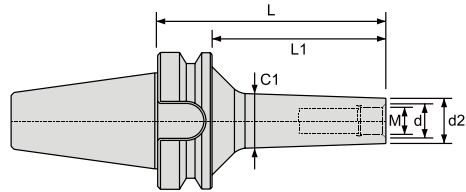
- When uninstall the Milling head, please push the spanner lightly for avoiding the neck broken.  
拆卸銑刀頭時，請輕輕推動板手，避免刀頭頸部斷裂

**Recommended Torque** 建議板手扭力值

Suitable Modular Milling Head	Recommended Clamping Torque (N · m)
M5	10
M6	15
M8	23
M10	46
M12	80
M16	90

**BT40/50 Adapter- ISO M Threads** BT40/50 鑽牙式刀柄 (ISO M 型牙)

**BT40/50 Adapter**

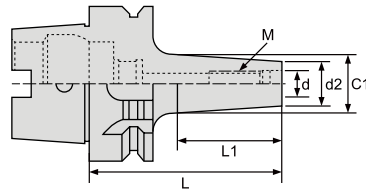


Order No.	d2	d	C1	L1	L	M	Arbor Type
IBT40DM08050	13	8.5	15	23	50	M8	BT40
IBT40DM10057	18	10.5	21	30	57	M10	
IBT40DM12080	21	12.5	25	53	80	M12	
IBT40DM16087	28	17.0	31	60	87	M16	
IBT40FMC403060	36	28.0	40	30	60	M18	
IBT40FMC406090	36	28.0	40	60	90	M18	
IBT50FMC5003065	48	36.0	50	30	65	M25	BT50
IBT50FMC50080115	48	36.0	50	80	115	M25	
IBT50FMC50130165	48	36.0	50	130	165	M25	



**HSK63 Adapter- ISO M Threads** HSK63 鎖牙式刀柄 (ISO M 型牙)

**HSK63 Adapter**



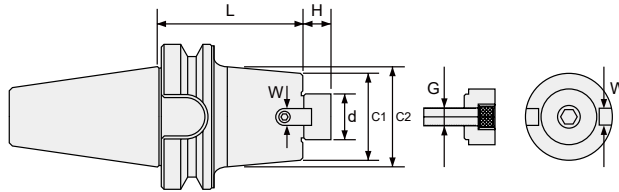
Order No.	d2	d	C1	L1	L	M
IHSK63AM08050	17	8.5	18	16	50	M8×P1.25
IHSK63AM10060	18	10.5	23	26	60	M10×P1.5
IHSK63AM10080	20	10.5	24	44	80	M10×P1.5
IHSK63AM12060	23	12.5	24	26	60	M12×P1.75
IHSK63AM12080	21	12.5	24	44	80	M12×P1.75
IHSK63AM16080	29	17	34	46	80	M16×P2.0
IHSK63AM16100	34	17	34	66	100	M16×P2.0



Indexable Milling

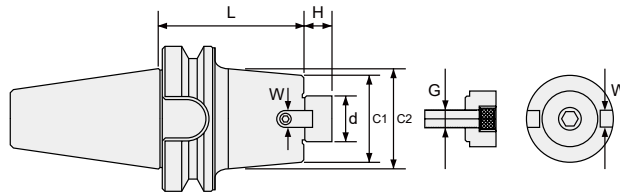
**BT Face Milling Holder** BT 面銑刀柄

**BT FMA Series (BT30, BT40, BT50)**



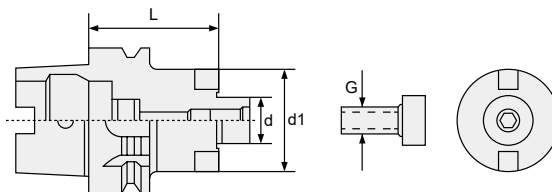
Order No.	Dimensions (mm)							
	Cutter dia.	d	L	C1	C2	H	W	G
IBT30FMA25045	76	25.4	45	45	-	20	9.5	M12
IBT30FMA31045	100	31.75	45	60	-	22	12.7	M12
IBT40FMA25045	76	25.4	45	50	-	20	9.5	M12
IBT40FMA25090	76	25.4	90	50	60	20	9.5	M12
IBT40FMA31045	100	31.75	45	60	-	22	12.5	M12
IBT40FMA31075	100	31.75	75	60	70	22	12.5	M12
IBT40FMA31105	100	31.75	105	60	70	22	12.5	M12
IBT50FMA25045	76	25.4	45	50	-	20	9.5	M12
IBT50FMA25075	76	25.4	75	50	60	20	9.5	M12
IBT50FMA25100	76	25.4	100	50	60	20	9.5	M12
IBT50FMA31045	100	31.75	45	60	-	20	12.5	M12
IBT50FMA31075	100	31.75	75	60	70	20	12.5	M12
IBT50FMA31100	100	31.75	100	60	70	20	12.5	M12

## BT FMB Series (BT30, BT40, BT50)



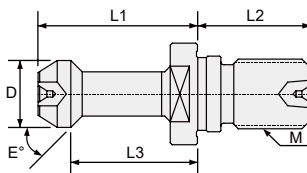
Order No.	Dimensions (mm)							
	Cutter dia.	d	L	C1	C2	H	W	G
IBT30FMB22045	60	22	45	56	-	18	10	M10
IBT30FMB27045	80	27	45	64	-	20	12	M12
IBT30FMB32045	100	32	45	70	-	20	14	M16
IBT40FMB22045	60	22	45	50	-	18	10	M10
IBT40FMB22060	60	22	60	50	60	18	10	M10
IBT40FMB22090	60	22	90	50	60	18	10	M10
IBT40FMB27045	80	27	45	60	-	20	12	M12
IBT40FMB27060	80	27	60	60	-	20	12	M12
IBT40FMB27090	80	27	90	60	-	20	12	M12
IBT40FMB27105	80	27	105	60	-	20	12	M12
IBT40FMB32045	100	32	45	78	-	20	14	M16
IBT40FMB40060	125	40	60	85	-	22	16	M16
IBT50FMB22060	60	22	60	50	-	18	10	M10
IBT50FMB22090	60	22	90	50	60	18	10	M10
IBT50FMB22150	60	22	150	50	60	18	10	M10
IBT50FMB27045	80	27	45	60	-	20	12	M12
IBT50FMB27090	80	27	90	60	70	20	12	M12
IBT50FMB27150	80	27	150	60	70	20	12	M12
IBT50FMB32045	100	32	45	70	-	20	14	M16
IBT50FMB32090	100	32	90	70	80	20	14	M16
IBT50FMB40045	125	40	45	90	-	23	16	M16
IBT50FMB40090	125	40	90	90	100	23	16	M16

**HSK63 FMA / FMB Series**



Order No.	Dimensions (mm)			
	d	d1	L	G
IHSK63AFMA25050	25.4	52	50	M12
IHSK63AFMA25075	25.4	51	75	M12
IHSK63AFMA25105	25.4	54	105	M12
IHSK63AFMA25150	25.4	54	150	M12
IHSK63AFMB16045	16	37	45	M8
IHSK63AFMB22050	22	45	50	M10
IHSK63AFMB22075	22	47	75	M10
IHSK63AFMB22105	22	47	105	M10
IHSK63AFMB22150	22	47	150	M10
IHSK63AFMB27050	27	52	50	M12
IHSK63AFMB27150	27	58	150	M12
IHSK63AFMB32150	32	76	150	M16

**BT Pull Studs**



Order No.	Dimensions (mm)						For Shank
	L1	L2	L3	D	E°	M	
IP30T01	23	20	18	11	45°	M12	BT30
IP30T02	23	20	18	11	60°	M12	BT30
IP40T01	35	25	28	15	45°	M16	BT40
IP40T02	35	25	28	15	60°	M16	BT40
IP50T01	45	40	35	23	45°	M24	BT50
IP50T02	45	40	35	23	60°	M24	BT50

Milling Inserts Grade Comparison - PVD 銑刀片材質比較表 - PVD

ISO Code	WINSTAR 萬事達	Mitsubishi 三菱	Hitachi 日立	Sumitomo 住友	Kyocera 京瓷	Tungaloy 泰珂洛	Korloy 克勞伊	TaeguTec 特固克	
<b>P</b> Steel	P10		JP4115	ACU2500 ACP200	PR1225 PR1230 PR1525		PC2005 PC2010	TT2510	
	P20	CX23TX CX32HS CX33TX	MP6120 VP15TF	JP4020 JP4120 CP9020 CY150	ACP3000 ACU2500 ACP200 ACP300	PR1225 PR1230 PR1525	AH725 AH120 AH330	PC3600 PC3700 PC2510	TT7080 TT7030
	P30	CX32HS CX33TX CX33UX	VP15TF MP6120 MP6130 VP30RT	JS4045 CY250 CY25	ACP3000 ACU2500 ACP200 ACP300	PR1225 PR1230 PR1525	AH725 AH130 AH140 AH730	PC5300	TT9080 TT9030
	P40	CX43TX	VP30RT	JS4060 JS4160 JX1060	ACP3000 ACU2500 ACP300		AH140 AH3035	PC5400	TT8080 TT8020
<b>M</b> Stainless Steel	M10			ACM100 ACU2500 ACK300 ACP300	PR1225 PR1525				
	M20	CX23TX	VP15TF MP7130 MP7140 VP20RT	JP4020 JP4120	ACM300 ACU2500 ACP300	PR1225 PR1525 PR1535	AH725 AH120 AH330 GH110	PC210F PC5300	TT9080 TT9030
	M30	CX33TX CX33UX CX43TX	VP15TF MP7130 MP7140 VP30RT	JS4045 CY250 CY25	ACM300	PR1225 PR1525 PR1535	AH725 AH130 AH730 GH130	PC9530	TT3540 TT8080 TT8020
	M40	CX43TX	MP7140 VP30RT	JM4160	ACM300	PR1525 PR1535	AH140 AH3135 AH4035	PC5400 PC9540	TT3540
<b>K</b> Cast Iron	K01		MP8010	ATH80D TH308		PR1510	AH110 GH110 AH330	PC8110	
	K10	CX23TX	MP8010	TH315 CY100H	ACK3000 ACU2500	PR1210 PR1510	AH110 AH120 GH110 AH725 AH330	PC6510	TT7515 TT6080
	K20	CX32HS CX33TX	VP15TF VP20RT	CY150 JP4120 CY9020	ACK3000 ACU2500 ACK300	PR1210 PR1510	GH130	PC5300	TT7515 TT6080
	K30	CX33TX CX43TX	VP15TF VP20RT	CY250 JS4045	ACK3000 ACU2500 ACK300	PR1510		PC5300	TT3080
<b>S</b> High-Temp Alloy	S01		PN08M PN208	ACM100 ACU2500 ACK300 ACP300	PR905 PR1210 PR1535	AH110 AH710			
	S10	CX33UX	MP9120 VP15TF	JS1025 JP4120	ACM100 ACU2500 ACK300 ACP300	PR905 PR1210 PR1535	AH120 AH725		TT9030 TT9080 TT8080
	S20	CX33UX CX43TX	MP9120 VP15TF MP9130 MP9030	PTH30H	ACM300 ACU2500 ACP300	PR905 PR1210 PR1535	AH725 AH130 AH6030	PC5300	TT8080 TT8020
	S30	CX43TX	MP9140	JM4160	ACM300	PR1535	AH130	PC3545	TT3540 TT8020

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此材質比較表僅供參考

Indexable Milling



**Milling Inserts Grade Comparison - PVD** 銑刀片材質比較表 - PVD

ISO Code		WINSTAR 萬事達	Sandvik 山特維克	Iscar 伊斯卡	Kennametal 肯納	SECO 山高	Walter 瓦爾特
<b>P</b> Steel	P10		GC1010	IC903 IC4100 IC4050	KC715M KC930M KC935M		WKP25 WKP25S WPP20 WKK20S
	P20	CX23TX CX33TX	GC1010 GC1030 GC1130 GC2030	IC8080 IC810 IC380	KC715M KC930M KC935M	F25M MP3000	WSM20
	P30	CX33TX CX33UX CX43TX	GC1010 GC1030 GC1130 GC2030	IC830 IC928 IC330	KC735M KC530M KC537M	F30M F40M MP3000	WSM30 WSM35
	P40	CX43TX	GC2030 GC1030 GC1130		KC735M KC537M KCPM40	F40M T60M	WKP45 WP45S WSP45
<b>M</b> Stainless Steel	M10		GC1025 GC1030	IC903	KC715M KC515M		
	M20	CX23TX	GC1025 GC1030 GC1040 GC2230	IC908 IC928	KC635M KC730M KC525M KCPM40	F25M MP3000	WSM35 WXM35
	M30	CX33UX CX43TX	S30T GC1040 GC2230	IC328 IC330 IC830	KC530M KC537M K735M KCPM40	F30M F40M MP3000	WSM35 WXM35
	M40	CX43TX		IC328 IC300 IC330		F40M	WSP45 WSM45S
<b>K</b> Cast Iron	K01						
	K10	CX23AX	GC1010	IC350 IC810	KC514M KC515M KC527M KC635M	MK1500	WAK15
	K20	CX33TX	GC1010 GC1020	IC5100 IC830	KC514M KC610M KC520M KC620M	MK1500 MK2000 T150M	WAK15 WKK25 WKP25S
	K30	CX33TX CX43TX	GC1020	IC810 IC908 IC910 IC928 IC950	KC522M KC725M KC524M KC735M	MK2000 MK2050	WKP35S WPP20
<b>S</b> High-Temp Alloy	S01		GC1010	IC808 IC907 IC908	KC510M		
	S10	CX33UX	S30T GC1010 GC1030 GC2030	IC808 IC907 IC908 IC903	KC510M KC610M	MS2050	
	S20	CX33UX CX43TX	S30T GC1030 GC1040 GC2030 GC2040	IC300 IC900 IC830 IC928	KC522M KC525M KC610M	MS2050 F40M	WSM35 WSM36
	S30	CX43TX	S30T GC1040 GC2040	IC830 IC928	KC522M KC525M KC725M	MS2050 F40M	WSM35 WSM36 WSP45 WSP46

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**Milling Inserts Grade Comparison - CVD** 銑刀片材質比較表 - CVD

ISO Code	WINSTAR 萬事達	Mitsubishi 三菱	Hitachi 日立	Sumitomo 住友	Kyocera 京瓷	Tungaloy 泰珂洛	Korloy 克勞伊	TaeguTec 特固克	
<b>P</b> Steel	P10			XCU2500 ACP2000 ACP100					
	P20	CX47TA	F7030 MC7020	GX2140	XCU2500 ACP2000 ACP100		T3130 T3225	NC5330	
	P30	CX47TA	F7030 MC7020	GX2140 GX2160	XCU2500 ACP2000 ACP100		T3130 T3225	NC5330 NCM535	TT8525B
	P40			GX2030 GX30 GX2160				NCM545	TT8525B
<b>M</b> Stainless Steel	M10			XCU2500 ACM200				NC5330	
	M20	CX47TA	F7030 MC7020	AX2040 GX2140	XCU2500 ACM200	CA6535	T3130 T3225	NC5330	TT9540
	M30	CX47TA	F7030 FC7020 MC7020	AX2040 GX2140 GX2160 GX30	XCU2500 ACM200	CA6535	T3130 T3225	NCM535 NCM545	TT8525B TT9540
	M40			GX2030 GX2160 GX30				NCM545	TT8525B TT9540
<b>K</b> Cast Iron	K01								
	K10	CX37TA	MC5020		XCK2000 ACK2000 ACK200	CA420M	T1215 T1115 T1015	NC5330	TT7515
	K20	CX37TA	MC5020		XCK2000 XCU2500 ACK2000 ACK200		T1115 T1015	NC5330	TT7515
	K30			GX30				NCM535	TT7515

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Indexable Milling

## Milling Inserts Grade Comparison - CVD

銑刀片材質比較表 - CVD

ISO Code		WINSTAR 萬事達	Sandvik 山特維克	Iscar 伊斯卡	Kennametal 肯納	SECO 山高	Walter 瓦爾特
<b>P</b> Steel	P10			IC9080 IC4100 IC9015		MP1500	WKP25
	P20	CX37TA	GC4220	IC5500 IC5100 IC520M		MP1500 MP2500	WKP35
	P30	CX37TA	GC4330 GC4230	IC5500 IC4050	KCPK30 KC930M	MP2500	
	P40	CX47TA	GC4340 GC4240		KC935M KC530M KCPM20		
<b>M</b> Stainless Steel	M10			IC9250			
	M20			IC520M IC9350	KC925M	MP2500 MM4500	
	M30	CX47TA	GC2040	IC9350 IC4050	KC930M KCPM20	MP2500 MM4500	
	M40			IC635	KC930M KC935M		
<b>K</b> Cast Iron	K01						
	K10						WAK15
	K20	CX37TA	GC3220 GC3330 K20W	IC5100 IC9150	KC915M	MK1500 MK2000	WKP25
	K30	CX37TA CX47TA	GC3330 GC3040	IC4100 IC4050 IC520M	KC920M KC925M KCPK30 KC930M KC935M KCPM20	MK2000 MK3000	WKP35

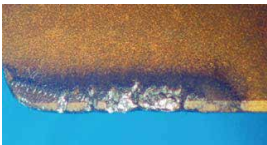
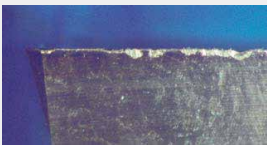


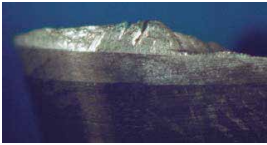
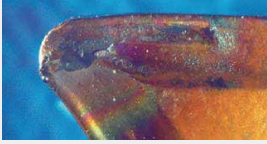

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**Troubleshooting in Insert**

刀片加工異常原因及對策

Indexable Milling

Trouble / 情況	Occurrences / 原因	Countermeasures / 對策
 Thermal Crackin 熱裂	Intermittent heating of the cutting edge. High speed, high volume metal removal. 切削角間歇性高熱，高切削線速度和較大的金屬移除量，造成的熱裂	1. Use heat resistant grades 使用具有耐熱抵抗的刀片材質 2. Use positive or large rake tools 使用正角或較銳利的刀片 3. Increase nose radius 使用較大半徑刀口的刀片 4. Reduce speed, feed or depth of cut 降低切削線速度、進給或切深
 Chipping 脆裂	Cutting tool excessively brittle. 刀片材質太硬脆	1. Use tougher grades 使用韌性較高的刀片材質 2. Use negative or smaller rake tools 使用負角或較鈍的刀片 3. Increase nose radius 使用較大半徑刀口的刀片 4. Use increased edge land 使用較大刀口平台的刀片 5. Increase cutting speed 增加切削線速度
 Excessive Flank Wear 過度磨耗	Cutting tool too soft. 刀片材質太軟  Surface speed too fast. 切削線速度太快	1. Use harder and more wear resistant grade 使用較硬或較耐磨的刀片材質 2. Reduce cutting speed 降低切削線速度 3. Increase feed 增加進給 4. Use coolant 使用冷卻液
 Notching 凹陷	Cutting material working harden cause serious wear of insert. 被加工材料產生硬化而造成刀片嚴重磨損	1. Increase approach angle 增加進刀時切削邊隙角 2. Reduce cutting speed and feed 降低切削線速度及進給量 3. Use high lubricity coolant 使用潤滑性較高的冷卻液
 Built-Up-Edge 積屑	Cutting speed too slow for material being machined. 就被加工材料而言，切削線速度太低	1. Increase cutting speed 提高切削線速度 2. Use friction reducing grade 使用摩擦力較低的刀片材質 3. Use high lubricity coolant 使用潤滑性較高的冷卻液
 Deformation 變形	Heavy feeds or higher cutting speed. 切削線速度太快或是進給量太大	1. Reduce cutting speed or feed 降低切削線速度或進給量 2. Use polished tools to reducing friction 使用拋光刀片降低磨擦阻力 3. Use more heat resistant grade 使用更高耐熱抵抗的刀片材質
 Crater Wear 熱裂	Excessive heat and pressure welding of chip to rake. 切削產生的高溫和高压，造成鐵屑焊黏在刀口上	1. Use a harder grade 使用較硬的刀片材質 2. Reduce cutting speed and feed 降低切削線速度及進給量 3. Use high lubricity coolant 使用潤滑性較高的冷卻液

\* Pictures from Kennametal Tooling Catalogue