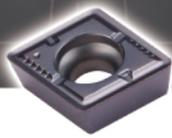




元磁特殊金屬有限公司
GUASS SPECIAL METAL PRODUCTS CORP.

品質 · QUALITY
技術 · TECHNOLOGY
服務 · SERVICE



CATALOGUE

2026

碳化鎢與 **CNC** 可轉位刀片專業生產製造

Professionally Manufactured of Indexable Inserts & Tungsten Carbides



元磁特殊金屬有限公司
GUASS SPECIAL METAL PRODUCT CORP.

● 公司簡介

元磁特殊金屬有限公司成立於1990年，從事碳化鎢成形與燒結，1993年開始研製捨棄式刀片之生產，提供優良品質且均一的捨棄式銑刀片予CNC銑床使用，深獲業界信賴及讚美，也因此更積極不斷的投入開發各產業所需求的刀片，舉凡航空、塑膠、機械、食品、汽車、電子等客戶，都是我們的夥伴，在將近數十年餘載，除了曾通過ISO 9001 2000 法國·貝爾的品保認證外，也從未間斷投資各項設備，皆只為供應業界品質優良且均一的捨棄式刀片，協助客戶能順利又穩定的生產，建立長期穩定的合作關係，領航於時代改變的前頭。

故目前廠內可提供各式之車刀片、銑刀片、鑽孔刀片、搪孔刀片、切槽、切斷刀片及各類特殊形式的鎢鋼產品，我們秉持「品質、技術、服務」作為公司經營方針，相信只要配合客戶要求，一起創造業界利潤，就能達成三方皆贏的方向，走向世界的舞台。

● COMPANY PROFILES:

Guass Special Metal Co., Ltd. was established in 1990, engaged in tungsten carbide forming and sintering work. In 1993, we began to produce the carbide inserts and offer high & stable quality milling carbide inserts for CNC milling machines, during this period, we received many excellent feedback and has won the trust and praise of the customer. Therefore, we throw in the development of carbide inserts positively and continually to suit for every industries demand, such as aviation, plastics, machinery, food, automobiles, electronics, etc.... many of them are our partners. In the past few decades, in addition to get the ISO system quality assurance (AFAQ- certification of 9001 2000 Bell of France), we also have never stopped investing in each new equipment, all for the purpose is to supply high & stable quality carbide inserts to the industry, supporting customers the smooth and stable production, and built a long-term and stable cooperative relations. Be ahead of the generation changed.

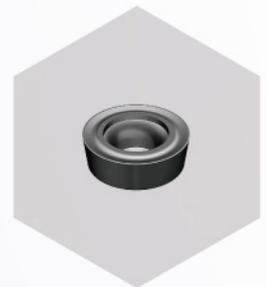
Therefore, Guass factory can provide all kinds of "turning inserts, milling inserts, drilling inserts, boring inserts, grooving, cutting inserts" and every kinds of special shapes of tungsten carbide products. We uphold "quality, technology, service" as our main business policy, believes that as long as we cooperates with customer requirements and creates industry profits together, it will be able to achieve a win-win direction for all three, and expand to the business to all worldwide.

QUALITY

TECHNOLOGY

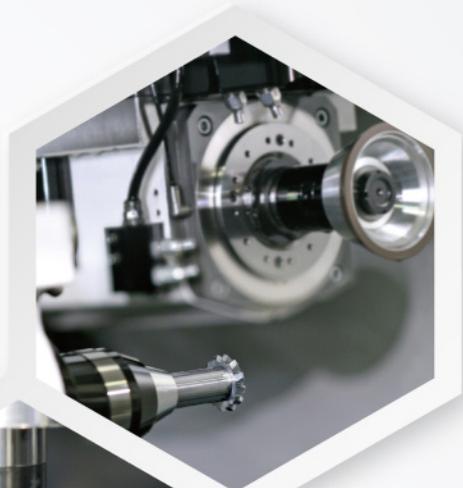
SERVICE

技術 · 品質 · 服務



完備的機械設備與量測儀器 COMPLETE MECHANICAL EQUIPMENTS

檢驗量測
Inspection
Measurement



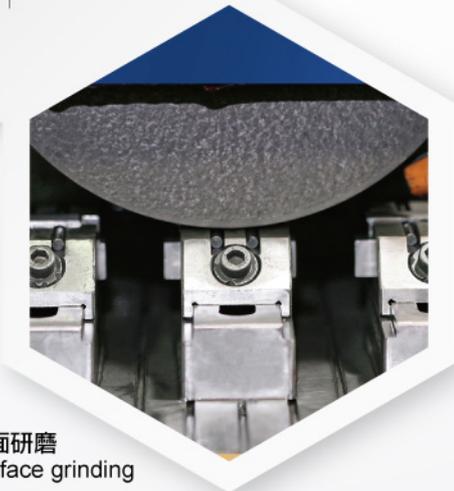
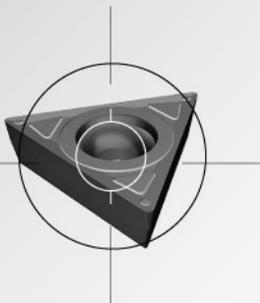
多軸研磨
Multi axis grinding
technology



粉末成型
Metallurgy molding
technology



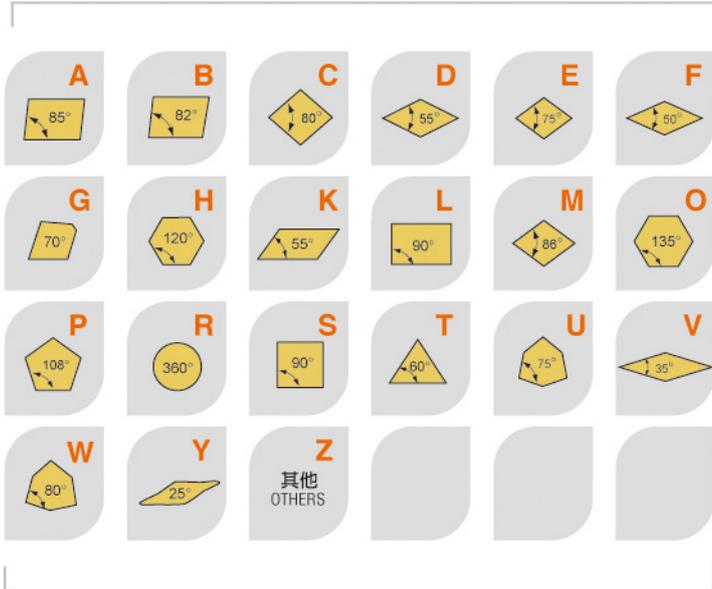
自動化研磨
Automatic grinding
technology



平面研磨
Surface grinding

1

形狀代號 SHAPE CODE

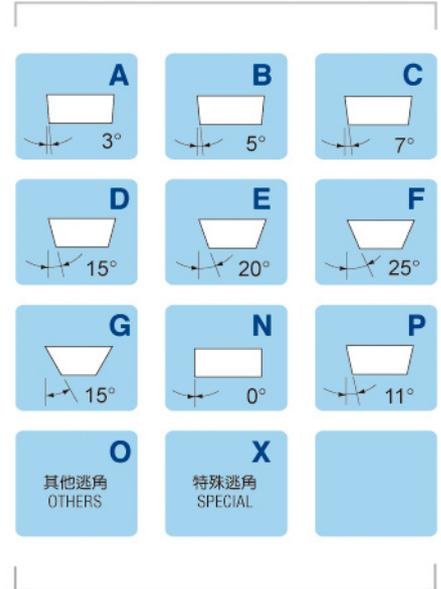


C **N** **M** **G** 12 04 08 (E) (N) — MS

1

2

后角代號 CLEARANCE ANGLE CODE



C **N** **M** **G** 12 04 08 (E) (N) — MS

2

3

精度代號 TOLERANCE CODE

代號	公差 (mm)			內切圓	內切圓直徑 (IC) 公差		刀尖高 (m) 公差		通用刀片形狀
	刀尖高 (m)	厚度 (s)	內切圓直徑 (Ød)		內切圓	J/K/L/M/N (級)	U (級)	J/K/L/M/N (級)	
A	±0.005	±0.025	±0.025	6.35	±0.05	±0.08	±0.08	±0.13	C, E, H, M, O, P, R, S, T, W
B	±0.005	±0.025	±0.013	9.525	±0.05	±0.08	±0.08	±0.13	
C	±0.013	±0.025	±0.025	12.7	±0.08	±0.13	±0.13	±0.2	
H	±0.013	±0.025	±0.013	15.875	±0.1	±0.18	±0.15	±0.27	
E	±0.025	±0.025	±0.025	19.05	±0.1	±0.18	±0.15	±0.27	
G	±0.025	±0.13	±0.025	25.4	±0.13	±0.25	±0.18	±0.38	
J	±0.005	±0.025	±0.05-0.13	31.75	±0.15	±0.25	±0.2	±0.38	
K	±0.013	±0.025	±0.05-0.13	32	±0.15	±0.25	±0.2	±0.38	
L	±0.025	±0.025	±0.05-0.13	內切圓	內切圓直徑 (IC) 公差		刀尖高 (m) 公差		通用刀片形狀
M	±0.08-0.18	±0.13	±0.05-0.13	6.35	±0.05	±0.05	±0.11	±0.11	W
N	±0.08-0.18	±0.025	±0.05-0.13	12.7	±0.05	±0.05	±0.11	±0.11	
U	±0.13-0.38	±0.13	±0.08-0.25	15.875	±0.08	±0.08	±0.15	±0.15	
				19.05	±0.1	±0.1	±0.18	±0.18	
				6.35	±0.1	±0.1	±0.18	±0.18	V
				9.525	±0.05	±0.05	±0.16	±0.16	Y

C **N** **M** **G** 12 04 08 (E) (N) — MS

3

4

斷屑槽及夾固形式代號 CHIP BREAKER AND HONE CODE

代號	形狀	孔	孔的形狀	斷屑槽
N				無
R		無	—	單面
F				雙面
A				無
M		有	圓柄孔	單面
G				雙面
W		有	圓柄孔	無
T		有	單面-埋頭孔	單面
Q		有	圓柄孔	無
U		有	雙面-埋頭孔	雙面
B		有	圓柄孔	無
H		有	單面-埋頭孔 (角度較大)	單面
C		有	圓柄孔	無
J		有	雙面-埋頭孔 (角度較大)	雙面
X	特殊 SPECIAL	—	—	—

C **N** **M** **G** 12 04 08 (E) (N) — MS

4

5

切削刃長度和內切圓代號 CUTTING EDGE LENGTH CODE

* (R)		(S)		(C)		(W)		(T)		(D)		(V)		(K)		內切圓直徑
代號	長度	代號	長度	代號	長度	代號	長度	代號	長度	代號	長度	代號	長度	代號	長度	
		0.3	3.97	0.3	4.0			06	6.9	0.4	4.8					3.97
		04	4.76	04	4.8			08	8.2	0.5	5.8	08	8.3			4.76
05	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00
		05	5.56	05	5.6	03	3.8	09	9.6	06	6.8					5.56
06	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.00
		06	6.35	06	6.5	04	4.3	11	11	07	7.8	11	11.2			6.35
		07	7.94	08	8.1	05	5.4	13	13.8	09	9.7					7.94
08	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.00
09	9.525	09	9.525	09	9.7	06	6.5	16	16.5	11	11.6	16	16.6	16	19.7	9.525
10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.00
12	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.00
12	12.7	12	12.7	12	12.9	08	8.7	22	22	15	15.5	22	22.1			12.70
15	15.875	15	15.875	16	16.1	10	10.9	27	27.5	19	19.4					15.875
16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.00
19	19.05	19	19.05	19	19.3	13	13	33	33	23	23.3					19.05
20	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.00
		22	22.225	22	22.6			38	38.5	27	27.1					22.225
25	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.00
25	25.4	25	25.4	25	25.8			44	44	31	31					25.40
31	31.75	31	31.75	32	32.2			55	55	38	38.8					31.75
32	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.00

C N M G 12 04 08 (E) (N) - MS
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6

刀片厚度 THICKNESS

代號	厚度(mm)	代號	厚度(mm)	代號	厚度(mm)
00	0.79	03	3.18	T6	6.75
T0	0.99	T3	3.97	07	7.94
X1	1.39	04	4.76	09	9.52
01	1.59	T4	4.96	T9	9.72
T1	1.98	05	5.56	11	11.11
02	2.38	T5	5.95	12	12.7
T2	2.58	06	6.35		

● 刀片厚度
斷屑槽的刀片，刀尖位
置的刀片高度更低。
圖中刀片厚度輪廓的外
形尺寸與右圖中的“S”
相等。

C N M G 12 04 08 (E) (N) - MS
6

7

刀尖圓角半徑 CORNER RADIUS

代號	半徑 Re(mm)	代號	半徑 Re(mm)
00	無圓角	20	2
02	0.2	24	2.4
04	0.4	28	2.8
08	0.8	32	3.2
12	1.2	X	其他 Special
16	1.6		

00: Round insert (inch)
MO: Round insert (meter)

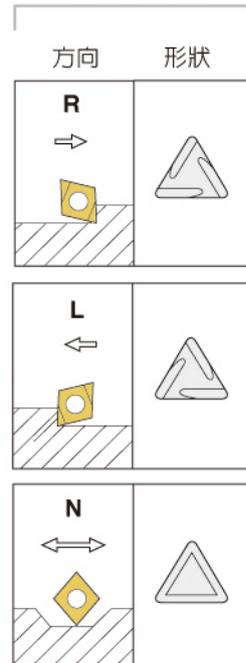
刀口角度 8 CUTTING EDGE

代號	刀尖	形狀
E	鋒利刀 Rounded	
F	圓弧刀 Sharp	
W.T	負倒稜 Chamfered	
S	複合型 Chamfers and rounded	

C N M G 12 04 08 (E) (N) - MS
7 8 9

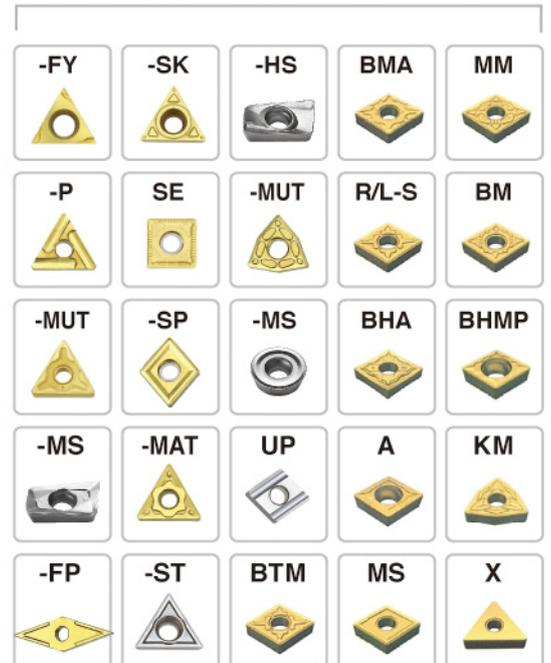
9

刃口方向 CUTTING DIRECTION



10

斷屑槽型 CHIP BREAKER



C N M G 12 04 08 (E) (N) - MS
10



G12XF	<p>硬度(Hardness) HRA92.7，結晶粒度(Grain size) 0.5μ~0.6μ，抗折力TRS 320kg/mm² (450ksi)</p> <p>極細微粒材質，質地均勻分散碳化鉻微粒，極為優越於加工高強度合金鋼，亦適合研磨銳利刀片 Ultra fine submicron grain size grade carbide, micron chrome carbide distributes in matrix, excels in sharpening cutting edge and machining high strength Alloyed Steel.</p>
G10CF	<p>硬度(Hardness)HRA92，結晶粒度(Grain size) 0.7μ~0.8μ，抗折力TRS 290kg/mm² (410ksi)</p> <p>超微粒材質，結晶粒極為均勻，質地均勻分散碳化鉻微粒，此材質通過美國太空總署航太認證，適合加工高強度航太合金及高強度鎳基合金，亦適合加工工具合金鋼及高強度鑄鐵。 Submicron grain size grade carbide, unique grain structure micron chrome carbide in matrix, able to retain a sharp cutting edge during the machining of high strength Ni-base alloy and aerospace alloy, also longer tool life for alloyed steel and high strength cast iron.</p>
G15M	<p>硬度(Hardness) HRA91.4，結晶粒度(Grain size)1μ~2μ，抗折力TRS 170kg/mm² (240ksi)</p> <p>此材質為P.M級材質Tic + Tac 含20%，ISO規格在M15~M20、P20~P40，由於高含量碳化鈮(Tac)耐熱性佳，適合於加工碳鋼、不鏽鋼及合金鋼。 This carbide grade is equivalent to ISO grade M15~M20, P20~P40 high Tantalum carbide content, Tic+ Tac total content 20%, high heat-resistance. Used in cutting carbon steel, stainless steel and alloyed steel.</p>
G20P	<p>硬度(Hardness) HRA90.5，結晶粒度(Grain size)1μ~2μ，抗折力TRS 180kg/mm² (255ksi)</p> <p>此材質為P.M級材質Tic + Tac 含21%，ISO規格在M20~M30、P20~P30，由於高鈷含量及(Tac)含量，韌性佳及耐熱性亦佳，適合車、銑碳鋼、合金鋼及不鏽鋼、鑄鐵等。 This carbide grade is equivalent to ISO grade M20~M30, P20~P30 with high cobalt content and high Tantalum carbide content, Tic+ Tac total content 21%, good toughness and heat-resistance. Used in machining carbon steel, alloyed steel and stainless steel, cast iron.</p>
G40M	<p>硬度(Hardness) HRA89，結晶粒度(Grain size)1μ~2μ，抗折力TRS 260kg/mm² (370ksi)</p> <p>此材質在ISO規格M30~M40，由於碳化鈮、碳化鈮顆粒均勻分佈在基地上，有良好熱抵抗，適合加工鎳基合金。 This carbide grade is equivalent to ISO grade M30~M40. It contains unique Tantalum carbide particle and Niobium carbide particle in matrix. With high temperature resistance and wear resistance. Used in turning and high Ni-base alloy.</p>

<p>G11C</p>	<p>硬度(Hardness) HRA89.5，結晶粒度(Grain size)1.5μ，抗折力TRS 250kg/mm² (360ksi)</p> <p>此材質碳化鎢結晶大小配比，ISO規格在K20~K30，由於結晶顆粒配比，耐衝擊性佳、韌性佳，適合進刀量大加工，經TIN、TICN或TIALN 鍍膜適合加工鑽、銑、車，刀刃不易崩裂，適合加工碳鋼、合金鋼。</p> <p>This carbide grade is ISO grade K20~K30 range. Its conglomerate of coarse and fine grain sizes makes its in high impact and toughness strengths. After coated with TIN, TICN or TIALN, it is good for heavy machining such as milling, turning and drilling carbon steel and alloy steel.</p>
<p>G10KTA</p>	<p>硬度(Hardness) HRA92.5，結晶粒度(Grain size)1.3μ，抗折力TRS 160kg/mm² (230ksi)</p> <p>超微粒材質，結晶粒極為均勻，質地均勻分散碳化鉻微粒，此材質通過美國太空總署航太認證，適合加工高強度航太合金及高強度鎳基合金，亦適合加工工具合金鋼及高強度鑄鐵。</p> <p>Submicron grain size grade carbide, unique grain structure micron chrome carbide in matrix, able to retain a sharp cutting edgeduring the machining of high strength Ni-base alloy and aerospace alloy, also longer tool life for alloyed steel and high strengthcast iron.</p>
<p>G20H</p>	<p>硬度(Hardness) HRA92，結晶粒度(Grain size) 0.8μ，抗折力TRS 240kg/mm² (340ksi)</p> <p>極微粒材質，ISO規格為K10~K20，硬度高、韌性佳，銲接性良好，適合製作端銑刀、絞刀、銲接倒角刀，適合加工碳鋼、合金鋼、不鏽鋼、鑄鐵、鋁合金及木工刀具。</p> <p>Submicron grain carbide, equivalent to ISO grade K10~K20, high tension strength, good toughness and good for braze with steel bar, Used in grinding solid carbide endmill, solid carbide chamfer cutter and solid carbide reamer cutter, also in machining carbon steel, stainless steel, alloyed steel, cast iron, copper, aluminum alloy and wood working tool.</p>
<p>G6CF</p>	<p>硬度(Hardness) HRA93，結晶粒度(Grain size)0.6μ~0.8μ，抗折力TRS 211kg/mm² (300ksi)</p> <p>此材質為ISO K05，由於含有碳化鈮及碳化鉻有良好的熱抵抗及耐磨耗，適合加工合金鋼、鑄鐵、合金鑄鐵及車削航太合金材料。</p> <p>This carbide grade is ISO grade K05, few parts of Vanadium carbide and Chromum carbide content is good for high temp resistance and good wear resistance is suit for turning and milling alloy steel, cast iron, cast iron alloy and turning aerospace alloy.</p>

Materials
材料與材質

Coating
GS 塗層

Milling Insert
銑刀系列

Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材



工件材料 Workpiece materials	P					M					K				S				N				H							
	鋼 Steel					不鏽鋼 Steel					鑄鐵 Cast iron				鈦合金 Hi-temp Alloy				有色金屬 Non-Ferrous Metals				高硬度材料 High Hardness Materials							
ISO	01	10	20	30	40	01	10	20	30	40	01	10	20	30	01	10	20	30	01	10	20	30	01	10	20	30	01	10	20	30
CVD																														
PVD		GA0120						GA0147					GA0148				GA0147				GA0120								GA0157	
硬質合金 Cemented carbide																														
超硬材料 Superhard materials																														

銑削 刀片塗層一覽表 *Turning / Drilling Insert Grades List*

GA0120

咖啡金色塗層 (PVD) 或稱古銅色塗層，屬TiSiN 高矽鈦，適用於大部分的合金鋼、碳鋼、不鏽鋼、高溫合金的半精密及精加工，加工中耐熱溫度可達1700度，在濕式切削環境下表現優秀，適用工件硬度HRC45~55度左右，亦可使用在乾式切削的環境。

The brown-gold coating (PVD), also known as bronze coating, is a high-silicon titanium TiSiN coating. It is suitable for semifinishing and finishing of most alloy steels, carbon steels, stainless steels, and high-temperature alloys. The coating can withstand temperatures of up to 1700°C during processing and performs exceptionally well in wet cutting environments. It is ideal for workpieces with a hardness of approximately 45–55 HRC and can also be used effectively in dry cutting conditions.

GA0124

咖啡金色塗層 (PVD) 或稱古銅色塗層，屬TiSiN 高矽鈦，適用於大部分的合金鋼、碳鋼、不鏽鋼、高溫合金的粗加工及半精密加工，加工中耐熱溫度可達1400度，在濕式切削的環境下表現優秀，適用工件硬度HRC20~45度，亦可使用在乾式切削的環境。

The brown-gold coating (PVD), also known as the bronze coating, is a high-silicon titanium TiSiN coating. It is suitable for roughing and semi-finishing of stainless steel, low-carbon alloy steel, and high-temperature alloys. This coating can withstand machining temperatures of up to 1600°C and delivers excellent performance in wet cutting, while also being suitable for dry cutting. It is recommended for workpieces with hardness levels of approximately HRC 20–45.

GA0128

咖啡金色塗層 (PVD) 或稱古銅色塗層，屬TiSiN 超高矽鈦，適用於大部分的合金鋼、碳鋼、不鏽鋼、高溫合金的半精密及精加工，加工中耐熱溫度可達2000度，在濕式切削的環境下表現優秀，適用工件硬度HRC55度以上，亦可使用在乾式切削的環境。

The brown-gold coating (PVD), also known as a bronze coating, is an ultra-high silicon titanium TiSiN coating. It is suitable for semi-finishing and finishing of most alloy steels, carbon steels, stainless steels, and high-temperature alloys. This coating can withstand machining temperatures of up to 2000°C and performs exceptionally well in wet cutting environments. It is ideal for workpieces with a hardness of HRC 55 or higher and can also be used effectively in dry cutting conditions.

GA0129

咖啡金色塗層（PVD）或稱古銅色塗層，屬TiSiN 標準矽鈦，適用於大部分的低碳合金鋼、不鏽鋼的半精密及精加工，加工中耐熱溫度可達1300度，在濕式切削的環境下表現良好，適用工件硬度HRC25度以下，亦可使用在乾式切削的環境。

The brown-gold coating (PVD), also known as the bronze coating, is a standard-silicon titanium TiSiN coating. It is suitable for semi-finishing and finishing of most low-carbon alloy steels and stainless steels. This coating can withstand machining temperatures of up to 1300°C and performs well in wet cutting environments. It is ideal for workpieces with a hardness below HRC 30 and can also be used effectively in dry cutting conditions. GA0129

GA0145

灰黑色塗層（PVD），或稱紫灰色塗層，屬AlTiN 標準鋁鈦，適用加工在大部分的低碳鋼、不鏽鋼、普通鋼件、鑄鐵材質上，適用於溼式切削的環境，是銑刀中較為常見的材質，適用工件硬度HRC約在25度以下，亦可使用在乾式切削的環境。

The gray-black coating (PVD), also known as the purple-gray coating, is a standard aluminum-titanium AlTiN coating. It is suitable for machining most mild steels, stainless steels, ordinary steels, and cast irons. This coating performs well in wet cutting environments and is commonly used for end mills. It is ideal for workpieces with a hardness of approximately HRC 25 and can also be used effectively in dry cutting conditions.

GA0147

灰黑色塗層（PVD），或稱紫灰色塗層，屬AlTiN 高鋁鈦，適用加工在大部分的碳鋼、鋼件、鑄鐵及高溫合金的材質，是捨棄式刀片應用非常廣泛的材質，可用在溼式切削的環境，適用工件硬度HRC25~35度左右，亦可使用在乾式切削的環境。

The gray-black coating (PVD), also known as the purple-gray coating, is a high-aluminum titanium AlTiN coating suitable for machining most carbon steels, general steels, cast irons, and high-temperature alloys. It is one of the most widely used coatings for carbide inserts and performs exceptionally well in wet cutting environments. Recommended for workpieces with a hardness of approximately HRC 25–35, it can also be used effectively in dry cutting conditions.

GA0148

灰黑色塗層（PVD），或稱紫灰色塗層，屬AlTiN 超高鋁鈦，適用粗加工在大部分的碳鋼、鋼件、鑄鐵及高溫合金的材質，尤其是在大型或巨型的工件加工上如風力發電，可用在溼式切削的環境，適用工件硬度HRC30度~50度左右，亦可使用在乾式切削的環境。

The gray-black coating (PVD), also known as the purple-gray coating, is an ultra-high aluminum titanium AlTiN coating suitable for rough machining of most carbon steels and high-temperature alloys. It is especially effective for machining large or oversized workpieces, such as those used in wind power generation. This coating performs well in wet cutting environments and is recommended for workpieces with a hardness of approximately HRC 30–50. It can also be used effectively in dry cutting conditions.

GA0157

銀色塗層（PVD），適用於鈦合金、鋁、銅等之類的有色金屬合金（非鐵），在長時間的連續加工下有相當優異的品質表現，可極度接近DLC類鑽或PCD鑽石刀具的效果，此類塗層僅接受訂製。

The silver coating (PVD) is suitable for non-ferrous alloys, such as titanium and aluminum. It delivers excellent performance under long-term continuous machining, approaching the quality of DLC (diamond-like carbon) or PCD (polycrystalline diamond) tools. This coating is available by custom order only.

Materials
材料與材質

Coating
GS 塗層

Milling Insert
銑刀系列

Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材

● 銑刀 Milling Insert

頁次 Page	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape
P13	EP		LN		LO		EN	
P14	QP		JD		WD			
P15	SO		3PKT		BL		SD	
P16	RT		LN		BD		JD	
P17	WN		LP		JO		CN	
P18	AP		AX					
P19	XO		XO					
P20	SD SP		AD AP		ZP			
P21	RD		RC					
P22	RP		RD 鋁用 AL					
P23	RP 鋁用 AL		RC 鋁用 AL					
P24	PN		SN		WN			
P25	WPON-FN		WPOV-FS					
P26	WPIN-FN							
P27	WGR-F		WGR-FS					
P29	SNFX							
P30	SE		SP		SF			
P31	TP		OE		OD			
P32	ON		SE					

● 銑刀 Milling Insert

頁次 Page	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape
P33	WD							
P34	4NKT		XN		SE			
P35	CKEM		CBCM					
P36	FEM							

● 車刀 Turning Insert

頁次 Page	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape
P39	MGTR		MGTL					
P40	MTRR		SAGE		GER			
P41	ER-60		IR-60		ER-55		IR-55	
P42	ER-ISO		IR-ISO		ER-NPT		IR-NPT	
P43	ER-W		IR-W		ER-BSPT		IR-BSPT	
P45	GF		GT		DGM			
P46	DGN		DGJ					
P47	MGMN		MRMN					
P48	TGMF		HFPR					
P49	GPX		GPGT					
P50	TN							
P51	CN							

Materials
材料與材質

Coating
CS 塗層

Milling Insert
銑刀系列

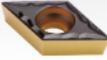
Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材

● 車刀 Turning Insert

頁次 Page	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape
P52	SN							
P53	WN							
P54	DN							
P55	VN							
P56	CC		DC					
P57	VC		VB					
P58	RC		RP		TC			
P61	TC		TP					
P63	MK		MK					
P64	TG		PG					
P65	BT		FG					
P66	TG		RG					
P67	PG		BT					
P68	FG		FT					
P69	TG		RG					
P70	PG		BT					
P71	FG		FT					
P72	MG							

● 鑽刀 Dilling Insert

頁次 Page	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape
P73	TC		TP		CC			
P74	XC							
P75	WC		SP					
P76	WP							

● 特殊刀片 Customized products Insert

頁次 Page	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape	刀片規格 Insert ISO Code	刀片外型 Shape
P77	QN		SN					
P78	RN		RP					
P79	SN		LW					
P80	LN		CN					
P81	木工刀 Wood		客製化刀片 Customized					
P82	圓鋸片 Saw blade							

● 素材 Blank

頁次 Page	刀片規格 Insert ISO Code	刀片外型 Shape	頁次 Page	刀片規格 Insert ISO Code	刀片外型 Shape
P83	刀具類碳化鎢		P85	模具類碳化鎢	
P84	礦山類碳化鎢 環狀鎢鋼		P86	模具類碳化鎢	

Materials
材料與材質

Coating
G S 塗層

Milling Insert
銑刀系列

Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材



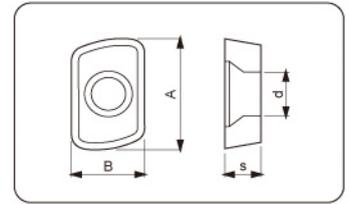
● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

EP高進給銑刀片
EP High Feed Milling Cutter



應用 Applicable
粗加工
Rough machining

P 鋼		●	●	●	●		
M 不鏽鋼	●	●	●				
K 鑄鐵				●			
N 非鐵金屬						●	
S 超級合金	●	●					
H 硬材質	●						



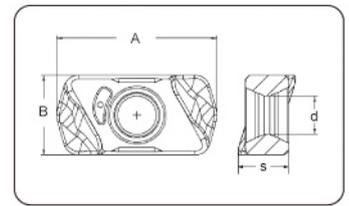
※ 詳見附表1 ※ See attached table 1

刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	A	B	s	d	R
MO MP	EPMW060308-MO	📄	🏠	🏠	📄		🏠	10.00	6.35	3.18	2.90	0.80
	EPMT060308-MP	📄	🏠	🏠	📄		🏠	10.00	6.35	3.18	2.90	0.80
	EPMT0603TN	📄	🏠	🏠	📄		🏠	10.00	6.35	3.18	-	8.00
	EPNW0603TN-8	📄	🏠	🏠	📄		🏠	10.00	6.35	3.18	-	8.00

LN高進給銑刀片
LN High Feed Milling Cutter



P 鋼		●	●	●			
M 不鏽鋼	●	●	●				
K 鑄鐵				●			
N 非鐵金屬						●	
S 超級合金	●	●					
H 硬材質	●						

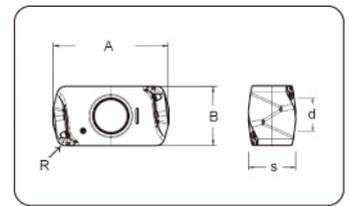


應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	A	B	s	d	R
半精密加工 Semi-fine machining	LNMU030312-TU	📄	🏠	🏠	📄		🏠	11.60	6.00	4.30	2.90	-

LO高進給銑刀片
LO High Feed Milling Cutter



P 鋼		●	●	●			
M 不鏽鋼	●	●	●				
K 鑄鐵				●			
N 非鐵金屬						●	
S 超級合金	●	●					
H 硬材質	●						



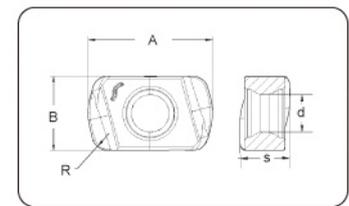
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	A	B	s	d	R
半精密加工 Semi-fine machining	LOGU030310-GS	📄	🏠	🏠	📄		🏠	11.90	6.20	4.88	3.44	0.90

EN高進給銑刀片
EN High Feed Milling Cutter



應用 Applicable
半精密加工
Semi-fine machining

P 鋼		●	●	●	●		
M 不鏽鋼	●	●	●				
K 鑄鐵				●			
N 非鐵金屬						●	
S 超級合金	●	●					
H 硬材質	●						



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	A	B	s	d	R
	ENMU100412-DJ	📄	🏠	🏠	📄		🏠	10.00	6.00	4.00	3.04	1.20
	ENHU100412-DJ	📄	🏠	🏠	📄		🏠	10.00	6.00	4.00	3.04	1.20
	ENMU060318-HI	📄	🏠	🏠	📄		🏠	10.00	6.00	4.20	2.80	1.80
	ENHU060318-HI	📄	🏠	🏠	📄		🏠	10.00	6.00	4.20	2.80	1.80

🟡: Adaptable processing 🏠: In stock 📄: customized order

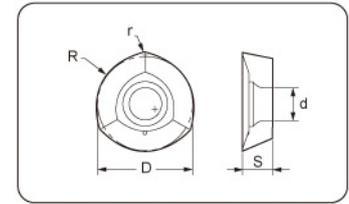
QPWR高進給銑刀片
QPWR High Feed Milling Cutter



刀片槽型 Insert shape

P 鋼		●	●	●	●		
M 不鏽鋼	●	●	●	●			
K 鑄鐵					●		
N 非鐵金屬						●	
S 超級合金	●	●					
H 硬材質	●						

※ 詳見附表1 ※ See attached table 1



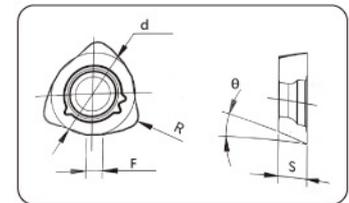
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	S	d	R	r
半精密加工 Semi-fine machining	QPMT0903-6R-FW	📄	🏠	🏠	📄		🏠	9.52	3.18	3.40	5.80	0.40
半精密加工 Semi-fine machining	QPMT12T3-8R-FW	📄	🏠	🏠	📄		🏠	12.70	3.97	4.40	7.72	0.40
半精密加工 Semi-fine machining	QPMT1504-10R-FW	📄	🏠	🏠	📄		🏠	15.87	4.76	4.40	9.66	0.40

JD高進給銑刀片
JD High Feed Milling Cutter



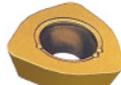
刀片槽型 Insert shape

P 鋼		●	●	●			
M 不鏽鋼	●	●	●	●			
K 鑄鐵					●		
N 非鐵金屬						●	
S 超級合金	●	●					
H 硬材質	●						



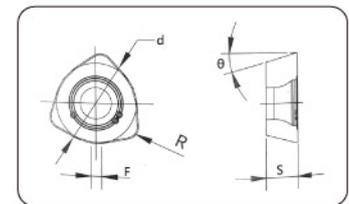
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	s	θ	F	R
半精密加工 Semi-fine machining	JDMW09T320SR-FT	📄	🏠	🏠	📄		🏠	9.52	3.97	15°	1.80	2.00
半精密加工 Semi-fine machining	JDMW120420SR-FT	📄	🏠	🏠	📄		🏠	12.00	4.76	15°	2.50	2.00
半精密加工 Semi-fine machining	JDMW140520SR-FT	📄	🏠	🏠	📄		🏠	14.00	5.56	15°	2.80	2.00

WD高進給銑刀片
WD High Feed Milling Cutter



刀片槽型 Insert shape

P 鋼		●	●	●			
M 不鏽鋼	●	●	●	●			
K 鑄鐵					●		
N 非鐵金屬						●	
S 超級合金	●	●					
H 硬材質	●						



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	s	θ	F	R
半精密加工 Semi-fine machining	WDMW06T320ZTR	📄	🏠	🏠	📄		🏠	10.00	3.97	15°	1.20	2.00
半精密加工 Semi-fine machining	WDMW080520ZTR	📄	🏠	🏠	📄		🏠	13.00	5.50	15°	1.50	2.00
半精密加工 Semi-fine machining	WDMW10X620ZTR	📄	🏠	🏠	📄		🏠	16.00	6.00	15°	2.00	2.00

◀ EN高進給銑刀片附表

加工材質 Machined Material	材質硬度 (HB) Material Hardness	切削速度 (Vc) m/min	進給 Feed mm/tooth
碳鋼 Carbon steel	180~280	180~310	0.1~0.15
合金鋼 Alloyed steel	180~280	180~310	0.1~0.15
高合金鋼 High alloyed steel	200~300	130~230	0.05~0.15
不鏽鋼 Stainless steel	260以下	180~310	0.05~0.15
灰口鑄鐵 Gray cast iron	FC25以下, HB220以下	180~310	0.1~0.2
球墨鑄鐵 Ductile cast iron	FCD45, HB160以下 FCD55, HB210以下	140~240 100~200	0.1~0.2 0.05~0.15

QPWR高進給銑刀片加工條件 ▶▶

Materials 材料與材質

Coating 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材



● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

SO高進給銑刀片

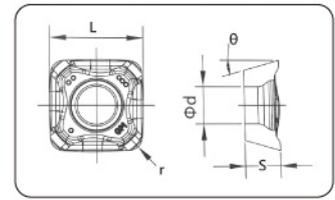
SO High Feed Milling Cutter



刀片槽型 Insert shape

P 鋼		●	●	●	●		
M 不鏽鋼	●	●	●	●			
K 鑄鐵				●			
N 非鐵金屬							●
S 超級合金	●	●					
H 硬材質	●						

※ 詳見附表2 ※ See attached table 2



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	S	θ	r	d
半精密加工 Semi-fine machining	SOMT100420ER-GM	📄	🏠	🏠	📄		🏠	10.30	4.58	16°	2.00	4.60
半精密加工 Semi-fine machining	SOMT140520ER-GM	📄	🏠	🏠	📄		🏠	14.14	5.56	16°	2.00	5.80

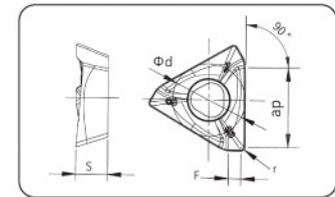
3PKT高進給銑刀片

3PKT High Feed Milling Cutter



刀片槽型 Insert shape

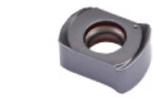
P 鋼		●	●	●	●		
M 不鏽鋼	●	●	●	●			
K 鑄鐵				●			
N 非鐵金屬							●
S 超級合金	●	●					
H 硬材質	●						



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	S	ap	F	r	d
半精密加工 Semi-fine machining	3PKT060304R-M	📄	🏠	🏠	📄		🏠	2.80	4.70	1.00	0.40	5.30
半精密加工 Semi-fine machining	3PKT100408R-M	📄	🏠	🏠	📄		🏠	4.00	7.00	1.20	0.80	6.90
半精密加工 Semi-fine machining	3PKT150508R-M	📄	🏠	🏠	📄		🏠	5.00	11.00	1.80	0.80	10.70
半精密加工 Semi-fine machining	3PKT190608R-M	📄	🏠	🏠	📄		🏠	6.00	15.00	2.00	0.80	13.50

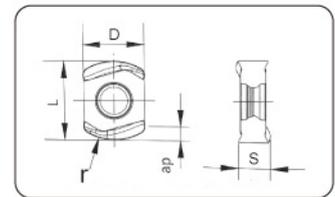
BL高進給銑刀片

BL High Feed Milling Cutter



刀片槽型 Insert shape

P 鋼		●	●	●	●		
M 不鏽鋼	●	●	●	●			
K 鑄鐵				●			
N 非鐵金屬							●
S 超級合金	●	●					
H 硬材質	●						



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	L	S	ap	r
半精密加工 Semi-fine machining	BLMP0603R-M	📄	🏠	🏠	📄		🏠	6.40	9.00	3.73	1.00	6.00
半精密加工 Semi-fine machining	BLMP0904R-MM	📄	🏠	🏠	📄		🏠	9.18	11.90	4.80	1.50	8.00

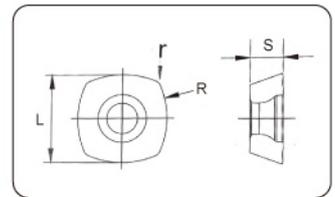
SD高進給銑刀片

SD High Feed Milling Cutter



應用 Applicable
半精密加工
Semi-fine machining

P 鋼		●	●	●	●		
M 不鏽鋼	●	●	●	●			
K 鑄鐵				●			
N 非鐵金屬							●
S 超級合金	●	●					
H 硬材質	●						



刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	S	R	r	d
	SDGT09T308	📄	🏠	🏠	📄		🏠	9.53	3.98	-	0.80	4.40
	SDMT120512-GH	📄	🏠	🏠	📄		🏠	12.70	5.56	15.00	1.20	4.40
	SDMT150512-GH	📄	🏠	🏠	📄		🏠	15.88	5.56	15.00	1.20	5.50

🟡: Adaptable processing 🏠: In stock 📄: customized order

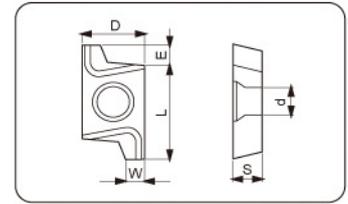
ARGT直角端銑刀 Radius End Miller ARGT Inserts



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表2 ※ See attached table 2



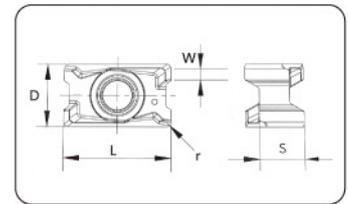
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	S	d	E	W	L
精密加工 Finish machining	RTH070204-NC	📄	🏠	🏠	📄		🏠	4.30	2.38	2.20	1.50	1.30	8.05

LN直角端銑刀 (正面負角加工 肩削加工) LN Inserts for Shoulder Cutter and Long Edge Cutter



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



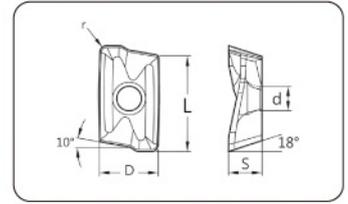
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	S	W	r	D
半精密加工 Semi-fine machining	LNGU110408-PR	📄	🏠	🏠	📄		🏠	12.16	4.83	1.00	0.80	6.60
半精密加工 Semi-fine machining	LNGU15T608-PR	📄	🏠	🏠	📄		🏠	17.01	6.96	1.80	0.80	10.00

BD直角端銑刀 (正面負角加工 肩削加工) BD Inserts for Shoulder Cutter and Long Edge Cutter



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



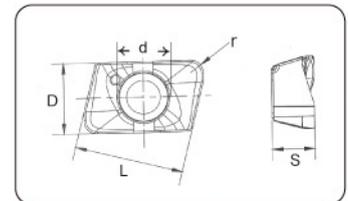
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	D	S	r	d
半精密加工 Semi-fine machining	BDMT11T308ER-JT	📄	🏠	🏠	📄		🏠	11.00	6.70	3.80	0.80	2.80

JD直角端銑刀 (正面負角加工 肩削加工) JD Inserts for Shoulder Cutter and Long Edge Cutter



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	D	S	r	d
半精密加工 Semi-fine machining	JDMT070204R	📄	🏠	🏠	📄		🏠	6.40	4.30	2.45	0.40	2.15
半精密加工 Semi-fine machining	JDMT070208R	📄	🏠	🏠	📄		🏠	6.40	4.30	2.45	0.80	2.15

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

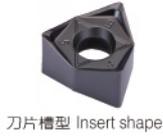
Blank 素材



銑刀片系列 End Miller Inserts Series

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

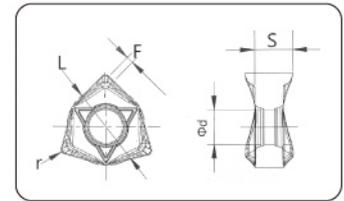
WN直角端銑刀 (正面負角加工) WN Inserts for Shoulder Cutter and Long Edge Cutter



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表2 ※ See attached table 2



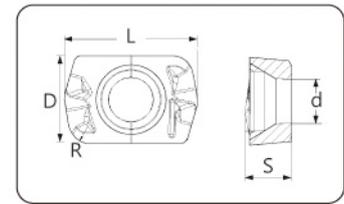
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	S	D	F	r
精密加工 Finish machining	WNMU040304EN-R	📄	🏠	🏠	📄		🏠	6.75	3.18	3.18	0.60	0.40
精密加工 Finish machining	WNMU060408EN-PM	📄	🏠	🏠	📄		🏠	10.14	4.36	4.20	-	0.80
精密加工 Finish machining	WNMU080608EN-R	📄	🏠	🏠	📄		🏠	14.02	6.65	6.20	1.30	0.80
精密加工 Finish machining	WNMU080608EN-GH	📄	🏠	🏠	📄		🏠	14.02	6.65	6.20	1.30	0.80
精密加工 Finish machining	WNEU080608N-GH	📄	🏠	🏠	📄		🏠	14.02	6.65	6.20	1.30	0.80
精密加工 Finish machining	WNEU080608N-GL	📄	🏠	🏠	📄		🏠	14.02	6.65	6.20	1.30	0.80

LP直角端銑刀 (正面負角加工) LP Inserts for Shoulder Cutter and Long Edge Cutter



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



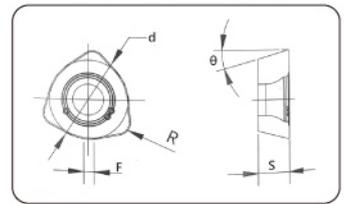
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	D	S	R	d
精密加工 Finish machining	LPGT010210	📄	🏠	🏠	📄		🏠	6.20	4.19	2.19	1.00	2.10

JO直角端銑刀 (正面負角加工) JO Inserts for Shoulder Cutter and Long Edge Cutter



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



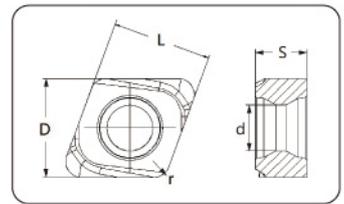
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	θ	F	R
半精密加工 Semi-fine machining	JOMW080320	📄	🏠	🏠	📄		🏠	8.00	3.18	13°	1.40	2.00

CN直角端銑刀 (正面負角加工) CN Inserts for Shoulder Cutter and Long Edge Cutter



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	D	S	r	d
半精密加工 Semi-fine machining	CNGU050208	📄	🏠	🏠	📄		🏠	5.00	5.00	2.60	0.80	2.30
半精密加工 Semi-fine machining	CNGU050210	📄	🏠	🏠	📄		🏠	5.00	5.00	2.60	1.00	2.30

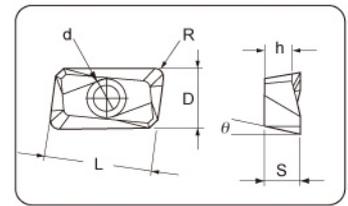
● : Adaptable processing 🏠 : In stock 📄 : customized order

AP直角端銑刀 (正面負角加工 / 肩削加工)
AP Inserts for Shoulder Cutter and Long Edge Cutter



應用 Applicable
半精密加工
Semi-fine machining

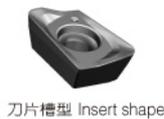
P 鋼	●	●	●	●		
M 不鏽鋼	●	●	●	●		
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



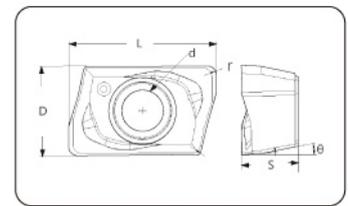
※ 詳見附表2 ※ See attached table 2

刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	D	S	θ	R	d
	APMT1604-MS	📄	🏠	🏠	📄		🏠	16.50	9.50	4.76	11°	0.80	4.50
	APMT1135-MS	📄	🏠	🏠	📄		🏠	11.00	6.30	3.50	11°	0.80	2.70
	APMT1604-HS	📄	🏠	🏠	📄		🏠	16.50	9.50	4.76	11°	0.80	4.50
	APMT1135-HS	📄	🏠	🏠	📄		🏠	11.00	6.30	3.50	11°	0.80	2.70
	APMT1604DER-R2	📄	🏠	🏠	📄		🏠	17.14	9.46	4.95	11°	2.00	4.40
	APMT1135DER-R1.6	📄	🏠	🏠	📄		🏠	11.34	6.20	3.45	11°	1.60	2.80
	APMT1604DER-G23	📄	🏠	🏠	📄		🏠	17.30	9.30	4.76	11°	0.80	4.50
	APMT160408-T2	📄	🏠	🏠	📄		🏠	16.50	9.50	4.76	11°	0.80	4.50
	APMT11T308-SV	📄	🏠	🏠	📄		🏠	11.00	6.80	3.59	11°	0.80	2.80
	APHT1604-AL	📄	🏠	🏠	📄		🏠	16.50	9.50	4.76	11°	0.80	4.40

AX直角端銑刀 (正面負角加工 / 肩削加工)
AX Inserts for Shoulder Cutter and Long Edge Cutter



P 鋼	●	●	●	●		
M 不鏽鋼	●	●	●	●		
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	D	S	θ	r	d
半精密加工 Semi-fine machining	AXHT060204R	📄	🏠	🏠	📄		🏠	6.70	4.15	2.60	11°	0.40	1.90
半精密加工 Semi-fine machining	AXHT060208R	📄	🏠	🏠	📄		🏠	6.70	4.15	2.60	11°	0.80	1.90

■ 技術資料 Technical Information

■ 加工條件 Machining Condition Guide

附表 2

1. 切削速率(轉速)與工作進盤給關係
Relationship between cutting speed (RPM) and working table speed.

$$\text{轉速 (RPM)} \times \text{齒數 (Tooth)} \times 0.3 \sim 0.5 = \text{工作盤進給速率 (mm/min)}$$

$$\text{RPM} \times \text{Number of tooth} \times 0.3 \sim 0.5 = \text{Work table feed speed (mm/min)}$$

2. 加工速率 Vc (m/min) , 刀具外徑 D (mm)

$$\text{RPM} = \frac{Vc \times 100}{D \times \pi} \quad \text{RPM} = \text{主軸轉速 Spindle speed}$$

加工材質 Machined Material	切削速率 Vc Cutting Speed (m/min)	進給 Feed mm/齒 (mm/tooth)
碳 鋼 Carbon steel	120 ~ 250	0.06 ~ 0.12
合金鋼 Alloyed steel	110 ~ 160	0.06 ~ 0.10
不鏽鋼 Stainless steel	110 ~ 160	0.06 ~ 0.10
PH 不鏽鋼 PH Stainless steel	95 ~ 150	0.06 ~ 0.10
鑄 鐵 Cast iron	115 ~ 220	0.06 ~ 0.13
鋁合金 Aluminum alloy	300 ~ 1000	0.04 ~ 0.20
硬化鋼 Hardened steel	30 ~ 60	0.04 ~ 0.10

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材



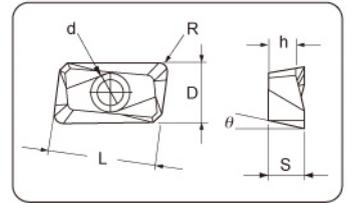
● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

XO直角端銑刀 (正面負角加工 / 肩削加工)
XO Inserts for Shoulder Cutter and Long Edge Cutter



刀片槽型 Insert shape

P 鋼	●	●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



※ 詳見附表3 ※ See attached table 3

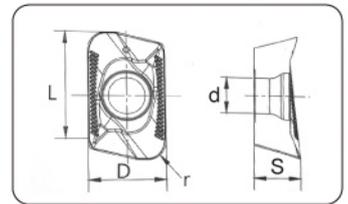
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	D	S	θ	R	d
半精密加工 Semi-fine machining	XOMT060204	📄	🏠	🏠	📄		🏠	6.40	4.00	2.40	15°	0.40	1.90
半精密加工 Semi-fine machining	XOMT060208	📄	🏠	🏠	📄		🏠	6.40	4.00	2.40	15°	0.80	1.90

XO直角端銑刀 (正面負角加工 / 肩削加工)
XO Inserts for Shoulder Cutter and Long Edge Cutter



刀片槽型 Insert shape

P 鋼	●	●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	D	S	θ	r	d
粗加工 Rough machining	XOMX120408TR-ME08	📄	🏠	🏠	📄		🏠	11.60	8.20	5.07	15°	0.80	3.85
粗加工 Rough machining	XOMX120420TR-ME08	📄	🏠	🏠	📄		🏠	11.60	8.20	5.07	15°	2.00	3.85

■ 技術資料 Technical Information

■ 加工條件 Machining Condition Guide

附表 3

1. 切削速率(轉速)與工作進盤給關係
Relationship between cutting speed (RPM)
and working table speed.

轉速 (RPM) x 齒數 (Tooth) x 0.3~0.5
= 工作盤進給速率 (mm/min)
RPM x Number of tooth x 0.3~0.5
= Work table feed speed (mm/min)

2. 加工速率 Vc (m/min) , 刀具外徑 D (mm)

$$RPM = \frac{Vc \times 100}{D \times \pi}$$

RPM = 主軸轉速 Spindle speed

加工材質 Machined Material	切削速率 Vc Cutting Speed (m/min)	進給 Feed mm/齒 (mm/tooth)
碳 鋼 Carbon steel	120 ~ 250	0.06 ~ 0.12
合金鋼 Alloyed steel	110 ~ 160	0.06 ~ 0.10
不鏽鋼 Stainless steel	110 ~ 160	0.06 ~ 0.10
PH 不鏽鋼 PH Stainless steel	95 ~ 150	0.06 ~ 0.10
鑄 鐵 Cast iron	115 ~ 220	0.06 ~ 0.13
鋁合金 Aluminum alloy	300 ~ 1000	0.04 ~ 0.20
硬化鋼 Hardened steel	30 ~ 60	0.04 ~ 0.10

● : Adaptable processing 🏠 : In stock 📄 : customized order

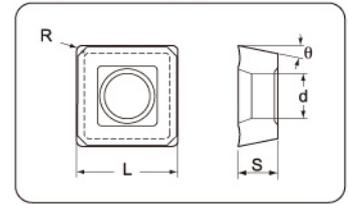
SD/SP端銑刀片

SD/SP Inserts for End Milling



P	鋼		●	●	●		
M	不鏽鋼	●	●	●			
K	鑄鐵				●		
N	非鐵金屬					●	
S	超級合金	●	●				
H	硬材質	●					

※ 詳見附表4 ※ See attached table 4



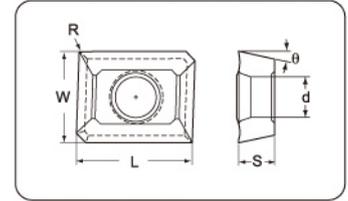
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	W	S	R	θ	d
SD	SDMT090308-SP	📄	🏠	🏠	📄		🏠	9.52	-	3.20	0.40	15°	4.50
SP	SPMT120408-TP	📄	🏠	🏠	📄		🏠	12.07	-	4.76	0.80	11°	5.60
SP	SPMT120408R-D51 SPMT120608R-D51	📄	🏠	🏠	📄		🏠	12.07	-	4.76 6.35	0.80 0.60	11°	5.60

AD/AP端銑刀片

AD/AP Inserts for End Milling



P	鋼		●	●	●		
M	不鏽鋼	●	●	●			
K	鑄鐵				●		
N	非鐵金屬					●	
S	超級合金	●	●				
H	硬材質	●					



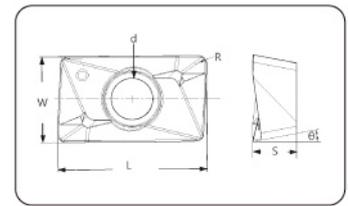
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	W	S	R	θ	d
AD	ADMT150308-SAP	📄	🏠	🏠	📄		🏠	15.00	9.52	3.20	0.80	15°	4.50
AP	APMT150422R-SAP	📄	🏠	🏠	📄		🏠	15.84	12.70	4.76	1.20	11°	5.60

ZP端銑刀片

ZP Inserts for End Milling



P	鋼		●	●	●		
M	不鏽鋼	●	●	●			
K	鑄鐵				●		
N	非鐵金屬					●	
S	超級合金	●	●				
H	硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0320	GA0324	GA0328	GA0329	GA0345	GA0347	L	W	S	R	θ	d
粗加工 Rough machining	ZPHT160408R	📄	🏠	🏠	📄		🏠	16.17	9.36	4.76	0.80	11°	4.55

進給調整係數

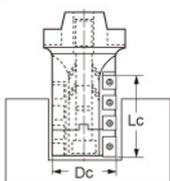
$$f_z = f_s \times k_{sp} \times k_{ae}$$

$$k_{sp} = a_p / L_c$$

$$k_{ae} = a_e / D_c$$

D_c = 刀刃寬度
diameter of cutter

L_c = 刃長
length of flute



a_p/L_c	k_{sp}	a_e/D_c	k_{ae}
6	1.0	1/1	1.0
9	1.0	1/2	1.0
12	1.0	1/5	1.1
0.5xD _c	1.0	1/10	1.2
1xD _c	0.7	1/20	1.3
$a_p=L_c$	0.5		

a_p = 切深
depth of cut
 a_e = 切寬度
width of cut

附表 4

加工材質 Machined Material	加工速度 $V_c a_r / a_e = 1$ Speed m/min (刀徑d)					進給 f_s Feed mm/tooth
	φ40	φ50	φ63	φ80	φ100	
碳鋼 Carbon steel	70~150	70~150	70~150	70~150	70~150	0.015~0.2
合金鋼 Alloyed steel	60~100	60~120	60~120	60~120	60~120	0.10~0.15
不鏽鋼 Stainless steel	60~100	60~120	60~120	60~120	60~120	0.06~0.1
鑄鐵 Cast iron	60~150	60~150	60~150	60~120	60~120	0.15~0.25
鋁合金 Aluminum alloy	200~500	200~500	200~500	200~500	200~500	0.06~0.12

加工條件

Materials
材料與材質

Coating
G S 塗層

Milling Insert
銑刀系列

Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材



銑刀片系列 End Miller Inserts Series

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

RD圓刀端銑刀片

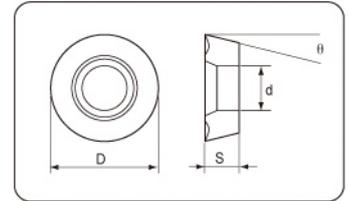
RD Contour Milling Cutter Inserts



應用 Applicable
半精密加工
Semi-fine machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表5 ※ See attached table 5



刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	d	S	θ
	RDMW0501-MO	📄	🏠	🏠	📄		🏠	5.00	2.20	1.50	15°
	RDMW0702-MO	📄	🏠	🏠	📄		🏠	7.00	2.72	2.38	15°
	RDMW0802-MO	📄	🏠	🏠	📄		🏠	8.00	3.40	2.38	15°
	RDMW1003-MO	📄	🏠	🏠	📄		🏠	10.00	4.60	3.18	15°
	RDMW10T3-MO	📄	🏠	🏠	📄		🏠	10.00	4.55	3.97	15°
	RDMW1204-MO	📄	🏠	🏠	📄		🏠	12.00	4.40	4.76	15°
	RDGW1604-MO	📄	🏠	🏠	📄		🏠	16.00	5.50	4.76	15°
	RDMW1604-MO	📄	🏠	🏠	📄		🏠	16.00	5.50	4.76	15°
	RDMT0802-MS	📄	🏠	🏠	📄		🏠	8.00	3.40	2.38	15°
	RDMT10T3-MS	📄	🏠	🏠	📄		🏠	10.00	4.55	3.97	15°
	RDMT1204-MS	📄	🏠	🏠	📄		🏠	12.00	4.40	4.76	15°
	RDGT1604-MS	📄	🏠	🏠	📄		🏠	16.00	5.50	4.76	15°
	RDMT1604-MS	📄	🏠	🏠	📄		🏠	16.00	5.50	4.76	15°
	RDMT0802MOE-TN	📄	🏠	🏠	📄		🏠	8.00	3.40	2.58	15°
	RDMT10T3MOE-TN	📄	🏠	🏠	📄		🏠	10.00	4.40	3.97	15°
	RDMT1204MOE-TN	📄	🏠	🏠	📄		🏠	12.00	4.40	4.76	15°
	RDMT1604MOE-TN	📄	🏠	🏠	📄		🏠	16.00	5.50	4.76	15°
	RDGT10T3MOTN-CN	📄	🏠	🏠	📄		🏠	10.00	4.40	3.97	15°
	RDGT1204MOTN-CN	📄	🏠	🏠	📄		🏠	12.00	4.40	4.76	15°
	RDGT1604MOTN-CN	📄	🏠	🏠	📄		🏠	16.00	5.50	4.76	15°

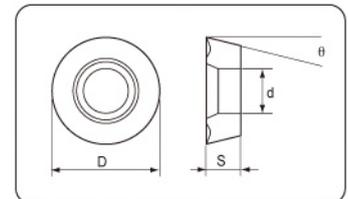
RC圓刀端銑刀片

RC Contour Milling Cutter Inserts



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	d	S	θ
半精密加工 Semi-fine machining	RCGT0602-MS	📄	🏠	🏠	📄		🏠	6.00	2.80	2.38	7°
半精密加工 Semi-fine machining	RCMT14T3-MS	📄	🏠	🏠	📄		🏠	14.00	3.50	4.00	7°

● : Adaptable processing 🏠 : In stock 📄 : customized order

RP圓刀端銑刀片

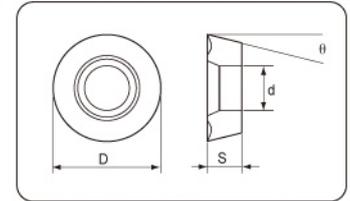
RP Contour Milling Cutter Inserts



應用 Applicable
半精密加工
Semi-fine machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表5 ※ See attached table 5



刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	d	S	θ d
	RPMW08T2MOE-P	📄	🏠	🏠	📄		🏠	8.00	3.40	2.78	11°
	RPMW1003MOE-P	📄	🏠	🏠	📄		🏠	10.00	4.60	3.18	11°
	RPMW10T3MOE-P	📄	🏠	🏠	📄		🏠	10.00	4.60	3.97	11°
	RPMW1003-MO	📄	🏠	🏠	📄		🏠	10.00	4.60	3.18	11°
	RPMW1204-MO	📄	🏠	🏠	📄		🏠	12.00	4.40	4.76	11°
	RPMT1204-MS	📄	🏠	🏠	📄		🏠	12.00	4.40	4.76	11°
	RPMT1204-MT	📄	🏠	🏠	📄		🏠	12.00	4.40	4.76	11°
	RPGT1204-MT	📄	🏠	🏠	📄		🏠	12.00	4.40	4.76	11°
	RPMT1204-MT	📄	🏠	🏠	📄		🏠	12.00	4.40	4.76	11°
	RPGW1003MOE-CN	📄	🏠	🏠	📄		🏠	10.00	4.40	3.18	11°
	RPMT10T3MOE-BJS	📄	🏠	🏠	📄		🏠	10.00	4.40	3.97	11°

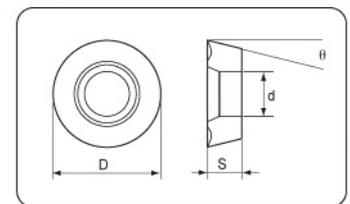
RD圓刀 鋁用端銑刀片

RD Contour Aluminum Milling Cutter Inserts



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	d	S	θ d
精密加工 finish machining	RDHT0702-AL	📄	🏠	🏠	📄		🏠	7.00	2.80	2.38	15°
精密加工 finish machining	RDHT0802-AL	📄	🏠	🏠	📄		🏠	8.00	3.40	2.38	15°
精密加工 finish machining	RDHT1003-AL	📄	🏠	🏠	📄		🏠	10.00	4.55	3.18	15°
精密加工 finish machining	RDHT10T3-AL	📄	🏠	🏠	📄		🏠	10.00	4.40	3.97	15°
精密加工 finish machining	RDHT1204-AL	📄	🏠	🏠	📄		🏠	12.00	4.40	4.76	15°
精密加工 finish machining	RDHT1604-AL	📄	🏠	🏠	📄		🏠	16.00	5.50	4.76	15°

Materials 材料與材質

Coating S 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材



銑刀片系列 End Miller Inserts Series

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

RP圓刀 鋁用 端銑刀片

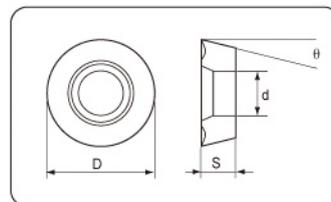
RP Contour Aluminum Milling Cutter Inserts



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表5 ※ See attached table 5



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	d	S	θ
精密加工 Finish machining	RPHT1003-AL	📄	🏠	🏠	📄		🏠	10.00	4.40	3.18	11°
精密加工 Finish machining	RPHT10T3-AL	📄	🏠	🏠	📄		🏠	10.00	4.40	3.97	11°

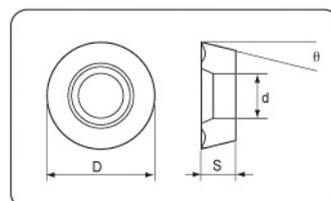
RC圓刀 鋁用 端銑刀片

RC Contour Aluminum Milling Cutter Inserts



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵				●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

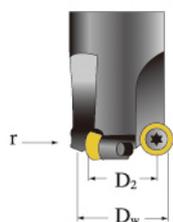


應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	d	S	θ
精密加工 Finish machining	RCHT1003-AL	📄	🏠	🏠	📄		🏠	10.00	4.40	3.18	7°
精密加工 Finish machining	RCHT10T3-AL	📄	🏠	🏠	📄		🏠	10.00	4.40	3.97	7°

技術資料 Technical Information

加工條件 Machining Condition Guide

附表 5



$$D_w = D_2 + 2 \times \sqrt{r^2 - (r - a_p)^2}$$

D_w: 工作件加工後直徑
Working diameter

D₂: 固定刀片間距
Diameter of cutting inserts
center to center

r: 刀片半徑 Insert radius

a_p: 加工切深 Axial depth of cut

加工材質 Machined Material	粗銑 Semi-Finish		精銑 Finish	
	加工速率 Speed Vc m/min	進給 Feed f mm/tooth	加工速率 Speed Vc m/min	進給 Feed f mm/tooth
碳鋼 Carbon steel	180~260	0.15~0.25	200~300	0.10~0.15
合金鋼 Alloyed steel	100~160	0.10~0.20	100~200	0.08~0.10
不鏽鋼 Stainless steel	120~180	0.10~0.15	150~220	0.08~0.10
鑄鐵 Cast iron	180~260	0.12~0.25	200~350	0.08~0.15
鋁合金 Aluminum alloy	400~750	0.05~0.10	700~1000	0.04~0.08
硬化鋼 Hardened steel	-	-	50~100	0.03~0.08

● : Adaptable processing 🏠 : In stock 📄 : customized order

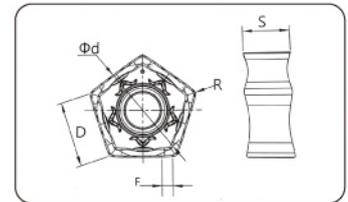
PN平面銑刀 (正面負角加工)

PN Inserts for Shoulder Cutter and Long Edge Cutter



應用 Applicable
粗加工 Rough machining

P	鋼		●	●	●		
M	不鏽鋼	●	●	●			
K	鑄鐵				●		
N	非鐵金屬						●
S	超級合金	●	●				
H	硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	S	F	θ	R	d
	PNMU0905GNEN-MJ	📄	🏠	🏠	📄		🏠	8.90	6.00	1.40	0°	0.80	12.20
	PNMU1205ANER-GH	📄	🏠	🏠	📄		🏠	-	7.00	-	0°	3.00	17.00
	PNMU1205ANER-GHxT4.95	📄	🏠	🏠	📄		🏠	-	6.00	-	0°	3.00	17.00

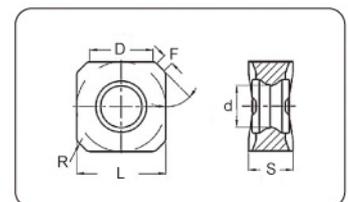
SN平面銑刀 (正面負角加工)

SN Inserts for Shoulder Cutter and Long Edge Cutter



應用 Applicable
粗加工 Rough machining

P	鋼		●	●	●		
M	不鏽鋼	●	●	●			
K	鑄鐵				●		
N	非鐵金屬						●
S	超級合金	●	●				
H	硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	L	D	S	F	R	d
	SNMU1206ANEN-GM	📄	🏠	🏠	📄		🏠	12.70	5.70	6.40	2.20	0.80	5.90
	SNMU1305ANR-MT	📄	🏠	🏠	📄		🏠	13.00	6.00	6.50	3.00	0.80	-

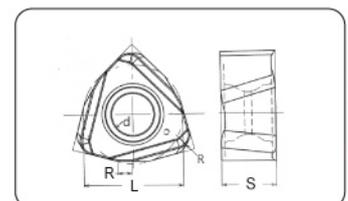
WN快進給銑削刀

WN Inserts for Shoulder Cutter and Long Edge Cutter



刀片槽型 Insert shape

P	鋼		●	●	●		
M	不鏽鋼	●	●	●			
K	鑄鐵				●		
N	非鐵金屬						●
S	超級合金	●	●				
H	硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	S	W	R	d
半精密加工 Semi-fine machining	WNMU070620ZER-PM	📄	🏠	🏠	📄		🏠	10.60	6.35	1.94	2.00	4.60
半精密加工 Semi-fine machining	WNMU090720ZER-PM	📄	🏠	🏠	📄		🏠	14.00	7.66	1.94	2.00	5.50

Materials
材料與材質

Coating
CS 塗層

Milling Insert
銑刀系列

Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材



銑刀片系列 End Miller Inserts Series

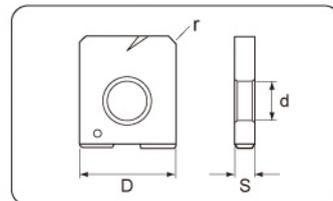
● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

R 角精銑刀

Radius Precision Inserts for End Miller
(Outer radius and Inner radius)



P	鋼		●	●	●		
M	不鏽鋼	●	●	●			
K	鑄鐵			●	●		
N	非鐵金屬						●
S	超級合金	●	●				
H	硬材質	●					



※ 詳見附表6 ※ See attached table 6

刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	S	d	L	r
	WPOV12-FN08R							12.0	2.5	5.0	14.0	0.8
	WPOV12-FN10R							12.0	2.5	5.0	14.0	1.0
	WPOV12-FN20R							12.0	2.5	5.0	14.0	2.0
	WPOV12-FN30R							12.0	2.5	5.0	14.0	3.0
	WPOV16-FN10R							16.0	3.0	5.0	16.0	1.0
	WPOV16-FN20R							16.0	3.0	5.0	16.0	2.0
	WPOV16-FN30R							16.0	3.0	5.0	16.0	3.0
	WPOV16-FN40R							16.0	3.0	5.0	16.0	4.0
	WPOV20-FN10R							20.0	3.0	5.0	18.0	1.0
	WPOV20-FN20R							20.0	3.0	5.0	18.0	2.0
	WPOV20-FN30R							20.0	3.0	5.0	18.0	3.0
	WPOV20-FN40R							20.0	3.0	5.0	18.0	4.0
	WPOV20-FN50R							20.0	3.0	5.0	18.0	5.0



以上規格皆為
接單生產
All are customized order

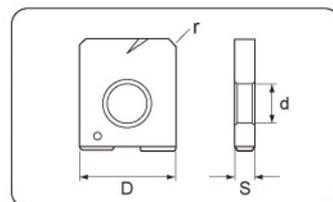


R 角精銑刀

Radius Precision Inserts for End Miller
(Outer radius and Inner radius)



P	鋼		●	●	●		
M	不鏽鋼	●	●	●			
K	鑄鐵			●	●		
N	非鐵金屬						●
S	超級合金	●	●				
H	硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	S	d	L	r
	WPOV12-FS08R							12.0	2.5	5.0	14.0	0.8
	WPOV12-FS10R							12.0	2.5	5.0	14.0	1.0
	WPOV12-FS20R							12.0	2.5	5.0	14.0	2.0
	WPOV12-FS30R							12.0	2.5	5.0	14.0	3.0



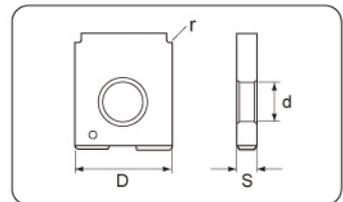
以上規格皆為
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All are customized order

● : Adaptable processing 🏠 : In stock 📄 : customized order

R角精銑刀
Radius Precision Inserts for End Miller
(Outer radius and Inner radius)



P 鋼	●	●	●	●		
M 不鏽鋼	●	●	●	●		
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



※ 詳見附表6 ※ See attached table 6

刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	S	d	L	r
	WPIV12-FN08R							12.0	2.5	5.0	14.0	0.8
	WPIV12-FN10R							12.0	2.5	5.0	14.0	1.0
	WPIV12-FN20R							12.0	2.5	5.0	14.0	2.0
	WPIV12-FN30R							12.0	2.5	5.0	14.0	3.0
	WPIV16-FN10R							16.0	3.0	5.0	16.0	1.0
	WPIV16-FN20R							16.0	3.0	5.0	16.0	2.0
	WPIV16-FN30R							16.0	3.0	5.0	16.0	3.0
	WPIV16-FN40R							16.0	3.0	5.0	16.0	4.0
	WPIV20-FN10R							20.0	3.0	5.0	18.0	1.0
	WPIV20-FN20R							20.0	3.0	5.0	18.0	2.0
	WPIV20-FN30R							20.0	3.0	5.0	18.0	3.0
	WPIV20-FN40R							20.0	3.0	5.0	18.0	4.0
	WPIV20-FN50R							20.0	3.0	5.0	18.0	5.0

以上規格皆為
接單生產
All are customized order



加工條件 Machining Condition Guide

附表 6

加工材質 Machined Material	粗銑 Semi-Finish		精銑 Finish	
	加工速率 Vc Speed	進給 Fz Feed	加工速率 Vc Speed	進給 Fz Feed
碳鋼 Carbon steel	170~230	0.1~0.3	170~230	0.10~0.15
金鋼 Alloyed seel	110~200	0.1~0.3	170~250	0.10~0.15
不鏽鋼 Stainless steel	110~200	0.1~0.3	180~235	0.08~0.12
鑄鐵 Cast iron	150~270	0.1~0.3	265~275	0.08~0.12
硬化鋼 Hardened steel	-	-	45~90	0.03~0.06

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材



銑刀片系列 End Miller Inserts Series

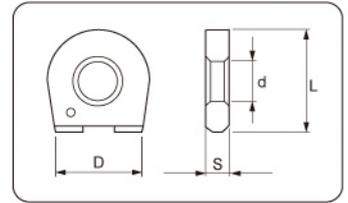
● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

WGR 球型銑刀

Inserts WGR Type Ball Nose End Mills

WGR- **F** 應用
Applicable
半精密加工
Semi-fine machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



※ 詳見附表7 ※ See attached table 7

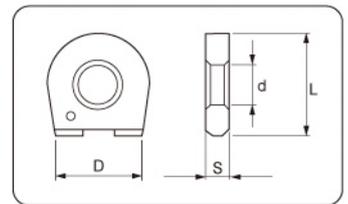
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	S	d	L
	WGR04-F	🏠		🏠		🏠		8.0	2.0	3.0	9.5
	WGR05-F	🏠		🏠		🏠		10.0	2.5	4.0	11.5
	WGR06-F	🏠		🏠		🏠		12.0	2.5	5.0	12.0
	WGR08-F	🏠		🏠		🏠		16.0	3.0	5.0	14.0
	WGR10-F	🏠		🏠		🏠		20.0	3.0	5.0	16.0
	WGR12.5-F	🏠		🏠		🏠		25.0	4.0	6.0	21.5
	WGR15-F	🏠		🏠		🏠		30.0	5.0	8.0	25.0
	WGR16-F	🏠		🏠		🏠		32.0	6.0	8.0	26.0

WGR 球型銑刀

Inserts WGR Type Ball Nose End Mills

WGR- **FS** 應用
Applicable
半精密加工
Semi-fine machining

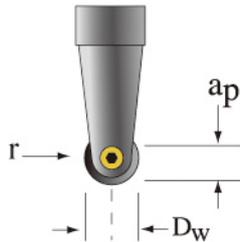
P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	S	d	L
	WGR04-FS	🏠		🏠		🏠		8.0	2.0	3.0	9.5
	WGR05-FS	🏠		🏠		🏠		10.0	2.5	4.0	11.5
	WGR06-FS	🏠		🏠		🏠		12.0	2.5	5.0	12.0
	WGR08-FS	🏠		🏠		🏠		16.0	3.0	5.0	14.0
	WGR10-FS	🏠		🏠		🏠		20.0	3.0	5.0	16.0
	WGR12.5-FS	🏠		🏠		🏠		25.0	4.0	6.0	21.5
	WGR15-FS	🏠		🏠		🏠		30.0	5.0	8.0	25.0
	WGR16-FS	🏠		🏠		🏠		32.0	6.0	8.0	26.0

■ 技術資料 Technical Information

附表 7



$$D_w = 2 \times \sqrt{r^2 - (r - a_p)^2}$$

每齒進給(Feed) f_z mm/tooth 平均切屑厚度(h_m) mm

$$f_z = \frac{h_m}{\frac{\sqrt{r^2 - (r - a_p)^2}}{r}} \times \frac{\sqrt{r^2 - (r - a_p)^2}}{r}$$

$$h_m = \frac{\sqrt{r^2 - (r - a_p)^2}}{r} \times \frac{\sqrt{r^2 - (r - a_p)^2}}{r}$$

- D_w : 工作件加工後直徑 Working diameter
- r : 刀片半徑 Insert radius
- a_p : 加工切深 Axial depth of cut
- f_z : 每齒進給 Feed per tooth
- a_e : 橫向圓弧切深 Radial depth of cut
- h_m : 平均切屑厚度 Average chip thickness

■ 加工條件 Machining Condition Guide

加工材質 Machined Material	粗銑(Semi-Finish)		精銑 (Finish)	
	加工速率 Vc Speed	進給 Fz Feed	加工速率 Vc Speed	進給 Fz Feed
碳鋼 Carbon steel	150~250	0.1~0.3	180~300	0.10~0.15
合金鋼 Alloyed steel	110~200	0.1~0.3	140~240	0.10~0.15
不鏽鋼 Stainless steel	110~200	0.1~0.3	120~200	0.08~0.12
鑄鐵 Cast iron	90~140	0.1~0.3	100~160	0.08~0.12
硬化鋼 Hardened steel	-	-	50~100	0.03~0.06

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材



● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

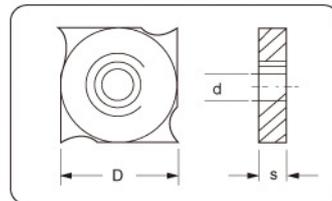
SNFX側銑刀片
Inserts For Side Milling Cutter



刀片槽型 Insert shape

P 鋼	●	●	●	●		
M 不鏽鋼	●	●	●	●		
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表8 ※ See attached table 8



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating					尺寸 Dimension (mm)			
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	d	s
半精密加工 Semi-fine machining	SNFX-1203	📄	🏠				🏠	12.7	5.0	3.20
半精密加工 Semi-fine machining	SNFX-1204	📄	🏠				🏠	12.7	5.0	4.00
半精密加工 Semi-fine machining	SNFX-12045	📄	🏠				🏠	12.7	5.0	4.50
半精密加工 Semi-fine machining	SNFX-1205	📄	🏠				🏠	12.7	5.0	5.40
半精密加工 Semi-fine machining	SNFX-1207	📄	🏠				🏠	12.7	5.0	7.00
半精密加工 Semi-fine machining	SNFX-1102	📄	🏠				🏠	11.0	3.7	2.30
半精密加工 Semi-fine machining	SNFX-1103	📄	🏠				🏠	11.0	3.7	3.20

加工條件 Machining Condition Guide

附表 8

$$h_m = \frac{\sqrt{ar}}{D \times f_z}$$

f_z = 每齒進給 Feed per tooth

D = 刀具直徑 (Cutter diameter)

ar = 切深 Depth of cut

h_m = 鐵屑厚度 Effective chip thickness

加工材質 Machined Material	加工速率 Vc Speed (m/min)	進給 h_m Feed (mm)
碳鋼 Carbon steel	180~220	0.10~0.14
合金鋼 Alloyed steel	70~110	0.10~0.12
不鏽鋼 Stainless steel	120~140	0.10~0.12
PH 不鏽鋼 PH Stainless steel	55~70	0.12~0.20
鑄鐵 Cast iron	140~280	0.10~0.12
鋁合金 Aluminum alloy	275~450	0.04~0.12
高溫合金 High temp alloys	25~30	0.05~0.10

● : Adaptable processing 🏠 : In stock 📄 : customized order

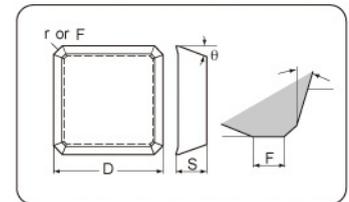
SE平面銑刀片 Face Milling



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表9 ※ See attached table 9



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	L	S	F	r	θ
精密加工 Finish machining	SEKN1203-AFTN							12.70	-	3.18	1.40	-	20°
精密加工 Finish machining	SEKN1504-AFTN							15.87	-	4.76	1.40	-	20°
精密加工 Finish machining	SECN1904-AFN							19.04	-	4.76	3.80	-	20°

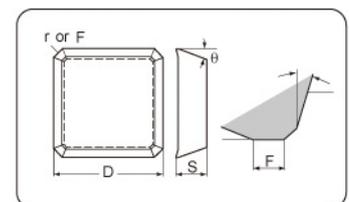
以上規格皆為
接單生產
All are customized order

SP平面銑刀片 Face Milling



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	L	S	F	r	θ
精密加工 Finish machining	SPKN1504-PPTR							15.87	-	4.76	1.40	-	11°
精密加工 Finish machining	SPKN1203-PPTR							12.70	-	3.18	1.40	-	11°
精密加工 Finish machining	SPUN120308							12.70	-	3.18	1.40	0.8	11°
精密加工 Finish machining	SPKN1204-PPTR							12.70	-	4.76	1.40	-	11°

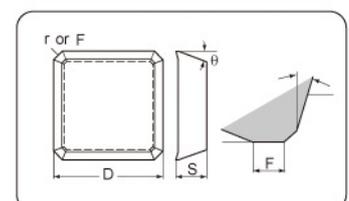
以上規格皆為
接單生產
All are customized order

SF平面銑刀片 Face Milling



刀片槽型 Insert shape

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	L	S	F	r	θ
精密加工 Finish machining	SFKN1504-AFTN	📄	📄	📄	📄	📄	📄	15.87	-	4.76	1.70	-	25°

Materials 材料與材質

Coating 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

TP平面銑刀片

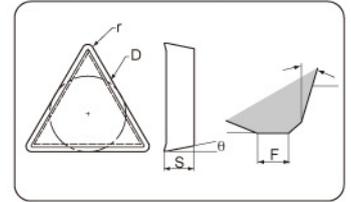
TP Face Milling



應用
Applicable
粗加工
Rough machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表9 ※ See attached table 9



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	L	S	F	r	θ
	TPKN1603-PPTR							9.52	-	3.18	1.40	-	11°
	TPKN2204-PPTR							12.70	-	4.76	1.40	-	11°
	TPUN160308							9.52	-	3.18	-	0.80	11°
	TPUN220412							12.70	-	4.76	-	1.20	11°

以上規格皆為
接單生產
All are customized order

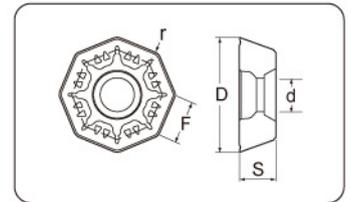
OE平面銑刀片

OE Face Milling



應用
Applicable
粗加工
Rough machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	s	F	r	θ	d
	OEMX12T3-PAT							12.70	4.00	6.00	0.80	20°	4.00
	OEHW12T3-MO							12.70	4.00	6.00	0.80	20°	4.00

以上規格皆為
接單生產
All are customized order

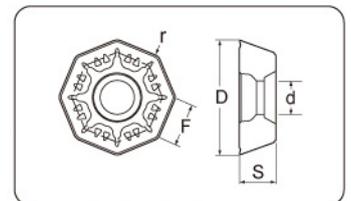
OD平面銑刀片

OD Face Milling



應用
Applicable
粗加工
Rough machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	s	F	r	θ	d
	ODMX1204-PAT							12.70	4.76	6.00	0.80	15°	4.76
	ODMW1204-MO							12.70	4.76	6.00	0.80	15°	4.76

以上規格皆為
接單生產
All are customized order

🟡: Adaptable processing 🏠: In stock 📄: customized order

ON 平面銑刀片

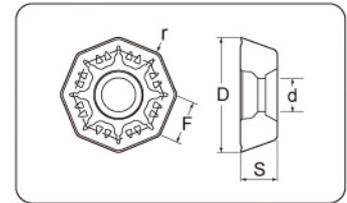
ON Face Milling



應用
Applicable
粗加工
Rough machining

P 鋼	●	●	●	●		
M 不鏽鋼	●	●	●	●		
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表9 ※ See attached table 9



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	s	F	r	θ	d
	ONMU050504-TN	🏠	📄	🏠	📄		📄	13.00	5.50	5.00	0.40	0°	5.50
	ONHU050508-TN	🏠	📄	🏠	📄		📄	13.00	5.50	5.00	0.80	0°	5.50

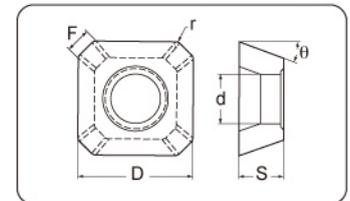
SE 平面銑刀片

SE Face Milling



應用
Applicable
粗加工
Rough machining

P 鋼	●	●	●	●		
M 不鏽鋼	●	●	●	●		
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	s	F	r	θ	d
	SEGW1204ADTR-MO		🏠					12.70	4.76	-	-	20°	5.50
	SEMW1204ADTR-MO		🏠					12.70	4.76	-	-	20°	5.50
	SEMT1204ADTR		🏠					12.70	4.76	-	-	20°	5.50
	SEMT1204-B		🏠					12.70	4.76	-	-	20°	5.50
	SEKT1204AFTN-BXM		🏠					13.40	3.97	2.10	0.80	20°	5.50
	SEHT13T3-AL		🏠					13.40	3.97	2.10	0.80	20°	4.20
	SEMT13T3ADR-SWU		🏠					13.40	3.97	2.10	0.80	20°	4.20
	SEHT13T3ADR-SWU		🏠					13.40	3.97	2.10	0.80	20°	4.20
	SEMT13T3AGSN-GM		🏠					13.40	3.97	2.10	0.80	20°	4.20
	SEMT13T3AGSN-JM		🏠					13.40	3.97	2.10	0.80	20°	4.20

Materials
材料與材質

Coating
GS 塗層

Milling Insert
銑刀系列

Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材



● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

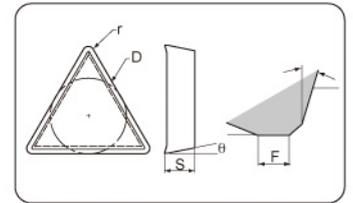
TP平面銑刀片 TP Face Milling



應用
Applicable
粗加工
Rough machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●	●		
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表9 ※ See attached table 9



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	PVD塗層 / PVD Coating						尺寸 Dimension					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	L	S	F	r	θ
	TPKN1603-PPTR							9.52	-	3.18	1.40	-	11°
	TPKN2204-PPTR							12.70	-	4.76	1.40	-	11°
	TPUN160308							9.52	-	3.18	-	0.80	11°
	TPUN220412							12.70	-	4.76	-	1.20	11°

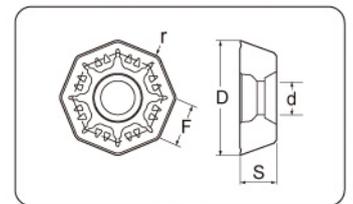
以上規格皆為
接單生產
All are customized order

OE平面銑刀片 OE Face Milling



應用
Applicable
粗加工
Rough machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●	●		
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	s	F	r	θ	d
	OEMX12T3-PAT							12.70	4.00	6.00	0.80	20°	4.00
	OEHW12T3-MO							12.70	4.00	6.00	0.80	20°	4.00

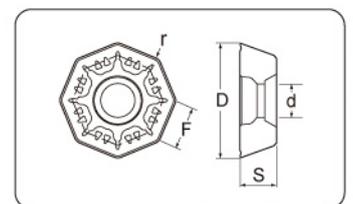
以上規格皆為
接單生產
All are customized order

OD平面銑刀片 OD Face Milling



應用
Applicable
粗加工
Rough machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●	●		
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	s	F	r	θ	d
	ODMX1204-PAT							12.70	4.76	6.00	0.80	15°	4.76
	ODMW1204-MO							12.70	4.76	6.00	0.80	15°	4.76

以上規格皆為
接單生產
All are customized order

● : Adaptable processing 🏠 : In stock 📄 : customized order

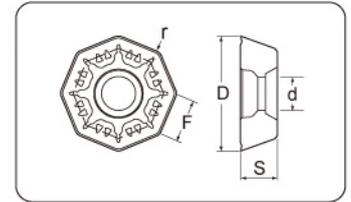
ON 平面銑刀片
ON Face Milling



應用
Applicable
粗加工
Rough machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					

※ 詳見附表9 ※ See attached table 9



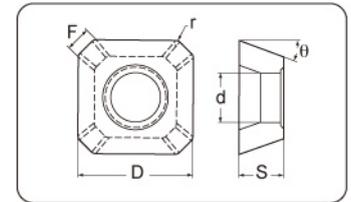
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	s	F	r	θ	d
	ONMU050504-TN	🏠	📄	🏠	📄		📄	13.00	5.50	5.00	0.40	0°	5.50
	ONHU050508-TN	🏠	📄	🏠	📄		📄	13.00	5.50	5.00	0.80	0°	5.50

SE 平面銑刀片
SE Face Milling



應用
Applicable
粗加工
Rough machining

P 鋼		●	●	●		
M 不鏽鋼	●	●	●			
K 鑄鐵			●	●		
N 非鐵金屬						●
S 超級合金	●	●				
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	s	F	r	θ	d
	SEGW1204ADTR-MO		🏠					12.70	4.76	-	-	20°	5.50
	SEMW1204ADTR-MO		🏠					12.70	4.76	-	-	20°	5.50
	SEMT1204ADTR		🏠					12.70	4.76	-	-	20°	5.50
	SEMT1204-B		🏠					12.70	4.76	-	-	20°	5.50
	SEKT1204AFTN-BXM		🏠					13.40	3.97	2.10	0.80	20°	5.50
	SEHT13T3-AL		🏠					13.40	3.97	2.10	0.80	20°	4.20
	SEMT13T3ADR-SWU		🏠					13.40	3.97	2.10	0.80	20°	4.20
	SEHT13T3ADR-SWU		🏠					13.40	3.97	2.10	0.80	20°	4.20
	SEMT13T3AGSN-GM		🏠					13.40	3.97	2.10	0.80	20°	4.20
	SEMT13T3AGSN-JM		🏠					13.40	3.97	2.10	0.80	20°	4.20

Materials
材料與材質

Coating
GS 塗層

Milling Insert
銑刀系列

Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材

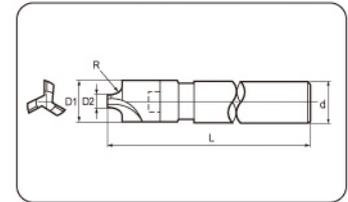
🟡: Adaptable processing 🏠: In stock 📄: customized order

整體碳化鎢銲接R角銑刀
Solid Carbide Head Corner Radius End Miller
-Brazed Alloyed Steel Shank



P 鋼	●						
M 不鏽鋼							
K 鑄鐵							
N 非鐵金屬							
S 超級合金							
H 硬材質							

※ 詳見附表10 ※ See attached table 10



應用 Applicable 精加工 Finish machining	訂購編號 Ordering Code	刀片規格 Insert ISO Code	塗層 Coating				尺寸 Dimension (mm)				
			G20H-TIN				D1	D2	R	L	d
	FEM -12xR1	12xR1.0x3Tx85L					12	8	1.0	85	12
	FEM -12xR1.5	12xR1.5x3Tx85L					12	7	1.5	85	12
	FEM -12xR2	12xR2.0x3Tx85L					12	6	2.0	85	12
	FEM -12xR2.5	12xR2.5x3Tx85L					12	5	2.5	85	12
	FEM -12xR3	12xR3.0x3Tx85L					12	4	3.0	85	12
	FEM -16xR3.5	16xR3.5x3Tx89L					16	7	3.5	89	16
	FEM -16xR4	16xR4.0x3Tx89L					16	6	4.0	89	16
	FEM -16xR5	16xR5.0x3Tx89L					16	4	5.0	89	16
	FEM -20xR6	20xR6.0x3Tx93L					20	6	6.0	93	20
	FEM -25xR8	25xR8.0x3Tx100L					25	7	8.0	100	25

以上規格皆為
接單生產
All are customized order

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

加工條件 Machining Condition Guide 附表10

品名 Cutter and drill	加工材質 Machined Material	轉數 VC m/min	進給 FS mm/rev
倒角刀 Chamfer Cutter	不鏽鋼 Stainless steel	20m~25m	0.1
	鋁合金 Aluminum alloy	100m~120m	0.3
	合金鋼 Alloyed steel	25m~30m	0.2
	鑄鐵 Cast iron	30m~40m	0.2
中心鑽 Center Driller	不鏽鋼 Stainless steel	25m~30m	0.08~0.12
	鋁合金 Aluminum alloy	150m~200m	0.5~0.6
	合金鋼 Alloyed steel	40m~50m	0.15~0.2
	鑄鐵 Cast iron	50m~60m	0.15~0.2
R角銑刀 Corner Radius End Miller	不鏽鋼 Stainless steel	30m~35m	0.1~0.15
	鋁合金 Aluminum alloy	150m~200m	0.5~0.6
	合金鋼 Alloyed steel	50m~60m	0.2~0.3
	鑄鐵 Cast iron	55m~65m	0.2~0.3



工件材料 Workpiece materials	P					M					K				S				N				H							
	鋼 Steel					不鏽鋼 Steel					鑄鐵 Cast iron				鈦合金 Hi-temp Alloy				有色金屬 Non-Ferrous Metals				高硬度材料 High Hardness Materials							
ISO	01	10	20	30	40	01	10	20	30	40	01	10	20	30	01	10	20	30	01	10	20	30	01	10	20	30	01	10	20	30
CVD	GSC33-2										GSC33												GSC33-2							
	GSC33-6										GSC33-5																			
	GSC33-5																													
PVD	GA0124					GA0124									GA0120								GA0120							
	GA0147					GA0147									GA0157				GA0157											
硬質合金 Cemented carbide																														
超硬材料 Superhard materials																														

車削 鑽削 刀片塗層一覽表 *Turning / Drilling Insert Grades List*

GSC33

黃色鍍層 (CVD)，適用於大部分鑄鐵、鐵的材質，較耐衝擊，可承受較大的斷續切削或較硬的鑄鐵材料。
 Yellow coating (CVD), suitable for most cast iron and ferrous materials. Offers greater impact resistance and durability, enabling it to handle heavier interrupted cutting as well as harder grades of cast iron.

GSC33-5

黑色塗層 (CVD)，適用於大部分鑄鐵、鐵、碳鋼材質，可耐衝擊，在連續切削效果上效果很好，亦可承受輕微的斷續切削，工件若需要同時有連續、斷續的加工，此材質為相當好的選擇。
 Black coating (CVD), suitable for most cast iron, iron, and carbon steel materials. Provides light impact resistance, with excellent performance in continuous cutting and stable capability under slight interrupted cutting. An excellent choice when machining requires both continuous and interrupted operations.

GSC33-2

黃色-黑色塗層 (CVD) 通稱雙色塗層，適用於市場上多數材質，尤其是在碳鋼、鋼、鑄鐵、鍛胚料、HSS沖頭及難切削材料 (P類) 或硬度極高的工件，連續切削的效果非常優異，不適用斷續切削，適用工件硬度HRC40度以上。
 Yellow-black coating (CVD), commonly known as a two-color coating, is suitable for a wide range of materials, especially carbon steel, steel, cast iron, forging blanks, HSS punches, difficult-to-cut materials (P-type), and workpieces with extremely high hardness. It delivers excellent performance in continuous cutting but is not suitable for interrupted cutting. Recommended for machining hardness above 40 HRC.

GSC33-6

黃色-黑色塗層 (CVD) 通稱雙色塗層，適用於市場上絕大部分的材質，無論碳鋼、鋼、鑄鐵、鍛胚料，甚至是HSS的沖頭幾乎都可適用，尤其是在無熱處理的工件或熱處理加工後硬度HRC低於39度的工件，在其連續切削的效果上相當優異，一般不適用於斷續切削上。

Yellow-black coating (CVD), commonly known as a two-color coating, is suitable for most materials on the market, including carbon steel, steel, cast iron, forging stock, and even HSS punches. It is particularly effective for non-heat-treated workpieces or those with a hardness below HRC 39 after heat treatment, offering excellent performance in continuous cutting.

GA0120

咖啡金色塗層 (PVD) 或稱古銅色塗層，屬TiSiN 高矽鈦，適用於大部分的合金鋼、碳鋼、不鏽鋼、高溫合金的半精密及精加工，加工中耐熱溫度可達1700度，在濕式切削環境下表現優秀，適用工件硬度HRC45~55度左右，亦可使用在乾式切削的環境。

The brown-gold coating (PVD), also known as bronze coating, is a high-silicon titanium TiSiN coating. It is suitable for semifinishing and finishing of most alloy steels, carbon steels, stainless steels, and high-temperature alloys. The coating can withstand temperatures of up to 1700°C during processing and performs exceptionally well in wet cutting environments. It is ideal for workpieces with a hardness of approximately 45–55 HRC and can also be used effectively in dry cutting conditions.

GA0124

咖啡金色塗層 (PVD) 或稱古銅色塗層，屬TiSiN 高矽鈦，適用於不鏽鋼、低碳合金鋼、高溫合金的粗精密及半精密加工，加工中耐熱溫度可達1600度，在濕式切削的環境下表現優秀，適用工件硬度約HRC20~40度，亦可使用在乾式切削的環境。

The brown-gold coating (PVD), also known as the bronze coating, is a TiSiN high-silicon titanium coating. It is suitable for roughing and semi-finishing stainless steel, low-carbon alloy steel, and high-temperature alloys. This coating can withstand machining temperatures up to 1600°C and delivers excellent performance in wet cutting, while also being applicable to dry cutting. It is recommended for workpieces with hardness levels of approximately HRC 20–40.

GA0147

灰黑色塗層 (PVD) 或稱紫灰色塗層，屬AlTiN高鋁鈦，適用於碳鋼、鑄、高溫合金的斷續切削上或不鏽鋼的斷續切削，在切槽、切斷的工法上此材質較不易斷裂，適用性非常的廣泛較不黏屑，適用溼式切削的環境亦可連續切削。屬於半精密及精加工。

The brown-gold coating (PVD), also known as the bronze coating, is a TiSiN high-silicon titanium coating. It is suitable for roughing and semi-finishing stainless steel, low-carbon alloy steel, and high-temperature alloys. This coating can withstand machining temperatures up to 1600°C and delivers excellent performance in wet cutting, while also being applicable to dry cutting. It is recommended for workpieces with hardness levels of approximately HRC 20–40.

GA0157

銀色塗層 (PVD)，適用於鈦合金、鋁、銅等類的有色金屬合金（非鐵），在長時間的連續加工下，有相當優異的品質表現，可極度接近DLC類鑽或PCD鑽石刀具的效果，此類塗層僅接受訂製。

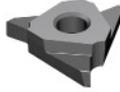
The silver coating (PVD) is designed for non-ferrous alloys such as titanium, aluminum, and copper. It delivers outstanding performance in long-term continuous machining, with results comparable to DLC (diamond-like carbon) or PCD (polycrystalline diamond) tools. This coating is available only by custom order.

Materials
材料與材質Coating
GS塗層Milling Insert
銑刀系列Turning Insert
車刀系列Drilling Insert
鑽刀系列Customized products
特殊系列Blank
素材



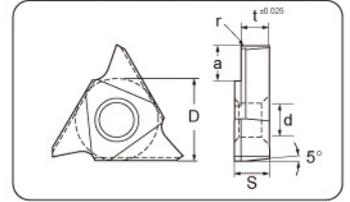
● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

外徑切槽刀片
Inserts for External Intermail
Face Grooving



刀片槽型 Insert shape

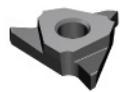
P 鋼	●	●				
M 不鏽鋼	●	●				
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



※ 詳見附表11 ※ See attached table 11

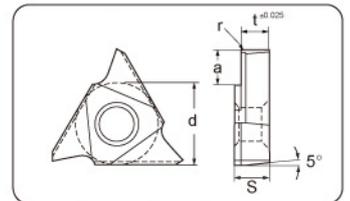
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	S	t	a	r	d
粗加工 Rough machining	MGTR22-400		📄	🏠				12.70	4.76	4.00	5.0	0.3	5.2
粗加工 Rough machining	MGTR22-350		📄	🏠				12.70	4.76	3.50	5.0	0.3	5.2
粗加工 Rough machining	MGTR22-300		📄	🏠				12.70	4.76	3.00	4.0	0.3	5.2
粗加工 Rough machining	MGTR22-250		📄	🏠				12.70	4.76	2.50	4.0	0.3	5.2
粗加工 Rough machining	MGTR22-200		📄	🏠				12.70	4.76	2.00	3.0	0.2	5.2
粗加工 Rough machining	MGTR22-175		📄	🏠				12.70	4.76	1.75	3.0	0.2	5.2
粗加工 Rough machining	MGTR22-150		📄	🏠				12.70	4.76	1.50	3.0	0.2	5.2
粗加工 Rough machining	MGTR22-125		📄	🏠				12.70	4.76	1.25	2.5	0.2	5.2
粗加工 Rough machining	MGTR22-100		📄	🏠				12.70	4.76	1.00	2.5	0.2	5.2
粗加工 Rough machining	MGTR16-300		📄	🏠				9.52	4.76	3.00	3.0	0.3	4.0
粗加工 Rough machining	MGTR16-200		📄	🏠				9.52	4.76	2.00	3.0	0.2	4.0
粗加工 Rough machining	MGTR16-150		📄	🏠				9.52	4.76	1.50	3.0	0.2	4.0
粗加工 Rough machining	MGTR16-100		📄	🏠				9.52	4.76	1.00	1.5	0.2	4.0

外徑切槽刀片
Inserts for External Intermail
Face Grooving



刀片槽型 Insert shape

P 鋼	●	●				
M 不鏽鋼	●	●				
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	S	t	a	r	d
粗加工 Rough machining	MGTL22-400		📄					12.70	4.76	4.00	5.0	0.3	5.2
粗加工 Rough machining	MGTL22-350		📄					12.70	4.76	3.50	5.0	0.3	5.2
粗加工 Rough machining	MGTL22-300		📄					12.70	4.76	3.00	4.0	0.3	5.2
粗加工 Rough machining	MGTL22-250		📄					12.70	4.76	2.50	4.0	0.3	5.2
粗加工 Rough machining	MGTL22-200		📄					12.70	4.76	2.00	3.0	0.2	5.2
粗加工 Rough machining	MGTL22-175		📄					12.70	4.76	1.75	3.0	0.2	5.2
粗加工 Rough machining	MGTL22-150		📄					12.70	4.76	1.50	3.0	0.2	5.2
粗加工 Rough machining	MGTL22-125		📄					12.70	4.76	1.25	2.5	0.2	5.2
粗加工 Rough machining	MGTL22-100		📄					12.70	4.76	1.00	2.5	0.2	5.2

● : Adaptable processing 🏠 : In stock 📄 : customized order

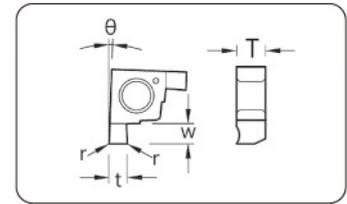
GER 外徑切槽刀片
GTR-Type for Intermail Grooving Insert



刀片槽型 Insert shape

P 鋼	●	●			●
M 不鏽鋼	●	●	●		
K 鑄鐵				●	●
N 非鐵金屬					
S 超級合金	●				
H 硬材質	●	●	●		

※ 詳見附表11 ※ See attached table 11



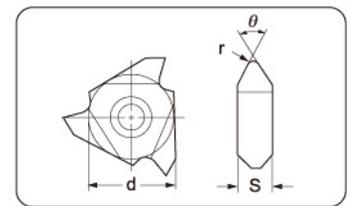
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	t	W	T	r	θ
半精密加工 Semi-fine machining	GER100-005B		📄	🏠			🏠	1.00	2.20	3.18	0.05	2°
半精密加工 Semi-fine machining	GER150-010B		📄	🏠			🏠	1.50	2.20	3.18	0.10	2°
半精密加工 Semi-fine machining	GER200-010B		📄	🏠			🏠	2.00	2.20	3.18	0.10	2°
半精密加工 Semi-fine machining	GER250-020B		📄	🏠			🏠	2.50	2.20	3.18	0.20	2°

MTTR 立式牙刀片
MTTR-Type Threading Insert



刀片槽型 Insert shape

P 鋼	●	●			
M 不鏽鋼	●	●			
K 鑄鐵					
N 非鐵金屬					
S 超級合金	●				
H 硬材質	●				



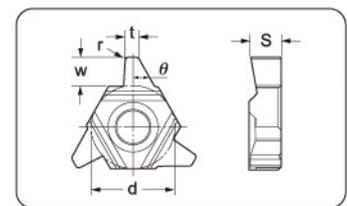
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	d	S	θ	r	t	w
半精密加工 Semi-fine machining	MTTR22-6002		📄	🏠			🏠	12.70	4.76	60°	0.20	-	-
半精密加工 Semi-fine machining	MTTR22-6004		📄	🏠			🏠	12.70	4.76	60°	0.40	-	-
半精密加工 Semi-fine machining	MTTR22-5502		📄	🏠			🏠	12.70	4.76	55°	0.20	-	-
半精密加工 Semi-fine machining	MTTR16-6002		📄	🏠			🏠	9.52	4.76	60°	0.20	-	-
半精密加工 Semi-fine machining	MTTR16-5502		📄	🏠			🏠	9.52	4.76	55°	0.20	-	-

SAGE 立式牙刀片
SAGE-Type Threading Insert



刀片槽型 Insert shape

P 鋼	●	●			
M 不鏽鋼	●	●			
K 鑄鐵					
N 非鐵金屬					
S 超級合金	●				
H 硬材質	●				



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	d	S	θ	r	t	w
半精密加工 Semi-fine machining	SAGE-22UIR5.0		📄	🏠			🏠	12.70	4.76	33°	0.50	1.55	3.65
半精密加工 Semi-fine machining	SAGE-22UIR6.0		📄	🏠			🏠	12.70	4.76	33°	0.50	1.83	4.40

牙刀刃端r角可依客戶要求訂製 (We accept order of changing the radius of cutting edge)

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

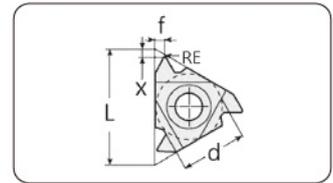
外螺紋 60°牙刀片 60°-Type External Threading Insert

ER-60°



刀片槽型 Insert shape

P	鋼	●	●			
M	不鏽鋼	●	●			
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				



※ 詳見附表11 ※ See attached table 11

應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16ER-A60 (TPI 0.5-1.5)		📄	🏠			🏠	9.525	3.00	16.00	0.80	0.90	0.05
半精密加工 Semi-fine machining	16ER-G60 (TPI 1.75-3.0)		📄	🏠			🏠	9.525	3.00	16.00	1.20	1.70	0.27
半精密加工 Semi-fine machining	16ER-AG60 (TPI 0.5-3.0)		📄	🏠			🏠	9.525	3.00	16.00	1.20	1.70	0.08

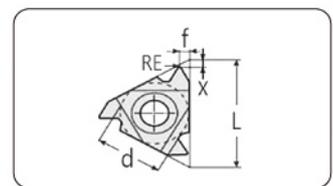
內螺紋 60°牙刀片 60°-Type Internal Threading Insert

IR-60°



刀片槽型 Insert shape

P	鋼	●	●			
M	不鏽鋼	●	●			
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16IR-A60 (TPI 0.5-1.5)		📄	🏠			🏠	9.525	3.00	16.00	0.80	0.90	0.08
半精密加工 Semi-fine machining	16IR-G60 (TPI 1.75-3.0)		📄	🏠			🏠	9.525	3.00	16.00	1.20	1.70	0.12
半精密加工 Semi-fine machining	16IR-AG60 (TPI 0.5-3.0)		📄	🏠			🏠	9.525	3.00	16.00	1.20	1.70	0.08

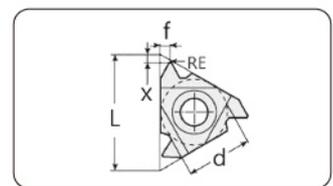
外螺紋 55°牙刀片 55°-Type External Threading Insert

ER-55°



刀片槽型 Insert shape

P	鋼	●	●			
M	不鏽鋼	●	●			
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16ER-A55 (TPI 0.5-1.5)		📄	🏠			🏠	9.525	3.00	16.00	0.80	0.90	0.05
半精密加工 Semi-fine machining	16ER-G55 (TPI 1.75-3.0)		📄	🏠			🏠	9.525	3.00	16.00	1.20	1.70	0.21
半精密加工 Semi-fine machining	16ER-AG55 (TPI 0.5-3.0)		📄	🏠			🏠	9.525	3.00	16.00	1.20	1.70	0.07

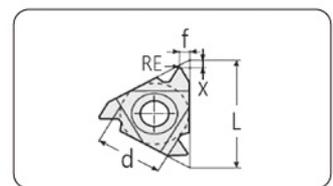
內螺紋 55°牙刀片 55°-Type Internal Threading Insert

IR-55°



刀片槽型 Insert shape

P	鋼	●	●			
M	不鏽鋼	●	●			
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16IR-A55 (TPI 0.5-1.5)		📄	🏠			🏠	9.525	3.00	16.00	0.80	0.90	0.08
半精密加工 Semi-fine machining	16IR-G55 (TPI 1.75-3.0)		📄	🏠			🏠	9.525	3.00	16.00	1.20	1.70	0.12
半精密加工 Semi-fine machining	16IR-AG55 (TPI 0.5-3.0)		📄	🏠			🏠	9.525	3.00	16.00	1.20	1.70	0.08

🟡: Adaptable processing 🏠: In stock 📄: customized order

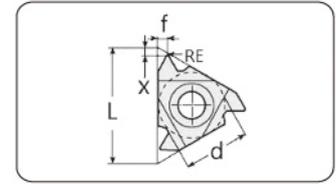
ISO 外螺紋車刀片
ISO Metric External Threading Insert



刀片槽型 Insert shape

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					

※ 詳見附表11 ※ See attached table 11



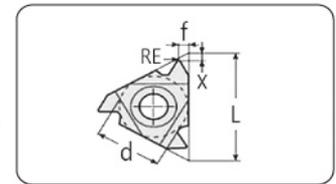
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16ER-100ISO (TPI 1)		📄	🏠			🏠	9.525	3.00	16.00	0.70	0.70	0.61
半精密加工 Semi-fine machining	16ER-150ISO (TPI 1.5)		📄	🏠			🏠	9.525	3.00	16.00	0.80	1.00	0.93
半精密加工 Semi-fine machining	16ER-200ISO (TPI 2)		📄	🏠			🏠	9.525	3.00	16.00	1.00	1.30	1.25
半精密加工 Semi-fine machining	16ER-300ISO (TPI 3)		📄	🏠			🏠	9.525	3.00	16.00	1.20	1.60	1.87

ISO 內螺紋車刀片
ISO Metric Internal Threading Insert



刀片槽型 Insert shape

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					



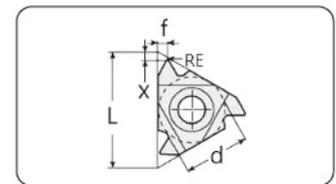
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16IR-100ISO (TPI 1)		📄	🏠			🏠	9.525	3.00	16.00	0.50	0.70	0.58
半精密加工 Semi-fine machining	16IR-150ISO (TPI 1.5)		📄	🏠			🏠	9.525	3.00	16.00	0.80	1.00	0.85
半精密加工 Semi-fine machining	16IR-200ISO (TPI 2)		📄	🏠			🏠	9.525	3.00	16.00	1.00	1.30	1.12
半精密加工 Semi-fine machining	16IR-300ISO (TPI 3)		📄	🏠			🏠	9.525	3.00	16.00	1.10	1.50	1.69

錐管外螺紋牙刀片
NPT-Type External Threading Insert



刀片槽型 Insert shape

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					



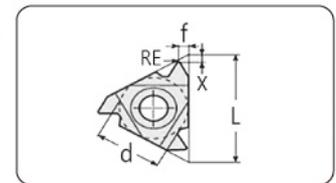
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16ER-11.5NPT (TPI 11.5)		📄	🏠			🏠	9.525	3.00	16.00	1.10	1.50	1.64
半精密加工 Semi-fine machining	16ER-14NPT (TPI 14)		📄	🏠			🏠	9.525	3.00	16.00	0.80	1.00	1.33

錐管內螺紋牙刀片
NPT-Type Internal Threading Insert



刀片槽型 Insert shape

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16IR-11.5NPT (TPI 11.5)		📄	🏠			🏠	9.525	3.00	16.00	1.10	1.50	1.64
半精密加工 Semi-fine machining	16IR-14NPT (TPI 14)		📄	🏠			🏠	9.525	3.00	16.00	0.80	1.00	1.33

Materials 材料與材質

Coating 塗層

Milling Insert 銑刀系列

Tuning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

惠氏外螺紋車刀片

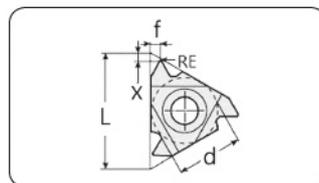
Whitworth External Threading Insert



刀片槽型 Insert shape

P	銅		●	●		
M	不鏽鋼		●	●		
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				

※ 詳見附表11 ※ See attached table 11



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16ER-11W (TPI 11)		📄	🏠			🏠	9.525	3.00	16.00	1.10	1.50	1.48
半精密加工 Semi-fine machining	16ER-14W (TPI 14)		📄	🏠			🏠	9.525	3.00	16.00	1.00	1.20	1.16

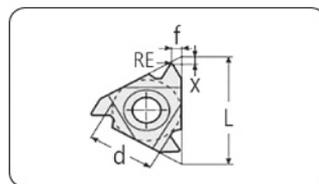
惠氏內螺紋車刀片

Whitworth Internal Threading Insert



刀片槽型 Insert shape

P	銅		●	●		
M	不鏽鋼		●	●		
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16IR-11.5NPT (TPI 11.5)		📄	🏠			🏠	9.525	3.00	16.00	1.10	1.50	1.64
半精密加工 Semi-fine machining	16IR-14NPT (TPI 14)		📄	🏠			🏠	9.525	3.00	16.00	0.80	1.00	1.33

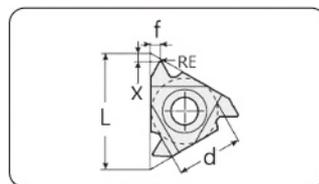
英制外螺紋車刀片

BSPT External Threading Insert



刀片槽型 Insert shape

P	銅		●	●		
M	不鏽鋼		●	●		
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16ER-11BSPT (TPI 11)		📄	🏠			🏠	9.525	3.00	16.00	1.10	1.50	1.48
半精密加工 Semi-fine machining	16ER-14BSPT (TPI 14)		📄	🏠			🏠	9.525	3.00	16.00	0.90	1.00	1.16

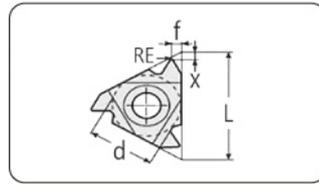
英制內螺紋車刀片

BSPT Internal Threading Insert



刀片槽型 Insert shape

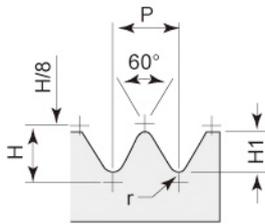
P	銅		●	●		
M	不鏽鋼		●	●		
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				



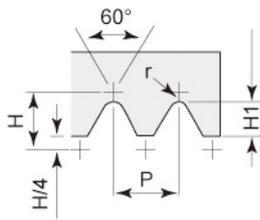
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	d	S	L	X	f	RE
半精密加工 Semi-fine machining	16IR-11BSPT (TPI 11)		📄	🏠			🏠	9.525	3.00	16.00	1.10	1.50	1.48
半精密加工 Semi-fine machining	16IR-14BSPT (TPI 14)		📄	🏠			🏠	9.525	3.00	16.00	0.90	1.00	1.16

附表 11

■ 外徑牙刀切削深度及切削次數



• 陽螺紋



• 陰螺紋

P	0.75	1.00	1.25	1.50	1.75	2.00	2.50	3.00	3.50	4.00	4.50
H1	0.46	0.61	0.77	0.92	1.07	1.23	1.53	1.84	2.15	2.45	2.76
r	0.11	0.14	0.18	0.22	0.25	0.29	0.36	0.43	0.50	0.58	0.65
1	0.18	0.20	0.20	0.25	0.25	0.25	0.30	0.30	0.35	0.35	0.40
2	0.13	0.15	0.18	0.20	0.20	0.25	0.25	0.25	0.30	0.30	0.35
3	0.10	0.10	0.12	0.15	0.20	0.20	0.20	0.25	0.25	0.25	0.30
4	0.05	0.10	0.12	0.15	0.15	0.15	0.20	0.20	0.20	0.25	0.25
5		0.06	0.10	0.10	0.12	0.15	0.15	0.20	0.20	0.25	0.25
6			0.05	0.07	0.10	0.10	0.10	0.15	0.20	0.20	0.20
7					0.05	0.08	0.10	0.15	0.15	0.20	0.20
8						0.05	0.10	0.10	0.15	0.15	0.15
9							0.08	0.10	0.10	0.15	0.15
10							0.05	0.09	0.10	0.10	0.15
11								0.05	0.10	0.10	0.10
12									0.05	0.10	0.10
13										0.05	0.10
14											0.06

■ 加工條件 Machining Condition Guide

加工材質 Machined Material	刀片材質 Insert Material	切削速率 Speed m/min sf	進給 Feed mm/rev
碳 鋼 Carbon steel	G12XF	100~130	0.03~0.1
合金鋼 Alloyed steel	G12XF	135~270	0.03~0.1
不鏽鋼 Stainless steel	G12XF / G20P	50~100	0.05~0.15
球墨鑄鐵 Ductile cast iron	G12XF	115~230	0.05~0.15
灰口鑄鐵 Gray cast iron	G12XF	135~270	0.05~0.15
鋁 合 金 Aluminum alloy	G11C	245~610	0.05~0.15
高溫合金 High temp alloy	G12XF	20~55	0.03~0.1

加工材質 MachinedMaterial	材質硬度 Material Hardness	切削速率 Vc Cutting speed (m/min)
軟 鋼 Low carbide steel	HB180以下	100~180
碳 鋼 Carbon steel	HB180~280	100~150
合金鋼 Alloyed steel	HB180~280	100~150
不鏽鋼 Stainless steel	HB200以下	80~150
鑄 鐵 Cast iron	HB220以下	60~100

Materials 材料與材質

Coating 塗層 G S 塗層

Milling Insert 銑刀系列

Tuning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材



車刀系列 Tuning Inserts Series

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

外徑切槽、端面切槽、 內徑切槽、外徑切斷刀片

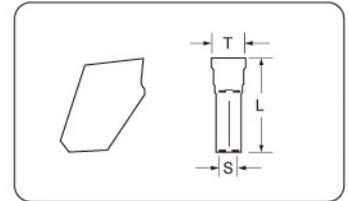
Inserts for External Grooving,
Inner Hole Grooving, End Face
Grooving and Parting



刀片槽型 Insert shape

P	鋼	●	●			
M	不鏽鋼	●	●			
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				

※ 詳見附表12 ※ See attached table 12



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	S	T	r	θ
半精密加工 Semi-fine machining	GFN3-MT	🏠		📄				9.50	2.50	3.0	0.20	140°

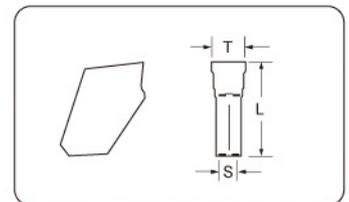
外徑切槽、端面切槽、 內徑切槽、外徑切斷刀片

Inserts for External Grooving,
Inner Hole Grooving, End Face
Grooving and Parting



刀片槽型 Insert shape

P	鋼	●	●			
M	不鏽鋼	●	●			
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	S	T	r	θ
半精密加工 Semi-fine machining	GTN3-MT	🏠		📄				10.70	2.50	3.0	0.20	140°

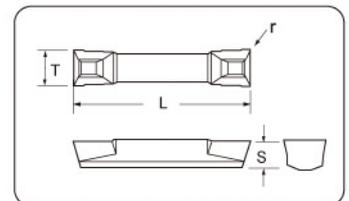
外徑切槽、端面切槽、 內徑切槽、外徑切斷刀片

Inserts for External Grooving,
Inner Hole Grooving,
End Face Grooving and Parting



應用
Applicable
粗加工
Rough machining

P	鋼	●	●			
M	不鏽鋼	●	●			
K	鑄鐵					
N	非鐵金屬					
S	超級合金	●				
H	硬材質	●				



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	S	T	r	θ
	DGM3020CT	🏠		📄				20.00	5.00	3.0	0.40	90°
	DGM4020CT	🏠		📄				20.00	5.00	4.0	0.40	120°
	DGM5025CT	🏠		📄				25.00	6.00	5.0	0.40	120°
	DGM3020CTF	🏠		📄				20.00	3.00	3.0	0.40	90°
	DGM4020CTF	🏠		📄				20.00	3.00	4.0	0.40	120°
	DGM5025CTF	🏠		📄				25.00	5.00	5.0	0.40	120°
	DGM3025CE	🏠		📄				25.00	5.00	3.0	0.40	90°

● : Adaptable processing 🏠 : In stock 📄 : customized order

外徑切槽、端面切槽、
內徑切槽、外徑切斷刀片

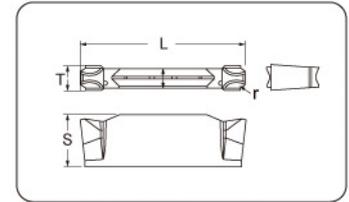
Inserts for External Grooving,
Inner Hole Grooving,
End Face Grooving and Parting



刀片槽型 Insert shape

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					

※ 詳見附表12 ※ See attached table 12



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating					尺寸 Dimension (mm)					
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	S	T	r	θ
半精密加工 Semi-fine machining	DGN3102MT	🏠		📄				20.00	6.20	3.10	0.25	130°
半精密加工 Semi-fine machining	DGN2202MT	🏠		📄				20.00	6.05	2.20	0.20	139°

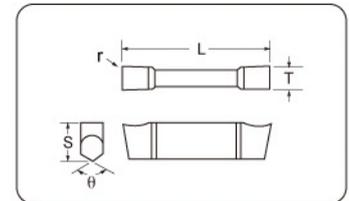
外徑切槽、端面切槽、
內徑切槽、外徑切斷刀片

Inserts for External Grooving,
Inner Hole Grooving,
End Face Grooving and Parting



刀片槽型 Insert shape

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating					尺寸 Dimension (mm)					
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	S	T	r	θ
精密加工 Finish machining	DGJ3020CTM							20.00	5.00	3.00	0.40	90°
精密加工 Finish machining	DGJ4020CTM							20.00	5.00	4.00	0.40	120°
精密加工 Finish machining	DGJ5025CTM							25.00	6.00	5.00	0.40	120°
精密加工 Finish machining	DGJ4025CE							20.00	6.20	4.00	0.20	120°
精密加工 Finish machining	DGJ3025CE							25.00	5.00	3.00	0.40	90°

📄 以上規格皆為
接單生產
All are customized order

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

● : 適用加工 🏠 : 常備庫存 📦 : 接單生產

外徑切槽、端面切槽、 內徑切槽、外徑切斷刀片

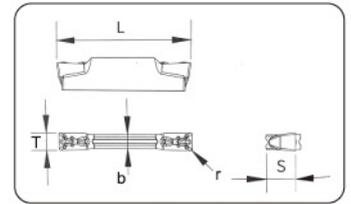
Inserts for External Grooving,
Inner Hole Grooving,
End Face Grooving and Parting



刀片槽型 Insert shape

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					

※ 詳見附表12 ※ See attached table 12



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA1820	GA1824	GA1828	GA1829	GA1845	GA1847	L	T	S	r	b
粗加工 Rough machining	MGMN200-M		🏠				🏠	16.00	2.00	3.50	0.20	1.60
粗加工 Rough machining	MGMN300-M		🏠				🏠	21.00	3.00	4.80	0.40	2.35
粗加工 Rough machining	MGMN400-M		🏠				🏠	21.00	4.00	4.80	0.40	3.30

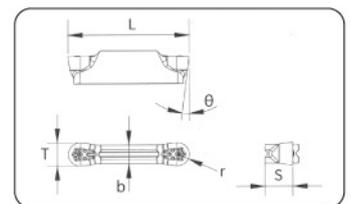
外徑切槽、端面切槽、 內徑切槽、外徑切斷刀片

Inserts for External Grooving,
Inner Hole Grooving,
End Face Grooving and Parting



刀片槽型 Insert shape

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA1820	GA1824	GA1828	GA1829	GA1845	GA1847	L	T	S	r	b	θ
粗加工 Rough machining	MRMN300-M		🏠				🏠	21.00	3.00	4.80	1.50	2.35	7°
粗加工 Rough machining	MRMN400-M		🏠				🏠	21.00	4.00	4.80	2.00	3.30	7°

● : Adaptable processing 🏠 : In stock 📄 : customized order

外徑切槽、端面切槽、
內徑切槽、外徑切斷刀片

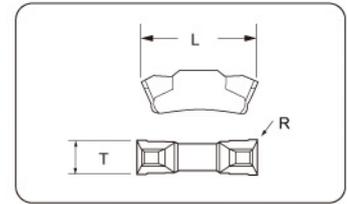
Inserts for External Grooving,
Inner Hole Grooving,
End Face Grooving and Parting



刀片槽型 Insert shape

P 鋼		●	●				
M 不鏽鋼		●	●				
K 鑄鐵							
N 非鐵金屬							
S 超級合金	●						
H 硬材質	●						

※ 詳見附表12 ※ See attached table 12



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)		
		GA1820	GA1824	GA1828	GA1829	GA1845	GA1847	L	T	R
粗加工 Rough machining	TGMF-304		📄				🏠	13.50	3.00	0.4
粗加工 Rough machining	TGMF-404		📄				🏠	17.70	4.00	0.4
粗加工 Rough machining	TGMF-508		📄				🏠	17.80	5.00	0.8

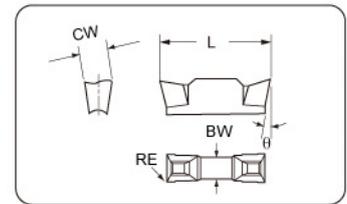
外徑切槽、端面切槽、
內徑切槽、外徑切斷刀片

Inserts for External Grooving,
Inner Hole Grooving,
End Face Grooving and Parting



刀片槽型 Insert shape

P 鋼		●	●				
M 不鏽鋼		●	●				
K 鑄鐵							
N 非鐵金屬							
S 超級合金	●						
H 硬材質	●						



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA1820	GA1824	GA1828	GA1829	GA1845	GA1847	L	CW	RE	BW	θ
粗加工 Rough machining	HFPR3003		📄				🏠	19.00	3.00	0.3	2.10	7°
粗加工 Rough machining	HFPR4004		📄				🏠	19.00	4.00	0.4	2.80	7°
粗加工 Rough machining	HFPR5004		📄				🏠	19.00	5.00	0.4	3.40	7°

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

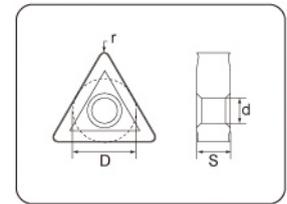
Blank 素材

TN 負角車刀片
Negative Inserts for Turning



P 鋼		●	●	●	●	●	●
M 不鏽鋼		●	●				
K 鑄鐵			●	●	●	●	●
N 非鐵金屬							
S 超級合金	●						
H 硬材質	●						

※ 詳見附表 13 ※ See attached table 13



刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension			
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d
	TNMG160404-BTM					☰	🏠	🏠	9.52	4.76	0.4	3.8
	TNMG160408-BTM					☰	🏠	🏠	9.52	4.76	0.8	3.8
	TNMG160412-BTM					☰	🏠	🏠	9.52	4.76	1.2	3.8
	TNMG160404-MF3								9.52	4.76	0.4	3.8
	TNMG160408-MF3								9.52	4.76	0.8	3.8
	TNMG160412-MF3								9.52	4.76	1.2	3.8
	TNMG160404-MR								9.52	4.76	0.4	3.8
	TNMG160408-MR								9.52	4.76	0.8	3.8
	TNMG160412-MR								9.52	4.76	1.2	3.8
	TNMG160404-TMA					☰	☰	☰	9.52	4.76	0.4	3.8
	TNMG160408-TMA					☰	☰	☰	9.52	4.76	0.8	3.8
	TNMG160412-TMA					☰	☰	☰	9.52	4.76	1.2	3.8
	TNMG160404-MM					☰	☰	☰	9.52	4.76	0.4	3.8
	TNMG160408-MM					☰	☰	☰	9.52	4.76	0.8	3.8
	TNMG160412-MM					☰	☰	☰	9.52	4.76	1.2	3.8
	TNMG160404-MS					☰	☰	☰	9.52	4.76	0.4	3.8
	TNMG160408-MS					☰	☰	☰	9.52	4.76	0.8	3.8
	TNMG160412-MS					☰	☰	☰	9.52	4.76	1.2	3.8
	TNMG160404-BMA					☰	☰	☰	9.52	4.76	0.4	3.8
	TNMG160408-BMA					☰	☰	☰	9.52	4.76	0.8	3.8
	TNMG160412-BMA					☰	☰	☰	9.52	4.76	1.2	3.8
	TNMG160404-BM					☰	☰	☰	9.52	4.76	0.4	3.8
	TNMG160408-BM					☰	☰	☰	9.52	4.76	0.8	3.8
	TNMG160412-BM					☰	☰	☰	9.52	4.76	1.2	3.8
	TNMG160404R-S					☰	☰	☰	9.52	4.76	0.4	3.8
	TNMG160408R-S					☰	☰	☰	9.52	4.76	0.8	3.8
	TNMG160412R-S					☰	☰	☰	9.52	4.76	1.2	3.8
	TNMG160404L-S					☰	☰	☰	9.52	4.76	0.4	3.8
	TNMG160408L-S					☰	☰	☰	9.52	4.76	0.8	3.8
	TNMG160412L-S					☰	☰	☰	9.52	4.76	1.2	3.8

Materials 材料與材質

Coating G S 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

CN負角車刀片

Negative Inserts for Turning

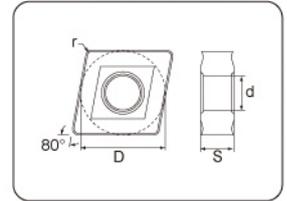


應用
Applicable
精密加工
Finish machining

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

P	鋼		●	●	●	●	●	●
M	不銹鋼		●	●				
K	鑄鐵			●	●	●	●	●
N	非鐵金屬							
S	超級合金	●						
H	硬材質	●						

※ 詳見附表13 ※ See attached table 13

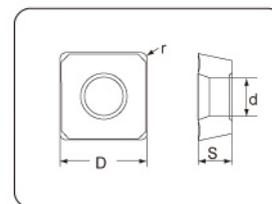


刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)			
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d
	CNMG120404-BTM					📄	🏠	🏠	12.70	4.76	0.4	5.1
	CNMG120408-BTM					📄	🏠	🏠	12.70	4.76	0.8	5.1
	CNMG120412-BTM					📄	🏠	🏠	12.70	4.76	1.2	5.1
	CNMG120404-MF3								12.70	4.76	0.4	5.1
	CNMG120408-MF3								12.70	4.76	0.8	5.1
	CNMG120412-MF3								12.70	4.76	1.2	5.1
	CNMG120404-MR								12.70	4.76	0.4	5.1
	CNMG120408-MR								12.70	4.76	0.8	5.1
	CNMG120412-MR								12.70	4.76	1.2	5.1
	CNMG120404-TMA					📄	📄	📄	12.70	4.76	0.4	5.1
	CNMG120408-TMA					📄	📄	📄	12.70	4.76	0.8	5.1
	CNMG120412-TMA					📄	📄	📄	12.70	4.76	1.2	5.1
	CNMG120404-MM					📄	📄	📄	12.70	4.76	0.4	5.1
	CNMG120408-MM					📄	📄	📄	12.70	4.76	0.8	5.1
	CNMG120412-MM					📄	📄	📄	12.70	4.76	1.2	5.1
	CNMG120404-MS					📄	📄	📄	12.70	4.76	0.4	5.1
	CNMG120408-MS					📄	📄	📄	12.70	4.76	0.8	5.1
	CNMG120412-MS					📄	📄	📄	12.70	4.76	1.2	5.1
	CNMG120404-BMA					📄	📄	📄	12.70	4.76	0.4	5.1
	CNMG120408-BMA					📄	📄	📄	12.70	4.76	0.8	5.1
	CNMG120412-BMA					📄	📄	📄	12.70	4.76	1.2	5.1
	CNMG120404-BM					📄	📄	📄	12.70	4.76	0.4	5.1
	CNMG120408-BM					📄	📄	📄	12.70	4.76	0.8	5.1
	CNMG120412-BM					📄	📄	📄	12.70	4.76	1.2	5.1
	CNMG120404R-S					📄	📄	📄	12.70	4.76	0.4	5.1
	CNMG120408R-S					📄	📄	📄	12.70	4.76	0.8	5.1
	CNMG120412R-S					📄	📄	📄	12.70	4.76	1.2	5.1
	CNMG120404L-S					📄	📄	📄	12.70	4.76	0.4	5.1
	CNMG120408L-S					📄	📄	📄	12.70	4.76	0.8	5.1
	CNMG120412L-S					📄	📄	📄	12.70	4.76	1.2	5.1

SN 負角車刀片
Negative Inserts for Turning



P 鋼		●	●	●	●	●
M 不鏽鋼		●	●			
K 鑄鐵				●	●	●
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



※ 詳見附表13 ※ See attached table 13

刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)			
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/315	GSC33-2/46	D	S	r	d
	SNMG120404-BTM					☰	🏠	🏠	12.70	4.76	0.4	5.1
	SNMG120408-BTM					☰	🏠	🏠	12.70	4.76	0.8	5.1
	SNMG120412-BTM					☰	🏠	🏠	12.70	4.76	1.2	5.1
	SNMG150612-BTM					☰	☰	☰	15.87	6.35	1.2	6.35
	SNMG190612-BTM					☰	☰	☰	19.05	6.35	1.2	7.94
	SNMG190616-BTM					☰	☰	☰	19.05	6.35	1.6	7.94
	SNMG120404-MF3	☰	🏠	🏠					12.70	4.76	0.4	5.1
	SNMG120408-MF3	☰	🏠	🏠					12.70	4.76	0.8	5.1
	SNMG120412-MF3	☰	🏠	🏠					12.70	4.76	1.2	5.1
	SNMG120404-MR	☰	🏠	🏠					12.70	4.76	0.4	5.1
	SNMG120408-MR	☰	🏠	🏠					12.70	4.76	0.8	5.1
	SNMG120412-MR	☰	🏠	🏠					12.70	4.76	1.2	5.1
	SNMG120404-TMA	☰	☰	☰					12.70	4.76	0.4	5.1
	SNMG120408-TMA	☰	☰	☰					12.70	4.76	0.8	5.1
	SNMG120412-TMA	☰	☰	☰					12.70	4.76	1.2	5.1
	SNMG120404-MM	☰	☰	☰					12.70	4.76	0.4	5.1
	SNMG120408-MM	☰	☰	☰					12.70	4.76	0.8	5.1
	SNMG120412-MM					☰	☰	☰	12.70	4.76	1.2	5.1
	SNMG120404-BMA					☰	☰	☰	12.70	4.76	0.4	5.1
	SNMG120408-BMA					☰	☰	☰	12.70	4.76	0.8	5.1
	SNMG120412-BMA					☰	☰	☰	12.70	4.76	1.2	5.1
	SNMG120404-BM	☰	☰	☰					12.70	4.76	0.4	5.1
	SNMG120408-BM	☰	☰	☰					12.70	4.76	0.8	5.1
	SNMG120412-BM	☰	☰	☰					12.70	4.76	1.2	5.1
	SNMG120404R-S	☰	☰	☰					12.70	4.76	0.4	5.1
	SNMG120408R-S	☰	☰	☰					12.70	4.76	0.8	5.1
	SNMG120412R-S	☰	☰	☰					12.70	4.76	1.2	5.1
	SNMG120404L-S	☰	☰	☰					12.70	4.76	0.4	5.1
	SNMG120408L-S	☰	☰	☰					12.70	4.76	0.8	5.1
	SNMG120412L-S	☰	☰	☰					12.70	4.76	1.2	5.1

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

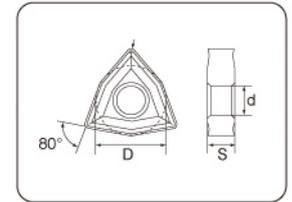
🟡 : 適用加工 🏠 : 常備庫存 📄 : 接單生產

WN負角車刀片

Negative Inserts for Turning

WN 應用
Applicable
精密加工
Finish machining

P 鋼	●	●	●	●	●	●
M 不鏽鋼	●	●				
K 鑄鐵		●	●	●	●	●
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



※ 詳見附表13 ※ See attached table 13

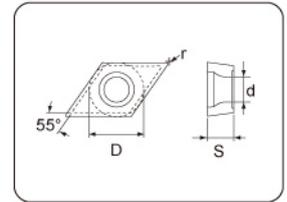
刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)			
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d
	WNMG080404-BTM			📄			🏠	🏠	12.70	4.76	0.4	5.1
	WNMG080408-BTM			📄			🏠	🏠	12.70	4.76	0.8	5.1
	WNMG080412-BTM			📄			📄	📄	12.70	4.76	1.2	5.1
	WNMG080404-MF3		📄	🏠					12.70	4.76	0.4	5.1
	WNMG080408-MF3		📄	🏠					12.70	4.76	0.8	5.1
	WNMG080412-MF3		📄	📄					12.70	4.76	1.2	5.1
	WNMG080404-MR		📄	🏠					12.70	4.76	0.4	5.1
	WNMG080408-MR		📄	🏠					12.70	4.76	0.8	5.1
	WNMG080412-MR		📄	📄					12.70	4.76	1.2	5.1
	WNMG080404-TMA		📄	🏠		📄	📄	📄	12.70	4.76	0.4	5.1
	WNMG080408-TMA		📄	🏠		📄	📄	📄	12.70	4.76	0.8	5.1
	WNMG080412-TMA		📄	📄		📄	📄	📄	12.70	4.76	1.2	5.1
	WNMG080404-MM					📄	📄	📄	12.70	4.76	0.4	5.1
	WNMG080408-MM					📄	📄	📄	12.70	4.76	0.8	5.1
	WNMG080412-MM					📄	📄	📄	12.70	4.76	1.2	5.1
	WNMG080404-MS					📄	📄	📄	12.70	4.76	0.4	5.1
	WNMG080408-MS					📄	📄	📄	12.70	4.76	0.8	5.1
	WNMG080412-MS					📄	📄	📄	12.70	4.76	1.2	5.1
	WNMG080404-BMA					📄	📄	📄	12.70	4.76	0.4	5.1
	WNMG080408-BMA					📄	📄	📄	12.70	4.76	0.8	5.1
	WNMG080412-BMA					📄	📄	📄	12.70	4.76	1.2	5.1
	WNMG080404-BM					📄	📄	📄	12.70	4.76	0.4	5.1
	WNMG080408-BM					📄	📄	📄	12.70	4.76	0.8	5.1
	WNMG080412-BM					📄	📄	📄	12.70	4.76	1.2	5.1
	WNMG080404R-S					📄	📄	📄	12.70	4.76	0.4	5.1
	WNMG080408R-S					📄	📄	📄	12.70	4.76	0.8	5.1
	WNMG080412R-S					📄	📄	📄	12.70	4.76	1.2	5.1
	WNMG080404L-S					📄	📄	📄	12.70	4.76	0.4	5.1
	WNMG080408L-S					📄	📄	📄	12.70	4.76	0.8	5.1
	WNMG080412L-S					📄	📄	📄	12.70	4.76	1.2	5.1

● : Adaptable processing 🏠 : In stock 📄 : customized order

DN 負角車刀片
Negative Inserts for Turning



P 鋼	●	●	●	●	●	●
M 不鏽鋼	●	●				
K 鑄鐵		●	●	●	●	●
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



※ 詳見附表13 ※ See attached table 13

刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)			
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-10/5	GSC33-2/4/6	D	S	r	d
	DNMG110404-BTM			📄		📄	📄	📄	9.53	4.76	0.4	3.8
	DNMG110408-BTM			📄		📄	📄	📄	9.53	4.76	0.8	3.8
	DNMG150404-BTM			📄		📄	📄	📄	12.70	4.76	0.4	5.1
	DNMG150408-BTM			📄		📄	📄	📄	12.70	4.76	0.8	5.1
	DNMG150412-BTM			📄		📄	📄	📄	12.70	4.76	1.2	5.1
	DNMG150604-BTM			📄		📄	📄	📄	12.70	6.35	0.4	5.1
	DNMG150608-BTM			📄		📄	📄	📄	12.70	6.35	0.8	5.1
	DNMG150612-BTM			📄		📄	📄	📄	12.70	6.35	1.2	5.1
	DNMG150404-MM			📄		📄	📄	📄	12.70	4.76	0.4	5.1
	DNMG150408-MM			📄		📄	📄	📄	12.70	4.76	0.8	5.1
	DNMG150412-MM			📄		📄	📄	📄	12.70	4.76	1.2	5.1
	DNMG150604-MM			📄		📄	📄	📄	12.70	6.35	0.4	5.1
	DNMG150608-MM			📄		📄	📄	📄	12.70	6.35	0.8	5.1
	DNMG150612-MM			📄		📄	📄	📄	12.70	6.35	1.2	5.1
	DNMG150404-BMA			📄		📄	📄	📄	12.70	4.76	0.4	5.1
	DNMG150408-BMA			📄		📄	📄	📄	12.70	4.76	0.8	5.1
	DNMG150412-BMA			📄		📄	📄	📄	12.70	4.76	1.2	5.1
	DNMG150604-BMA			📄		📄	📄	📄	12.70	6.35	0.4	5.1
	DNMG150608-BMA			📄		📄	📄	📄	12.70	6.35	0.8	5.1
	DNMG150612-BMA			📄		📄	📄	📄	12.70	6.35	1.2	5.1

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

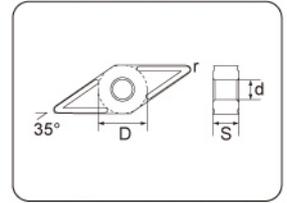
VN 負角車刀片

Negative Inserts for Turning



應用
Applicable
精密加工
Finish machining

P 鋼	●	●	●	●	●	●
M 不鏽鋼	●	●				
K 鑄鐵		●	●	●	●	●
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



※ 詳見附表13 ※ See attached table 13

刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)			
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d
	VNMG160404-BTM		📄			📄	📄	📄	9.52	4.76	0.4	3.8
	VNMG160408-BTM		📄			📄	📄	📄	9.52	4.76	0.8	3.8
	VNMG160412-BTM		📄			📄	📄	📄	9.52	4.76	1.2	3.8
	VNMG160404-MF3		📄			📄	📄	📄	9.52	4.76	0.4	3.8
	VNMG160408-MF3		📄			📄	📄	📄	9.52	4.76	0.8	3.8
	VNMG160412-MF3		📄			📄	📄	📄	9.52	4.76	1.2	3.8
	VNMG160404-BM		📄			📄	📄	📄	9.52	4.76	0.4	3.8
	VNMG160408-BM		📄			📄	📄	📄	9.52	4.76	0.8	3.8
	VNMG160412-BM		📄			📄	📄	📄	9.52	4.76	1.2	3.8
	VNMG160404-MM		📄			📄	📄	📄	9.52	4.76	0.4	3.8
	VNMG160408-MM		📄			📄	📄	📄	9.52	4.76	0.8	3.8
	VNMG160412-MM		📄			📄	📄	📄	9.52	4.76	1.2	3.8
	VNMG160404-BMA		📄			📄	📄	📄	9.52	4.76	0.4	3.8
	VNMG160408-BMA		📄			📄	📄	📄	9.52	4.76	0.8	3.8
	VNMG160412-BMA		📄			📄	📄	📄	9.52	4.76	1.2	3.8

● : Adaptable processing 🏠 : In stock 📄 : customized order

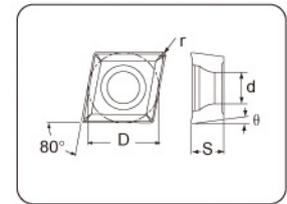
CC 正角車刀片

Positive Inserts for Turning



P	鋼		●	●	●	●	●	●
M	不鏽鋼		●	●				
K	鑄鐵			●	●	●	●	●
N	非鐵金屬							
S	超級合金	●						
H	硬材質	●						

※ 詳見附表13 ※ See attached table 13



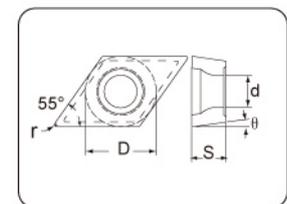
刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)				
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d	θ
	CCMT060204-BHMP			🏠		📄	📄	📄	6.35	2.38	0.4	2.8	7°
	CCMT060208-BHMP			🏠		📄	🏠	🏠	6.35	2.38	0.8	2.8	7°
	CCMT09T304-BHMP			🏠		📄	📄	🏠	9.525	3.97	0.4	4.4	7°
	CCMT09T308-BHMP			🏠		📄	🏠	📄	9.525	3.97	0.8	4.4	7°
	CCMT120404-BHMP			🏠		📄	🏠	📄	12.70	4.76	0.4	5.6	7°
	CCMT120408-BHMP			🏠		📄	🏠	📄	12.70	6.35	0.8	5.6	7°
	CCMT09T304-MF3	📄		🏠					9.525	3.97	0.4	4.4	7°
	CCMT09T308-MF3	📄		🏠					9.525	3.97	0.8	4.4	7°
	CCGT060204-SP	📄		📄					6.35	2.38	0.4	2.8	7°

DC 正角車刀片

Positive Inserts for Turning



P	鋼		●	●	●	●	●	●
M	不鏽鋼		●	●				
K	鑄鐵			●	●	●	●	●
N	非鐵金屬							
S	超級合金	●						
H	硬材質	●						



刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)				
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d	θ
	DCMT070204-BHMP		📄	📄		📄	📄	📄	6.35	2.38	0.4	2.8	7°
	DCMT070208-BHMP		📄	📄		📄	📄	🏠	6.35	2.38	0.8	2.8	7°
	DCMT11T304-BHMP		📄	🏠		📄	📄	🏠	9.53	3.97	0.4	4.4	7°
	DCMT11T308-BHMP		📄	📄		🏠	📄	📄	9.53	3.97	0.8	4.4	7°
	DCMW070204-MO			📄					6.35	2.38	0.4	2.8	7°
	DCMW11T302-MO			📄					9.52	3.97	0.2	4.4	7°
	DCGT070204-FY			📄					6.35	2.38	0.4	2.8	7°
	DCGT11T302-FY			📄					9.52	3.97	0.2	4.4	7°
	DCMT11T304-ST			📄					9.52	3.97	0.4	4.4	7°
	DCHT11T308-ST	🏠		🏠					9.52	3.97	0.8	4.5	7°
	DCGT11T302	🏠		🏠					9.59	3.97	0.2	4.5	7°
	DCGT11T304	🏠		🏠					9.59	3.97	0.4	4.5	7°
	DCGT11T308	📄		📄					9.59	3.97	0.8	4.5	7°

Materials 材料與材質

Coating CS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

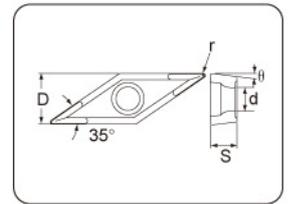
● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

VC 正角車刀片

Positive Inserts for Turning



P 鋼		●	●	●	●	●	●
M 不鏽鋼		●	●				
K 鑄鐵			●	●	●	●	●
N 非鐵金屬							
S 超級合金	●						
H 硬材質	●						



※ 詳見附表13 ※ See attached table 13

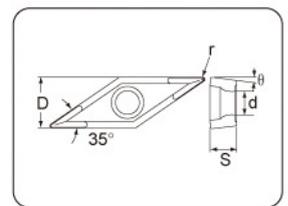
刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)				
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d	θ
	VCEW110304-MO	📄		📄					6.35	3.18	0.4	2.8	7°
	VCMW160404-MO	📄		📄					9.52	4.76	0.4	4.4	7°
	VCGW160404-MO	📄		📄					9.52	4.76	0.4	4.4	7°
	VCMT160404-GV	📄		📄					9.52	4.76	0.4	4.4	7°
	VCMT160408-V	📄		📄					9.52	4.76	0.8	4.4	7°
	VCEX110301R-SV	📄		📄					6.35	3.18	0.4	2.8	7°
	VCGT110304-FP	📄		📄					6.35	3.18	0.4	2.8	7°
	VCGT110301-PF-C	📄		📄					6.35	3.18	0.1	2.8	7°
	VCMT110308-PC	📄		📄					6.35	3.18	0.8	2.8	7°
	VCMT160404-FP	📄		📄					9.52	4.76	0.4	4.4	7°

VB 正角車刀片

Positive Inserts for Turning



P 鋼		●	●	●	●	●	●
M 不鏽鋼		●	●				
K 鑄鐵			●	●	●	●	●
N 非鐵金屬							
S 超級合金	●						
H 硬材質	●						



刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)				
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d	θ
	VBMT110304-Q	📄		📄					6.35	3.18	0.4	2.8	5°

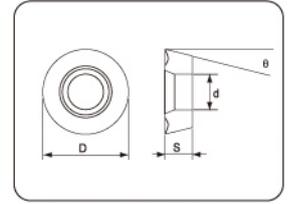
🟡: Adaptable processing 🏠: In stock 📄: customized order

RC 正角車刀片

Positive Inserts for Turning



P 鋼		●	●	●	●	●	●
M 不鏽鋼		●	●				
K 鑄鐵			●	●	●	●	●
N 非鐵金屬							
S 超級合金	●						
H 硬材質	●						



※ 詳見附表13 ※ See attached table 13

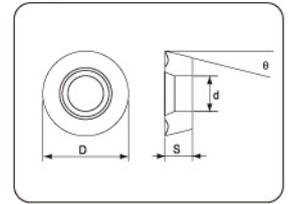
刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)				
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d	θ
	RCGT1003-MS	📄		📄					10.0	3.18	-	4.4	7°
	RCGT10T3-MS	📄		📄					10.0	3.97	-	4.4	7°

RP 正角車刀片

Positive Inserts for Turning



P 鋼		●	●	●	●	●	●
M 不鏽鋼		●	●				
K 鑄鐵			●	●	●	●	●
N 非鐵金屬							
S 超級合金	●						
H 硬材質	●						



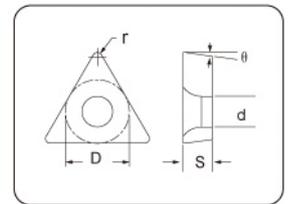
刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)				
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d	θ
	RPGT10T3-MS	📄		📄					10.0	3.97	-	4.4	11°

TC 正角車刀片

Positive Inserts for Turning



P 鋼		●	●	●	●	●	●
M 不鏽鋼		●	●				
K 鑄鐵			●	●	●	●	●
N 非鐵金屬							
S 超級合金	●						
H 硬材質	●						



刀片槽型 Insert shape	刀片規格 Insert ISO Code	塗層 Coating				CVD塗層 / CVD Coating			尺寸 Dimension (mm)				
		GA0124	GA0128	GA0147	GA0148	GSC33	GSC33-1/3/5	GSC33-2/4/6	D	S	r	d	θ
	TCMW090204-MO	📄		📄					5.56	2.38	0.4	2.6	7°
	CMW16T304-MO	📄		📄					9.52	3.97	0.4	4.4	7°
	TCMT16T304-SK	📄		📄					9.52	3.97	0.4	4.4	7°
	TCGT16T305-ST	📄		📄					9.52	3.97	0.5	4.4	7°
	TCMT16T304-SP	📄		📄					9.52	3.97	0.4	4.4	7°
	TCMT16T308-SP	📄		📄					9.52	3.97	0.8	4.4	7°
	TCMT16T304-BHMP	📄		📄					9.52	3.97	0.4	4.4	7°
	TCMT110204-EM	📄		📄					6.35	2.38	0.4	2.8	7°
	TCMT090204-N	📄		📄					5.56	2.38	0.4	2.6	7°

Materials 材料與材質

Coating 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

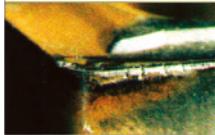
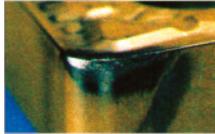
Customized products 特殊系列

Blank 素材

外徑加工條件表 Cutting & Turning Data Suggestion

加工材質 Machined Material	負角刀片 Negative Insert		正角刀片 Positive Insert	
	vc m/min	fn mm/min	vc m/min	fn mm/min
碳鋼 Carbon steel	100~425	0.1~0.5	135~450	0.025~0.25
合金鋼 Alloyed steel	70~250	0.1~0.3	60~200	0.025~0.25
不鏽鋼 Stainless steel	110~300	0.1~0.3	130~300	0.025~0.25
PH不鏽鋼 PH stainless steel	125~450	0.1~0.4	95~175	0.025~0.25
鑄鐵 Cast iron	350~1000	0.25~0.35	180~800	0.05~0.20
鋁合金 Aluminum alloy	25~90	0.1~0.3	25~90	0.025~0.2
硬化鋼 Hardened steel	45~65	0.1~0.3	20~90	0.025~0.2

刀片損壞分析及解決方案

圖示 Pictures	現象 Result	原因 Reason of cause	解決方案 Problem solution
	熱裂 Thermal Cracking	切削速率太高，產生高熱，冷卻不當 Vc is higher or cooling too fast.	1. 使用含有碳化鈮材質，增加熱抵抗 Choose grade with higher Tac content. 2. 使用正角刀片，降低切削速度進給及切深 Use positive insert, slow down cutting speed and feed or depth of cut.
	脆裂 Chipping	刀片材質太脆硬 Insert grade is too brittle.	1. 使用含有鈷量較高材質，增加韌性 Choose grade with higher cobalt content. 2. 使用負角刀片增加切削速度 Use negative insert and increase cutting speed.
	過度磨耗 Excess Wear	刀片材質太軟或加工速度太快 Insert grade is too soft or speed too high.	1. 使用較硬或耐磨材質 Insert grade select hardness is higher or wear resistance is higher. 2. 降低切削速率及進給 Decrease cutting speed and feed.
	凹陷 Notching	加工材料產生加工硬化而高度磨耗所造成 Cut material hardened wears the insert.	1. 增加刀片切削邊隙角 Increase cutting rake angle. 2. 降低切削速率及進給 Decrease the cutting speed and feed.
	積屑 Built-up Edge	加工切削速率太慢造成積屑 Cutting speed too slow causes built-up edge.	1. 提高切削速率 Increase cutting speed. 2. 使用較低摩擦力之鍍層如TIN Choose coating with lower friction such as TIN.
	變形 Deformation	切削速率太快或進給量太大 Cutting speed too high or feed too larg.	1. 使用更耐熱材質或較硬材質 Use insert grade with higher heat resistance or choose grade with higher hardness. 2. 降低切削速率及進給 Decrease cutting speed and feed.
	熱裂 Cracking	切削產生高熱屑片黏在刀片上 Cutting case too high temp chip welded on insert.	1. 使用較硬材質刀片 Choose grade with higher hardness. 2. 降低切削速率及進給 Decrease cutting speed and feed.

■ 技術資料 Technical Information

附表 13

(1) 切削速度 Cutting Speed (Vc)

$$V_c = \frac{\pi \times D \times S}{1000} \text{ m/min}$$

$$S = \frac{1000 \times V_c}{\pi \times D} \text{ r.p.m.}$$

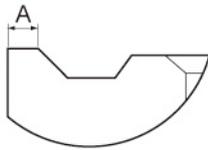
Vc = 切削速度 (Cutting speed) m/min

D = 被加工材料直徑 (Cut material outer dimension) mm

S = 主軸轉速 (Spindle speed) r.p.m

(2) 加工量進給與斷屑槽關係-每轉進給須大於斷屑槽 Land 寬(>A)

The relationship between feed and chipbreak-Feed per turn larger than that of the land of the chip breaker



Land A mm	Feed fn mm/rev
0.0635	0.08~0.13
0.0762	0.10~0.25
0.2547	0.27~0.40
0.1524	0.17~0.25
0.2667	0.28~0.40

(3) 切削量移除率 Metal removal (cm³/min)

$$\theta z = V_c \times f_n \times a_p$$

f_n = 每轉進給 (Feed per turning) mm/rev

a_p = 切深 (Depth of cut) mm

(4) 消耗動力 Power demand (KW)

$$P_{kw} = \frac{K_s \times A_e \times A_p \times F}{60 \times 1000 \times \eta}$$

K_s = 切削抵抗 (Specific cutting force) kg/m²

A_e = 切寬 (Width of cut) mm

A_p = 切深 (Depth of cut) mm

F = 工作台進給 (Table feed) mm/min

η = 機台效率 (Efficiency of machine=0.7~0.8)

品 項	Value of Ks
低碳鋼 Low carbon steel	190
中碳鋼 Carbon steel	210
高碳鋼 High carbon steel	240
低合金鋼 Low alloyed steel	190
高合金鋼 High alloyed steel	245
鑄鐵 Cast iron	93
球墨鑄鐵 Ductile iron	120
銅合金 Copper alloy	70

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

TC 搪孔用刀片

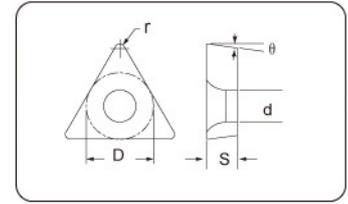
Inserts for Inner Hole Boring



應用
Applicable
精密加工
Finish machining

P 鋼	●	●	●	●	●	●
M 不鏽鋼	●	●	●	●	●	●
K 鑄鐵		●	●	●	●	●
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					

※ 詳見附表14 ※ See attached table 14



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	S	r	d	θ
	TCGT110204-FY	📄	📄	📄				6.35	2.38	0.4	2.8	7°
	TCMT110208-B	📄	📄	📄				6.35	2.38	0.8	2.8	7°

TP 搪孔用刀片

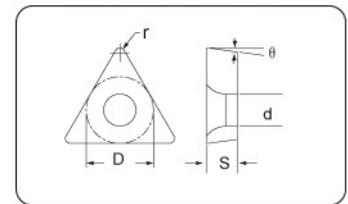
Inserts for Inner Hole Boring



應用
Applicable
精密加工
Finish machining

P 鋼	●	●	●	●	●	●
M 不鏽鋼	●	●	●	●	●	●
K 鑄鐵		●	●	●	●	●
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					

※ See attached table13



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	S	r	d	θ
	TPGT080202-FY	📄	📄	📄				4.76	2.38	0.2	2.3	11°
	TPGT080204-FY	📄	📄	📄				4.76	2.38	0.4	2.3	11°
	TPGT080208-FY	📄	📄	📄				4.76	2.38	0.8	2.3	11°
	TPGT090202-FY	📄	📄	📄				5.56	2.38	0.2	2.7	11°
	TPGT090204-FY	📄	📄	📄				5.56	2.38	0.4	2.7	11°
	TPGT090208-FY	📄	📄	📄				5.56	2.38	0.8	2.7	11°
	TPGT09T204-FY	📄	📄	📄				5.56	2.78	0.4	2.8	11°
	TPGT110302-FY	📄	📄	📄				6.35	3.18	0.2	3.4	11°
	TPGT110302-FY	📄	📄	📄				6.35	3.18	0.2	3.4	11°
	TPGT110304-FY	📄	📄	📄				6.35	3.18	0.4	3.4	11°
	TPGT110308-FY	📄	📄	📄				6.35	3.18	0.8	3.4	11°
	TPGT110304-MUT	📄	📄	📄				6.35	3.18	0.4	3.4	11°

■ 內徑加工面粗度 Surface Quality

(1) 刀刃R角與進刀量 Relationship between insert radius and feed to the surface quality

刀刃R角 Insert radius	面粗度 Ra			
	0.4	1.6	3.2	6.3
	進給 mm / 轉			
0.2R	0.05	0.08	0.13	
0.4R	0.07	0.11	0.17	0.22

(2) 刀柄材質防震效果 Surface quality affected by material of tooling shank

$$\frac{L}{D} = 4 \text{ 以下 鋼柄 Steel Bar}$$

L = 加工深度 Depth of cut

D = 加工孔徑 Diameter of cutting hole

$$\frac{L}{D} = 5\sim7 \text{ 全鎢鋼柄 Solid carbide Bar}$$

■ 加工條件 Machining Condition Guide

附表 14

加工材質 Machined Material	加工形態 Machining Condition	$\frac{L}{D} = 3 \text{ 以下}$		$\frac{L}{D} = 3\sim4$		$\frac{L}{D} = 4\sim5$		$\frac{L}{D} = 6\sim7$	
		vc m/min	fs mm/rev	vc m/min	fs mm/rev	vc m/min	fs mm/rev	vc m/min	fs mm/rev
碳鋼 Carbon steel	輕切 Finish	90~150	0.05~0.15	80~140	0.05~0.15	80~120	0.05~0.15	100~180	0.05~0.15
合金鋼 Alloyed steel	中切 Semi-finish	60~120	0.15~0.30	50~110	0.15~0.25	40~90	0.15~0.25	80~130	0.15~0.30
不鏽鋼 Stainless steel	輕切 Finish	100~180	0.05~0.15	100~180	0.05~0.15	80~160	0.05~0.15	100~180	0.05~0.15
	中切 Semi-finish	50~90	0.15~0.25	40~80	0.15~0.25	40~80	0.15~0.25	70~130	0.15~0.25
鋁合金 Aluminum alloy	輕切 Finish	200~400	0.05~0.15	200~400	0.05~0.15	200~300	0.05~0.15	200~400	0.05~0.15
	中切 Semi-finish	150~250	0.05~0.15	150~250	0.05~0.15	150~250	0.05~0.15	150~250	0.05~0.15
鑄鐵 Cast iron	輕切 Finish	80~140	0.05~0.15	80~130	0.05~0.15	80~120	0.05~0.15	80~150	0.05~0.15
	中切 Semi-finish	60~100	0.1~0.4	60~100	0.1~0.4	50~90	0.1~0.3	60~110	0.1~0.3

Materials
材料與材質

Coating
GS 塗層

Milling Insert
銑刀系列

Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

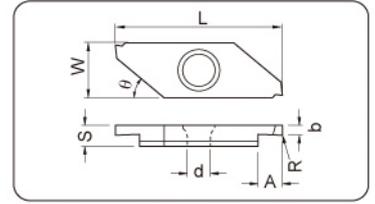
CNC 走心自動車床車刀片 Inserts for Auto-Lathe Turning



應用
Applicable
精密加工
Finish machining

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					

※ 詳見附表15 ※ See attached table 15



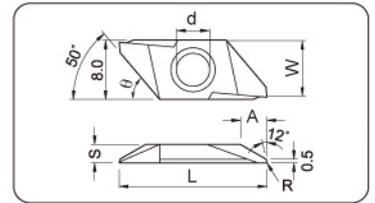
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)						
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	W	S	d	A	b	R
	MKGR25-PT100							25.0	8.0	3.18	4.8	3.7	2.7	0.10
	MKGR25-PT150	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 📄 以上規格皆為 接單生產 All are customized order </div>						25.0	8.0	3.18	4.8	3.7	3.7	0.10
	MKGR25-PT200							25.0	8.0	3.18	4.8	3.7	3.7	0.10

CNC 走心自動車床車刀片 Inserts for Auto-Lathe Turning



應用
Applicable
精密加工
Finish machining

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)							
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	W	S	d	A	b	R	
	MKGR20-PT050							20.0	8.0	2.50	4.5	1.3	1.3	0.15	
	MKGR20-PT075							20.0	8.0	2.50	4.5	1.8	1.8	0.05	
	MKGR20-PT100							20.0	8.0	2.50	4.5	2.5	2.5	0.05	
	MKGR20-PT150							20.0	8.0	2.50	4.5	3.5	3.5	0.05	
	MKGR20-PT200							20.0	8.0	2.50	4.5	5.0	5.0	0.05	
	MKGR20-FT100		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 📄 以上規格皆為 接單生產 All are customized order </div>						20.0	8.0	2.50	4.5	2.5	2.5	0.05
	MKGR20-FT150							20.0	8.0	2.50	4.5	3.5	3.5	0.05	
	MKGR20-FT200							20.0	8.0	2.50	4.5	5.0	5.0	0.05	
	MKGR20-BT2802							20.0	8.0	2.50	4.5	7.5	-	0.10	
	MKGR20-BT3502							20.0	8.0	2.50	4.5	7.5	-	0.10	
	MKGR20-TH602002							20.0	8.0	2.50	4.5	6.0	6.0	0.20	
	MKGR20-TH552002							20.0	8.0	2.50	4.5	6.0	6.0	0.20	

I CNC 走心自動車床車刀片-小型 **單孔** 螺絲固定刀片
 Inserts for Auto-Lathe Turning - Single Screw Lock Type

TG 右/左向牙刀片
 Left / Right handed threading

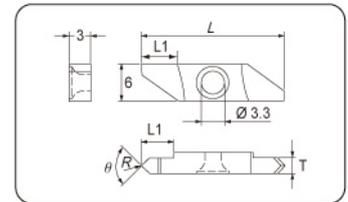
PG 右/左向切斷刀片
 Left / Right handed parting

CNC 走心自動車床車刀片
 Inserts for Auto-Lathe Turning

TG 應用
 Applicable
 精密加工
 Finish machining

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					

※ 詳見附表15 ※ See attached table 15



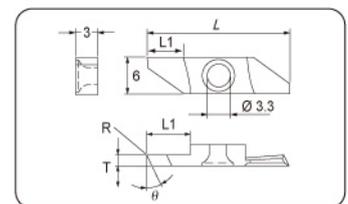
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	TG2863-5501-R							28.0	5.0	2.0	55°	0.1
	TG2863-6001-R							28.0	5.0	2.0	60°	0.1
	TG2863-5501-L							28.0	5.0	2.0	55°	0.1
	TG2863-6001-L							28.0	5.0	2.0	60°	0.1

以上規格皆為
 接單生產
 All are customized order

CNC 走心自動車床車刀片
 Inserts for Auto-Lathe Turning

PG 應用
 Applicable
 精密加工
 Finish machining

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	PG2863-100R							28.0	4.0	1.0	15°	0.1
	PG2863-150R							28.0	5.0	1.5	15°	0.1
	PG2863-200R							28.0	5.0	2.0	15°	0.1
	PG2863-100L							28.0	5.0	1.0	15°	0.1
	PG2863-150L							28.0	5.0	1.5	15°	0.1
	PG2863-200L							28.0	5.0	2.0	15°	0.1

以上規格皆為
 接單生產
 All are customized order

Materials
 材料與材質

Coating
 GS 塗層

Milling Insert
 銑刀系列

Turning Insert
 車刀系列

Drilling Insert
 鑽刀系列

Customized products
 特殊系列

Blank
 素材

I CNC 走心自動車床車刀片-小型單孔螺絲固定刀片 Inserts for Auto-Lathe Turning - Single Screw Lock Type

BT 右/左向後掃刀片
Left / Right back turning

FG 右/左向插掃刀片
Left / Right grooving turning

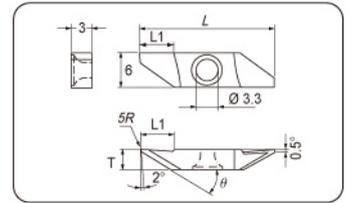
CNC 走心自動車床車刀片 Inserts for Auto-Lathe Turning

BT

應用
Applicable
精密加工
Finish machining

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					

※ 詳見附表15 ※ See attached table 15



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	BT2863-35°-R							28.0	3.0	3.0	35°	0.1
	BT2863-35°-L							28.0	3.0	3.0	35°	0.1
	BT2863-20°-R							28.0	3.0	3.0	20°	0.1
	BT2863-20°-L							28.0	3.0	3.0	20°	0.1

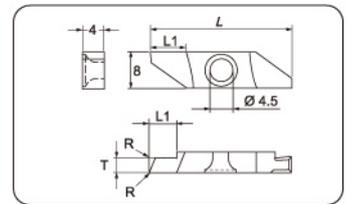
以上規格皆為
接單生產
All are customized order

CNC 走心自動車床車刀片 Inserts for Auto-Lathe Turning

FG

應用
Applicable
精密加工
Finish machining

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	FG2863-100R							28.0	1.7	1.0	-	0.1
	FG2863-150R							28.0	3.0	1.5	-	0.2
	FG2863-200R							28.0	4.0	2.0	-	0.2
	FG2863-100L							28.0	1.7	1.0	-	0.1
	FG2863-150L							28.0	3.0	1.5	-	0.2
	FG2863-200L							28.0	4.0	2.0	-	0.2

以上規格皆為
接單生產
All are customized order

2 CNC 走心自動車床車刀片-單孔螺絲固定刀片
Inserts for Auto-Lathe Turning - Single Screw Lock Type

TG 右向牙刀片
Right handed threading

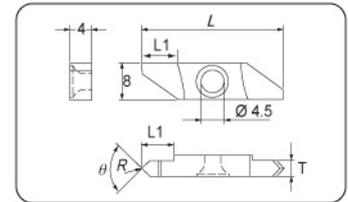
RG 右向圓槽刀片
Right radius grooving

CNC 走心自動車床車刀片
Inserts for Auto-Lathe Turning

TG 應用
Applicable
精密加工
Finish machining

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					

※ 詳見附表15 ※ See attached table 15



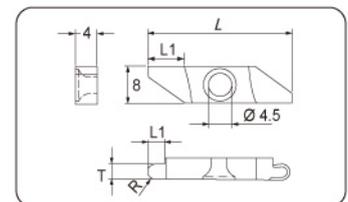
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	TG35.844.5501-R							35.0	6.0	2.0	55°	0.1
	TG35.844.6001-R							35.0	6.0	2.0	60°	0.1

以上規格皆為 按單生產
All are customized order

CNC 走心自動車床車刀片
Inserts for Auto-Lathe Turning

RG 應用
Applicable
精密加工
Finish machining

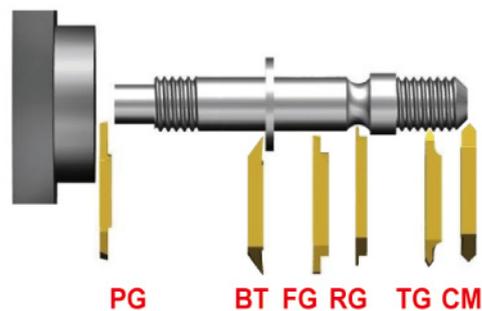
P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	RG35844-050R							35.0	2.2	1.0	-	0.5
	RG35844-100R							35.0	3.7	2.0	-	1.0
	RG35844-150R							35.0	4.2	3.0	-	1.5

以上規格皆為 按單生產
All are customized order

▶▶▶ 刀片加工示意圖 Inserts machining figure



Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

2 CNC 走心自動車床車刀片 - 單孔螺絲固定刀片 Inserts for Auto-Lathe Turning - Single Screw Lock Type

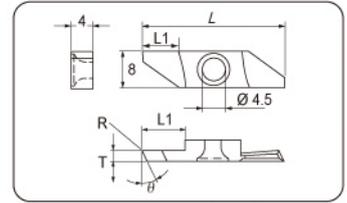
PG 右向切斷刀片
Right parting

BT 右向後掃刀片
Right back turning

CNC 走心自動車床車刀片 Inserts for Auto-Lathe Turning

PG 應用
Applicable
精加工
Finish machining

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



※ 詳見附表15 ※ See attached table 15

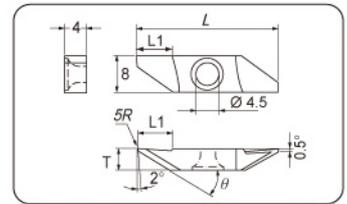
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	PG35844-100R							35.0	6.5	1.0	15°	0.05
	PG35844-150R							35.0	8.0	1.5	15°	0.10
	PG35844-200R							35.0	8.5	2.0	15°	0.10
	PG35844-250R							35.0	8.5	2.5	15°	0.10
	PG35844-300R							35.0	8.5	3.0	15°	0.10

以上規格皆為
接單生產
All are customized order

CNC 走心自動車床車刀片 Inserts for Auto-Lathe Turning

BT 應用
Applicable
精加工
Finish machining

P 鋼		●	●			
M 不鏽鋼		●	●			
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	BT35844-010-35°-R							35.0	5.0	4.0	35°	0.1
	BT35844-010-35°-R							35.0	5.0	4.0	35°	0.1
	BT35844-020-35°-R							35.0	5.0	4.0	35°	0.2
	BT35844-010-20°-R							35.0	3.5	4.0	20°	0.1
	BT35844-010-20°-R							35.0	6.0	4.0	20°	0.1
	BT35844-020-20°-R							35.0	6.0	4.0	20°	0.2

以上規格皆為
接單生產
All are customized order

2 CNC走心自動車床車刀片-單孔螺絲固定刀片
Inserts for Auto-Lathe Turning - Single Screw Lock Type

FG 右向插掃刀片
Right grooving turning

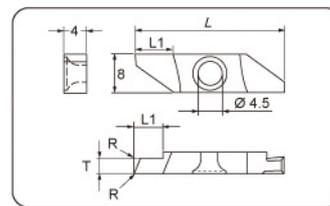
FT 端面切槽刀片
Face grooving

CNC走心自動車床車刀片
Inserts for Auto-Lathe Turning

FG 應用 Applicable
精加工 Finish machining

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					

※ 詳見附表15 ※ See attached table 15



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	FG35844-100R							35.0	2.5	1.0		0.1
	FG35844-150R							35.0	3.0	1.5		0.1
	FG35844-200R							35.0	4.0	2.0		0.1
	FG35844-250R							35.0	6.0	2.5		0.1
	FG35844-300R							35.0	8.0	3.0		0.1
	FG35844-350R							35.0	8.0	3.5		0.1

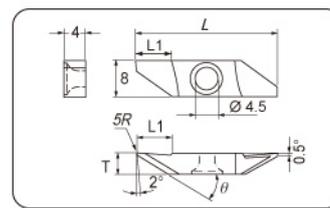
以上規格皆為
接單生產
All are customized order

CNC走心自動車床車刀片
Inserts for Auto-Lathe Turning

FT 應用 Applicable
精加工 Finish machining

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					

※ See attached table14



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	FT35844-050R							35.0	6.0	0.5	S=1.5	0.1
	FT35844-100R							35.0	6.0	1.0	S=1.5	0.1
	FT35844-150R							35.0	6.0	1.5	S=1.5	0.1

以上規格皆為接單生產
All are customized order

■ 技術資料 Technical Information ■ 加工條件 Machining Condition Guide

附表 15

加工材質 Machined Material	車削加工 Turning			切斷加工 Parting		
	切削速率 VC m/min	切深 AP /min	進給 fs mm /rev	切削速率 VC m/min	切深 AP /min	進給 fs mm /rev
快削鋼 Free cutting steel	100~200	0.05~4.0	0.01~0.25	75~150	0.05~3.0	0.01~0.15
低碳鋼 Low carbon steel	70~160	0.05~4.0	0.01~0.25	60~120	0.05~3.0	0.01~0.12
中碳鋼 Carbon steel	55~120	0.05~4.0	0.01~0.20	50~100	0.05~3.0	0.01~0.00
合金鋼 Alloyed steel	45~100	0.05~4.0	0.01~0.15	35~80	0.05~3.0	0.01~0.08
不鏽鋼 Stainless steel	50~120	0.05~4.0	0.01~0.15	50~100	0.05~3.0	0.01~0.08
鋁合金 Aluminum alloy	200~1000	0.05~4.0	0.01~0.20	150~400	0.5~3.0	0.01~0.10
銅合金 Copper alloy	90~500	0.05~4.0	0.01~0.30	90~300	0.5~3.0	0.01~0.20
鈦合金 Titanium alloy	25~70	0.05~4.0	0.01~0.08	25~50	0.5~3.0	0.01~0.06

Materials 材料與材質
Coating GS 塗層
Milling Insert 銑刀系列
Turning Insert 車刀系列
Drilling Insert 鑽刀系列
Customized products 特殊系列
Blank 素材

3 CNC 走心自動車床車刀片-小型雙孔螺絲固定刀片 Inserts for Auto-Lathe Turning-Double Screw Lock Type

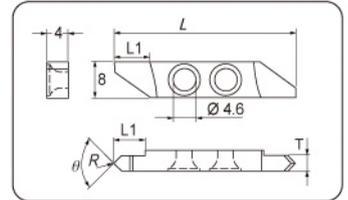
TG 右/左向牙刀片
Left / Right handed threading

RG 右/左向圓槽刀片
Left / Right radius grooving

CNC 走心自動車床車刀片 Inserts for Auto-Lathe Turning

TG 應用
Applicable
精加工
Finish machining

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					



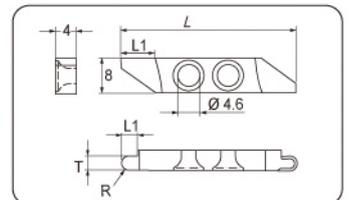
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	TG37.844.5501-R							37.5	6.0	3.0	55°	0.1
	TG37.844.6001-R							37.5	6.0	3.0	60°	0.1
	TG37.844.5501-L							37.5	6.0	3.0	55°	0.1
	TG37.844.6001-L							37.5	6.0	3.0	60°	0.1

以上規格皆為
接單生產
All are customized order

CNC 走心自動車床車刀片 Inserts for Auto-Lathe Turning

RG 應用
Applicable
精加工
Finish machining

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	RG37844-050R							37.5	2.2	1.0	-	0.5
	RG37844-100R							37.5	3.7	2.0	-	1.0
	RG37844-150R							37.5	4.2	3.0	-	1.5
	RG37844-050L							37.5	2.2	1.0	-	0.5
	RG37844-100L							37.5	3.7	2.0	-	1.0
	RG37844-150L							37.5	4.2	3.0	-	1.5

以上規格皆為
接單生產
All are customized order

3 CNC 走心自動車床車刀片-小型 **雙孔** 螺絲固定刀片
Inserts for Auto-Lathe Turning-Double Screw Lock Type

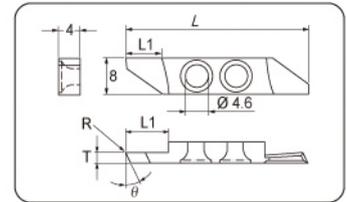
PG 右/左向切斷刀片
Left / Right handed parting

BT 右/左向後掃刀片
Left / Right back turning

CNC 走心自動車床車刀片
Inserts for Auto-Lathe Turning

PG 應用
Applicable
精加工
Finish machining

P 鋼	●	●				
M 不鏽鋼	●	●				
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



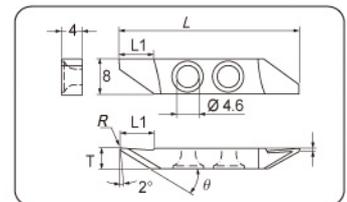
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	PG37844-100R							37.5	6.5	1.0	15°	0.1
	PG37844-150R							37.5	8.5	1.5	15°	0.1
	PG37844-200R							37.5	8.5	2.0	15°	0.1
	PG37844-250R							37.5	8.5	2.5	15°	0.1
	PG37844-300R							37.5	8.5	3.0	15°	0.1
	PG37844-100L							37.5	6.5	1.0	15°	0.1
	PG37844-150L							37.5	8.5	1.5	15°	0.1
	PG37844-200L							37.5	8.5	2.0	15°	0.1
	PG37844-250L							37.5	8.5	2.5	15°	0.1
	PG37844-300L							37.5	8.5	3.0	15°	0.1

以上規格皆為
接單生產
All are customized order

CNC 走心自動車床車刀片
Inserts for Auto-Lathe Turning

BT 應用
Applicable
精加工
Finish machining

P 鋼	●	●				
M 不鏽鋼	●	●				
K 鑄鐵						
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	BT37844-010-35°R							37.5	3.5	4.0	35°	0.1
	BT37844-010-20°R							37.5	3.5	4.0	20°	0.1
	BT37844-010-20°R							37.5	6.0	4.0	20°	0.1
	BT37844-020-20°R							37.5	6.0	4.0	20°	0.2
	BT37844-010-35°L							37.5	3.5	4.0	35°	0.1
	BT37844-010-20°L							37.5	3.5	4.0	20°	0.1
	BT37844-010-20°L							37.5	6.0	4.0	20°	0.1
	BT37844-020-20°L							37.5	6.0	4.0	20°	0.2

以上規格皆為
接單生產
All are customized order

Materials 材料與材質
Coating GS 塗層
Milling Insert 銑刀系列
Turning Insert 車刀系列
Drilling Insert 鑽刀系列
Customized products 特殊系列
Blank 素材



3 CNC 走心自動車床車刀片-小型 **雙孔** 螺絲固定刀片
Inserts for Auto-Lathe Turning-Double Screw Lock Type

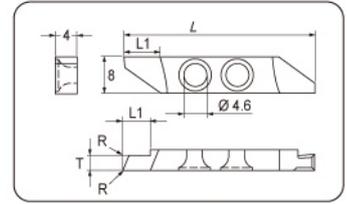
FG 右/左向插掃刀片
 Left / Right grooving turning

FT 端面切槽刀片
 Face grooving

CNC 走心自動車床車刀片
Inserts for Auto-Lathe Turning

FG 應用
 Applicable
 精加工
 Finish machining

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	FG37844-100R							37.5	2.5	1.0	-	0.1
	FG37844-150R							37.5	3.0	1.5	-	0.1
	FG37844-200R							37.5	4.0	2.0	-	0.1
	FG37844-250R							37.5	6.0	2.5	-	0.1
	FG37844-300R							37.5	8.0	3.0	-	0.1
	FG37844-350R							37.5	8.0	3.5	-	0.1
	FG37844-100L							37.5	2.5	1.0	-	0.1
	FG37844-150L							37.5	3.0	1.5	-	0.1
	FG37844-200L							37.5	4.0	2.0	-	0.1
	FG37844-250L							37.5	6.0	2.5	-	0.1
	FG37844-300L							37.5	8.0	3.0	-	0.1
	FG37844-350L							37.5	8.0	3.5	-	0.1

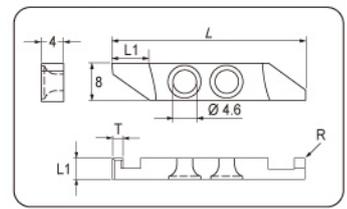


以上規格皆為
 接單生產
 All are customized order

CNC 走心自動車床車刀片
Inserts for Auto-Lathe Turning

FT 應用
 Applicable
 精加工
 Finish machining

P	鋼		●	●			
M	不鏽鋼		●	●			
K	鑄鐵						
N	非鐵金屬						
S	超級合金	●					
H	硬材質	●					



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	FT37844-050R							37.5	6.0	0.5	S=1.5	0.1
	FT37844-100R							37.5	6.0	1.0	S=1.5	0.1
	FT37844-150R							37.5	6.0	1.5	S=1.5	0.1



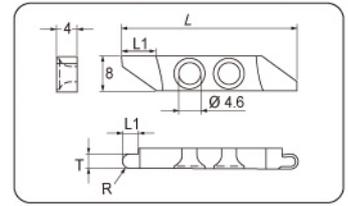
以上規格皆為
 接單生產
 All are customized order

CNC 走心自動車床車刀片
Inserts for Auto-Lathe Turning



應用
Applicable
精加工
Finish machining

P	鋼		●	●				
M	不鏽鋼		●	●				
K	鑄鐵							
N	非鐵金屬							
S	超級合金	●						
H	硬材質	●						



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	L	L1	T	θ	R
	MG37844-085R							37.5	2.0	0.9	-	0.1
	MG37844-100R							37.5	2.5	1.0	-	0.1
	MG37844-125R							37.5	3.0	1.3	-	0.1
	MG37844-150R							37.5	3.7	1.5	-	0.1
	MG37844-175R							37.5	4.0	1.8	-	0.1
	MG37844-200R							37.5	5.0	2.0	-	0.1
	MG37844-250R							37.5	6.0	2.5	-	0.1
	MG37844-300R							37.5	8.0	3.0	-	0.1

以上規格皆為
按單生產
All are customized order

■ 刀片加工示意圖 Inserts machining figure

PG BT FG RG TG CM

- Materials 材料與材質
- Coating GS 塗層
- Milling Insert 銑刀系列
- Turning Insert 車刀系列
- Drilling Insert 鑽刀系列
- Customized products 特殊系列
- Blank 素材

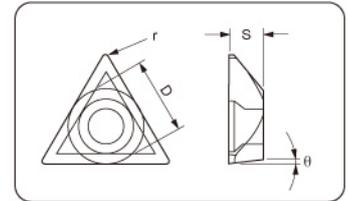
● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

TC 定位倒角刀片
 Inserts for Spot Drill Cutter


刀片槽型 Insert shape

P 鋼		●	●			●
M 不鏽鋼		●	●	●		
K 鑄鐵			●		●	●
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●		●			

※ 詳見附表16 ※ See attached table 16

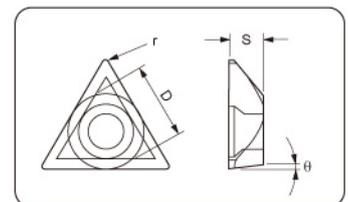


應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	S	d	r	θ
半精密加工 Semi-fine machining	TCEX16T308	📄		📄				9.52	3.97	4.40	0.80	7°

TP 定位倒角刀片
 Inserts for Spot Drill Cutter


刀片槽型 Insert shape

P 鋼		●	●			●
M 不鏽鋼		●	●	●		
K 鑄鐵			●		●	●
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●		●			

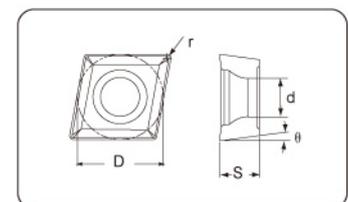


應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	S	d	r	θ
半精密加工 Semi-fine machining	TPEX13T302	📄		📄				7.94	3.97	3.70	0.20	11°
半精密加工 Semi-fine machining	TPEX13T304	📄		📄				7.94	3.97	3.70	0.40	11°

CC 鉸孔刀片
 Reaming Insert


刀片槽型 Insert shape

P 鋼		●	●			●
M 不鏽鋼		●	●	●		
K 鑄鐵			●		●	●
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●		●			



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	S	d	r	θ
半精密加工 Semi-fine machining	CCGT060204-MUT	📄		🏠				6.35	2.38	2.20	0.40	7°
半精密加工 Semi-fine machining	CCGT060204-TM	📄		🏠				6.35	2.38	2.20	0.40	7°

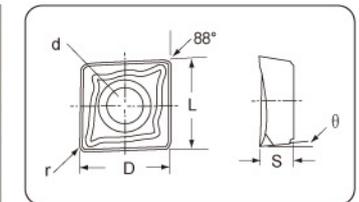
XC 鑽銑刀片
Inserts for Drilling and Milling



刀片槽型 Insert shape

P 鋼		●	●			●
M 不鏽鋼		●	●	●		
K 鑄鐵			●		●	●
N 非鐵金屬						
S 超級合金	●					
H 硬材質	●		●			

※ 詳見附表 16 ※ See attached table 16



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	S	d	r	L
半精密加工 Semi-fine machining	XCGT080304-EN	☰		🏠				8.40	3.18	3.40	0.40	8.40
半精密加工 Semi-fine machining	XCGT10T304-EN	☰		🏠				10.44	3.97	4.54	0.40	10.44
半精密加工 Semi-fine machining	XCGT130404-EN	☰		🏠				13.20	4.76	5.31	0.40	13.20

特點說明 Features:

1. 適用於多種形狀上的倒角，如圓孔、錐孔、溝槽、外邊。
2. 亦可做雕刻、定位的加工作業，
3. 適合多數材料的應用。

1. Suit for most kinds of shape in chamfer process, ex: central hole, taper hole, grooving, outer side.
2. Also could do the engraving, positioning mark work.
3. Suit for most kinds of material machining application.

Materials 材料與材質

Coating 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

Blank 素材

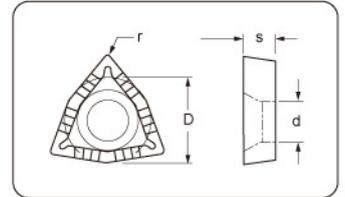
WC 快速鑽頭刀片
Inserts for High Speed Drill



刀片槽型 Insert shape

P 鋼		●	●			●
M 不鏽鋼		●	●	●		
K 鑄鐵			●			●
N 非鐵金屬					●	●
S 超級合金	●					
H 硬材質	●		●			

※ 詳見附表16 ※ See attached table 16



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0220	GA0224	GA0228	GA0229	GA0245	GA0247	D	d	s	r
粗加工 Rough machining	WCMT-0302							5.56	2.78	2.38	0.80
粗加工 Rough machining	WCMT-0402							6.36	2.97	2.38	0.80
粗加工 Rough machining	WCMT-0503							7.96	3.40	3.18	0.80
粗加工 Rough machining	WCMT-06T3							9.52	3.80	3.97	0.80
粗加工 Rough machining	WCMT-0804							12.70	4.40	4.76	1.20

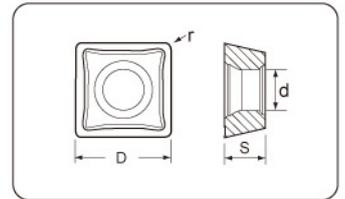
以上規格皆為
接單生產
All are customized order

SP 快速鑽頭刀片
Inserts for High Speed Drill



刀片槽型 Insert shape

P 鋼		●	●			●
M 不鏽鋼		●	●	●		
K 鑄鐵			●			●
N 非鐵金屬					●	●
S 超級合金	●					
H 硬材質	●		●			



應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	d	s	r
粗加工 Rough machining	SPMT-050204							5.00	2.25	2.38	0.40
粗加工 Rough machining	SPMT-060204							6.00	2.58	2.38	0.40
粗加工 Rough machining	SPMT-07T308							7.94	2.85	3.97	0.80
粗加工 Rough machining	SPMT-09T308							9.78	4.05	3.97	0.80

以上規格皆為
接單生產
All are customized order

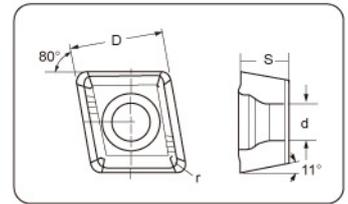
WP 快速鑽頭刀片
Inserts for High Speed Drill



刀片槽型 Insert shape

P 鋼	●	●	●	●	●
M 不鏽鋼	●	●	●	●	●
K 鑄鐵		●		●	●
N 非鐵金屬				●	●
S 超級合金	●				
H 硬材質	●	●			

※ 詳見附表16 ※ See attached table 16



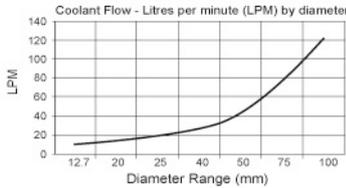
應用 Applicable	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	d	s	r
粗加工 Rough machining	WPXT042004-G						☞	4.20	1.80	2.00	0.40
粗加工 Rough machining	WPXT052504-G						☞	5.00	2.30	2.50	0.40
粗加工 Rough machining	WPXT063006-G						☞	6.00	2.40	3.00	0.60
粗加工 Rough machining	WPXT073506-G						☞	7.50	2.80	3.50	0.60
粗加工 Rough machining	WPXT094008-G						☞	9.60	4.00	4.00	0.80

技術資料 Technical Information

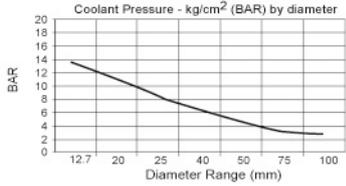
加工條件 Machining Condition Guide

附表 16

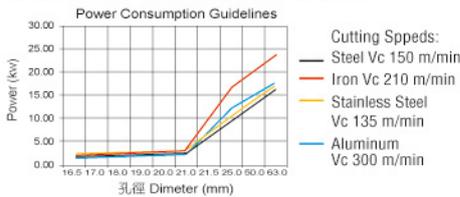
1. 冷卻液流量(Coolant Flow) 公升/分(l/min)



2. 冷卻液壓力(Coolant Pressure) kg/cm²



3. 加工施力(Power Consumption)kw



加工材質 Machined Material	刀片材質 鍍層 Insert material coating	切削速度 m/min sfs	進刀量 Feed mm/rev(轉)			
			Ø20以下	Ø20-Ø24	Ø20-Ø24	Ø45以上
低碳鋼 Low carbon steel	G12XF TIN	100~200	0.04~0.01	0.06~0.15	0.08~0.17	0.1~0.2
碳鋼 Carbon steel	G12XF TIN	100~200	0.04~0.01	0.06~0.15	0.08~0.17	0.1~0.2
合金鋼 Alloyed steel	G12XF TIN	100~200	0.04~0.01	0.06~0.12	0.08~0.17	0.1~0.2
不鏽鋼 Stainless steel	G12XF TIN	100~200	0.04~0.01	0.06~0.12	0.08~0.15	0.1~0.2
鋁合金 Aluminum alloy	G11C TIN	150~250	0.05~0.1	0.1~0.2	0.12~0.23	0.2~0.3
鑄鐵 Cast iron	G11C TIN	70~120	0.06~0.1	0.08~0.15	0.08~0.2	0.1~0.3

Materials 材料與材質

Coating GS 塗層

Milling Insert 銑刀系列

Turning Insert 車刀系列

Drilling Insert 鑽刀系列

Customized products 特殊系列

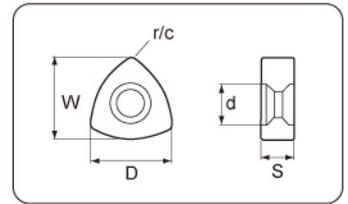
Blank 素材

● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

**QN 加工H型鋼/
軌道用特殊銑刀片**
Special Face and Side Milling Insert /
Inserts for Milling H-Beam, rails



P	鋼							●
M	不鏽鋼							●
K	鑄鐵							●
N	非鐵金屬							
S	超級合金							
H	硬材質							

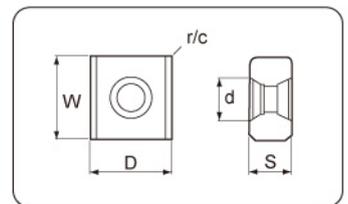


刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)				
		GA0620	GA0624	GA0628	GA0629	GA0645	GA0647	D	W	S	d	r/c
	QNAC150608-ZC	📄	📄	📄	📄	📄	📄	16.18	-	6.35	5.40	0.80

**SN 加工H型鋼/
軌道用特殊銑刀片**
Special Face and Side Milling Insert /
Inserts for Milling H-Beam, rails



P	鋼							●
M	不鏽鋼							●
K	鑄鐵							●
N	非鐵金屬							
S	超級合金							
H	硬材質							



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)					
		GA0620	GA0624	GA0628	GA0629	GA0645	GA0647	D	W	S	d	R-Face	r/c
	SNGQ1206-MO-1C							12.70	12.70	6.35	4.40	-	1.0C
	SNGQ1206-MO-10R							12.70	12.70	6.35	4.40	one side 10R	-
	SNGQ120604-MO							12.70	12.70	6.35	4.40	-	0.40
	SNGQ120620-MO							12.70	12.70	6.35	4.40	-	2.00
	SNHW1306-ZC							13.50	13.50	6.35	5.40	-	0.3C
	SNHW130710-10R							13.50	13.50	8.00	5.40	10.00	1.00
	SNGQ1507-UG							15.88	15.88	7.94	5.30	12	-
	SNGT1508-13R							15.88	15.88	7.93	5.30	1.70	-
	SNGT1508-19R							15.88	15.88	7.93	5.30	1.70	-

📄
以上規格皆為
接單生產
All are customized order

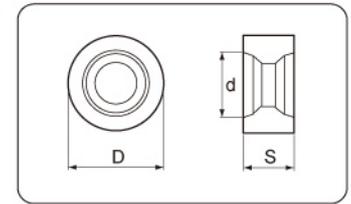
🟡: Adaptable processing 🏠: In stock 📄: customized order

**RN 加工H型鋼/
軌道用特殊銑刀片**
Special Face and Side Milling Insert /
Inserts for Milling H-Bean, rails



應用
Applicable
精密加工
Finish machining

P	鋼						●
M	不鏽鋼						●
K	鑄鐵						●
N	非鐵金屬						
S	超級合金						
H	硬材質						



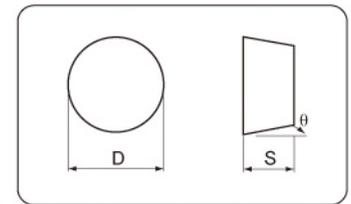
刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0620	GA0624	GA0628	GA0629	GA0645	GA0647	D	W	s	d
	RNHC1206	📄	📄	📄	📄	📄	📄	12.00	-	6.35	5.40

**RP 加工H型鋼/
軌道用特殊銑刀片**
Special Face and Side Milling Insert /
Inserts for Milling H-Bean, rails



應用
Applicable
精密加工
Finish machining

P	鋼						●
M	不鏽鋼						●
K	鑄鐵						●
N	非鐵金屬						
S	超級合金						
H	硬材質						



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0620	GA0624	GA0628	GA0629	GA0645	GA0647	D	W	s	θ
	RPKN2004-MO	📄	📄	📄	📄	📄	📄	20.00	-	4.76	11°

📄 以上加工H型鋼、軌道用銑刀片 Inserts for milling H-Bean and rails

Materials
材料與材質

Coating
GS 塗層

Milling Insert
銑刀系列

Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材



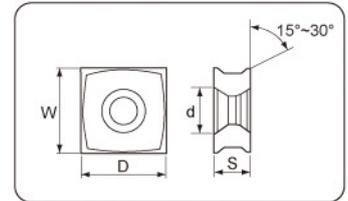
● : 適用加工 🏠 : 常備庫存 📄 : 接單生產

TSSN、TSCN、TSLN
特殊銑刀片
 Special Face and Side Milling Insert
 TISSN, SICN, TSLN



應用
Applicable
 精密加工
Finish machining

P 鋼							●
M 不鏽鋼							●
K 鑄鐵							●
N 非鐵金屬							
S 超級合金							
H 硬材質							



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	W	s	d
	SNHU1205-ZC							12.70	12.70	5.50	5.00
	SNHU120610							12.70	12.70	6.50	4.60
	SNHU1606-ZC							16.00	16.00	6.50	5.30

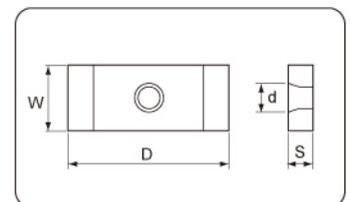
📄
 以上規格皆為
接單生產
 All are customized order

TSSN、TSCN、TSLN
特殊銑刀片
 Special Face and Side Milling Insert
 TISSN, SICN, TSLN



應用
Applicable
 精密加工
Finish machining

P 鋼							●
M 不鏽鋼							●
K 鑄鐵							●
N 非鐵金屬							
S 超級合金							
H 硬材質							



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	W	s	d
	LWHX2807R8							28.00	12.70	7.50	4.60
	LWHX3006R2							30.00	12.70	6.50	4.60

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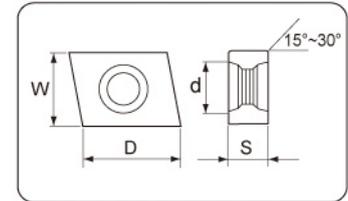
🟡: Adaptable processing 🟢: In stock 📄: customized order

TSSN、TSCN、TSLN
特殊銑刀片
Special Face and Side Milling Insert
TISSN, SICN, TSLN



應用
Applicable
精密加工
Finish machining

P	鋼						●
M	不鏽鋼						●
K	鑄鐵						●
N	非鐵金屬						
S	超級合金						
H	硬材質						



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	W	s	d
	LNHU1606-ZC							16.00	12.00	6.40	5.80
	LNHU1205-ZC							12.70	10.00	5.40	4.80

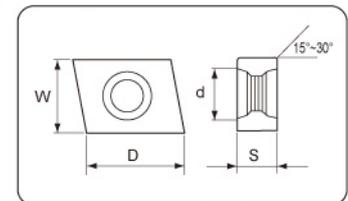
📄
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All are customized order

TSSN、TSCN、TSLN
特殊銑刀片
Special Face and Side Milling Insert
TISSN, SICN, TSLN



應用
Applicable
精密加工
Finish machining

P	鋼						●
M	不鏽鋼						●
K	鑄鐵						●
N	非鐵金屬						
S	超級合金						
H	硬材質						



刀片槽型 Insert Shape	刀片規格 Insert ISO Code	塗層 Coating						尺寸 Dimension (mm)			
		GA0120	GA0124	GA0128	GA0129	GA0145	GA0147	D	W	s	d
	CNHU1205-ZC							10.50	10.00	5.40	4.80
	CNHU1508-ZC							16.00	15.00	8.00	5.50
	CNHU1206-ZC							12.70	12.70	6.35	4.40

📄
以上規格皆為
接單生產
All are customized order

2 TSSN, TSCN, TSLN

- TSSN-ZC Type Precision Face Milling Inserts
- TSCN-ZC Type Precision Side Milling and Face Milling Inserts
- TSLN-ZC Type Precision Side Milling and Face Milling Inserts

Materials
材料與材質

Coating
G S 塗層

Milling Insert
銑刀系列

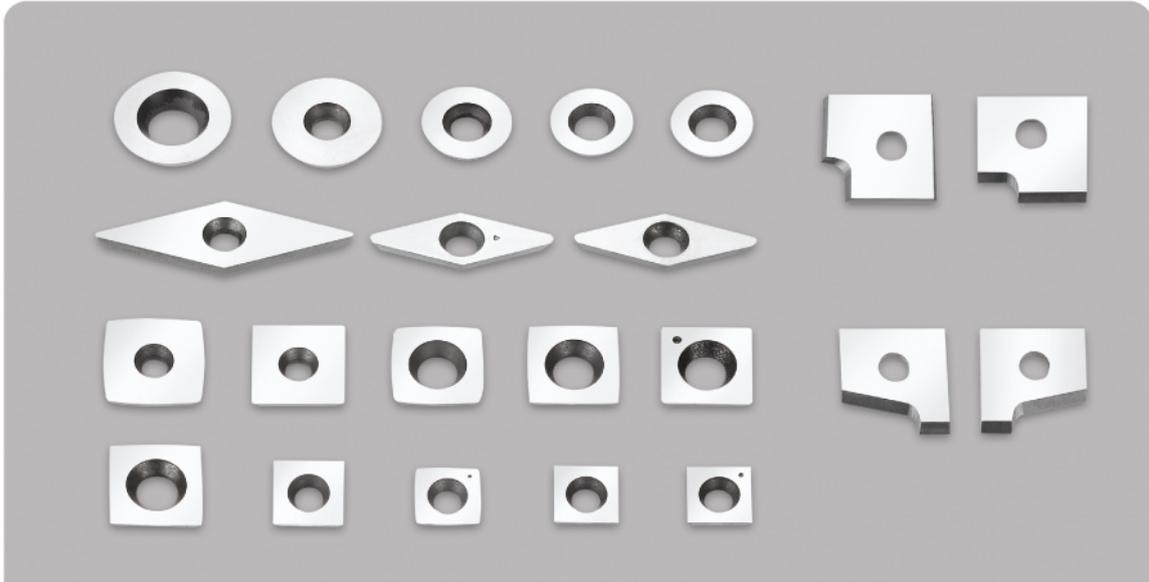
Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

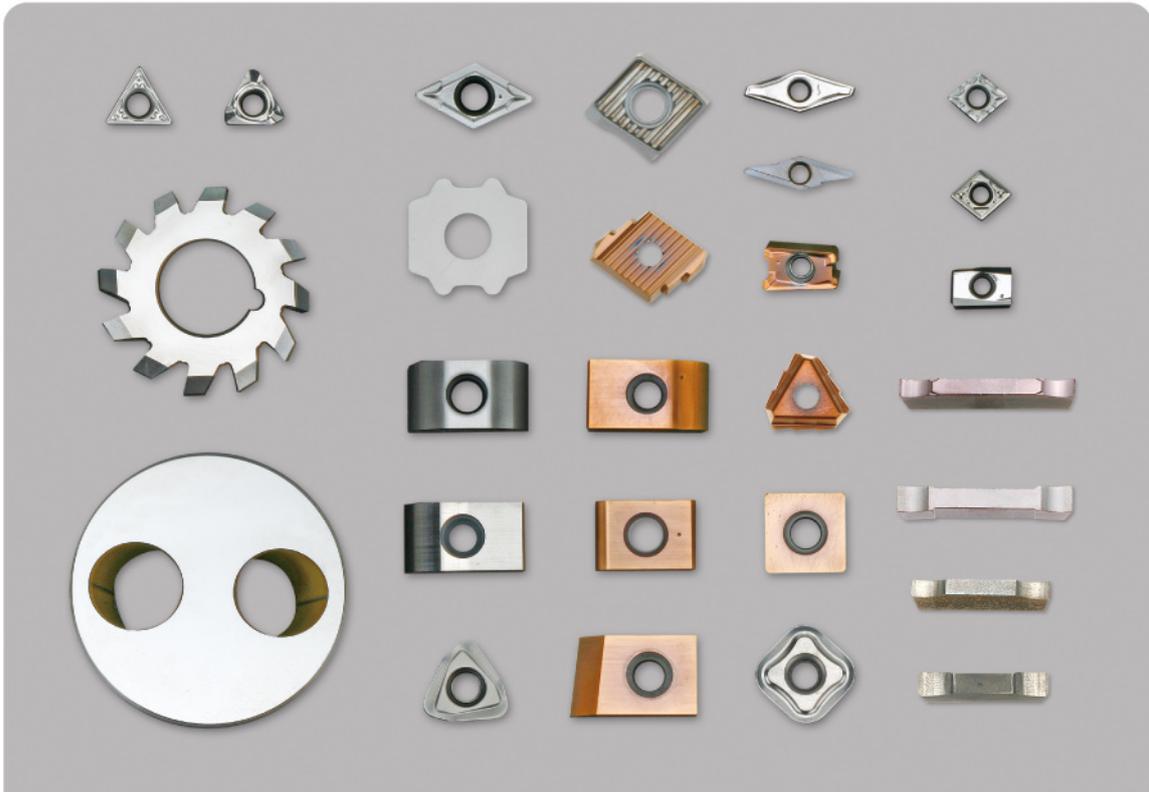
Blank
素材

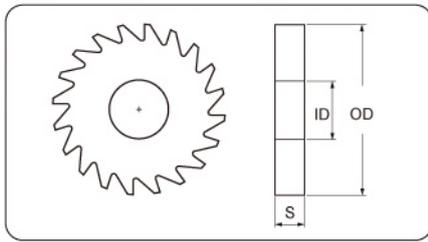
- 木工平刀 Planner Cutter Inserts for Wood Working
- 木工車刀片 Turning Inserts for Wood Working
- 異形木工刀片 Shaper cutter Inserts for Wood Working



捨棄式碳化鎢木工刀片 *Indexable T.C.T. Inserts for Wood Working*

訂製規格刀片 *Customized products*





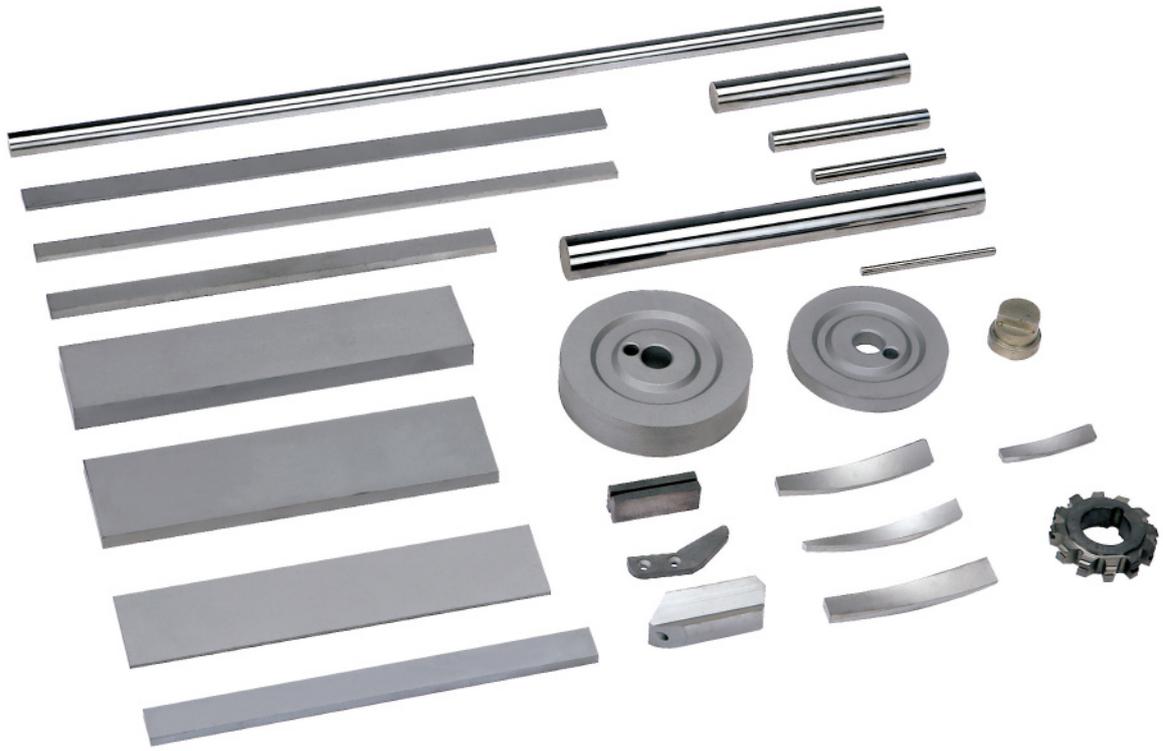
Materials 材料與材質
Coating GS 塗層
Milling Insert 銑刀系列
Turning Insert 車刀系列
Drilling Insert 鑽刀系列
Customized products 特殊系列
Blank 素材

刀片槽型 Blade shape	尺寸 Dimension			
	OD	ID	S	T
TCT Ø125 x Ø1" x S x T	125	25.4	1.0~3.0	72T 56T
TCT Ø100 x Ø1" x S x T	100	25.4	0.8~4.0	72T 56T
TCT Ø90 x Ø1" x S x T	90	25.4	0.8~4.0	72T 56T
TCT Ø85 x Ø1" x S x T	85	25.4	0.8~4.0	72T 56T
TCT Ø80 x Ø1" x S x T	80	25.4	0.6~4.0	56T
TCT Ø75 x Ø1" x S x T	75	25.4	0.5~4.0	56T
TCT Ø70 x Ø1" x S x T	70	25.4	0.5~4.0	56T 40T
TCT Ø65 x Ø1" x S x T	65	25.4	0.5~4.0	56T 40T
TCT Ø60 x Ø1" x S x T	60	25.4	0.5~4.0	56T 40T
TCT Ø55 x Ø1" x S x T	55	25.4	0.5~4.0	40T
TCT Ø50 x Ø1" x S x T	50	25.4	0.5~4.0	40T
TCT Ø45 x Ø1" x S x T	45	25.4	0.5~4.0	40T
TCT Ø40 x Ø10 x S x T	40	10.0	0.5~4.0	40T
TCT Ø40 x Ø8 x S x T	40	8.0	0.5~4.0	40T
TCT Ø32 x Ø12 x S x T	32	12.0	0.5~4.0	30T
TCT Ø30 x Ø10 x S x T	30	10.0	0.5~4.0	30T
TCT Ø25 x Ø10 x S x T	25	10.0	0.5~4.0	30T

■ 技術資料 Technical Information

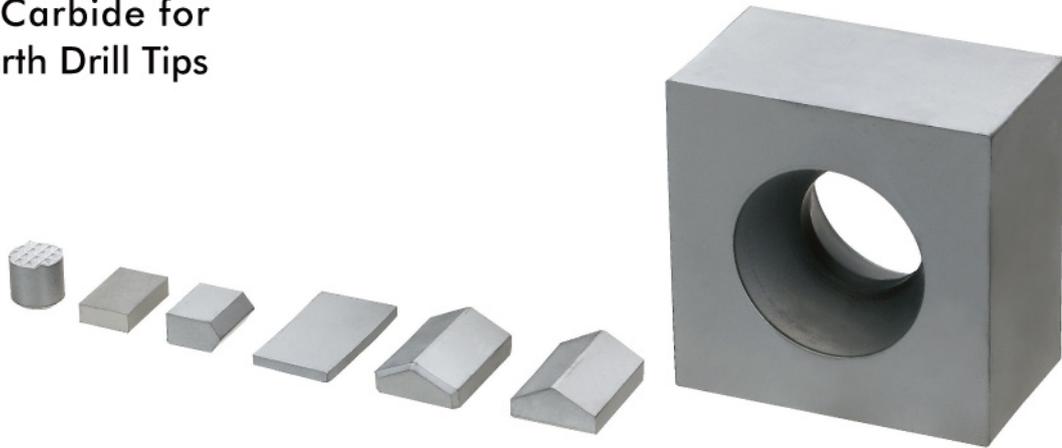
齒深(mm) = 外徑 ÷ 齒數 x 0.045
Depth of tooth(mm) = OD ÷ Numbers of tooth x 0.045

Tungsten Carbide for Tools & Cutters,
Such as Turning Tools,
Milling Cutters,
Reamers etc.



材質編號/ISO號 Material/ ISO No.	密度 Density g/ml	硬度 Hardness HRA	抗折力 AVE T.R.S kg/mm ²	適合加工材料 Applications	備註 Remarks
G20H / K20~K30	14.5	91.4	289	碳鋼、合金鋼、不鏽鋼、鑄鐵、銅、鋁 Carbon steel, Alloyed steel, Stainless steel, Cast iron, Copper, Aluminum.	超微粒 Sub-micron
G10CF / K10	14.4	92	290	熱處理鋼材、碳鋼、合金鋼、不鏽鋼 Hardened steel, Carbon steel, Alloyed steel, Stainless steel.	車刀、銑刀 Turning tool, Milling cutter.
G20P / P20~P30	12.48	91.1	208	碳鋼、合金鋼、不鏽鋼 Carbon steel, Alloyed steel, Stainless steel.	車刀、銑刀 Turning tool, Milling cutter.
G15M / M15~M25	12.4	91.4	190	碳鋼、合金鋼、不鏽鋼 Carbon steel, Alloyed steel, Stainless steel.	車刀、銑刀、鉸刀 Turning tool, Milling cutter, Reamers.
G20KS / K30	14.8	89.5	200	木工刀、耐磨件 Wooden cutter, Abrasive part.	木工刀 Wooden cutter.
G10KS / K20	14.85	90.5	190	瓷磚、耐磨件 Tile, Abrasive part.	瓷磚刀 Tile cutter.
G10KTA / K10	14.85	92.5	180	鑄鐵、碳鋼、銅、鋁 Cast iron, Carbon steel, Copper, Aluminum.	車刀、銑刀 Turning tool, Milling cutter.
G12XF / K10~K20	14.1	92.7	320	熱處理鋼材、合金鋼、鈦合金 Hardened steel, Alloyed steel, Titanium alloy.	端銑刀 End milling cutter.
G11C / K30~K40	14.2	89.5	290	碳鋼、合金鋼、鑄鐵 Carbon steel, Alloyed steel, Cast iron.	車刀、鑽頭 Turning cutter, Drilling tool.

Tungsten Carbide for Mining-earth Drill Tips



材質編號/ISO號 Material/ ISO No.	密度 Density g/ml	硬度 Hardness HRA	抗折力 AVE T.R.S kg/mm ²	適合加工材料 Applications	備註 Remarks
G11C	14.5	88.6	250	地質鑽頭 Earth Drill Tips	
G13C	14.0	88.0	289	地質鑽頭 Earth Drill Tips	-
G16C	13.6	86.0	295	地質鑽頭 Earth Drill Tips	

- 耐腐蝕、耐酸用碳化鎢－環狀鎢鋼
- 鋸輪用碳化鎢－精軋鋸輪
- Corrosion Resistant Tungsten Carbide for Sealing
- Tungsten Carbide for Finish Rodmill Roller



材質編號/ISO號 Material/ ISO No.	密度 Density g/ml	硬度 Hardness HRA	抗折力 AVE T.R.S kg/mm ²	適合加工材料 Applications	備註 Remarks
GSN2	14.5	90.0	210	化學幫浦、凡爾墊圈、噴嘴 Pump & Valve, Nozzle liners	鎳基碳化鎢 Ni-base carbide

Materials
材料與材質

Coating
GS 塗層

Milling Insert
銑刀系列

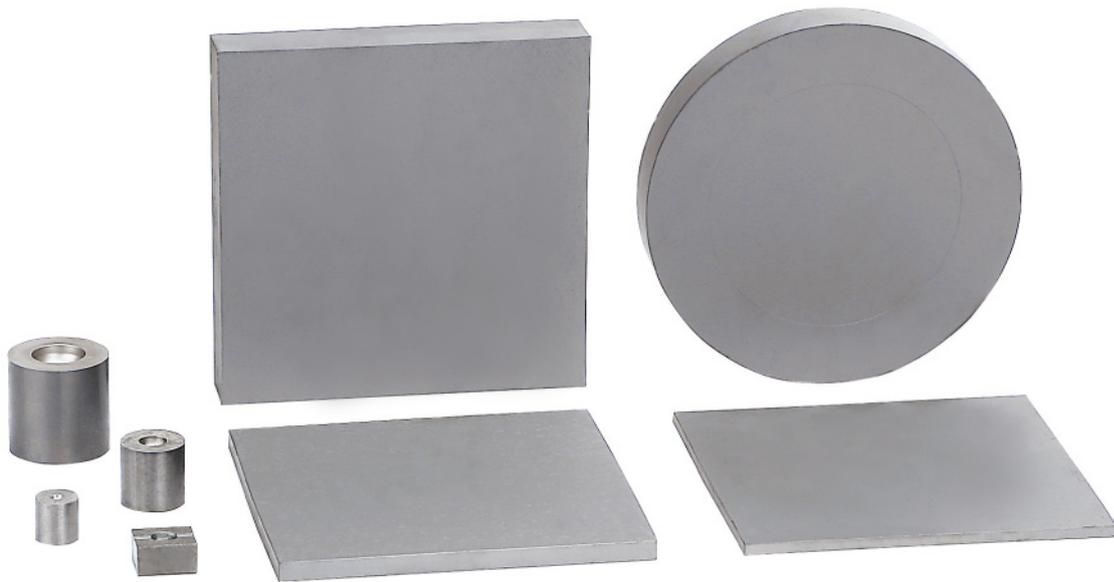
Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材

- Tungsten Carbide for Header Nibs, Drawing Core Nibs, Lead-Frame Punch & Die



材質編號/ISO號 Material/ ISO No.	密度 Density g/ml	硬度 Hardness HRA	抗折力 AVE T.R.S kg/mm ²	適合加工材料 Applications	備註 Remarks
G10K	14.9	92.4	175	抽線眼模、噴砂嘴 Drawing die nibs, Sandblasting nozzle	-
G13C	14.0	88.0	289	打頭模、衝模 Head nibs, Punch & die	-
G16C	13.9	86.0	295	打頭模、衝模 Head nibs, Punch & die	-
G20C	13.4	85.0	253	打頭模、衝模 Head nibs, Punch & die	-
G25C	13.1	84.0	264	打頭模、衝模 Head nibs, Punch & die	-
G11C	14.2	89.5	290	抽線眼模 Drawing die nibs	-
G12XF	14.1	92.7	310	電子腳衝模、打頭模 Lead-frame punch & die, Head nibs	超細微粒 Ultra fine

- Tungsten Carbide for Tools & Cutters.
Such as Powder Metallurgy Impacting Mold, Wire Drawing Die, Press Mold, Hot Forging Mold, Cold Forging Mold, etc.



材質編號/ISO號 Material/ ISO No.	密度 Density g/ml	硬度 Hardness HRA	抗折力 AVE T.R.S kg/mm ²	適合加工材料 Applications	備註 Remarks
G13C / C13	14.0	88.0	289	壓造模具、熱鍛模具、礦山工具 Press mold, Hot forging mold, Mining tool.	粉末冶金整形模 Powder metallurgy sizing mold
G20C / C14	13.4	86.0	253	熱鍛模具、冷鍛模具 Hot forging mold, Cold forging mold.	-
G25C / C17	13.1	83.0	264	熱鍛模具、冷鍛模具 Hot forging mold, Cold forging mold.	-

Materials
材料與材質

Coating
塗層

Milling Insert
銑刀系列

Turning Insert
車刀系列

Drilling Insert
鑽刀系列

Customized products
特殊系列

Blank
素材



Line QR Code



www.gs-carbide.com



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GUASS SPECIAL METAL PRODUCTS CORP.

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