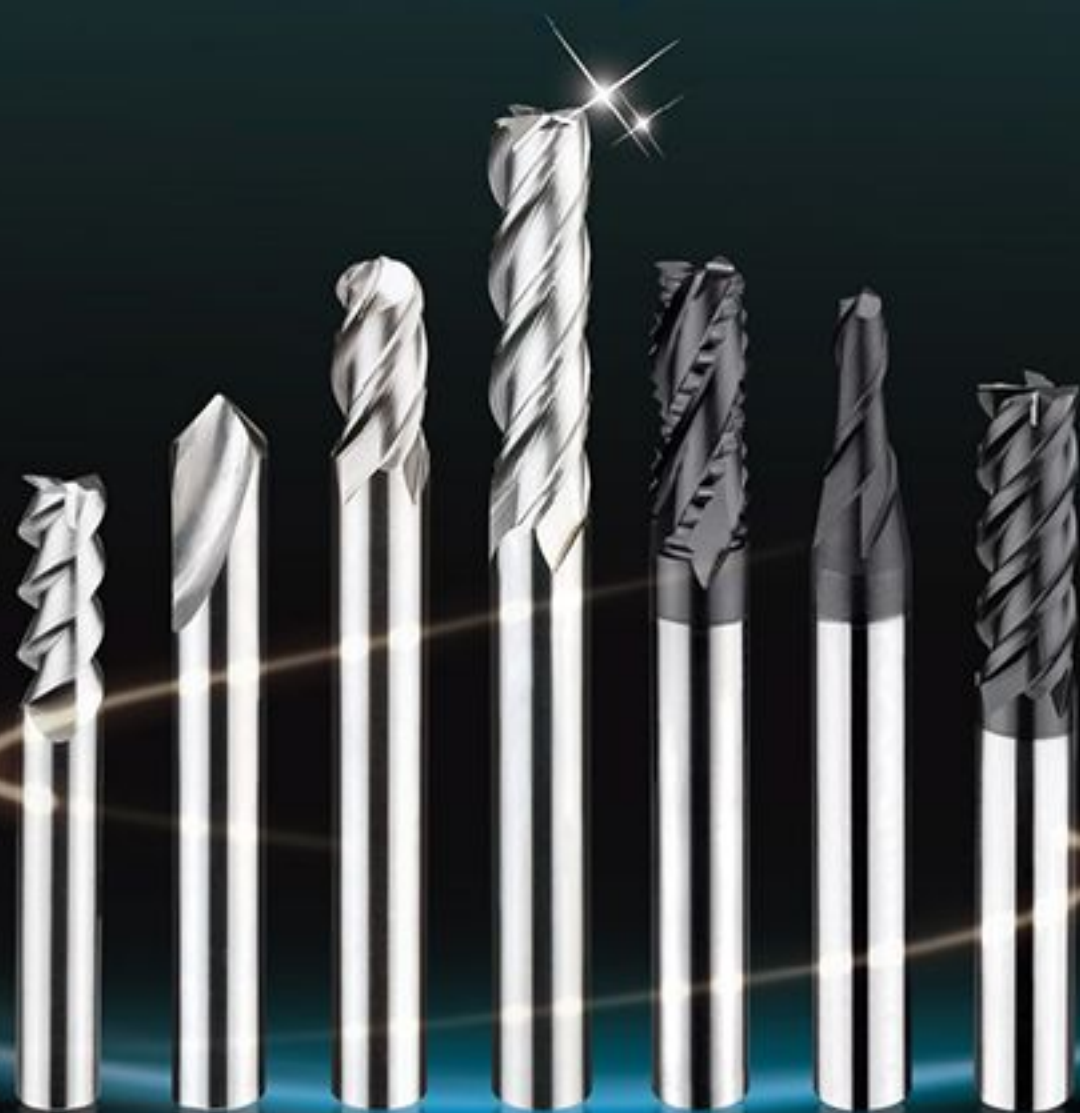




MSC

超微粒碳化鎢立銑刀系列 CARBIDE END MILLS BOUNDLESS SERIES

<http://www.msc-hsc.com.tw>





● Guide Lines to Icons

鎢鋼材質 Carbide



Super Micro Grain.
極超微粒子



Micro Grain.
超微粒子

鍍層 Coating



Generally used on all kind of machining
with benefits of long tool life.
一般切削加工用・壽命長・

刃數 Flute

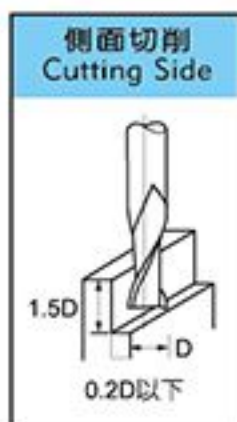
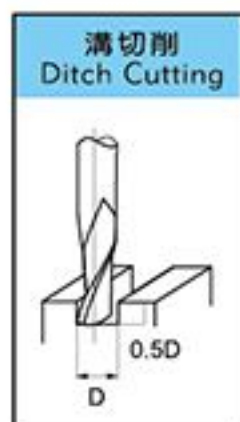


螺旋角 Helix Angle



● OK 被覆 Featheriness

被削材 Wood was cut 外徑 Outside diameter (mm)	普通鋼，合金鋼 Ordinary steel. Alloy Steel						不鏽鋼 Stainless Steel (SUS302. 304)		鑄 鐵 Cast Iron (FCD60)		硬質鋁合金 Hard Alloy (AC8A. AC9A)	
	(HRC30未満 HRC30 Under)		(HRC30~45)		(HRC45~55)							
	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)
1	24000	170	21000	95	10600	40	19000	140	29000	230	19000	230
2	12000	180	10600	100	5300	40	9500	150	14500	240	9500	240
4	6000	210	5300	120	2650	50	4800	175	7200	280	4800	280
6	4000	235	3500	135	1800	55	3200	190	4800	320	3200	320
8	3000	260	2650	150	1300	60	2400	220	3600	350	2400	350
10	2400	280	2100	160	1050	70	1900	230	2900	380	1900	380
16	1500	315	1300	180	660	75	1200	260	1800	420	1200	420
20	1200	305	1050	175	530	70	950	250	1400	410	950	410



- 註1) 4刃刀請以上表所列 1.4~1.6倍之進給使用。
 註2) 進刀深度超越左述時，請將進給降低20%~30%。
 註3) OK被覆品可提升上列迴轉數與進給50%。
 註4) 請使用鋼性強、精度高之機械與夾具。
 註5) 請選用適合被削材之切削油。

- 1) 4 bladed knife to the above listed in Table 1.4 to 1.6 times the use of feed.
 2) Feed in depth beyond the left when you feed reduced by 20% to 30%.
 3) OK lining materials can enhance the number of the above rotary feed 50%.
 4) Please use the steel strong, with high precision mechanical fixture.
 5) Please be selected for cutting wood cutting oil.

● Guide Lines to Icons

被切削材硬度 Work Material Hardness

HRC
▶ 30

HRC
▶ 45

HRC
▶ 60

HRC
▶ 65

Work material hardness in up to
HRC30°, HRC45°, HRC60°, HRC65°.
被切削材質硬度在 HRC30°, HRC45°, HRC60°, HRC65°。

夾角 Angle

90°

圓隅角 Corner R

角度 Angle

偏心圓弧離隙角 Angle of Eccentric Radius Relief.
斜線切面離隙角 Angle of Slant Tangent Relief.
大斜線切面離隙角 Angle of Big Slant Tangent Relief.

● OK 被覆 Featheriness

被削材 Wood was cut 外徑 Outside diameter (mm)	普通鋼，合金鋼 Ordinary steel, Alloy Steel						不鏽鋼 Stainless Steel (SUS302, 304)		鑄鐵 Cast Iron (FCD60)		硬質鋁合金 Hard Alloy (AC8A, AC9A)	
	(HRC30未滿 HRC30 Under)		(HRC30~45)		(HRC45~55)							
	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)	迴轉數 Rotary Few (rpm)	進給 Feed-in (mm/min)
1	24000	170	21000	95	10600	40	19000	140	29000	230	19000	230
2	12000	180	10600	100	5300	40	9500	150	14500	240	9500	240
4	6000	210	5300	120	2650	50	4800	175	7200	280	4800	280
6	4000	235	3500	135	1800	55	3200	190	4800	320	3200	320
8	3000	260	2650	150	1300	60	2400	220	3600	350	2400	350
10	2400	280	2100	160	1050	70	1900	230	2900	380	1900	380
16	1500	315	1300	180	660	75	1200	260	1800	420	1200	420
20	1200	305	1050	175	530	70	950	250	1400	410	950	410

	粗切削 Rough cut	加工 Dressing
進刀 深度 Feed dep (t)	<0.3D	0.1 ~ 0.3mm
進給 Feed in (p)	<0.7D	<0.1D



註1) 4刃刀請以上表所列 1.4~1.6倍之進給使用。

註2) 進刀深度超越左邊時，請將進給降低20%~30%。

註3) OK被覆品可提升上列迴轉數與進給50%。

註4) 請使用鋼性強、精度高之機械與夾具。

註5) 請選用適合被削材之切削油。

1) 4 bladed knife to the above listed in Table 1.4 to 1.6 times the use of feed.

2) Feed in depth beyond the left when you feed reduced by 20% to 30%.

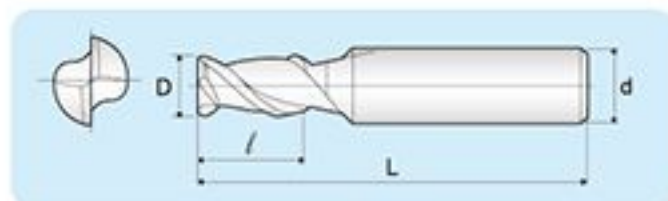
3) OK lining materials can enhance the number of the above rotary feed 50%.

4) Please use the steel strong, with high precision mechanical fixture.

5) Please be selected for cutting wood cutting oil.



● 超微粒立銑刀 Micro Grain End Mills



2刃 2 Flutes



產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

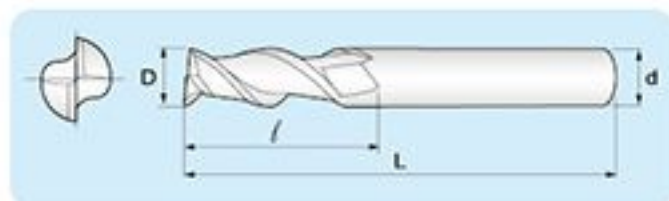
Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia	牌價 Price
GCA0101042	1.0	2.5	50	4	370
GCA0151042	1.5	4.0	50	4	370
GCA0201042	2.0	5.0	50	4	370
GCA0251042	2.5	6.5	50	4	370
GCA0301042	3.0	7.5	50	4	370
GCA0351042	3.5	9.0	50	4	370
GCA0401042	4.0	10.0	50	4	370
GCA0451062	4.5	11.5	50	6	420
GCA0501062	5.0	12.5	50	6	420
GCA0551062	5.5	14.0	50	6	420
GCA0601062	6.0	15.0	50	6	420
GCA0652082	6.5	16.5	60	8	840
GCA0702082	7.0	17.5	60	8	840
GCA0752082	7.5	19.0	60	8	840
GCA0802082	8.0	20.0	60	8	840
GCA0853102	8.5	21.5	75	10	1300
GCA0903102	9.0	22.5	75	10	1300
GCA0953102	9.5	24.0	75	10	1300
GCA1003102	10.0	25.0	75	10	1300
GCA1053122	10.5	26.5	75	12	1750
GCA1103122	11.0	27.5	75	12	1750
GCA1153122	11.5	29.0	75	12	1750
GCA1203122	12.0	30.0	75	12	1750
GCA1304162	13.0	32.5	100	16	4080
GCA1404162	14.0	35.0	100	16	4080
GCA1504162	15.0	37.5	100	16	4450
GCA1604162	16.0	40.0	100	16	4450
GCA1804202	18.0	45.0	100	20	6200
GCA2004202	20.0	50.0	100	20	6200

Unit : mm



2刃 2 Flutes

● 超微粒立銑刀 Micro Grain End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
GC0101042	1.0	2.5	50	4	335
GC0151042	1.5	4.0	50	4	335
GC0201042	2.0	5.0	50	4	335
GC0251042	2.5	6.5	50	4	335
GC0301042	3.0	7.5	50	4	335
GC0351042	3.5	9.0	50	4	335
GC0401042	4.0	10.0	50	4	335
GC0451062	4.5	11.5	50	6	380
GC0501062	5.0	12.5	50	6	380
GC0551062	5.5	14.0	50	6	380
GC0601062	6.0	15.0	50	6	380
GC0652082	6.5	16.5	60	8	760
GC0702082	7.0	17.5	60	8	760
GC0752082	7.5	19.0	60	8	760
GC0802082	8.0	20.0	60	8	760
GC0853102	8.5	21.5	75	10	1170
GC0903102	9.0	22.5	75	10	1170
GC0953102	9.5	24.0	75	10	1170
GC1003102	10.0	25.0	75	10	1170
GC1053122	10.5	26.5	75	12	1575
GC1103122	11.0	27.5	75	12	1575
GC1153122	11.5	29.0	75	12	1575
GC1203122	12.0	30.0	75	12	1575
GC1304162	13.0	32.5	100	16	3675
GC1404162	14.0	35.0	100	16	3675
GC1504162	15.0	37.5	100	16	4005
GC1604162	16.0	40.0	100	16	4005
GC1804202	18.0	45.0	100	20	5580
GC2004202	20.0	50.0	100	20	5580

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

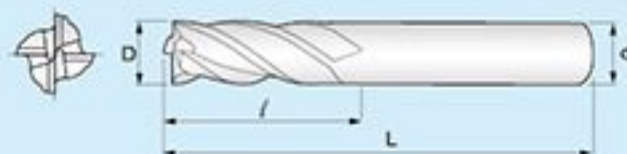
Generally used on wide range of every kind machining. With enefits of fracture resistance and strong edge.

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★	鋼、碳鋼	Steel, Carbon steel S45C
★	鋼、碳鋼	Hardened S45C 硬化處理
	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不銹鋼	Stainless steel SUS400
	不銹鋼	Stainless steel SUS400
	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 超合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可

※本牌價依市場行情依折扣優惠，歡迎查詢價格
The discount will be offered based on current prices. Welcome to check the prices.

●超微粒立銑刀 Micro Grain End Mills



4刃 4 Flutes



產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

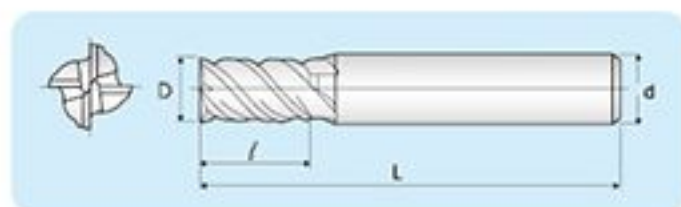
Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS400
★	不銹鋼	Stainless steel SUS400
★	不銹鋼	Stainless steel SUS304, SUS316
★★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
GCA0101044	1.0	2.5	50	4	370
GCA0151044	1.5	4.0	50	4	370
GCA0201044	2.0	5.0	50	4	370
GCA0251044	2.5	6.5	50	4	370
GCA0301044	3.0	7.5	50	4	370
GCA0351044	3.5	9.0	50	4	370
GCA0401044	4.0	10.0	50	4	370
GCA0451064	4.5	11.5	50	6	420
GCA0501064	5.0	12.5	50	6	420
GCA0551064	5.5	14.0	50	6	420
GCA0601064	6.0	15.0	50	6	420
GCA0652084	6.5	16.5	60	8	840
GCA0702084	7.0	17.5	60	8	840
GCA0752084	7.5	19.0	60	8	840
GCA0802084	8.0	20.0	60	8	840
GCA0853104	8.5	21.5	75	10	1300
GCA0903104	9.0	22.5	75	10	1300
GCA0953104	9.5	24.0	75	10	1300
GCA1003104	10.0	25.0	75	10	1300
GCA1053124	10.5	26.5	75	12	1750
GCA1103124	11.0	27.5	75	12	1750
GCA1153124	11.5	29.0	75	12	1750
GCA1203124	12.0	30.0	75	12	1750
GCA1304164	13.0	32.5	100	16	4080
GCA1404164	14.0	35.0	100	16	4080
GCA1504164	15.0	37.5	100	16	4450
GCA1604164	16.0	40.0	100	16	4450
GCA1804204	18.0	45.0	100	20	6200
GCA2004204	20.0	50.0	100	20	6200

Unit : mm



4刃 4 Flutes

● 超微粒立銑刀 Micro Grain End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
GC0101044	1.0	2.5	50	4	335
GC0151044	1.5	4.0	50	4	335
GC0201044	2.0	5.0	50	4	335
GC0251044	2.5	6.5	50	4	335
GC0301044	3.0	7.5	50	4	335
GC0351044	3.5	9.0	50	4	335
GC0401044	4.0	10.0	50	4	335
GC0451064	4.5	11.5	50	6	380
GC0501064	5.0	12.5	50	6	380
GC0551064	5.5	14.0	50	6	380
GC0601064	6.0	15.0	50	6	380
GC0652084	6.5	16.5	60	8	760
GC0702084	7.0	17.5	60	8	760
GC0752084	7.5	19.0	60	8	760
GC0802084	8.0	20.0	60	8	760
GC0853104	8.5	21.5	75	10	1170
GC0903104	9.0	22.5	75	10	1170
GC0953104	9.5	24.0	75	10	1170
GC1003104	10.0	25.0	75	10	1170
GC1053124	10.5	26.5	75	12	1575
GC1103124	11.0	27.5	75	12	1575
GC1153124	11.5	29.0	75	12	1575
GC1203124	12.0	30.0	75	12	1575
GC1304164	13.0	32.5	100	16	3675
GC1404164	14.0	35.0	100	16	3675
GC1504164	15.0	37.5	100	16	4005
GC1604164	16.0	40.0	100	16	4005
GC1804204	18.0	45.0	100	20	5580
GC2004204	20.0	50.0	100	20	5580

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With enefits of fracture resistance and strong edge.

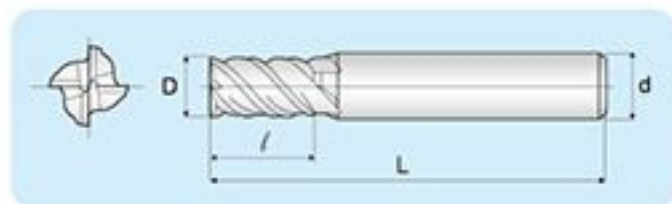
適用性	被削材料	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★	鋼、碳鋼	Steel, Carbon steel S45C
★	鋼、碳鋼	Hardened S45C 硬化處理
	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可

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The discount will be offered based on current prices. Welcome to check the prices.



● 超微粒立銑刀 Micro Grain End Mills



4刃 4 Flutes



產品特色

螺旋角為45度，切削阻力小，高效能加工，可應用不銹鋼、高合金鋼、調質鋼、熱處理鋼及難切削材，性能完全發揮。

FEATURES

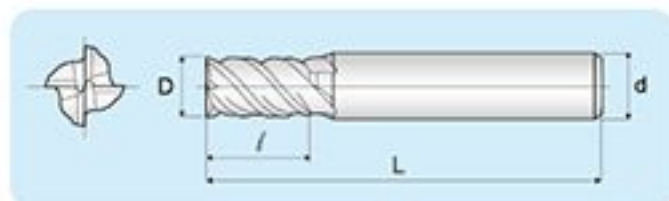
Helix angle 45°, less cutting drag, more effective working, best for working on stainless steel, high alloy steel, harden steel, and difficult - machine materials. Coated TiAlN for maximum heat and wear resistance provide maximum hardness and fracture resistance.

適用性	被削鋼材	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★★★	鋼、碳鋼	Steel, Carbon steel S75C
★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★★★	球墨鑄鐵	Nodular cast iron
★★	難削材料	Exotic material 耐熱合金、超合金
★★	鋁	Aluminum
★★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
FGA0101044	1.0	3.0	50	4	450
FGA0151044	1.5	4.5	50	4	450
FGA0201044	2.0	6.0	50	4	450
FGA0251044	2.5	7.5	50	4	450
FGA0301044	3.0	9.0	50	4	450
FGA0351044	3.5	10.5	50	4	450
FGA0401044	4.0	12.0	50	4	450
FGA0451064	4.5	13.5	50	6	510
FGA0501064	5.0	15.0	50	6	510
FGA0551064	5.5	16.5	50	6	510
FGA0601064	6.0	18.0	50	6	510
FGA0652084	6.5	19.5	60	8	1010
FGA0702084	7.0	21.0	60	8	1010
FGA0752084	7.5	22.5	60	8	1010
FGA0802084	8.0	24.0	60	8	1010
FGA0853104	8.5	25.5	75	10	1560
FGA0903104	9.0	27.0	75	10	1560
FGA0953104	9.5	28.5	75	10	1560
FGA1003104	10.0	30.0	75	10	1560
FGA1053124	10.5	31.5	75	12	2100
FGA1103124	11.0	33.0	75	12	2100
FGA1153124	11.5	34.5	75	12	2100
FGA1203124	12.0	36.0	75	12	2100
FGA1304164	13.0	39.0	100	16	5340
FGA1404164	14.0	42.0	100	16	5340
FGA1504164	15.0	45.0	100	16	5340
FGA1604164	16.0	48.0	100	16	5340
FGA1804204	18.0	50.0	100	20	7440
FGA2004204	20.0	50.0	100	20	7440

Unit : mm



4刃 4 Flutes

● 超微粒立銑刀 Micro Grain End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
FG0101044	1.0	3.0	50	4	410
FG0151044	1.5	4.5	50	4	410
FG0201044	2.0	6.0	50	4	410
FG0251044	2.5	7.5	50	4	410
FG0301044	3.0	9.0	50	4	410
FG0351044	3.5	10.5	50	4	410
FG0401044	4.0	12.0	50	4	410
FG0451064	4.5	13.5	50	4	460
FG0501064	5.0	15.0	50	6	460
FG0551064	5.5	16.5	50	6	460
FG0601064	6.0	18.0	50	6	460
FG0652084	6.5	19.5	50	6	920
FG0702084	7.0	21.0	60	8	920
FG0752084	7.5	22.5	60	8	920
FG0802084	8.0	24.0	60	8	920
FG0853104	8.5	25.5	60	10	1410
FG0903104	9.0	27.0	75	10	1410
FG0953104	9.5	28.5	75	10	1410
FG1003104	10.0	30.0	75	10	1410
FG1053124	10.5	31.5	75	12	1890
FG1103124	11.0	33.0	75	12	1890
FG1153124	11.5	34.5	75	12	1890
FG1203124	12.0	36.0	75	12	1890
FG1304164	13.0	39.0	75	16	4810
FG1404164	14.0	42.0	100	16	4810
FG1504164	15.0	45.0	100	16	4810
FG1604164	16.0	48.0	100	16	4810
FG1804204	18.0	50.0	100	20	6700
FG2004204	20.0	50.0	100	20	6700

Unit : mm

產品特色

螺旋角為45度，切削阻力小，高效能加工，可應用不鏽鋼、高合金鋼、調質鋼、熱處理鋼及難切削材，性能完全發揮。

FEATURES

Helix angle 45°, less cutting drag, more effective working, best for working on stainless steel, high alloy steel, harden steel, and difficult-machine materials. Coated TiAlN for maximum heat and wear resistance provide maximum hardness and fracture resistance.

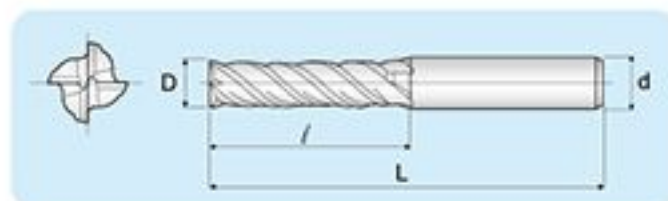
適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★	鋼、碳鋼	Steel, Carbon steel S45C
★	鋼、碳鋼	Hardened S45C 硬化處理
	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不鏽鋼	Stainless steel SUS403
	不鏽鋼	Stainless steel SUS403
	不鏽鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 超合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可

※本牌價依市場行情依折扣優惠，歡迎查詢價格
The discount will be offered based on current prices. Welcome to check the prices.



● 超微粒立銑刀 Micro Grain End Mills



4刃 4 Flutes



產品特色

螺旋角為45度，切削阻力小，高效能加工，可應用不鏽鋼、高合金鋼、調質鋼、熱處理鋼及難切削材，性能完全發揮。

FEATURES

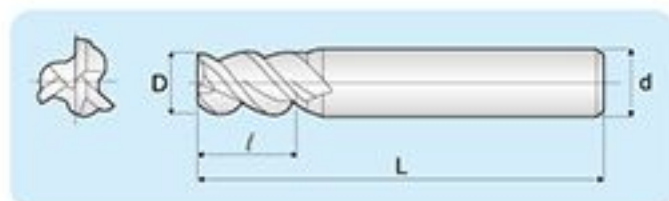
Helix angle 45°, less cutting drag, more effective working, best for working on stainless steel, high alloy steel, harden steel, and difficult-machine materials. Coated TiAlN for maximum heat and wear resistance provide maximum hardness and fracture resistance.

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★★★	鋼、碳鋼	Steel, Carbon steel S75C
★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★★	不鏽鋼	Stainless steel SUS403
★★★★	不鏽鋼	Stainless steel SUS403
★★★★	不鏽鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★★★	球墨鑄鐵	Nodular cast iron
★★	難削材料	Exotic material 超合金、超合金
★★	鋁	Aluminum
★★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
XGA0101044	1.0	2.5	50	4	450
XGA0151044	1.5	4.0	50	4	450
XGA0201044	2.0	5.0	50	4	450
XGA0251044	2.5	6.5	50	4	450
XGA0301044	3.0	7.5	50	4	450
XGA0351044	3.5	9.0	50	4	450
XGA0401044	4.0	10.0	50	4	450
XGA0451064	4.5	11.5	50	6	510
XGA0501064	5.0	12.5	50	6	510
XGA0551064	5.5	14.0	50	6	510
XGA0601064	6.0	15.0	50	6	510
XGA0652084	6.5	16.5	60	8	1010
XGA0702084	7.0	17.5	60	8	1010
XGA0752084	7.5	19.0	60	8	1010
XGA0802084	8.0	20.0	60	8	1010
XGA0853104	8.5	21.5	75	10	1560
XGA0903104	9.0	22.5	75	10	1560
XGA0953104	9.5	24.0	75	10	1560
XGA1003104	10.0	25.0	75	10	1560
XGA1053124	10.5	26.5	75	12	2100
XGA1103124	11.0	27.5	75	12	2100
XGA1153124	11.5	29.0	75	12	2100
XGA1203124	12.0	30.0	75	12	2100
XGA1304164	13.0	32.5	100	16	5340
XGA1404164	14.0	35.0	100	16	5340
XGA1504164	15.0	37.5	100	16	5340
XGA1604164	16.0	40.0	100	16	5340
XGA1804204	18.0	45.0	100	20	7440
XGA2004204	20.0	50.0	100	20	7440

Unit : mm



3刃 3 Flutes

● 超微粒高螺旋立銑刀

Micro Grain High Helix End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
HGA0101043	1	2.5	50	4	445
HGA0201043	2	5.0	50	4	445
HGA0301043	3	7.5	50	4	445
HGA0401043	4	10.0	50	4	445
HGA0501063	5	12.5	50	6	505
HGA0601063	6	15.0	50	6	505
HGA0702083	7	17.5	60	8	1010
HGA0802083	8	20.0	60	8	1010
HGA0903103	9	22.5	75	10	1560
HGA1003103	10	25.0	75	10	1560
HGA1103123	11	27.5	75	12	2100
HGA1203123	12	30.0	75	12	2100
HGA1604163	16	40.0	100	16	5340

Unit : mm

產品特色

螺旋角為45度，切削阻力小，高效能加工，可應用不銹鋼、高合金鋼、調質鋼、熱處理鋼及難切削材，性能完全發揮。

FEATURES

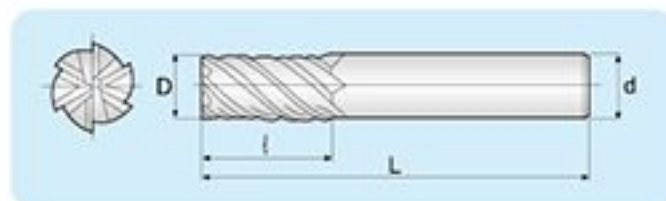
Helix angle 45°, less cutting drag, more effective working, best for working on stainless steel, high alloy steel, harden steel, and difficult-machine materials. Coated TiAlN for maximum heat and wear resistance provide maximum hardness and fracture resistance.

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★★	鋼、碳鋼	Steel, Carbon steel S75C
★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS304, SUS316
★★	鑄鐵	Cast iron
★★	球墨鑄鐵	Nodular cast iron
★	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可

※本牌價依市場行情依折扣優惠，歡迎查詢價格
The discount will be offered based on current prices. Welcome to check the prices.

● 超微粒高硬度立銑刀 Micro Grain High Hardness End Mills



6刃 6 Flutes

產品特色

1. 高硬度加工用，針對熱處理鋼材 HRC60 以上，性能完全發揮。
2. 刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。
3. 使用高速切削，可得到非常光滑的表面。

FEATURES

Exceptionally strong which improve surface finishes and high feed rates. Coated TiAlN for maximum heat and wear resistance provide maximum hardness and fracture resistance.

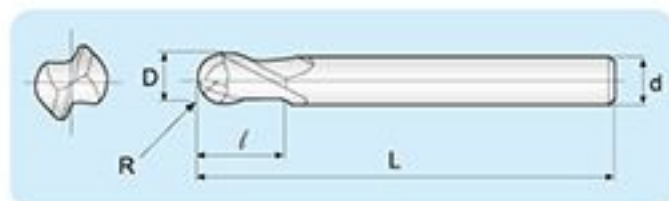


型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
VGA0301046	3	7.5	50	4	500
VGA0401046	4	10.0	50	4	500
VGA0501066	5	12.5	50	6	570
VGA0601066	6	15.0	50	6	570
VGA0802086	8	20.0	60	8	1135
VGA1003106	10	25.0	75	10	1755
VGA1203126	12	30.0	75	12	2365
VGA1604166	16	40.0	100	16	6010
VGA2004206	20	50.0	100	20	8370
VGA2506256	25	65.0	150	25	28000

Unit : mm

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★★	鋼、碳鋼	Steel, Carbon steel S75C
★	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★	不銹鋼	Stainless steel SUS403
★★	不銹鋼	Stainless steel SUS403
★★	不銹鋼	Stainless steel SUS304, SUS316
★★	鑄鐵	Cast iron
★★	球墨鑄鐵	Nodular cast iron
★★★	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



2刃 2 Flutes

●超微粒圓頭立銑刀 Micro Grain Ball End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
BCA0101042	0.5 R	2	50	4	480
BCA0151042	0.75 R	3	50	4	480
BCA0201042	1 R	4	50	4	480
BCA0251042	1.25 R	5	50	4	480
BCA0301042	1.5 R	6	50	4	480
BCA0351042	1.75 R	7	50	4	480
BCA0401042	2 R	8	50	4	480
BCA0451062	2.25 R	9	50	6	525
BCA0501062	2.5 R	10	50	6	525
BCA0551062	2.75 R	11	50	6	525
BCA0601062	3 R	12	50	6	525
BCA0652082	3.25 R	13	60	8	950
BCA0702082	3.5 R	14	60	8	950
BCA0752082	3.75 R	15	60	8	950
BCA0802082	4 R	16	60	8	950
BCA0903102	4.5 R	18	75	10	1400
BCA1003102	5 R	20	75	10	1400
BCA1103122	5.5 R	22	75	12	1850
BCA1203122	6 R	24	75	12	1850
BCA1404162	7 R	28	100	16	6000
BCA1604162	8 R	32	100	16	6000
BCA18041202	9 R	36	100	20	8000
BCA2004202	10 R	40	100	20	8000
BCA2505252	12.5 R	50	150	25	-

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

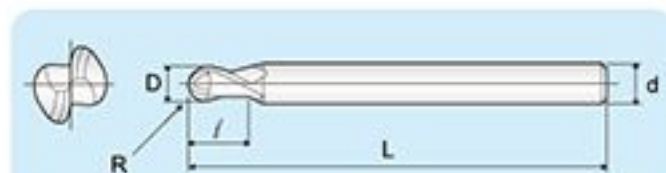
Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒圓頭立銑刀 Micro Grain Ball End Mills



2刃 2 Flutes

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge.

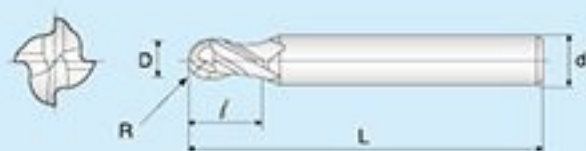


型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
BC0101042	0.5 R	2	50	4	435
BC0151042	0.75 R	3	50	4	435
BC0201042	1.0 R	4	50	4	435
BC0251042	1.25 R	5	50	4	435
BC0301042	1.5 R	6	50	4	435
BC0351042	1.75 R	7	50	4	435
BC0401042	2.0 R	8	50	4	435
BC0451062	2.25 R	9	50	6	475
BC0501062	2.5 R	10	50	6	475
BC0551062	2.75 R	11	50	6	475
BC0601062	3.0 R	12	50	6	475
BC0652082	3.25 R	13	60	8	855
BC0702082	3.5 R	14	60	8	855
BC0752082	3.75 R	15	60	8	855
BC0802082	4.0 R	16	60	8	855
BC0903102	4.5 R	18	75	10	1260
BC1003102	5.0 R	20	75	10	1260
BC1103122	5.5 R	22	75	12	1665
BC1203122	6.0 R	24	75	12	1665
BC1404162	7.0 R	28	100	16	5400
BC1604162	8.0 R	32	100	16	5400
BC1804202	9.0 R	36	100	20	7200
BC2004202	10.0 R	40	100	20	7200
BC2505252	12.5 R	50	150	25	-

Unit : mm

適用性	被削材料	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★	鋼、碳鋼	Steel, Carbon steel S45C
★	鋼、碳鋼	Hardened S45C 硬化處理
★★	鋼、碳鋼	Steel, Carbon steel S75C
★	鋼、碳鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
★	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



4刃 4 Flutes

● 超微粒圓頭立銑刀 Micro Grain Ball End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
BCA0101044	0.5 R	2	50	4	540
BCA0151044	0.75 R	3	50	4	540
BCA0201044	1.0 R	4	50	4	540
BCA0251044	1.25 R	5	50	4	540
BCA0301044	1.5 R	6	50	4	540
BCA0351044	1.75 R	7	50	4	540
BCA0401044	2.0 R	8	50	4	540
BCA0451064	2.25 R	9	50	6	600
BCA0501064	2.5 R	10	50	6	600
BCA0551064	2.75 R	11	50	6	600
BCA0601064	3.0 R	12	50	6	600
BCA0652084	3.25 R	13	60	8	1075
BCA0702084	3.5 R	14	60	8	1075
BCA0752084	3.75 R	15	60	8	1075
BCA0802084	4.0 R	16	60	8	1075
BCA0903104	4.5 R	18	75	10	1575
BCA1003104	5.0 R	20	75	10	1575
BCA1103124	5.5 R	22	75	12	2085
BCA1203124	6.0 R	24	75	12	2085
BCA1404164	7.0 R	28	100	16	6750
BCA1604164	8.0 R	32	100	16	6750
BCA1804204	9.0 R	36	100	20	9000
BCA2004204	10.0 R	40	100	20	9000
BCA2505254	12.5 R	50	150	25	-

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

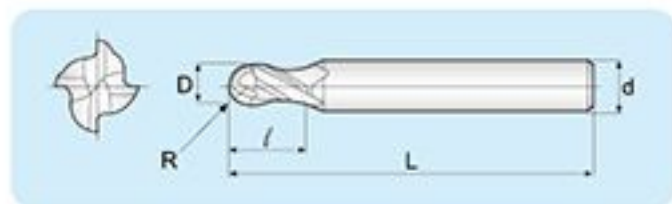
Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS400
★	不銹鋼	Stainless steel SUS400
★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒圓頭立銑刀 Micro Grain Ball End Mills



4刃 4 Flutes



產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

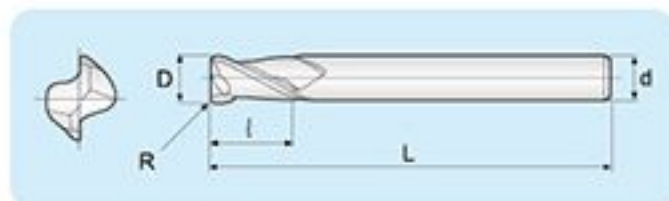
Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

適用性	被削材料	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★	鋼、碳鋼	Steel, Carbon steel S45C
★	鋼、碳鋼	Hardened S45C 硬化處理
	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
BC0101044	0.5 R	2	50	4	490
BC0151044	0.75 R	3	50	4	490
BC0201044	1.0 R	4	50	4	490
BC0251044	1.25 R	5	50	4	490
BC0301044	1.5 R	6	50	4	490
BC0351044	1.75 R	7	50	4	490
BC0401044	2.0 R	8	50	4	490
BC0451064	2.25 R	9	50	6	540
BC0501064	2.5 R	10	50	6	540
BC0551064	2.75 R	11	50	6	540
BC0601064	3.0 R	12	50	6	540
BC0652084	3.25 R	13	60	8	970
BC0702084	3.5 R	14	60	8	970
BC0752084	3.75 R	15	60	8	970
BC0802084	4.0 R	16	60	8	970
BC0903104	4.5 R	18	75	10	1420
BC1003104	5.0 R	20	75	10	1420
BC1103124	5.5 R	22	75	12	1880
BC1203124	6.0 R	24	75	12	1880
BC1404164	7.0 R	28	100	16	6070
BC1604164	8.0 R	32	100	16	6070
BC1804204	9.0 R	36	100	20	8100
BC2004204	10.0 R	40	100	20	8100
BC2505254	12.5 R	50	150	25	-

Unit : mm



2刃 2 Flutes

● 超微粒圓隅角立銑刀 Micro Grain Corner Radius End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	R角 (D) Corner R	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
RGA03051032	3	6	0.5	50	3	480
RGA03101032	3	6	1.0	50	3	480
RGA04051042	4	8	0.5	50	4	480
RGA04101042	4	8	1.0	50	4	480
RGA06051062	6	12	0.5	50	6	525
RGA06101062	6	12	1.0	50	6	525
RGA06151062	6	12	1.5	50	6	525
RGA06201062	6	12	2.0	50	6	525
RGA08052082	8	16	0.5	60	8	950
RGA08102082	8	16	1.0	60	8	950
RGA08152082	8	16	1.5	60	8	950
RGA08202082	8	16	2.0	60	8	950
RGA08252082	8	16	2.5	60	8	950
RGA08302082	8	16	3.0	60	8	950
RGA10053102	10	20	0.5	75	10	1400
RGA10103102	10	20	1.0	75	10	1400
RGA10153102	10	20	1.5	75	10	1400
RGA10203102	10	20	2.0	75	10	1400
RGA10253102	10	20	2.5	75	10	1400
RGA10303102	10	20	3.0	75	10	1400
RGA12053122	12	24	0.5	75	12	1850
RGA12103122	12	24	1.0	75	12	1850
RGA12153122	12	24	1.5	75	12	1850
RGA12203122	12	24	2.0	75	12	1850
RGA12253122	12	24	2.5	75	12	1850
RGA12303122	12	24	3.0	75	12	1850

Unit : mm

產品特色

1. 使用圓隅角立銑刀可提高進給速率，一次加工完成，增加生產效能降低成本。
2. 圓隅角的設計比一般立銑刀更耐磨耗，延長刀具壽命。
3. 應用於模具加工，適用於一般鋼材、難切削材質，如不銹鋼、鋁合金、調質鋼、NAK55、NAK80、高合金鋼等。

FEATURES

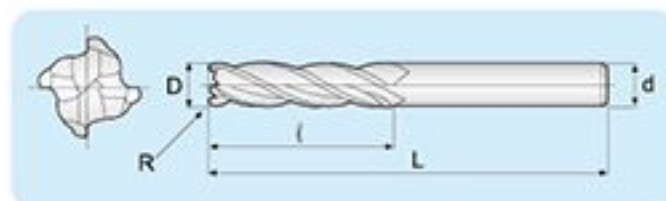
The corner radius design strengthens the end mill by reducing chipping, providing longer tool life. Corner more material faster, improve productivity and reduce cost.

適用性	被削鋼材	WORK MATERIAL
★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS400
★	不銹鋼	Stainless steel SUS400
★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 超合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒圓隅角立銑刀 Micro Grain Corner Radius End Mills



4刃 4 Flutes

產品特色

1. 使用圓隅角立銑刀可提高進給速率，一次加工完成，增加生產效能降低成本。
2. 圓隅角的設計比一般立銑刀更耐磨耗，延長刀具壽命。
3. 應用於模具加工，適用於一般鋼材、難切削材質，如不銹鋼、鋁合金、調質鋼、NAK55、NAK80、高合金鋼等。

FEATURES

The corner radius design strengthens the end mill by reducing chipping, providing longer tool life. Corner more material faster, improve productivity and reduce cost.

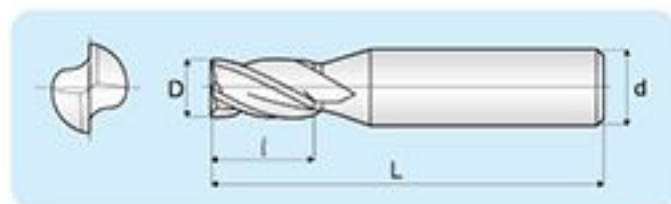
適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
★★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 鉻熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	R角 (D) Corner R	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
RGA03051034	3	6	0.5	50	3	480
RGA03101034	3	6	1.0	50	3	480
RGA04051044	4	8	0.5	50	4	480
RGA04101044	4	8	1.0	50	4	480
RGA06051064	6	12	0.5	50	6	525
RGA06101064	6	12	1.0	50	6	525
RGA06151064	6	12	1.5	50	6	525
RGA06201064	6	12	2.0	60	6	525
RGA08052084	8	16	0.5	60	8	950
RGA08102084	8	16	1.0	60	8	950
RGA08152084	8	16	1.5	60	8	950
RGA08202084	8	16	2.0	60	8	950
RGA08252084	8	16	2.5	60	8	950
RGA08302084	8	16	3.0	60	8	950
RGA10053104	10	20	0.5	75	10	1400
RGA10103104	10	20	1.0	75	10	1400
RGA10153104	10	20	1.5	75	10	1400
RGA10203104	10	20	2.0	75	10	1400
RGA10253104	10	20	2.5	75	10	1400
RGA10303104	10	20	3.0	75	10	1400
RGA12053124	12	24	0.5	75	12	1850
RGA12103124	12	24	1.0	75	12	1850
RGA12153124	12	24	1.5	75	12	1850
RGA12203124	12	24	2.0	75	12	1850
RGA12253124	12	24	2.5	75	12	1850
RGA12303124	12	24	3.0	75	12	1850

Unit : mm



2刃 2 Flutes

● 超微粒長柄立銑刀 Micro Grain Long Shank End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LGCA0303032	3	9	75	3	555
LGCA0403032	4	12	75	4	555
LGCA0604062	6	18	100	6	840
LGCA0605062	6	18	150	6	1260
LGCA0804082	8	24	100	8	1400
LGCA0805082	8	24	150	8	2100
LGCA1004102	10	30	100	10	1850
LGCA1005102	10	30	150	10	2775
LGCA1204122	12	36	100	12	2350
LGCA1205122	12	36	150	12	3450

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

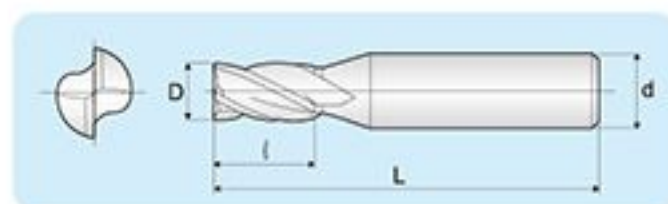
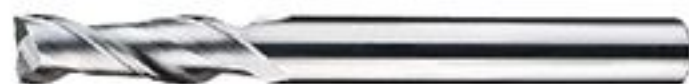
Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge.

適用性	被削材料	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒長柄立銑刀 Micro Grain Long Shank End Mills



2刃 2 Flutes

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge.

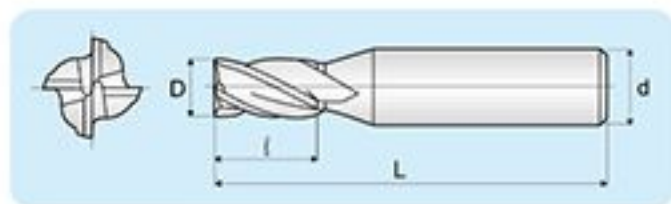


型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
LGC0303032	3	9	75	3	500
LGC0403042	4	12	75	4	500
LGC0604062	6	18	100	6	760
LGC0605062	6	18	150	6	1135
LGC0804082	8	24	100	8	1260
LGC0805082	8	24	150	8	1890
LGC1004102	10	30	100	10	1665
LGC1005102	10	30	150	10	2070
LGC1204122	12	36	100	12	2500
LGC1205122	12	36	150	12	3105

Unit : mm

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★	鋼、碳鋼	Steel, Carbon steel S45C
★	鋼、碳鋼	Hardened S45C 硬化處理
	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



4刃 4 Flutes

●超微粒長柄立銑刀 Micro Grain Long Shand End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LGCA0303034	3	9	75	3	555
LGCA0403034	4	12	75	4	555
LGCA0604064	6	18	100	6	840
LGCA0605064	6	18	150	6	1260
LGCA0804084	8	24	100	8	1400
LGCA0805084	8	24	150	8	2100
LGCA1004104	10	30	100	10	1850
LGCA1005104	10	30	150	10	2775
LGCA1204124	12	36	100	12	2350
LGCA1205124	12	36	150	12	3450

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

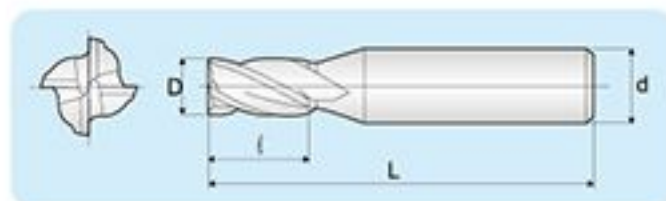
Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge.

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS400
★	不銹鋼	Stainless steel SUS400
★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒長柄立銑刀 Micro Grain Long Shank End Mills



4刃 4 Flutes

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge.

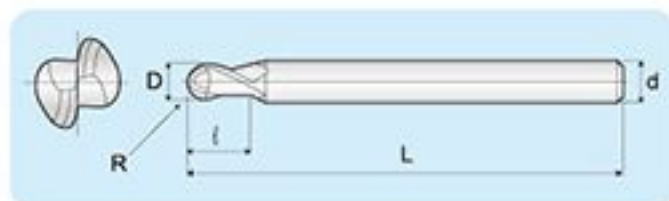


型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
LGC0303034	3	9	75	3	500
LGC0403044	4	12	75	4	500
LGC0604064	6	18	100	6	760
LGC0605064	6	18	150	6	1135
LGC0804084	8	24	100	8	1260
LGC0805084	8	24	150	8	1890
LGC1004104	10	30	100	10	1665
LGC1005104	10	30	150	10	2070
LGC1204124	12	36	100	12	2500
LGC1205124	12	36	150	12	3105

Unit : mm

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★	鋼、碳鋼	Steel, Carbon steel S45C
★	鋼、碳鋼	Hardened S45C 硬化處理
	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



2刃 2 Flutes

● 超微粒長柄圓頭立銑刀 Micro Grain Long Shank Ball End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LBCA0103042	0.5 R	2	75	4	720
LBCA0104042	0.5 R	2	100	4	960
LBCA0153042	0.75 R	3	75	4	720
LBCA0154042	0.75 R	3	100	4	960
LBCA0203042	1 R	4	75	4	720
LBCA0204042	1 R	4	100	4	960
LBCA0253042	1.25 R	5	75	4	720
LBCA0254042	1.25 R	5	100	4	960
LBCA0303042	1.5 R	6	75	4	720
LBCA0304042	1.5 R	6	100	4	960
LBCA0353042	1.75 R	7	75	4	720
LBCA0354042	1.75 R	7	100	4	960
LBCA0403042	2 R	8	75	4	720
LBCA0404042	2 R	8	100	4	960
LBCA0503062	2.5 R	10	75	6	790
LBCA0504062	2.5 R	10	100	6	1050
LBCA0603062	3 R	12	75	6	790
LBCA0604062	3 R	12	100	6	1050
LBCA0804082	4 R	16	100	8	1590
LBCA0805082	4 R	16	150	8	2375
LBCA1004102	5 R	20	100	10	2000
LBCA1005102	5 R	20	150	10	3000
LBCA1204122	6 R	24	100	12	2470
LBCA1205122	6 R	24	150	12	3700
LBCA1605162	8 R	32	150	16	9000
LBCA2005202	10 R	40	150	20	12000

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

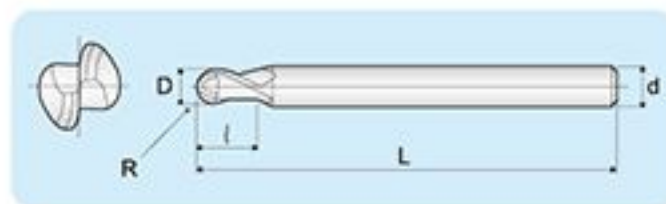
Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS400
★	不銹鋼	Stainless steel SUS400
★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒長柄圓頭立銑刀 Micro Grain Long Shank Ball End Mills



2刃 2 Flutes

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge.

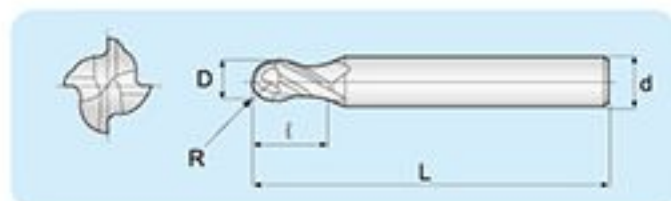
適用性	被削材料	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★	鋼、碳鋼	Steel, Carbon steel S45C
★	鋼、碳鋼	Hardened S45C 硬化處理
	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LBC0103042	0.5 R	2	75	4	650
LBC0104042	0.5 R	2	100	4	865
LBC0153042	0.75 R	3	75	4	650
LBC0154042	0.75 R	3	100	4	865
LBC0203042	1 R	4	75	4	650
LBC0204042	1 R	4	100	4	865
LBC0253042	1.25R	5	75	4	650
LBC0254042	1.25R	5	100	4	865
LBC0303042	1.5R	6	75	4	650
LBC0304042	1.5R	6	100	4	865
LBC0353042	1.75R	7	75	4	650
LBC0354042	1.75R	7	100	4	865
LBC0403042	2 R	8	75	4	650
LBC0404042	2 R	8	100	4	865
LBC0503062	2.5 R	10	75	6	710
LBC0504062	2.5 R	10	100	6	945
LBC0603062	3 R	12	75	6	710
LBC0604062	3 R	12	100	6	945
LBC0804082	4 R	16	100	8	1425
LBC0805082	4 R	16	150	8	2140
LBC1004102	5 R	20	100	10	1800
LBC1005102	5 R	20	150	10	2700
LBC1204122	6 R	24	100	12	2220
LBC1205122	6 R	24	150	12	3330
LBC1605162	8 R	32	150	16	8100
LBC2005202	10 R	40	150	20	10800

Unit : mm



4刃 4 Flutes

● 超微粒長柄圓頭立銑刀 Micro Long Shank Ball End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LBCA0103044	0.5 R	2	75	4	720
LBCA0104044	0.5 R	2	100	4	960
LBCA0153044	0.75 R	3	75	4	720
LBCA0154044	0.75 R	3	100	4	960
LBCA0203044	1 R	4	75	4	720
LBCA0204044	1 R	4	100	4	960
LBCA0253044	1.25 R	5	75	4	720
LBCA0254044	1.25 R	5	100	4	960
LBCA0303044	1.5 R	6	75	4	720
LBCA0304044	1.5 R	6	100	4	960
LBCA0353044	1.75 R	7	75	4	720
LBCA0354044	1.75 R	7	100	4	960
LBCA0403044	2 R	8	75	4	720
LBCA0404044	2 R	8	100	4	960
LBCA0503064	2.5 R	10	75	6	790
LBCA0504064	2.5 R	10	100	6	1050
LBCA0603064	3 R	12	75	6	790
LBCA0604064	3 R	12	100	6	1050
LBCA0804084	4 R	16	100	8	1590
LBCA0805084	4 R	16	150	8	2375
LBCA1004104	5 R	20	100	10	2000
LBCA1005104	5 R	20	150	10	3000
LBCA1204124	6 R	24	100	12	2470
LBCA1205124	6 R	24	150	12	3700
LBCA1605164	8 R	32	150	16	9000
LBCA2005204	10 R	40	150	20	12000

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

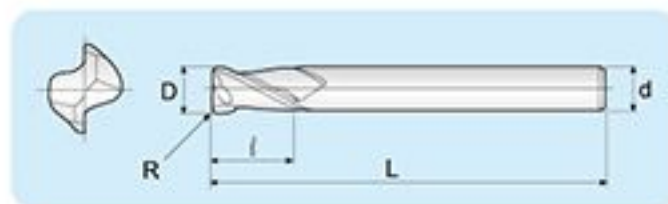
Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

適用性	被削材料	WORK MATERIAL
★★★	鋼、鐵鋼	Steel, Carbon steel S15C
★★★	鋼、鐵鋼	Steel, Carbon steel S45C
★★	鋼、鐵鋼	Hardened S45C 硬化處理
★	鋼、鐵鋼	Steel, Carbon steel S75C
	鋼、鐵鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒長柄圓隅角立銑刀 Micro Grain Long Corner Radius End Mills



2刃 2 Flutes



產品特色

1. 使用圓隅角立銑刀可提高進給速率，一次加工完成，增加生產效能降低成本。
2. 圓隅角的設計比一般立銑刀更耐磨耗，延長刀具壽命。
3. 應用於模具加工，適用於一般鋼材、難切削材質，如不銹鋼、鋁合金、調質鋼、NAK55、NAK80、高合金鋼等。

FEATURES

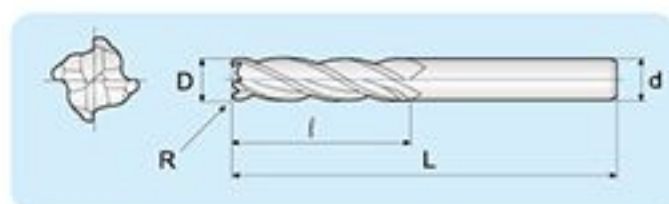
The corner radius design strengthens the end mill by reducing chipping, providing longer tool life. Corner more material faster, improve productivity and reduce cost.

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
★★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	R角 (D) Corner R	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
LRGA03053032	3	6	0.5	75	3	720
LRGA03103032	3	6	1.0	75	3	720
LRGA04053042	4	8	0.5	75	4	720
LRGA04103042	4	8	1.0	75	4	720
LRGA06053062	6	12	0.5	75	6	720
LRGA06103062	6	12	1.0	75	6	720
LRGA06153062	6	12	1.5	75	6	720
LRGA06203062	6	12	2.0	75	6	720
LRGA08054082	8	16	0.5	100	8	1585
LRGA08104082	8	16	1.0	100	8	1585
LRGA08154082	8	16	1.5	100	8	1585
LRGA08204082	8	16	2.0	100	8	1585
LRGA08254082	8	16	2.5	100	8	1585
LRGA08304082	8	16	3.0	100	8	1585
LRGA10054102	10	20	0.5	100	10	2000
LRGA10104102	10	20	1.0	100	10	2000
LRGA10154102	10	20	1.5	100	10	2000
LRGA10204102	10	20	2.0	100	10	2000
LRGA10254102	10	20	2.5	100	10	2000
LRGA10304102	10	20	3.0	100	10	2000
LRGA12054122	12	24	0.5	100	12	2470
LRGA12104122	12	24	1.0	100	12	2470
LRGA12154122	12	24	5.0	100	12	2470
LRGA12204122	12	24	2.0	100	12	2470
LRGA12254122	12	24	2.5	100	12	2470
LRGA12304122	12	24	3.0	100	12	2470

Unit : mm



4刃 4 Flutes

●超微粒長柄圓隅角立銑刀 Micro Grain Long Corner Radius End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	R角 (D) Corner R	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
LRGA03053034	3	4	0.5	75	3	720
LRGA03103034	3	4	1.0	75	4	720
LRGA04053044	4	5	0.5	75	4	720
LRGA04103044	4	5	1.0	75	4	720
LRGA06053064	6	7.5	0.5	75	6	720
LRGA06103064	6	7.5	1.0	75	6	720
LRGA06153064	6	7.5	1.5	75	6	720
LRGA06203064	6	7.5	2.0	75	6	720
LRGA08054084	8	10	0.5	100	8	1585
LRGA0804084	8	10	1.0	100	8	1585
LRGA08154084	8	10	1.5	100	8	1585
LRGA08204084	8	10	2.0	100	8	1585
LRGA08254084	8	10	2.5	100	8	1585
LRGA08304084	8	10	3.0	100	8	1585
LRGA10054104	10	12	0.5	100	10	2000
LRGA10104104	10	12	1.0	100	10	2000
LRGA10154104	10	12	1.5	100	10	2000
LRGA10204104	10	12	2.0	100	10	2000
LRGA10254104	10	12	2.5	100	10	2000
LRGA10304104	10	12	3.0	100	10	2000
LRGA12054124	12	14.5	0.5	100	12	2470
LRGA12104124	12	14.5	1.0	100	12	2470
LRGA12154124	12	14.5	1.5	100	12	2470
LRGA1204124	12	14.5	2.0	100	12	2470
LRGA1204124	12	14.5	2.5	100	12	2470
LRGA12304124	12	14.5	3.0	100	12	2470

Unit : mm

產品特色

1. 使用圓隅角立銑刀可提高進給速率，一次加工完成，增加生產效能降低成本。
2. 圓隅角的設計比一般立銑刀更耐磨耗，延長刀具壽命。
3. 應用於模具加工，適用於一般鋼材、難切削材質，如不銹鋼、鋁合金、調質鋼、NAK55、NAK80、高合金鋼等。

FEATURES

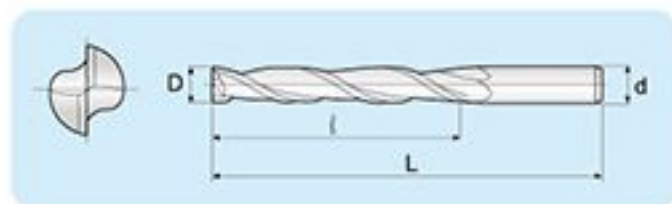
The corner radius design strengthens the end mill by reducing chipping, providing longer tool life. Corner more material faster, improve productivity and reduce cost.

適用性	被削材料	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒長刃立銑刀 Micro Grain Long Flute End Mills



2刃 2 Flutes



產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

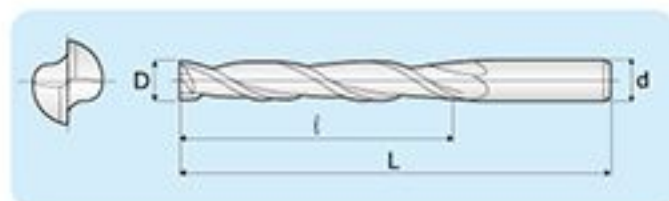
Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and for fracture resistance.

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
★★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 易熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LGFA0101042	1.0	5.0	50	4	1000
LGFA0151042	1.5	7.5	50	4	1000
LGFA0201042	2.0	10	50	4	1000
LGFA0251042	2.5	12.5	50	4	1000
LGFA0301042	3.0	15.0	50	4	1000
LGFA0352042	3.5	17.5	60	4	1000
LGFA0402042	4.0	20.0	60	4	1000
LGFA0453062	4.5	22.5	75	6	1200
LGFA0503062	5.0	25.0	75	6	1200
LGFA0553062	5.5	27.5	75	6	1200
LGFA0603062	6.0	30.0	75	6	1200
LGFA0654082	6.5	32.5	100	8	1400
LGFA0704082	7.0	35	100	8	1400
LGFA0754082	7.5	35	100	8	1400
LGFA0804082	8.0	35	100	8	1400
LGFA0854102	8.5	40	100	10	1860
LGFA0904102	9.0	40	100	10	1860
LGFA1004102	10.0	40	100	10	1860
LGFA1104122	11.0	50	100	12	2350
LGFA1204122	12.0	50	100	12	2350
LGFA1405162	14.0	60	150	16	7650
LGFA1605162	16.0	60	150	16	7650
LGFA2005202	20.0	60	150	20	10350

Unit : mm



2刃 2 Flutes

● 超微粒長刃立銑刀 Micro Grain Long Flute End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LGF0101042	1.0	5.0	50	4	900
LGF0151042	1.5	7.5	50	4	900
LGF0201042	2.0	10.0	50	4	900
LGF0251042	2.5	12.5	50	4	900
LGF0301042	3.0	15.0	50	4	900
LGF0352042	3.5	17.5	60	4	900
LGF0402042	4.0	20.0	60	4	900
LGF0453062	4.5	22.5	75	6	1080
LGF0503062	5.0	20.5	75	6	1080
LGF0553062	5.5	27.5	75	6	1080
LGF0603062	6.0	30.0	75	6	1080
LGF0654082	6.5	32.5	100	8	1260
LGF0704082	7.0	35	100	8	1260
LGF0754082	7.5	35	100	8	1675
LGF0804082	8.0	35	100	8	1675
LGF0854102	8.5	40	100	10	1675
LGF0904102	9.0	40	100	10	1675
LGF1004102	10.0	40	100	10	1675
LGF1104122	11.0	50	100	12	2115
LGF1204122	12.0	50	100	12	2115
LGF1405162	14.0	60	150	16	6885
LGF1605162	16.0	60	150	16	6885
LGF2005202	20.0	60	150	20	9315

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge.

適用性	被削材料	WORK MATERIAL
★★★	鋼、鐵鋼	Steel, Carbon steel S15C
★★	鋼、鐵鋼	Steel, Carbon steel S45C
★	鋼、鐵鋼	Hardened S45C 硬化處理
	鋼、鐵鋼	Steel, Carbon steel S75C
	鋼、鐵鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒長刃立銑刀 Micro Grain Long Flute End Mills



4刃 4 Flutes



產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

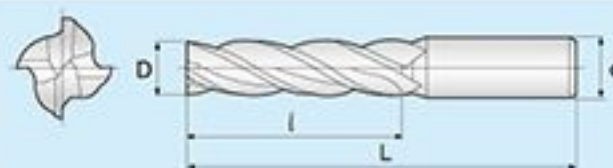


適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
★★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 易熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LGFA0101044	1.0	5.0	50	4	1000
LGFA0151044	1.5	7.5	50	4	1000
LGFA0201044	2.0	10.0	50	4	1000
LGFA0251044	2.5	12.5	50	4	1000
LGFA0301044	3.0	15.0	50	4	1000
LGFA0352044	3.5	17.5	60	4	1000
LGFA0402044	4.0	20.0	60	4	1000
LGFA0453064	4.5	22.5	75	6	1200
LGFA0503064	5.0	25.0	75	6	1200
LGFA0553064	5.5	27.5	75	6	1200
LGFA0603064	6.0	30.0	75	6	1200
LGFA0654084	6.5	32.5	100	8	1400
LGFA0704084	7.0	35	100	8	1400
LGFA0754084	7.5	35	100	8	1400
LGFA0804084	8.0	35	100	8	1400
LGFA0854104	8.5	40	100	10	1860
LGFA0904104	9.0	40	100	10	1860
LGFA1004104	10.0	40	100	10	1860
LGFA1104124	11.0	50	100	12	2350
LGFA1204124	12.0	50	100	12	2350
LGFA1405164	14.0	60	150	16	7650
LGFA1605164	16.0	60	150	16	7650
LGFA2005204	20.0	60	150	20	10350

Unit : mm



4刃 4 Flutes

● 超微粒長刃立銑刀 Micro Grain Long Flute End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LGF0101044	1.0	5.0	50	4	900
LGF0151044	1.5	7.5	50	4	900
LGF0201044	2.0	10.0	50	4	900
LGF0251044	2.5	12.5	50	4	900
LGF0301044	3.0	15.0	50	4	900
LGF0352044	3.5	17.5	60	4	900
LGF0402044	4.0	20.0	60	4	900
LGF0453064	4.5	22.5	75	6	1080
LGF0503064	5.0	25.0	75	6	1080
LGF0553064	5.5	27.5	75	6	1080
LGF0603064	6.0	30.0	75	6	1080
LGF0654084	6.5	32.5	100	8	1260
LGF0704084	7.0	35	100	8	1260
LGF0754084	7.5	35	100	8	1260
LGF0804084	8.0	35	100	8	1260
LGF0854104	8.5	40	100	10	1675
LGF0904104	9.0	40	100	10	1675
LGF1004104	10.0	40	100	10	1675
LGF1104124	11.0	50	100	12	2115
LGF1204124	12.0	50	100	12	2115
LGF1405164	14.0	60	150	16	6885
LGF1605164	16.0	60	150	16	6885
LGF2005204	20.0	60	150	20	9315

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge.

適用性	被削材料	WORK MATERIAL
★★★	鋼、鐵鋼	Steel, Carbon steel S15C
★★	鋼、鐵鋼	Steel, Carbon steel S45C
★	鋼、鐵鋼	Hardened S45C 硬化處理
	鋼、鐵鋼	Steel, Carbon steel S75C
	鋼、鐵鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒長刃立銑刀 Micro Grain Long Flute End Mills



4刃 4 Flutes

產品特色

螺旋角為45度，切削阻力小，高效能加工，可應用不鏽鋼、高合金鋼、調質鋼、熱處理鋼及難切削材，性能完全發揮。

FEATURES

Helix angle 45°, less cutting drag, more effective working, best for working on stainless steel, high alloy steel, hardened steel, and difficult-machine materials. Coated TiAlN for maximum heat and wear resistance provide maximum hardness and fracture resistance.

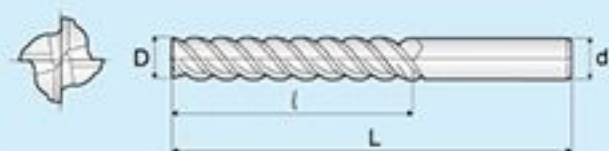
適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★★★	鋼、碳鋼	Steel, Carbon steel S75C
★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★★	不鏽鋼	Stainless steel SUS403
★★★★	不鏽鋼	Stainless steel SUS403
★★★★	不鏽鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★★★	球墨鑄鐵	Nodular cast iron
★★	難削材料	Exotic material 超合金、超合金
★★	鋁	Aluminum
★★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★★★★ 佳 ★★★★★ 尚可



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LFGA0101044	1.0	5.0	50	4	1000
LFGA0151044	1.5	7.5	50	4	1000
LFGA0201044	2.0	10.0	50	4	1000
LFGA0251044	2.5	12.5	50	4	1000
LFGA0301044	3.0	15.0	50	4	1000
LFGA0352044	3.5	17.5	60	4	1000
LFGA0402044	4.0	20.0	60	4	1000
LFGA0453064	4.5	22.5	75	6	1200
LFGA0503064	5.0	25.0	75	6	1200
LFGA0553064	5.5	27.5	75	6	1200
LFGA0603064	6.0	30.0	75	6	1200
LFGA0654084	6.5	32.5	100	8	1400
LFGA0704084	7.0	35	100	8	1400
LFGA0754084	7.5	35	100	8	1400
LFGA0804084	8.0	35	100	8	1400
LFGA0854104	8.5	40	100	10	1860
LFGA0904104	9.0	40	100	10	1860
LFGA1004104	10.0	40	100	10	1860
LFGA1104124	11.0	50	100	12	2350
LFGA1204124	12.0	50	100	12	2350
LFGA1405164	14.0	60	150	16	7650
LFGA1605164	16.0	60	150	16	7650
LFGA2005204	20.0	60	150	20	10350

Unit : mm



4刃 4 Flutes

● 超微粒長刃立銑刀 Micro Grain Long Flute End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LFG0101044	1.0	5.0	50	4	900
LFG0151044	1.5	7.5	50	4	900
LFG0201044	2.0	10.0	50	4	900
LFG0251044	2.5	12.5	50	4	900
LFG0301044	3.0	15.0	50	4	900
LFG0352044	3.5	17.5	60	4	900
LFG0402044	4.0	20.0	60	4	900
LFG0453064	4.5	22.5	75	6	1080
LFG0503064	5.0	25.0	75	6	1080
LFG0553064	5.5	27.5	75	6	1080
LFG0603064	6.0	30.0	75	6	1080
LFG0654084	6.5	32.5	100	8	1260
LFG0704084	7.0	35	100	8	1260
LFG0754084	7.5	35	100	8	1260
LFG0804084	8.0	35	100	8	1260
LFG0854104	8.5	40	100	10	1675
LFG0904104	9.0	40	100	10	1675
LFG1004104	10.0	40	100	10	1675
LFG1104124	11.0	50	100	12	2115
LFG1204124	12.0	50	100	12	2115
LFG1405164	14.0	60	150	16	6885
LFG1605164	16.0	60	150	16	6885
LFG2005204	20.0	60	150	20	9315

Unit : mm

產品特色

螺旋角為45度，切削阻力小，高效能加工，可應用不銹鋼、高合金鋼、調質鋼、熱處理鋼及難切削材，性能完全發揮。

FEATURES

Helix angle 45°, less cutting drag, more effective working, best for working on stainless steel, high alloy steel, harden steel, and difficult-machine materials. Coated TiAlN for maximum heat and wear resistance provide maximum hardness and fracture resistance.

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、鐵鋼	Steel, Carbon steel S15C
★★	鋼、鐵鋼	Steel, Carbon steel S45C
★	鋼、鐵鋼	Hardened S45C 硬化處理
	鋼、鐵鋼	Steel, Carbon steel S75C
	鋼、鐵鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒長刃立銑刀 Micro Grain Long Flute End Mills



4刃 4 Flutes

產品特色

螺旋角為45度，切削阻力小，高效能加工，可應用不鏽鋼、高合金鋼、調質鋼、熱處理鋼及難切削材，性能完全發揮。

FEATURES

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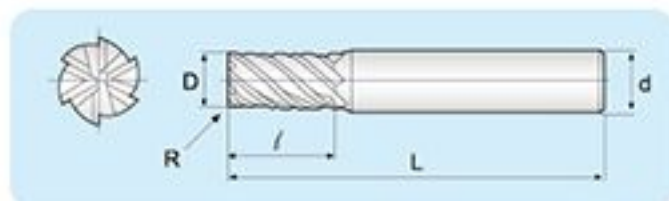
適用性	被削鋼材	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★★★	鋼、碳鋼	Steel, Carbon steel S75C
★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★★	不鏽鋼	Stainless steel SUS400
★★★★	不鏽鋼	Stainless steel SUS400
★★★★	不鏽鋼	Stainless steel SUS304, SUS316
★★	鑄鐵	Cast iron
★★	球墨鑄鐵	Nodular cast iron
★	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
LXGA0101044	1.0	5.0	50	4	900
LXGA0151044	1.5	7.5	50	4	900
LXGA0201044	2.0	10.0	50	4	900
LXGA0251044	2.5	12.5	50	4	900
LXGA0301044	3.0	15.0	50	4	900
LXGA0352044	3.5	17.5	60	4	900
LXGA0402044	4.0	20.0	60	4	900
LXGA0453064	4.5	22.5	75	6	1080
LXGA0503064	5.0	25.0	75	6	1080
LXGA0553064	5.5	27.5	75	6	1080
LXGA0603064	6.0	30.0	75	6	1080
LXGA0654084	6.5	32.5	100	8	1260
LXGA0704084	7.0	35	100	8	1260
LXGA0754084	7.5	35	100	8	1260
LXGA0804084	8.0	35	100	8	1260
LXGA0854104	8.5	40	100	10	1675
LXGA0904104	9.0	40	100	10	1675
LXGA1004104	10.0	40	100	10	1675
LXGA1104124	11.0	50	100	12	2115
LXGA1204124	12.0	50	100	12	2115
LXGA1405164	14.0	60	150	16	6885
LXGA1605164	16.0	60	150	16	6885
LXGA2005204	20.0	60	150	20	9315

Unit : mm



6刃 6 Flutes

● 超微粒長刃高硬度立銑刀 Micro Grain Long High Hardness End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LVGA0101046	1.0	5.0	50	4	1350
LVGA0151046	1.5	7.5	50	4	1350
LVGA0201046	2.0	10.0	50	4	1350
LVGA0251046	2.5	12.5	50	4	1350
LVGA0301046	3.0	15.0	50	4	1350
LVGA0352046	3.5	17.5	60	4	1350
LVGA0402046	4.0	20.0	60	4	1350
LVGA0453066	4.5	22.5	75	6	1620
LVGA0503066	5.0	25.0	75	6	1620
LVGA0553066	5.5	27.5	75	6	1620
LVGA0603066	6.0	30.0	75	6	1620
LVGA0654086	6.5	32.5	100	8	1890
LVGA0704086	7.0	35	100	8	1890
LVGA0754086	7.5	35	100	8	1890
LVGA0804086	8.0	35	100	8	1890
LVGA0854106	8.5	40	100	10	2511
LVGA0904106	9.0	40	100	10	2511
LVGA1004106	10.0	40	100	10	2511
LVGA1104126	11.0	50	100	12	3173
LVGA1204126	12.0	50	100	12	3173
LVGA1405166	14.0	60	150	16	10328
LVGA1605166	16.0	60	150	16	10328
LVGA2005206	20.0	60	150	20	10328

Unit : mm

產品特色

1. 高硬度加工用，針對熱處理鋼材 HRC60 以上，性能完全發揮。
2. 刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。
3. 使用高速切削，可得到非常光滑的表面。

FEATURES

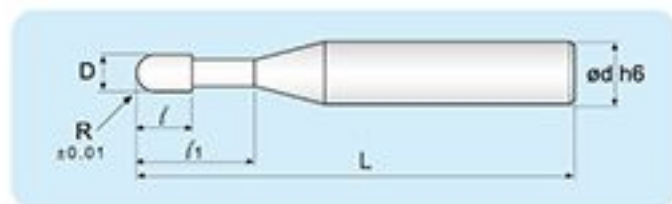
Exceptionally strong which improve surface finishes and high feed rates. Coated TiAlN for maximum heat and wear resistance provide maximum hardness and fracture resistance.

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★★	鋼、碳鋼	Steel, Carbon steel S75C
★	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★	不銹鋼	Stainless steel SUS400
★★★	不銹鋼	Stainless steel SUS400
★★★	不銹鋼	Stainless steel SUS304, SUS316
★★	鑄鐵	Cast iron
★★	球墨鑄鐵	Nodular cast iron
★	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒深溝圓頭立銑刀 Micro Grain Taper End Mills



4刃 4 Flutes

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.



型號 Type No	R角 Corner R	刃長(L) Flute Length	有效長(L1) Lange Min Dia	全長(L) O. A. L	柄徑(d) Shank Dia.	牌價 Price
LBHA020005454	0.2	0.4	0.5	45	4	715
LBHA020010454	0.2	0.4	1	45	4	715
LBHA020015454	0.2	0.4	1.5	45	4	715
LBHA020020454	0.2	0.4	2	45	4	715
LBHA020030454	0.2	0.4	3	45	4	715
LBHA020040454	0.2	0.4	4	45	4	715
LBHA020050454	0.2	0.4	5	45	4	810
LBHA025010454	0.25	0.5	1	45	4	655
LBHA025020454	0.25	0.5	2	45	4	655
LBHA025030454	0.25	0.5	3	45	4	655
LBHA025040454	0.25	0.5	4	45	4	655
LBHA025050454	0.25	0.5	5	45	4	655
LBHA025060454	0.25	0.5	6	45	4	765
LBHA025080454	0.25	0.5	8	45	4	765
LBHA030010454	0.3	0.6	1	45	4	655
LBHA030020454	0.3	0.6	2	45	4	655
LBHA030030454	0.3	0.6	3	45	4	655
LBHA030040454	0.3	0.6	4	45	4	655
LBHA030050454	0.3	0.6	5	45	4	655
LBHA030060454	0.3	0.6	6	45	4	655
LBHA060080454	0.3	0.6	8	45	4	765
LBHA030100454	0.3	0.6	10	45	4	765
LBHA040020454	0.4	0.8	2	45	4	605
LBHA040040454	0.4	0.8	4	45	4	605
LBHA040060454	0.4	0.8	6	45	4	605
LBHA040080454	0.4	0.8	8	45	4	605
LBHA040100454	0.4	0.8	10	45	4	765
LBHA050030454	0.5	1.0	3	45	4	555
LBHA050040454	0.5	1.0	4	45	4	555

Unit : mm

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★	鋼、碳鋼	Steel, Carbon steel S75C
	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS403
★	不銹鋼	Stainless steel SUS304, SUS316
★★★★	鑄鐵	Cast iron
★	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可

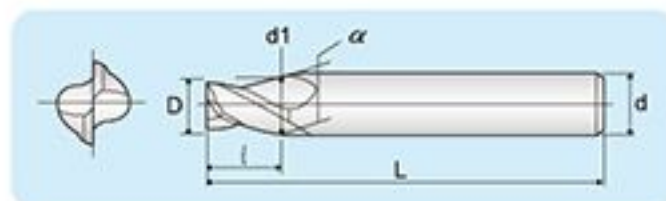
型號 Type No	R角 Corner R	刃長(L) Flute Length	有效長(L) Longe Min Dia	全長(L) O. A. L	柄徑(d) Shank Dia	牌價 Price
LBHA050050454	0.5	1	5	45	4	555
LBHA050060454	0.5	1	6	45	4	555
LBHA050070454	0.5	1	7	45	4	555
LBHA050080454	0.5	1	8	45	4	555
LBHA050100454	0.5	1	10	45	4	555
LBHA050120454	0.5	1	12	45	4	585
LBHA050140504	0.5	1	14	50	4	585
LBHA050160504	0.5	1	16	50	4	630
LBHA150200554	0.5	1	20	55	4	665
LBHA060040454	0.6	1.2	4	45	4	555
LBHA060060454	0.6	1.2	6	45	4	555
LBHA060080454	0.6	1.2	8	45	4	555
LBHA060100454	0.6	1.2	10	45	4	555
LBHA060120454	0.6	1.2	12	45	4	585
LBHA070080454	0.7	1.4	8	45	4	555
LBHA070120454	0.7	1.4	12	45	4	585
LBHA070160504	0.7	1.4	16	50	4	630
LBHA075040454	0.75	1.5	4	45	4	555
LBHA075060454	0.75	1.5	6	45	4	555
LBHA075080454	0.75	1.5	8	45	4	555
LBHA075100454	0.75	1.5	10	45	4	555
LBHA075120454	0.75	1.5	12	45	4	585
LBHA075140504	0.75	1.5	14	50	4	585
LBHA075160504	0.75	1.5	16	50	4	630
LBHA075200554	0.75	1.5	20	55	4	630
LBHA080080454	0.8	1.6	8	45	4	555
LBHA080120454	0.8	1.6	12	45	4	585
LBHA080160504	0.8	1.6	16	50	4	630
LBHA080200554	0.8	1.6	20	55	4	630
LBHA090080454	0.9	1.8	8	45	4	555
LBHA090120454	0.9	1.8	12	45	4	585
LBHA090160504	0.9	1.8	16	50	4	630
LBHA090200554	0.9	1.8	20	55	4	630
LBHA100040454	1	2	4	45	4	525
LBHA100060454	1	2	6	45	4	525
LBHA100080454	1	2	8	45	4	525
LBHA100100454	1	2	10	45	4	525
LBHA100120504	1	2	12	50	4	525
LBHA100140504	1	2	14	50	4	555

型號 Type No	R角 Corner R	刃長(L) Flute Length	有效長(L) Longe Min Dia	全長(L) O. A. L	柄徑(d) Shank Dia	牌價 Price
LBHA100160504	1	2	16	50	4	555
LBHA100180554	1	2	18	55	4	585
LBHA100200554	1	2	20	55	4	585
LBHA100220604	1	2	22	60	4	585
LBHA100260704	1	2	26	70	4	680
LBHA100300704	1	2	30	70	4	680
LBHA125080506	1.25	2.5	8	50	6	790
LBHA125100506	1.25	2.5	10	50	6	790
LBHA125160556	1.25	2.5	16	55	6	790
LBHA125200606	1.25	2.5	20	60	6	850
LBHA150080506	1.5	3	8	50	6	790
LBHA150100506	1.5	3	10	50	6	790
LBHA150120506	1.5	3	12	50	6	790
LBHA150140556	1.5	3	14	55	6	790
LBHA150160556	1.5	3	16	55	6	790
LBHA150180606	1.5	3	18	60	6	850
LBHA150200606	1.5	3	20	60	6	850
LBHA150260706	1.5	3	26	70	6	900
LBHA150300706	1.5	3	30	70	6	900
LBHA150360806	1.5	3	36	80	6	995
LBHA200100606	2	4	10	60	6	790
LBHA200120606	2	4	12	60	6	790
LBHA200160606	2	4	16	60	6	790
LBHA200200656	2	4	20	65	6	850
LBHA200260706	2	4	26	70	6	900
LBHA200300706	2	4	30	70	6	900
LBHA200360806	2	4	36	80	6	995
LBHA200400906	2	4	40	90	6	1195
LBHA200460906	2	4	46	90	6	1195
LBHA200500106	2	4	50	100	6	1275
LBHA250160606	2.5	5	16	60	6	790
LBHA250200606	2.5	5	20	60	6	850
LBHA250260706	2.5	5	26	70	6	850
LBHA250300806	2.5	5	30	80	6	900
LBHA250360806	2.5	5	36	80	6	995
LBHA300200806	3	6	20	80	6	995
LBHA300300906	3	6	30	90	6	1195
LBHA300400106	3	6	40	100	6	1275
LBHA300500116	3	6	50	110	6	1275

Unit : mm



● 超微粒斜度立銑刀 Micro Grain Taper End Mills



2刃 2 Flutes

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge.

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★★	鋼、碳鋼	Hardened S45C 硬化處理
★★	鋼、碳鋼	Steel, Carbon steel S75C
★★★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	高合金鋼	High alloy steel SKD, SKT, SKH
★★★★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★	不銹鋼	Stainless steel SUS403
★★	不銹鋼	Stainless steel SUS403
★★	不銹鋼	Stainless steel SUS304, SUS316
★★★★	鑄鐵	Cast iron
★★	球墨鑄鐵	Nodular cast iron
★★	難削材料	Exotic material 耐熱合金、超合金
★★	鋁	Aluminum
★★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可



型號 Type No	先端徑 (D) Small Min Dia	刃長 (L) Flute Length	斜角 (α) Taper Angle	粗端徑 (d1) Large Min Dia	全長 (L) O. A. L	柄徑 (d) Shank Dia	牌價 Price
TGA005051042	0.5	2	30°	0.6	50	4	1380
TGA005101042	0.5	2	1°	0.5	50	4	1380
TGA005151042	0.5	2	1° 30'	0.5	50	4	1380
TGA005301042	0.5	2	3°	0.6	50	4	1380
TGA005251042	0.5	2	2° 30'	0.6	50	4	1380
TGA005301042	0.5	2	3°	0.5	50	4	1380
TGA005501042	0.5	2	5°	0.6	50	4	1380
TGA005701042	0.5	2	7°	0.5	50	4	1650
TGA0051001042	0.5	2	10°	0.6	50	4	1650
TGA010051042	1.0	4	30°	1.7	50	4	980
TGA010101042	1.0	4	1°	1.14	50	4	980
TGA010151042	1.0	4	1° 30'	1.21	50	4	980
TGA010201042	1.0	4	2°	1.28	50	4	980
TGA010251042	1.0	4	2° 30'	1.35	50	4	980
TGA010301042	1.0	4	3°	1.42	50	4	980
TGA010501042	1.0	4	5°	1.70	50	4	1280
TGA010701042	1.0	4	7°	1.98	50	4	1280
TGA015051042	1.5	5	30°	1.59	50	4	980
TGA015101042	1.5	5	1°	1.67	50	4	980
TGA015151042	1.5	5	1° 30'	1.76	50	4	980
TGA015201042	11.5	5	2°	1.85	50	4	980
TGA015251042	1.5	5	2° 30'	1.93	50	4	980
TGA015301042	1.5	5	3°	2.02	50	4	980
TGA015501042	1.5	5	5°	2.37	50	4	1280
TGA015701042	1.5	5	7°	2.72	50	4	1280
TGA0151001042	1.5	5	10°	3.26	50	4	1280
TGA020051042	2.0	6	30°	2.10	50	4	980
TGA020101042	2.0	6	1°	2.21	50	4	980
TGA020151042	2.0	6	1° 30'	2.31	50	4	980
TGA020201042	2.0	6	2°	2.41	50	4	980

Unit : mm

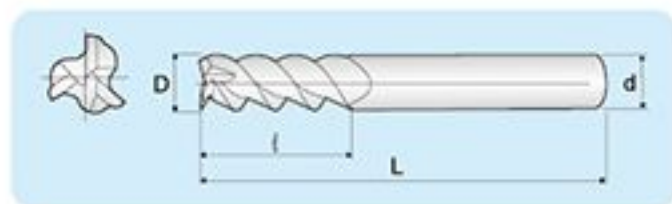


型號 Type No	先端徑(D) Small Min Dia	刃長(ℓ) Flute Length	斜角 Taper Angle	粗端徑(L) Large Min Dia	全長(L) O. A. L	柄徑(d) Shank Dia.	牌價 Price	型號 Type No	先端徑(D) Small Min Dia	刃長(ℓ) Flute Length	斜角 Taper Angle	粗端徑(L) Large Min Dia	全長(L) O. A. L	柄徑(d) Shank Dia.	牌價 Price
TGA020251042	2.0	6	2° 30'	2.52	50	4	980	TGA040702062	4.0	15	7°	7.68	60	6	1780
TGA020301042	2.0	6	3°	2.62	50	4	980	TGA050052062	5.0	20	30°	5.34	60	6	1380
TGA020501042	2.0	6	5°	3.05	50	4	1280	TGA050102062	5.0	20	1°	5.70	60	6	1380
TGA020701042	2.0	6	7°	3.47	50	4	1280	TGA050152062	5.0	20	1° 30'	6.04	60	6	1380
TGA0201001042	2.0	6	10°	4.12	50	4	1280	TGA050202062	5.0	20	2°	6.39	60	6	1380
TGA025051042	2.5	8	30°	2.64	50	4	980	TGA050252062	5.0	20	2° 30'	6.74	60	6	1380
TGA025101042	2.5	8	1°	2.71	50	4	980	TGA050302062	5.0	20	3°	7.10	60	6	1380
TGA025151042	2.5	8	1° 30'	2.91	50	4	980	TGA050503062	5.0	20	5°	8.50	70	6	1880
TGA025201042	2.5	8	2°	3.05	50	4	980	TGA050703062	5.0	20	7°	9.91	70	6	2080
TGA025251042	2.5	8	2° 30'	3.20	50	4	1280	TGA060051062	6.0	20	30°	6.35	60	6	1380
TGA025301042	2.5	8	3°	3.33	50	4	1280	TGA060101062	6.0	20	1°	6.70	60	6	1380
TGA025501042	2.5	8	5°	3.90	50	4	1280	TGA060152062	6.0	20	1° 30'	7.05	60	6	1380
TGA025701062	2.5	8	7°	4.46	50	6	980	TGA060202062	6.0	20	2°	7.40	60	6	1380
TGA0251001062	2.5	8	10°	5.32	50	6	980	TGA060252062	6.0	20	2° 30'	7.75	60	6	1780
TGA030051062	3.0	10	30°	3.17	50	6	980	TGA060302062	6.0	20	3°	8.10	60	8	1780
TGA030101062	3.0	10	1°	3.35	50	6	980	TGA060505082	6.0	20	5°	9.50	80	8	2080
TGA030151062	3.0	10	1° 30'	3.52	50	6	950	TGA080053082	8.0	25	30°	8.44	70	8	2080
TGA030201062	3.0	10	2°	3.69	50	6	950	TGA080103082	8.0	25	1°	8.87	70	8	2080
TGA030251062	3.0	10	2° 30'	3.87	50	6	980	TGA080153082	8.0	25	1° 30'	9.31	70	8	2080
TGA030301062	3.0	10	3°	4.05	50	6	980	TGA080203082	8.0	25	2°	9.74	70	8	2080
TGA030501062	3.0	10	5°	4.75	50	6	1280	TGA080253102	8.0	25	2° 30'	10.18	70	10	2880
TGA030701062	3.0	10	7°	5.45	50	6	1580	TGA08302102	8.0	25	3°	10.62	70	10	2880
TGA0301001062	3.0	10	10°	6.53	50	6	1780	TGA08503122	8.0	25	5°	12.37	90	12	3280
TGA040051062	4.0	15	30°	4.26	50	6	980	TGA10053102	10.0	35	30°	10.61	90	10	2880
TGA040101062	4.0	15	1°	4.52	50	6	980	TGA10103102	10.0	35	1°	11.22	90	10	2880
TGA040151062	4.0	15	1° 30'	4.79	50	6	980	TGA10153102	10.0	35	1° 30'	11.83	90	10	2880
TGA040201062	4.0	15	2°	5.04	50	6	980	TGA10203122	10.0	35	2°	12.44	90	12	3580
TGA040251062	4.0	15	2° 30'	5.31	50	6	980	TGA10253122	10.0	35	2° 30'	13.06	90	12	3880
TGA040301062	4.0	15	3°	5.57	50	6	980	TGA10503162	10.0	35	5°	16.12	115	16	5280
TGA040501062	4.0	15	5°	6.62	50	6	1580								

Unit : mm



● 超微粒鋁用立銑刀 Micro Grain End Mills



3刃 3 Flutes

產品特色

特殊切削角度與特殊刃口設計，針對輕合金加工有良好表現，高效能排屑效果，特別在鋁合金加工可高速切削，達到光滑的表面。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

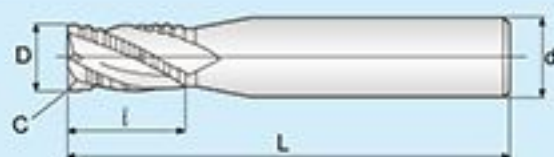


型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
AEC0051043	0.5	1.25	50	4	1100
AEC0061043	0.6	1.5	50	4	1100
AEC0081043	0.8	2.0	50	6	1100
AEC0101063	1.0	2.5	50	6	530
AEC0121063	1.2	9.5	50	6	530
AEC0151063	1.5	4.0	50	6	530
AEC0181063	1.8	4.5	50	6	530
AEC0201063	2.0	5.0	50	6	530
AEC0301063	3.0	7.5	50	6	530
AEC0401063	4.0	10.0	50	6	530
AEC0501063	5.0	12.5	50	6	530
AEC0601063	6.0	15.0	50	6	530
AEC0802083	8.0	20.0	60	8	1050
AEC1003103	10.0	25.0	75	10	1650
AEC1203123	12.0	30.0	75	12	2200

Unit : mm

適用性	被削材料	WORK MATERIAL
鋼、碳鋼	Steel, Carbon steel	S15C
鋼、碳鋼	Steel, Carbon steel	S45C
鋼、碳鋼	Hardened	S45C 硬化處理
鋼、碳鋼	Steel, Carbon steel	S75C
鋼、碳鋼	Hardened	S75C 硬化處理
低合金鋼	Low alloy steel	SCM, SNCM
低合金鋼	Hardened SCM, SNCM	硬化處理
低合金鋼	Hardened SCM, SNCM	硬化處理
低合金鋼	Hardened SCM, SNCM	硬化處理
高合金鋼	High alloy steel	SKD, SKT, SKH
高合金鋼	Hardened SKD, SKT, SKH	硬化處理
不銹鋼	Stainless steel	SUS403
不銹鋼	Stainless steel	SUS403
不銹鋼	Stainless steel	SUS304, SUS316
鑄鐵	Cast iron	
球墨鑄鐵	Nodular cast iron	
難削材料	Exotic material	鉻熱合金、超合金
★★★	鋁	Aluminum
★★★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



4刃 4 Flutes

● 超微粒粗齒立銑刀 Micro Grain Roughing End Mill



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	刀尖倒角 (C)	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
GCAE0601064	6	15	0.5	50	6	630
GCAE0802084	8	20	0.5	60	8	1260
GCAE1003104	10	25	0.5	75	10	1950
GCAE1203124	12	30	0.5	75	12	2625
GCAE1404164	14	35	0.5	100	16	6675
GCAE1604164	16	40	0.6	100	16	6675
GCAE1804204	18	40	0.6	100	20	9300
GCAE2004204	20	40	0.6	100	20	9300
GCAE2204254	22	45	0.6	100	25	20000
GCAE2504254	25	50	0.6	100	25	20000

Unit : mm

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

適用性	被削材料	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★★	鋼、碳鋼	Steel, Carbon steel S75C
★	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★	不銹鋼	Stainless steel SUS403
★★★	不銹鋼	Stainless steel SUS403
★★★	不銹鋼	Stainless steel SUS304, SUS316
★★	鑄鐵	Cast iron
★★	球墨鑄鐵	Nodular cast iron
★	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



● 超微粒定位鑽 Micro Grain Orientate Drill

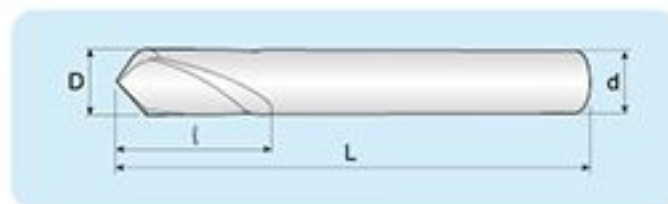


產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.



型號 Type No	直徑 (D) Diameter	刃長 (l) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
WPA3	3	4.5	75	6	510
WPA4	4	6	75	6	510
WPA6	6	9	75	6	510
WPA8	8	12	100	8	1010
WPA10	10	15	100	10	1560
WPA12	12	18	100	12	2100
WPA16	16	24	150	16	5340
WPA20	20	30	150	20	7440

Unit : mm

● 長柄超微粒定位鑽 Micro Grain Long Shank Orientate Drill



型號 Type No	直徑 (D) Diameter	刃長 (l) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LWPA3	3	4.5	100	6	510
LWPA4	4	6	100	6	510
LWPA6	6	9	100	6	510
LWPA8	8	12	150	8	1010
LWPA10	10	15	150	10	1560
LWPA12	12	18	150	12	2100
LWPA16	16	24	150	16	5340
LWPA20	20	30	150	20	7440

Unit : mm

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★★	鋼、碳鋼	Hardened S45C 硬化處理
★★★★	鋼、碳鋼	Steel, Carbon steel S75C
★★★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★★★★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS304, SUS316
★★★★	鑄鐵	Cast iron
★★★★	球墨鑄鐵	Nodular cast iron
★★★★	難削材料	Exotic material 耐熱合金、超合金
★★★★	鋁	Aluminum
★★★★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★★★★ 佳 ★★★★★ 尚可



● 超微粒定位鑽 Micro Grain Orientate Drill



產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
WP3	3	4.5	50	6	460
WP4	4	6	50	6	460
WP6	6	9	50	6	460
WP8	8	12	60	8	920
WP10	10	15	75	10	1410
WP12	12	18	75	12	1890
WP16	16	24	100	16	5340
WP20	20	30	100	20	7440

Unit : mm



● 長柄超微粒定位鑽 Micro Grain Long Shank Orientate Drill



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
LWP3	3	4.5	100	6	460
LWP4	4	6	100	6	460
LWP6	6	9	100	6	460
LWP8	8	12	150	8	920
LWP10	10	15	150	10	1410
LWP12	12	18	150	12	1890
LWP16	16	24	150	16	5340
LWP20	20	30	150	20	7440

Unit : mm

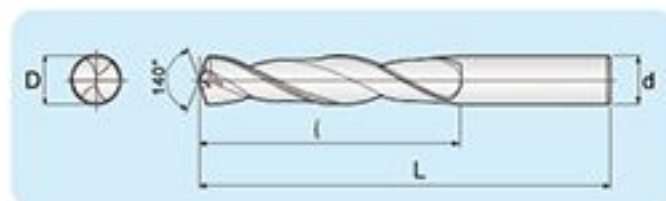
適用性	被削鋼材	WORK MATERIAL
★★★	鋼、鐵鋼	Steel, Carbon steel S15C
★★	鋼、鐵鋼	Steel, Carbon steel S45C
★	鋼、鐵鋼	Hardened S45C 硬化處理
	鋼、鐵鋼	Steel, Carbon steel S75C
	鋼、鐵鋼	Hardened S75C 硬化處理
★★	低合金鋼	Low alloy steel SCM, SNCM
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
	低合金鋼	Hardened SCM, SNCM 硬化處理
★	高合金鋼	High alloy steel SKD, SKT, SKH
	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS403
	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
	球墨鑄鐵	Nodular cast iron
	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可

※ 本牌價依市場行情依折扣優惠，歡迎查詢價格。
The discount will be offered based on current prices. Welcome to check the prices.



● 超微粒鑽頭 Micro Grain Coated Drill



2刃 2 Flutes

產品特色

刀刃區近於鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

Generally used on wide range of every kind machining. With benefits of fracture resistance and strong edge. Coated TiAlN for maximum heat and wear resistance. Provide maximum hardness and fracture resistance.

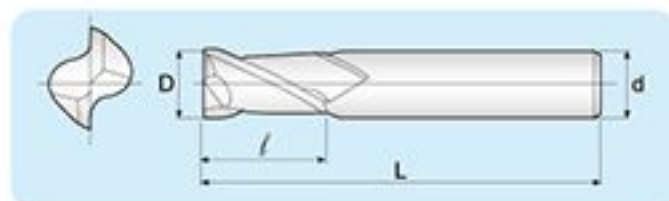


型號 Type No	直徑 (D) Diameter	刃長 (l) Flute Length	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
WDA3.0~3.7	3.0~3.7	22	62	6	1500
WDA3.8~4.7	3.8~4.7	26	66	6	1850
WDA4.8~6.0	4.8~6.0	30	66	6	2250
WDA6.1~7.0	6.1~7.0	38	79	8	2800
WDA7.1~8.0	7.1~8.0	42	79	8	3150
WDA8.1~9.0	8.1~9.0	49	89	10	4100
WDA9.1~10.0	9.1~10.0	49	89	10	4100
WDA10.1~11.0	10.1~11.0	56	102	12	5600
WDA11.1~12.0	11.1~12.0	56	102	12	5600
WDA12.1~13.0	12.1~13.0	61	107	14	8500
WDA13.1~14.0	13.1~14.0	61	107	14	8500
WDA14.1~15.0	14.1~15.0	65	115	16	11100
WDA15.1~16.0	15.1~16.0	65	115	16	11100
WDA16.5	16.5	73	123	18	15000
WDA17.0	17.0	73	123	18	15000
WDA17.5	17.5	73	123	18	15000
WDA18.0	18.0	73	123	18	15000
WDA18.5	18.5	79	131	20	18500
WDA19.0	19.0	79	131	20	18500
WDA19.5	19.5	79	131	20	18500
WDA20.0	20.0	79	131	20	18500

Unit : mm

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★★★	鋼、碳鋼	Steel, Carbon steel S75C
★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★★★	球墨鑄鐵	Nodular cast iron
★★	難削材料	Exotic material 易熱合金、超合金
★★	鋁	Aluminum
★★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可



2刃 2 Flutes

●極超微粒立銑刀 Super Micro Grain End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
UGA0101042	1.0	2.5	50	4	550
UGA0151042	1.5	4.0	50	4	550
UGA0201042	2.0	5.0	50	4	550
UGA0251042	2.5	6.5	50	4	550
UGA0301042	3.0	7.5	50	4	550
UGA0351042	3.5	9.0	50	4	550
UGA0401042	4.0	10.0	50	4	550
UGA0451062	4.5	11.5	50	6	635
UGA0501062	5.0	12.5	50	6	635
UGA0551062	5.5	14.0	50	6	635
UGA0601062	6.0	15.0	50	6	635
UGA0652082	6.5	16.5	60	8	1260
UGA0702082	7.0	17.5	60	8	1260
UGA0752082	7.5	19.0	60	8	1260
UGA0802082	8.0	20.0	60	8	1260
UGA0853102	8.5	21.5	75	10	1950
UGA0903102	9.0	22.5	75	10	1950
UGA0953102	9.5	24.0	75	10	1950
UGA1003102	10.0	25.0	75	10	1950
UGA1053122	10.5	27.0	75	12	2750
UGA1103122	11.0	27.5	75	12	2750
UGA1153122	11.5	29.0	75	12	2750
UGA1203122	12.0	30.0	75	12	2750
UGA1304162	13.0	32.5	100	16	6200
UGA1404162	14.0	35.0	100	16	6200
UGA1504162	15.0	37.5	100	16	6200
UGA1604162	16.0	40.0	100	16	6200

Unit : mm

產品特色

1. 適用高速切削極高硬度切削。
2. 針對熱處理鋼材HRC60以上，性能完全發揮。
3. 刀刃趨於近鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

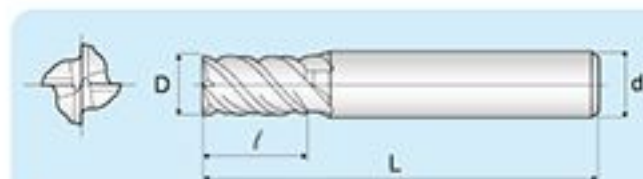
Goof at High Speed and hardness cutting. It may achieve best above HRC60. With benefits of fracture resistance and strong edge.

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、鐵鋼	Steel, Carbon steel S15C
★★★	鋼、鐵鋼	Steel, Carbon steel S45C
★★	鋼、鐵鋼	Hardened S45C 硬化處理
★★	鋼、鐵鋼	Steel, Carbon steel S75C
★	鋼、鐵鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★	不銹鋼	Stainless steel SUS403
★★★	不銹鋼	Stainless steel SUS403
★★★	不銹鋼	Stainless steel SUS304, SUS316
★★	鑄鐵	Cast iron
★★	球墨鑄鐵	Nodular cast iron
★	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



●極超微粒立銑刀 Super Micro Grain End Mills



4刃 4 Flutes



產品特色

1. 適用高速切削極高硬度切削。
2. 針對熱處理鋼材HRC60以上，性能完全發揮。
3. 刀刃趨於近鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

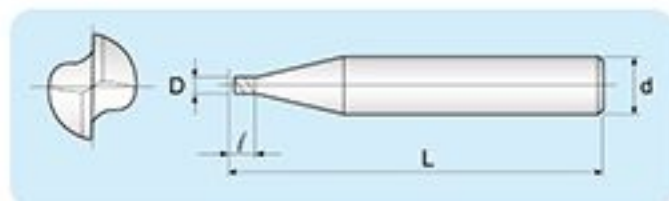
Good at High Speed and hardness cutting. It may achieve best above HRC60. With benefits of fracture resistance and strong edge.

適用性	被削鋼材	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★★★	鋼、碳鋼	Steel, Carbon steel S75C
★★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★★★	球墨鑄鐵	Nodular cast iron
★★	難削材料	Exotic material 耐熱合金、超合金
★★	鋁	Aluminum
★★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★★★★ 佳 ★★★★★ 尚可

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
UGA0101044	1.0	2.5	50	4	550
UGA0151044	1.5	4.0	50	4	550
UGA0201044	2.0	5.0	50	4	550
UGA0251044	2.5	6.5	50	4	550
UGA0301044	3.0	7.5	50	4	550
UGA0351044	3.5	9.0	50	4	550
UGA0401044	4.0	10.0	50	4	550
UGA0451064	4.5	11.5	50	6	635
UGA0501064	5.0	12.5	50	6	635
UGA0551064	5.5	14.0	50	6	635
UGA0601064	6.0	15.0	50	6	635
UGA0652084	6.5	16.5	60	8	1260
UGA0702084	7.0	17.5	60	8	1260
UGA0752084	7.5	19.0	60	8	1260
UGA0802084	8.0	20.0	60	8	1260
UGA0853104	8.5	21.5	75	10	1950
UGA0903104	9.0	22.5	75	10	1950
UGA0953104	9.5	24.0	75	10	1950
UGA1003104	10.0	25.0	75	10	1950
UGA1053124	10.5	27.0	75	12	2750
UGA1103124	11.0	27.5	75	12	2750
UGA1153124	11.5	29.0	75	12	2750
UGA1203124	12.0	30.0	75	12	2750
UGA1304164	13.0	32.5	100	16	6200
UGA1404164	14.0	35.0	100	16	6200
UGA1504164	15.0	37.5	100	16	6200
UGA1604164	16.0	40.0	100	16	6200

Unit : mm



2刃 2 Flutes

●極超微粒微小徑立銑刀 Super Micro Diameter End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
UMGA0021042	0.2	0.4	50	4	1500
UMGA0031042	0.3	0.6	50	4	1300
UMGA0041042	0.4	0.8	50	4	1300
UMGA0051042	0.5	1.0	50	4	1100
UMGA0061042	0.6	1.2	50	4	1100
UMGA0071042	0.7	1.4	50	4	1100
UMGA0081042	0.8	1.6	50	4	1100
UMGA0091042	0.9	1.8	50	4	1100
UMGA0101042	1.0	2.5	50	4	550
UMGA0111042	1.1	3.0	50	4	780
UMGA0121042	1.2	3.0	50	4	780
UMGA0130142	1.3	3.5	50	4	780
UMGA0141042	1.4	3.5	50	4	780
UMGA0151042	1.5	4.0	50	4	550
UMGA0161042	1.6	4.0	50	4	750
UMGA0171042	1.7	4.5	50	4	750
UMGA0181042	1.8	4.5	50	4	750
UMGA0191042	1.9	5.0	50	4	750
UMGA0201042	2.0	5.0	50	4	550
UMGA0211042	2.1	5.5	50	4	750
UMGA0221042	2.2	5.5	50	4	750
UMGA0221042	2.3	6.0	50	4	750
UMGA0241042	2.4	6.0	50	4	750
UMGA0251042	2.5	6.5	50	4	550
UMGA0261042	2.6	6.5	50	4	750
UMGA0271042	2.7	7.0	50	4	750
UMGA0281042	2.8	7.0	50	4	750
UMGA0291042	2.9	7.5	50	4	750
UMGA0301042	3.0	7.5	50	4	550

Unit : mm

產品特色

1. 適用高速切削極高硬度切削。
2. 針對熱處理鋼材HRC60以上，性能完全發揮。
3. 刀刃趨於近鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

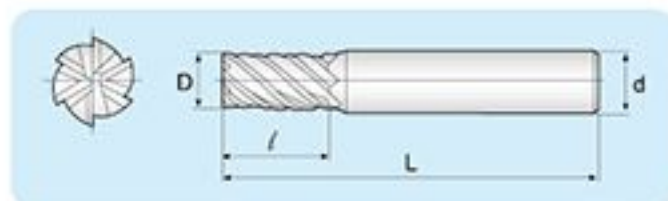
Goof at High Speed and hardness cutting. It may achieve best above HRC60. With benefits of fracture resistance and strong edge.

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★★	鋼、碳鋼	Steel, Carbon steel S75C
★	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★	不銹鋼	Stainless steel SUS400
★★★	不銹鋼	Stainless steel SUS400
★★★	不銹鋼	Stainless steel SUS304, SUS316
★★	鑄鐵	Cast iron
★★	球墨鑄鐵	Nodular cast iron
★	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



●極超微粒高硬度專用立銑刀 Super Micro Grain High Hardness End Mills



6刃 6 Flutes



產品特色

1. 適用高速切削極高硬度切削。
2. 針對熱處理鋼材HRC60以上，性能完全發揮。
3. 刀刃趨於近鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

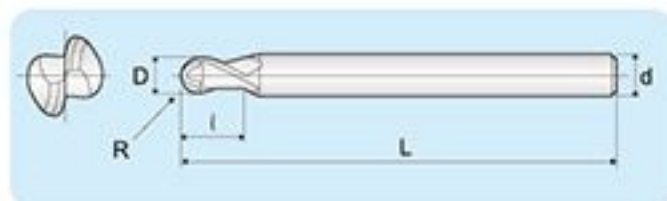
Good at High Speed and hardness cutting. It may achieve best above HRC60. With benefits of fracture resistance and strong edge.

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
UVA0201046	2.0	5.0	50	4	625
UVA0301046	3.0	7.5	50	4	625
UVA0401046	4.0	10.0	50	4	625
UVA0501066	5.0	12.5	50	6	710
UVA0601066	6.0	15.0	50	6	710
UVA0603066	6.0	26.0	75	6	1065
UVA0802086	8.0	20.0	60	8	1420
UVA0804086	8.0	35.0	100	8	2370
UVA1003106	10.0	25.0	75	10	2370
UVA1004106	10.0	40.0	100	10	3135
UVA1203126	12.0	30.0	75	12	2955
UVA1204126	12.0	50.0	100	12	3940
UVA1605166	16.0	50.0	150	16	12520
UVA2006206	20.0	50.0	150	20	17440

Unit : mm

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★★	鋼、碳鋼	Steel, Carbon steel S75C
★	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★	不銹鋼	Stainless steel SUS400
★★★	不銹鋼	Stainless steel SUS400
★★★	不銹鋼	Stainless steel SUS304, SUS316
★★	鑄鐵	Cast iron
★★	球墨鑄鐵	Nodular cast iron
★	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



2刃 2 Flutes

● 極超微粒圓頭立銑刀 Super Micro Grain Ball End Mills



型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	全長 (L) O. A. L.	柄徑 (d) Shank Dia.	牌價 Price
UBA0041042	0.2 R	0.8	50	4	1350
UBA0061042	0.3 R	1.2	50	4	1350
UBA0081042	0.4 R	1.6	50	4	1350
UBA0101042	0.5 R	2.0	50	4	600
UBA0151042	0.75 R	3.0	50	4	600
UBA0201042	1.0 R	4.0	50	4	600
UBA0251042	1.25 R	5.0	50	4	600
UBA0301042	1.5 R	6.0	50	4	600
UBA0401042	2.0 R	8.0	50	4	600
UBA0601042	3.0 R	12.0	50	6	725
UBA0802082	4.0 R	16.0	60	8	1430
UBA1003102	5.0 R	20.0	75	10	2100
UBA1203122	6.0 R	24.0	75	12	2950

Unit : mm

產品特色

1. 適用高速切削極高硬度切削。
2. 針對熱處理鋼材HRC60以上，性能完全發揮。
3. 刀刃趨於近鏡面，刃口表面光滑，排屑順暢，刀具壽命長，精度也提高。

FEATURES

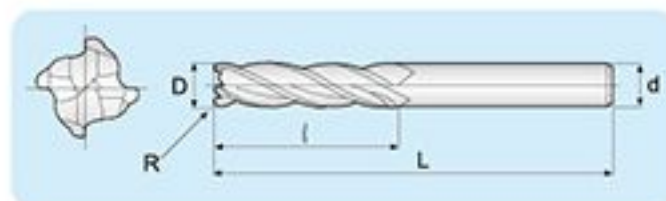
Good at High Speed and hardness cutting. It may achieve best above HRC60. With benefits of fracture resistance and strong edge.

適用性	被削鋼材	WORK MATERIAL
★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★	鋼、碳鋼	Hardened S45C 硬化處理
★★	鋼、碳鋼	Steel, Carbon steel S75C
★	鋼、碳鋼	Hardened S75C 硬化處理
★★★	低合金鋼	Low alloy steel SCM, SNCM
★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★	不銹鋼	Stainless steel SUS400
★★★	不銹鋼	Stainless steel SUS400
★★★	不銹鋼	Stainless steel SUS304, SUS316
★★	鑄鐵	Cast iron
★★	球墨鑄鐵	Nodular cast iron
★	難削材料	Exotic material 耐熱合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★ 極佳 ★★ 佳 ★ 尚可



●極超微粒圓隅立銑刀 Super Micro Grain End Mills



4刃 4 Flutes



產品特色

1. 使用圓隅角立銑刀可提高進給速率，一次加工完成，增加生產效能降低成本。
2. 圓隅角的設計比一般立銑刀更耐磨耗，延長刀具壽命。
3. 應用於模具加工，適用於一般鋼材、難切削材質，如不銹鋼、鋁合金、銅質鋼、NAK55、NAK80、高合金鋼等。

FEATURES

The corner radius design strengthens the end mill by reducing chipping, providing longer tool life. Corner more material faster, improve productivity and reduce cost.

適用性	被削材料	WORK MATERIAL
★★★★	鋼、碳鋼	Steel, Carbon steel S15C
★★★★	鋼、碳鋼	Steel, Carbon steel S45C
★★★	鋼、碳鋼	Hardened S45C 硬化處理
★★★	鋼、碳鋼	Steel, Carbon steel S75C
★	鋼、碳鋼	Hardened S75C 硬化處理
★★★★	低合金鋼	Low alloy steel SCM, SNCM
★★★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★	低合金鋼	Hardened SCM, SNCM 硬化處理
★★★★	高合金鋼	High alloy steel SKD, SKT, SKH
★	高合金鋼	Hardened SKD, SKT, SKH 硬化處理
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS403
★★★★	不銹鋼	Stainless steel SUS304, SUS316
★★★	鑄鐵	Cast iron
★★★	球墨鑄鐵	Nodular cast iron
★	難削材料	Exotic material 超合金、超合金
★	鋁	Aluminum
★	鋁合金	Aluminum alloy

★★★★ 極佳 ★★ 佳 ★ 尚可

型號 Type No	直徑 (D) Diameter	刃長 (L) Flute Length	R 角 Corner R	全長 (L) O. A. L	柄徑 (d) Shank Dia.	牌價 Price
URA03051034	3	4.0	0.5	50	3	600
URA03101034	3	4.0	1.0	50	3	600
URA04051044	4	5.0	0.5	50	4	600
URA04101044	4	5.0	1.0	50	4	600
URA06051064	6	7.5	0.5	50	6	725
URA06101064	6	7.5	1.0	50	6	725
URA06151064	6	7.5	1.5	50	6	725
URA06201064	6	7.5	2.0	50	6	725
URA08052084	8	10.0	0.5	60	8	1430
URA08102084	8	10.0	1.0	60	8	1430
URA08152084	8	10.0	1.5	60	8	1430
URA08202084	8	10.0	2.0	60	8	1430
URA08252084	8	10.0	2.5	60	8	1430
URA08302084	8	10.0	3.0	60	8	1430
URA10053104	10	12.0	0.5	75	10	2110
URA10103104	10	12.0	1.0	75	10	2110
URA10153104	10	12.0	1.5	75	10	2110
URA10203104	10	12.0	2.0	75	10	2110
URA10253104	10	12.0	2.5	75	10	2110
URA10303104	10	12.0	3.0	75	10	2110
URA12053124	12	14.5	0.5	75	12	2950
URA12103124	12	14.5	1.0	75	12	2950
URA12153124	12	14.5	1.5	75	12	2950
URA12203124	12	14.5	2.0	75	12	2950
URA12253124	12	14.5	2.5	75	12	2950
URA12303124	12	14.5	3.0	75	12	2950

Unit : mm

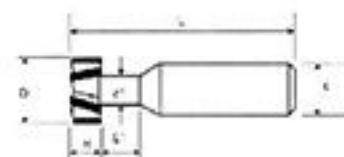
● 焊刃鎢鋼刀具系列 Milling Cutter Series



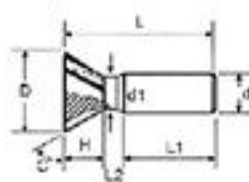
焊接式鎢鋼標準刃直柄精銑刀
Brazed Carbide Spiral End Mill



焊接式鎢鋼T型鍵槽銑刀
Saggered Tooth-Slot Milling Cutter



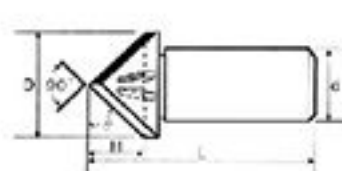
焊接式鎢鋼鳩尾槽銑刀
Dovetail Milling Cutter



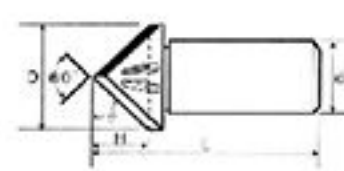
焊接式鎢鋼標準刃直柄精銑刀
Brazed Carbide Spiral End Mill



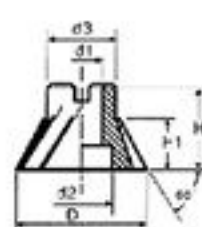
鎢鋼倒角刀
Angle Milling Cutter



鎢鋼銑刀
Milling Cutter



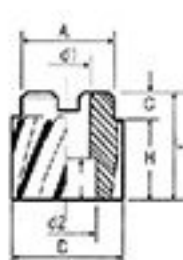
鳩尾槽筒狀銑刀
Dovetail Milling Cutter



鎢鋼銑刀
Milling Cutter



焊刃筒仔刀
Carbide Spial End Mill



鎢鋼側銑刀
Brazed Side Milling Cutter

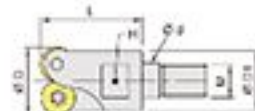
● 捨棄式銑刀具系列 Disposable Milling Cutter Series



圓刃銑刀
End Mills(W) Indexable Inserts



ED圓刃銑刀
End Mills(W) ED Indexable Inserts



RD圓刃銑刀
End Mills(W) ED Indexable Inserts



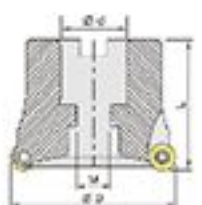
RD圓刃銑刀
End Mills(W) ED Indexable Inserts



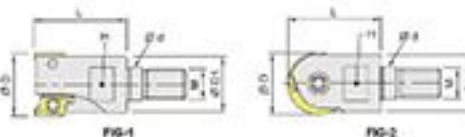
RD圓刃銑刀
End Mills(W) ED Indexable Inserts



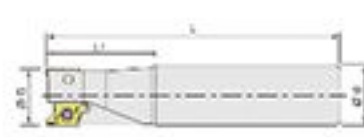
RD圓刃銑刀
End Mills(W) ED Indexable Inserts



TR圓刃銑刀
End Mills(W) ED Indexable Inserts



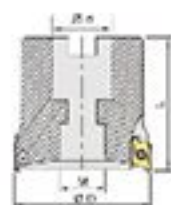
捨棄式刀刃直角銑刀
Shoulder/Cutting End Mills(W) Throw-Away inserts



捨棄式刀刃直角銑刀
Shoulder/Cutting End Mills(W) Throw-Away inserts



捨棄式刀刃直角銑刀
Shoulder/Cutting End Mills(W) Throw-Away inserts



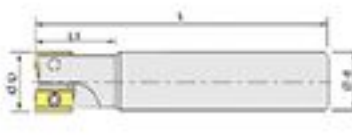
捨棄式刀刃直角銑刀
Shoulder/Cutting End Mills(W) Throw-Away inserts



捨棄式刀刃直角銑刀
Shoulder/Cutting End Mills(W) Throw-Away inserts



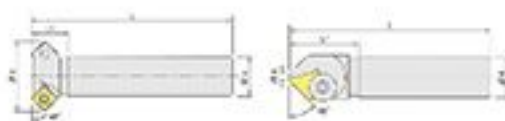
捨棄式刀刃直角銑刀
Shoulder/Cutting End Mills(W) Throw-Away inserts



捨棄式刀刃直角銑刀
Shoulder/Cutting End Mills(W) Throw-Away inserts



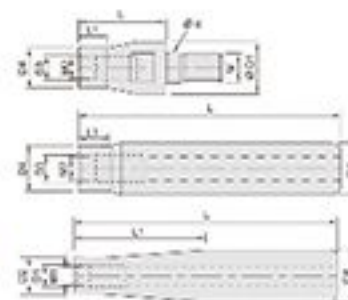
捨棄式面銑刀
Face Milling Cutters



捨棄式刀刃倒角刀
Chamfer Mills(W) Throw-Away Inserts



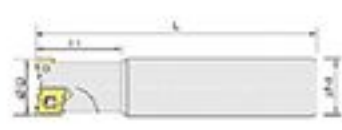
捨棄式刀刃倒角刀
Chamfer Mills(W) Throw-Away Inserts



MD連接式刀桿
Extension Adapter



捨棄式刀刃鑽銑刀
Boring & Milling Cutting (W) Throw-Away inserts



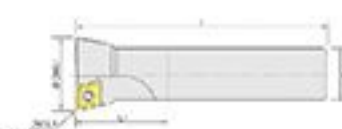
捨棄式刀刃鑽銑刀
Boring & Milling Cutting (W) Throw-Away inserts



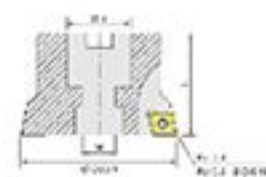
球型銑刀
Ball Nose Mills (SE)



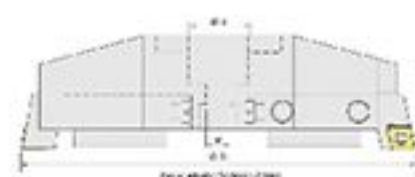
WGR球型精銑刀
Ball Nose Fine Mills (WGR)



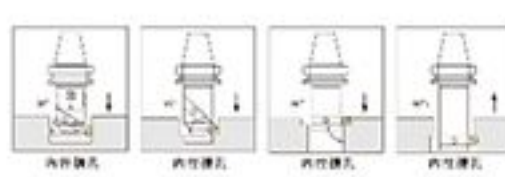
固定式粗鑽刀桿
Fixed Rounge Boring Bar



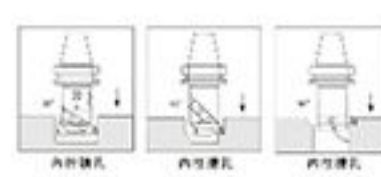
固定式粗鑽刀桿
Fixed Rounge Boring Bar



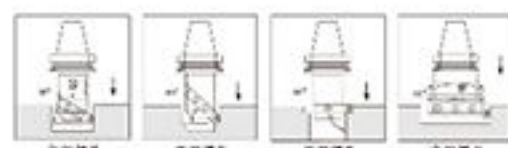
可調式粗鑽刀桿
Adjustable Rounge Boring Bar



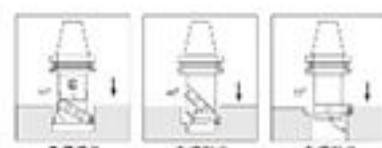
捨棄式刀刃鑽孔刀架
Boring Bar(W) Throw-Away Inserts



捨棄式刀刃鑽孔刀架
Boring Bar(W) Throw-Away Inserts



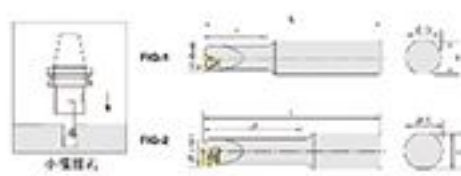
捨棄式刀刃鑽孔刀架
Boring Bar(W) Throw-Away Inserts



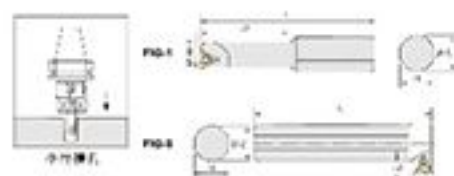
捨棄式刀刃鑽孔刀架
Boring Bar(W) Throw-Away Inserts



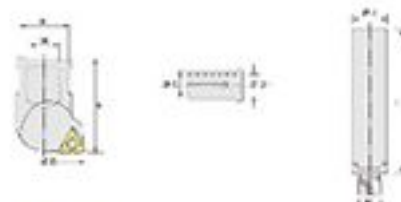
捨棄式刀刃鑽孔刀柄
Boring Ahank(W) Throw-Away Inserts



捨棄式刀刃鑽孔刀柄
Boring Ahank(W) Throw-Away Inserts



捨棄式刀刃鑽孔刀柄
Boring Ahank(W) Throw-Away Inserts



鑽孔刀頭 & 配件
Boring Ahank(W) Throw-Away Inserts



卡式刀座(符合ISO規格)
Cartridges Meet With ISO Std



卡式刀座(符合ISO規格)
Cartridges Meet With ISO Std



卡式刀座(符合ISO規格)
Cartridges Meet With ISO Std

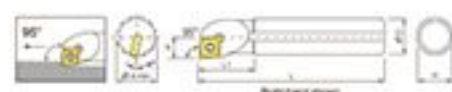


卡式刀座(符合ISO規格)
Cartridges Meet With ISO Std

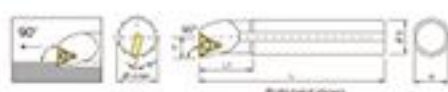


配件
Spare Parts

● 捨棄式車刀具系列 Disposable Lathe Cutter Series



SCLC-SCLP



STFC/STFP



STUC/STIP



SDZC



STWC



SDUC



SDQC 107.5°



SDJC 107.5°



SVQC



SVUC



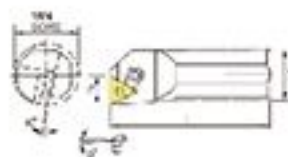
SVJC 95°



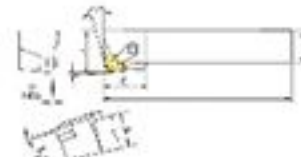
MTUN 93°



MTUN-A 93°



MTFN 90°



MCKN 75°



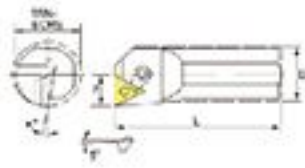
MWLN 95°



MCLN 95°



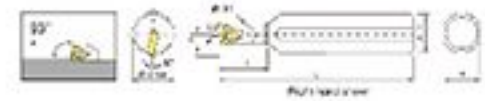
MDUN 93°



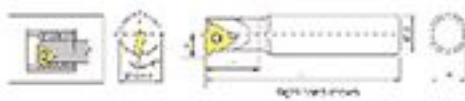
CTFP 90°



SCLC



SWUB



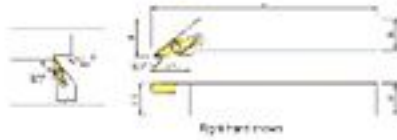
SNR



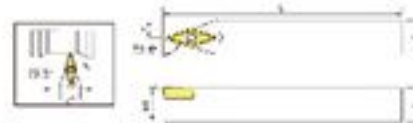
SINR/L



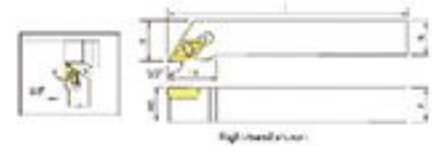
SWUBR



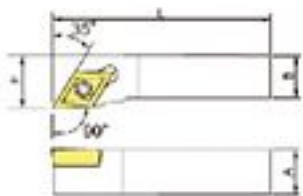
SVJC 93°



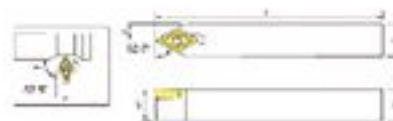
SVVC



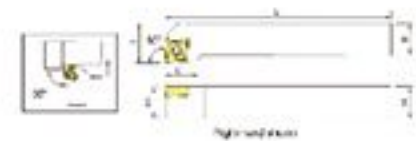
SDJC 93°



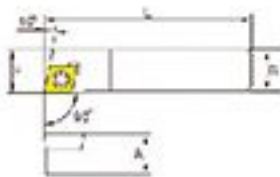
SDAC



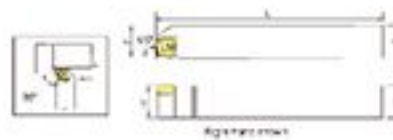
SDNCN



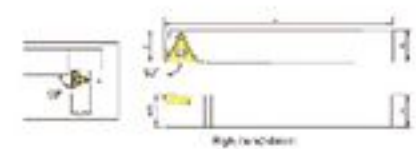
SLCL



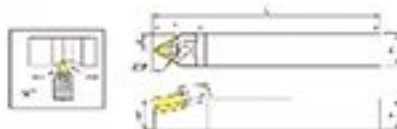
SCAC



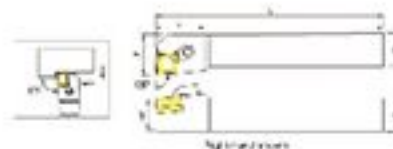
SCLC-N



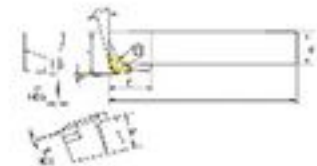
STAC-N



MTEN 60°



MCLN 95°



MCKN 75°

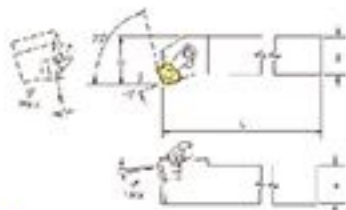
● 捨棄式車刀具系列 Disposable Lathe Cutter Series



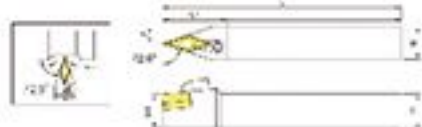
MCRN 75°



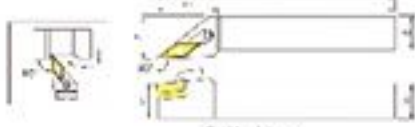
MSBN 75°



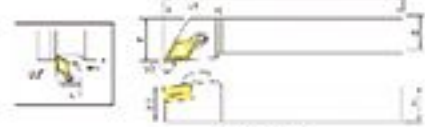
MSKN 75°



MVVN 75° 30'



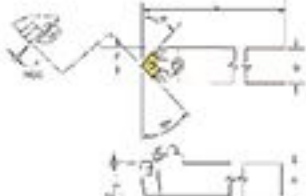
MVJN 93°



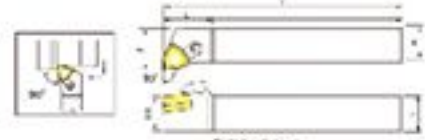
MDJN 93°



MDNN 63°



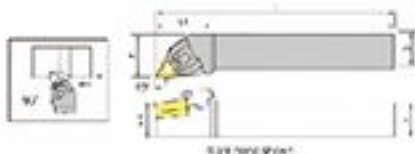
MSDN 45°



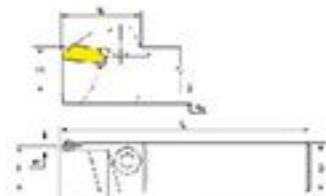
MWLN



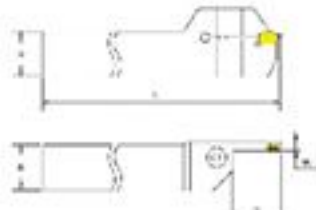
MTGN 90°



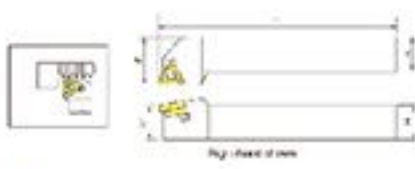
MTJN 93°



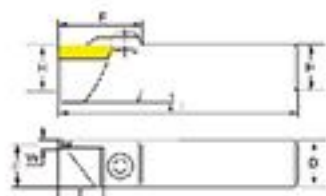
GHGR



GHR



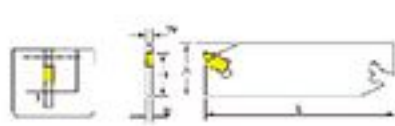
SER/L



DGTR



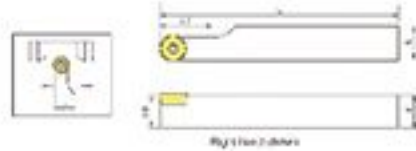
KGBR



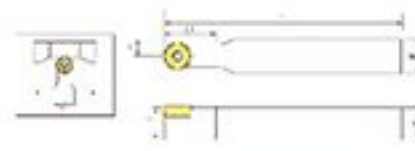
CGIH



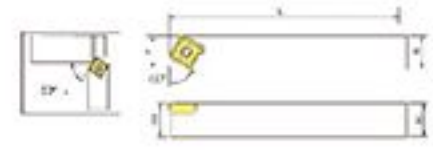
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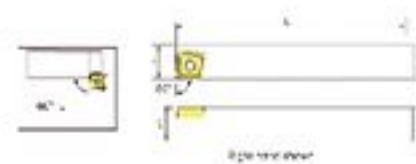
SRAC



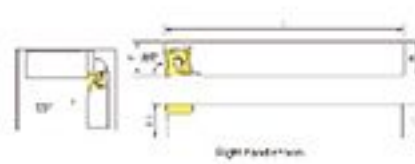
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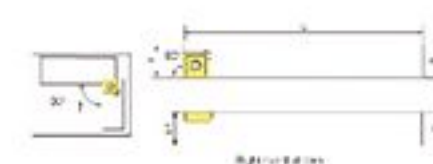
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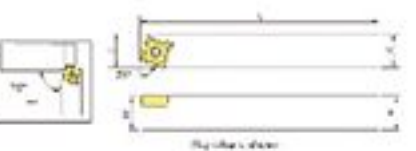
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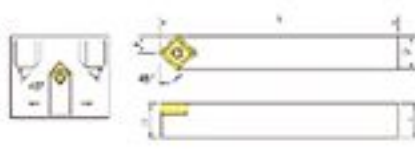
SSYC



SSAC



SSBC



SSDCN

● 刀具系列 Cutting Tools Series





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