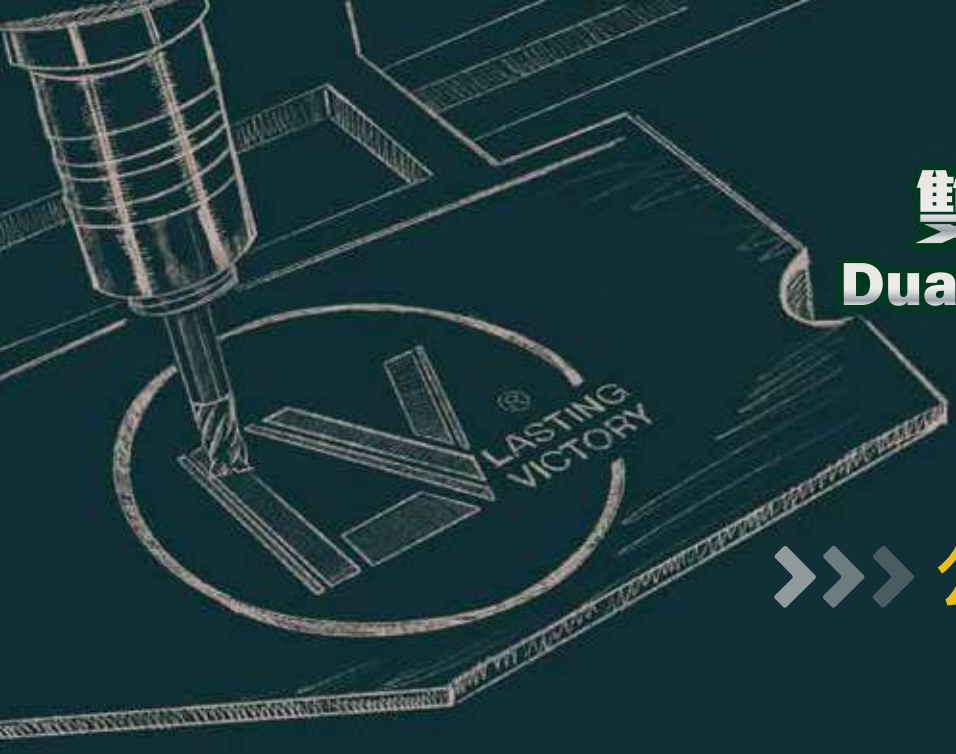
TUNGSTEN CUTTING TOOLS

—— 鎢鋼切削刀具・專業設計製造 ——

Specialized Design & Manufacturing

LASTING VICTORY



雙品牌
Dual Brand

公司簡介
About Us

元駿國際 台灣專業刀具製造商

從無到有，從傳統到數位，歷經多年的辛勤耕耘，無論刀具的專業度、各產品的品質、多元化的客戶服務，元駿國際都已成為台灣數一數二銑刀製造商之一，我們準備好成為您最佳的夥伴選擇。

創立於1995年，2014年新廠遷至台中工業區現址，2022年打造刀具業界首家數位智能工廠。並打造了LV及Vtool雙品牌，滿足全球加工機械產業之各類需求。

選擇元駿國際的夥伴來自全球40餘國，並廣泛來自各大產業上，3C電子業、航太產業、民生產業、模具產業、自行車產業、汽車機械產業、自動化產業，有需求就會有我們的服務。

LV International Co., Ltd is a leader of Taiwan Tungsten Carbide End Mills Industry and many customers come from more 40 countries. They all from 3C Electronics Industry, Aerospace industry, Bicycle Industry, Auto machinery industry and Automation Industry... etc, then they are all our best partners now.

History :
- Establish in Year 1995
- Move to new factory in Taichung in Year 2014.
- Crate and Develop two brands LV and Vtool.

Future Plans :
- LV will bring the customer new generation “Smart Factory” in order to be a pioneer in Taiwan end mills industry.
- Fully automated production of Cutting tools Industry.

專利認證
Patent & Certification

- 專利字號：M586180 易黏屑且非鐵質材料加工的铣刀結構 (883L-AEP)
- 專利字號：M586181 不等分割刀刃及螺旋角漸縮導程的R溝立铣刀 (884L-UP)
- 專利字號：M586182 不等分割刀刃及不等螺旋角的立铣刀 (884L-Z)

- Patent in 2019 M586180 End mill geometry design for sticky non-ferrous material.(883L-AEP)
- Patent in 2019 M586181 unequal pitches and variable leads end mill with U flute.(884L-UP)
- Patent in 2019 M586182 unequal pitches and unequal helix angles end mill.(884L-Z)

專業製刀技術
經驗達25年以上

More than 25 years experienceinCutting Tools Industry.

提供OEM/
ODM/OBM服務

Provide OEM / ODM / OBM service.

ISO 9001認證
與各國專利肯定

ISO 9001 Certification & Patents.

打造智慧機械
數位智能工廠

Developing intelligent manufacturing.

致力於ESG/
碳中和永續發展

Dedicated to develop the ESG and carbon neutrality.

選擇元駿

Best Choice - LV Tool

COATING INTRODUCTION 鍍層介紹

鍍層代號 Coating	顏色 Color		塗層厚度 Thickness (um)	硬度 Hardness (Gpa)
Arti-Co	黑色 Black		1 - 4 um	34
S-Fire (TiAlN)	棕紫色 Dark Purple		1 - 4 um	30
TixSiN	亮金色 Golden		1 - 5 um	45
Naco-Blue	藍色 Blue		1 - 4 um	45
Ti - 18	暗金色 Dark Golden		1 - 5 um	45

〝◎〞Recommend 最適合 / 〝○〞Suitable 適合 / 〝╳〞Not Recommend 不建議

耐熱性 Oxidation Temp	摩擦係數 Coefficient of Friction	應用 / 特色 Applications / Features
900°	0.55	1.可應用於乾式 / 濕式加工 Applies to both dry-type and wet-type machining. 2.耐高溫、耐磨耗，適合高速加工 High temperature-resistance and great durability. Suitable for high-speed machining. 3.適用於中高硬度加工 Applies to general materials and medium hardness materials.
800°	0.4	1.可應用於乾式 / 濕式加工 (特別適用濕式) Applies to both dry-type and wet-type machining. Especially for wet-type machining. 2.摩擦係數較低，塗層緻密性佳，排屑性優異 Small friction coefficient, smooth density distribution, and incredible chip removal ability. 3.適合應用於中低硬度加工 Applies to general materials and medium hardness materials.
800°	0.45	1.耐高溫、耐磨耗 High temperature-resistance and great durability. 2.適用於高硬度加工 Applies to high hardness materials. 3.可應用於乾式 / 濕式加工 Applies to both dry-type and wet-type machining.
1200°	0.45	1.耐高溫、耐磨耗性較TixSin優異 Better performance in high temperature-resistance and durability than TixSiN coating. 2.適用於高硬度加工 Applies to high hardness materials. 3.僅適用乾式加工 Only applies to dry-type machining.
800°	0.45	1.可應用於乾式 / 濕式加工 Applies to both dry-type and wet-type machining. 2.耐高溫、耐磨耗性較TixSin優異 Better performance in high temperature-resistance and toughness than TixSiN coating. 3.塗層導熱性良好 Excellent thermal conductivity. 4.適用於高硬度加工 Applies to high hardness materials.

COATING INTRODUCTION 鍍層介紹

鍍層代號 Coating	顏色 Color		塗層厚度 Thickness (um)	硬度 Hardness (Gpa)
Diamond	鐵灰色 Iron Gray		4-12um	80
DLC	黑色 Black		1 - 3 um	20
AlCrN	鐵灰色 Iron Gray		1 - 4 um	40
AlTiN	黑色 Black		1 - 6 um	38
AlTiSiN	暗金色 Dark Golden		1 - 4 um	45

〝◎〞Recommend 最適合 / 〝○〞Suitable 適合 / 〝╳〞Not Recommend 不建議

耐熱性 Oxidation Temp	摩擦係數 Coefficient of Friction	應用 / 特色 Applications / Features
900°	0.1	1.塗層擁有極高硬度 With the features of high hardness. 2.塗層熱傳導性佳、摩擦係數低 Excellent thermal conductivity and a low coefficient of friction. 3.適合應用於高硬度加工、石墨、玻纖材料 Applies to graphite, fiberglass materials, and composite materials.
400°	0.15	1.摩擦係數低，排屑性佳 The extremely small friction coefficient and incredible chip removal ability. 2.適合應用於加工鋁合金 Applies to aluminum.
1100°	0.3	1.具備優異的耐高溫性能 With the features of extremely high temperature-resistance. 2.摩擦係數低，抗沾黏，排屑性佳 Small friction coefficient, anti-sticky, and incredible chip removal ability. 3.特別適用於加工不鏽鋼及鈦合金 Especially suitable for Stainless Steel and Titanium.
900°	0.35	1.相較於Arti-Co，具有更高耐熱性、硬度及耐磨耗性 Compare with Arti-Co; the AlTiN coating provides better high-temperature resistance, hardness, and durability. 2.適合應用於加工中高硬度鋼材 Applies to general materials.
900°	0.35	1.相較於TixSiN，具有更高耐熱性、硬度及耐磨耗性 Compare with TixSiN; the AlTiSiN provides better high-temperature resistance, hardness, and durability. 2.適合應用於加工高硬度鋼材 Applies to high hardness materials.

CONTENTS 目錄

▼ 德製微小徑 LV99 系列

〝◎〞 Recommend 最適合 / 〝○〞 Suitable 適合 / 〝╳〞 Not Recommend 不建議

碳鋼 Carbon Steel	合金鋼 20-30 HRC Alloy Steel	工具鋼 30-45 HRC Tool Steel	硬化鋼 ~50 HRC Hardend Steels	硬化鋼 ~60 HRC Hardend Steels	不鏽鋼 Stainless Steel	鑄鐵 Cast Iron	鋁合金 Aluminum	銅 Copper	石墨 Graphite	粗銑 Roughing	中銑 Semi Finishing	精修 Finishing
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CONTENTS 目錄

▼ 高效系列 High- Efficient Series

〝◎〞 Recommend 最適合 / 〝○〞 Suitable 適合 / 〝╳〞 Not Recommend 不建議

碳 鋼 Carbon Steel	合金鋼 20-30 HRC Alloy Steel	工具鋼 30-45 HRC Tool Steel	硬化鋼 ~50 HRC Hardend Steels	硬化鋼 ~60 HRC Hardend Steels	不鏽鋼 Stainless Steel	鑄鐵 Cast Iron	鋁合金 Aluminum	銅 Copper	石墨 Graphite	粗銑 Roughing	中銑 Semi Finishing	精修 Finishing
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CONTENTS 目錄

▼鑽石石墨刀系列 Diamond Coated End Mill For Graphite

〝◎〞 Recommend 最適合 / 〝○〞 Suitable 適合 / 〝╳〞 Not Recommend 不建議

碳 鋼 Carbon Steel	合金鋼 20-30 HRC Alloy Steel	工具鋼 30-45 HRC Tool Steel	硬化鋼 ~50 HRC Hardend Steels	硬化鋼 ~60 HRC Hardend Steels	不鏽鋼 Stainless Steel	鑄鐵 Cast Iron	鋁合金 Aluminum	銅 Copper	石墨 Graphite	粗銑 Roughing	中銑 Semi Finishing	精修 Finishing
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CONTENTS 目錄

▼ 66/88 系列 66/88 Series

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碳鋼 Carbon Steel	合金鋼 20-30 HRC Alloy Steel	工具 鋼 30-45 HRC Tool Steel	硬化鋼 ~50 HRC Hardend Steels	硬化鋼 ~60 HRC Hardend Steels	不鏽鋼 Stainless Steel	鑄鐵 Cast Iron	鋁合金 Aluminum	銅 Copper	石墨 Graphite	粗銑 Roughing	中銑 Semi Finishing	精修 Finishing
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CONTENTS 目錄

▼ 66/88 系列 66/88 Series

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	碳鋼	合金鋼 20-30 HRC	工具鋼 30-45 HRC	硬化鋼 ~50 HRC	硬化鋼 ~60 HRC	不鏽鋼	鑄鐵	鋁合金	銅	石墨	粗銑	中銑	精修
	Carbon Steel	**Alloy Steel**	**Tool Steel**	**Hardend Steels**	**Hardend Steels**	**Stainless Steel**	**Cast Iron**	**Aluminum**	**Copper**	**Graphite**	**Roughing**	**Semi Finishing**	**Finishing**
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CONTENTS 目錄

▼ 66/88 系列 66/88 Series

〝◎〞 Recommend 最適合 / 〝○〞 Suitable 適合 / 〝╳〞 Not Recommend 不建議

碳鋼 Carbon Steel	合金鋼 20-30 HRC Alloy Steel	工具鋼 30-45 HRC Tool Steel	硬化鋼 ~50 HRC Hardend Steels	硬化鋼 ~60 HRC Hardend Steels	不鏽鋼 Stainless Steel	鑄鐵 Cast Iron	鋁合金 Aluminum	銅 Copper	石墨 Graphite	粗銑 Roughing	中銑 Semi Finishing	精修 Finishing
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CONTENTS 目錄

▼ 66/88 系列 66/88 Series

▼ 77 系列 77Series

〝◎〞 Recommend 最適合 / 〝○〞 Suitable 適合 / 〝╳〞 Not Recommend 不建議

碳鋼 Carbon Steel	合金鋼 20-30 HRC Alloy Steel	工具鋼 30-45 HRC Tool Steel	硬化鋼 ~50 HRC Hardend Steels	硬化鋼 ~60 HRC Hardend Steels	不鏽鋼 Stainless Steel	鑄鐵 Cast Iron	鋁合金 Aluminum	銅 Copper	石墨 Graphite	粗銑 Roughing	中銑 Semi Finishing	精修 Finishing
◎	◎	◎	○	╳	○	○	╳	╳	╳	○	○	○
╳	╳	╳	╳	╳	╳	╳	◎	◎	╳	○	○	○
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CONTENTS 目錄

▼ 99 系列 99Series

〝◎〞 Recommend 最適合 / 〝○〞 Suitable 適合 / 〝╳〞 Not Recommend 不建議

	碳鋼	合金鋼 20-30 HRC	工具鋼 30-45 HRC	硬化鋼 ~50 HRC	硬化鋼 ~60 HRC	不鏽鋼	鑄鐵	鋁合金	銅	石墨	粗銑	中銑	精修
	Carbon Steel	Alloy Steel	Tool Steel	Hardend Steels	Hardend Steels	Stainless Steel	Cast Iron	Aluminum	Copper	Graphite	Roughing	Semi Finishing	Finishing
	○	○	◎	◎	◎	◎	○	╳	╳	╳	○	○	○
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	○	○	◎	◎	◎	◎	○	╳	╳	╳	○	○	◎
	○	○	◎	◎	◎	◎	○	╳	╳	╳	○	○	◎
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CONTENTS 目錄

▼ 99 系列 99Series

〝◎〞 Recommend 最適合 / 〝○〞 Suitable 適合 / 〝╳〞 Not Recommend 不建議

	碳鋼	合金鋼 20-30 HRC	工具鋼 30-45 HRC	硬化鋼 ~50 HRC	硬化鋼 ~60 HRC	不鏽鋼	鑄鐵	鋁合金	銅	石墨	粗銑	中銑	精修
	Carbon Steel	Alloy Steel	Tool Steel	Hardend Steels	Hardend Steels	Stainless Steel	Cast Iron	Aluminum	Copper	Graphite	Roughing	Semi Finishing	Finishing
	○	○	◎	◎	◎	◎	○	╳	╳	╳	○	○	○
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CONTENTS 目錄

▼ 魔神系列 99⁺ Series

〝◎〞 Recommend 最適合 / 〝○〞 Suitable 適合 / 〝╳〞 Not Recommend 不建議

碳鋼 Carbon Steel	合金鋼 20-30 HRC Alloy Steel	工具鋼 30-45 HRC Tool Steel	硬化鋼 ~50 HRC Hardend Steels	硬化鋼 ~60 HRC Hardend Steels	不鏽鋼 Stainless Steel	鑄鐵 Cast Iron	鋁合金 Aluminum	銅 Copper	石墨 Graphite	粗銑 Roughing	中銑 Semi Finishing	精修 Finishing
╳	○	◎	◎	◎	◎	○	╳	╳	╳	○	◎	◎
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CONTENTS 目錄

▼ HSS 系列 HSS End Mill

"◎" Recommend 最適合 / "○" Suitable 適合 / "╳" Not Recommend 不建議

	碳鋼	合金鋼 20-30 HRC	工具鋼 30-45 HRC	硬化鋼 ~50 HRC	硬化鋼 ~60 HRC	不鏽鋼	鑄鐵	鋁合金	銅	石墨	粗銑	中銑	精修
	Carbon Steel	Alloy Steel	Tool Steel	Hardend Steels	Hardend Steels	Stainless Steel	Cast Iron	Aluminum	Copper	Graphite	Roughing	Semi Finishing	Finishing
	○	○	◎	◎	◎	◎	○	╳	╳	╳	○	◎	○
	╳	○	╳	╳	╳	╳	╳	○	○	╳	○	○	○
	╳	○	╳	╳	╳	╳	╳	○	○	╳	◎	○	○
	╳	○	╳	╳	╳	╳	╳	○	○	╳	◎	○	◎
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	○	○	╳	╳	╳	╳	╳	○	○	╳	○	○	◎
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	○	○	╳	╳	╳	╳	╳	○	○	╳	○	○	○

CONTENTS 目錄

▼ Carbide Drill

〝◎〞 Recommend 最適合 / 〝○〞 Suitable 適合 / 〝╳〞 Not Recommend 不建議

碳鋼 Carbon Steel	合金鋼 20-30 HRC Alloy Steel	工具鋼 30-45 HRC Tool Steel	硬化鋼 ~50 HRC Hardend Steels	硬化鋼 ~60 HRC Hardend Steels	不鏽鋼 Stainless Steel	鑄鐵 Cast Iron	鋁合金 Aluminum	銅 Copper	石墨 Graphite	粗銑 Roughing	中銑 Semi Finishing	精修 Finishing
╳	╳	╳	╳	╳	╳	╳	◎	◎	╳			
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LV INTERNATIONAL CO., LTD

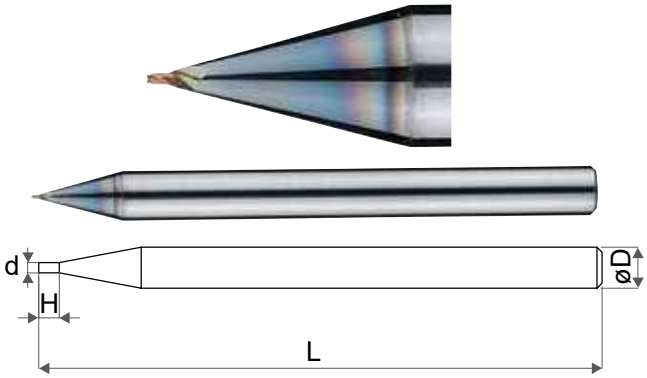
LV 9938 系列
LV 9939 系列
LV 9940 系列

高效能、高信價比
德製微小徑鎢鋼銑刀

針對微小孔徑加工需求。研發特殊幾何設計之刀型，採用德國鎢鋼圓棒，瑞士進口五軸高精密研磨機製作，刀刃外表鍍以高硬度材質鈦矽(ALTISIN)塗層，可加工所有硬度HRC58以上之金屬。

LV-Micro"micro type End Mill, specialize for micro hole machining.The cutting geometry designed for great milling needs.The raw material of Tungsten Carbide is made in Germany and it made by 5 axes CNC grinding machine from Switzerland, coating with high hardness material AlTiSiN.It can be machining the metal hardness over HRC58.

高硬度專用



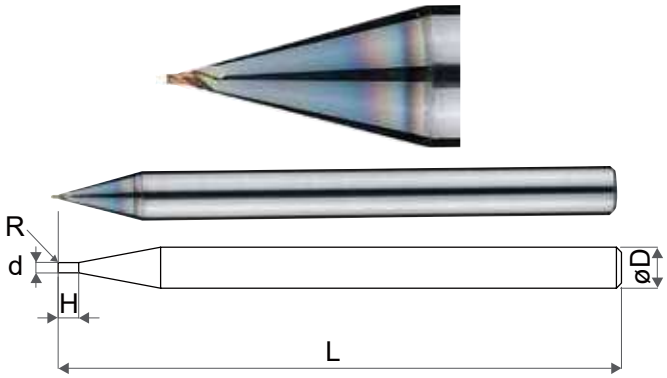
材　　質	KFM39
螺　旋　角	35°
柄 徑 公 差	h6
刃 徑 公 差	∅ 0.5 以下 +0/-0.01
	∅ 0.5 以上 +0/-0.02
刀 刃 偏 擺	< 0.005mm
加 工 硬 度	≤ HRC60

- 有效長度可依客戶需求訂製
- 非標準品可訂製
- 拿取刀具使用時，請特別小心以免傷害刃部

LV9938/2ENS

型號 MODE	直徑 d	刃長 H	柄徑 D	全長 L	刃數 Z
LV99380024	d0.2	0.3	∅ 4	45	2
LV99380034	d0.3	0.45	∅ 4	45	2
LV99380044	d0.4	0.6	∅ 4	45	2
LV99380054	d0.5	0.75	∅ 4	45	2
LV99380064	d0.6	0.9	∅ 4	45	2
LV99380074	d0.7	1.05	∅ 4	45	2
LV99380084	d0.8	1.2	∅ 4	45	2
LV99380094	d0.9	1.35	∅ 4	45	2
LV99380104	d1.0	1.5	∅ 4	45	2

高硬度專用



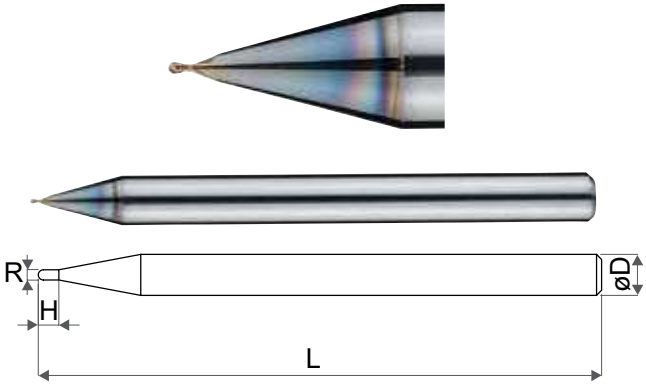
材　　質	KFM39
螺　旋　角	30°
柄 徑 公 差	h6
刃 徑 公 差	∅ 0.5 以下 +0/-0.01
	∅ 0.5 以上 +0/-0.02
R 徑 公 差	±0.005mm
刀 刃 偏 擺	＜0.005mm
加 工 硬 度	≤ HRC60

- 有效長度可依客戶需求訂製
- 非標準品可訂製
- 拿取刀具使用時，請特別小心以免傷害刃部

LV9939/2ENSR

型號 MODE	直徑 d	角徑 R	刃長 H	柄徑 D	全長 L	刃數 Z
LV9939004012	d0.4	R0.1	0.6	∅ 4	45	2
LV9939005012	d0.5	R0.1	0.75	∅ 4	45	2
LV9939006012	d0.6	R0.1	0.9	∅ 4	45	2
LV9939007012	d0.7	R0.1	1.05	∅ 4	45	2
LV9939008012	d0.8	R0.1	1.2	∅ 4	45	2
LV9939010012	d1.0	R0.1	2	∅ 4	45	2

高硬度專用



材　　質	KFM39
螺　旋　角	30°
柄 徑 公 差	h6
刃 徑 公 差	∅ 0.5 以下 +0/-0.01
	∅ 0.5 以上 +0/-0.02
R 徑 公 差	±0.005mm
刀 刃 偏 擺	< 0.005mm
加 工 硬 度	≤ HRC60

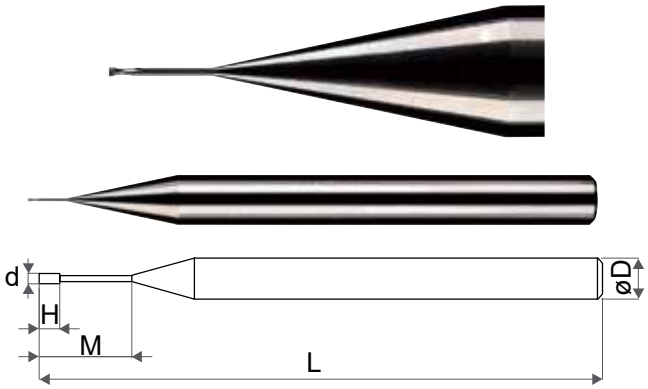
- 有效長度可依客戶需求訂製
- 非標準品可訂製
- 拿取刀具使用時，請特別小心以免傷害刃部

LV9940/2BES

型號 MODE	角徑 R	刃長 H	柄徑 D	全長 L	刃數 Z
LV99400044	R0.2	0.6	∅ 4	45	2
LV99400054	R0.25	0.75	∅ 4	45	2
LV99400064	R0.3	0.9	∅ 4	45	2
LV99400074	R0.35	1.05	∅ 4	45	2
LV99400084	R0.4	1.2	∅ 4	45	2
LV99400094	R0.45	1.35	∅ 4	45	2
LV99400104	R0.5	1.5	∅ 4	45	2

Miniature Square Type Long Neck - 2 Flutes
2刃微小徑深溝立銑刀

高硬度專用



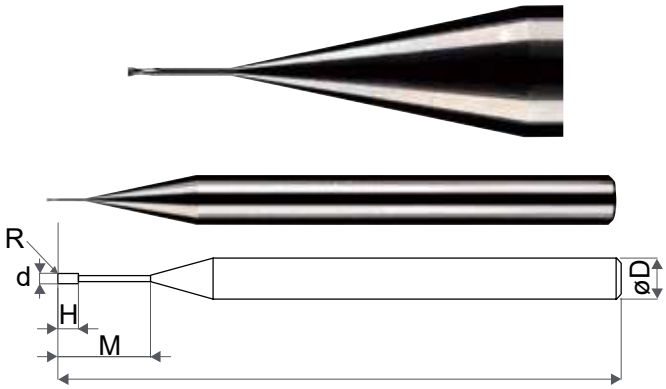
材　　質	KFM39
螺 旋 角	35°
柄 徑 公 差	h6
刃 徑 公 差	∅ 0.5 以下 +0/-0.01
	∅ 0.5 以上 +0/-0.02
R 徑 公 差	±0.005mm
刀 刃 偏 擺	< 0.005mm
加 工 硬 度	≤ HRC60

- 有效長度可依客戶需求訂製
- 非標準品可訂製
- 拿取刀具使用時，請特別小心以免傷害刃部

LV9938L/2ENSM

型號 MODE	直徑 d	刃長 H	柄徑 D	全長 L	刃數 Z	有效長 M
LV9938L020062	d0.2	0.3	∅ 4	45	2	0.6
LV9938L02012	d0.2	0.3	∅ 4	45	2	1
LV9938L020152	d0.2	0.3	∅ 4	45	2	1.5
LV9938L03012	d0.3	0.45	∅ 4	45	2	1
LV9938L030152	d0.3	0.45	∅ 4	45	2	1.5
LV9938L03022	d0.3	0.45	∅ 4	45	2	2
LV9938L04012	d0.4	0.6	∅ 4	45	2	1
LV9938L040152	d0.4	0.6	∅ 4	45	2	1.5
LV9938L04022	d0.4	0.6	∅ 4	45	2	2
LV9938L050152	d0.5	0.75	∅ 4	45	2	1.5
LV9938L05022	d0.5	0.75	∅ 4	45	2	2
LV9938L05032	d0.5	0.75	∅ 4	45	2	3
LV9938L05042	d0.5	0.75	∅ 4	45	2	4
LV9938L060152	d0.6	0.9	∅ 4	45	2	1.5
LV9938L06022	d0.6	0.9	∅ 4	45	2	2
LV9938L06042	d0.6	0.9	∅ 4	45	2	4
LV9938L07022	d0.7	1.05	∅ 4	45	2	2
LV9938L07042	d0.7	1.05	∅ 4	45	2	4
LV9938L08022	d0.8	1.2	∅ 4	45	2	2
LV9938L08042	d0.8	1.2	∅ 4	45	2	4
LV9938L08062	d0.8	1.2	∅ 4	45	2	6
LV9938L09022	d0.9	1.35	∅ 4	45	2	2
LV9938L09042	d0.9	1.35	∅ 4	45	2	4
LV9938L09062	d0.9	1.35	∅ 4	45	2	6
LV9938L10032	d1.0	1.5	∅ 4	45	2	3
LV9938L10042	d1.0	1.5	∅ 4	45	2	4
LV9938L10062	d1.0	1.5	∅ 4	45	2	6

高硬度專用



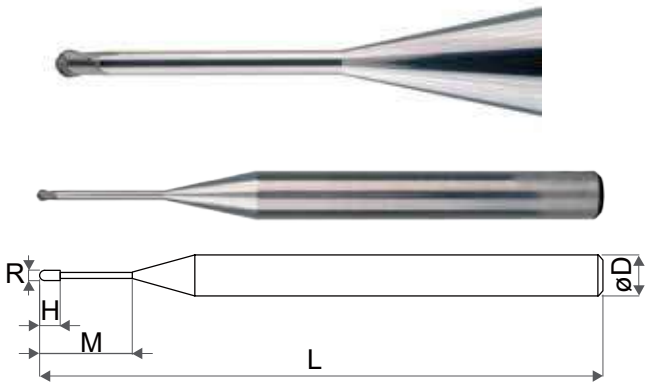
材　　質	KFM39
螺　旋　角	30°
柄 徑 公 差	h6
刃 徑 公 差	∅ 0.5 以下 +0/-0.01
	∅ 0.5 以上 +0/-0.02
R 徑 公 差	±0.005mm
刀 刃 偏 擺	< 0.005mm
加 工 硬 度	≤ HRC60

- 有效長度可依客戶需求訂製
- 非標準品可訂製
- 拿取刀具使用時，請特別小心以免傷害刃部

LV9939L/2ENSMR

型號 MODE	直徑 d	角徑 R	刃長 H	柄徑 D	全長 L	刃數 Z	有效長 M
LV9939L0040101	d0.4	R0.1	0.6	∅ 4	45	2	1
LV9939L00401015	d0.4	R0.1	0.6	∅ 4	45	2	1.5
LV9939L0040102	d0.4	R0.1	0.6	∅ 4	45	2	2
LV9939L00501015	d0.5	R0.1	0.75	∅ 4	45	2	1.5
LV9939L0050102	d0.5	R0.1	0.75	∅ 4	45	2	2
LV9939L0050104	d0.5	R0.1	0.75	∅ 4	45	2	4
LV9939L00601015	d0.6	R0.1	0.9	∅ 4	45	2	1.5
LV9939L0060102	d0.6	R0.1	0.9	∅ 4	45	2	2
LV9939L0060104	d0.6	R0.1	0.9	∅ 4	45	2	4
LV9939L0070102	d0.7	R0.1	1.05	∅ 4	45	2	2
LV9939L0070104	d0.7	R0.1	1.05	∅ 4	45	2	4
LV9939L0080102	d0.8	R0.1	1.2	∅ 4	45	2	2
LV9939L0080104	d0.8	R0.1	1.2	∅ 4	45	2	4
LV9939L0080106	d0.8	R0.1	1.2	∅ 4	45	2	6
LV9939L0100104	d1.0	R0.1	2	∅ 4	45	2	4
LV9939L0100106	d1.0	R0.1	2	∅ 4	45	2	6
LV9939L0100108	d1.0	R0.1	2	∅ 4	45	2	8

高硬度專用



材　　質	KFM39
螺　旋　角	30°
柄 徑 公 差	h6
刃 徑 公 差	∅ 0.5 以下 +0/-0.01
	∅ 0.5 以上 +0/-0.02
R 徑 公 差	±0.005mm
刀 刃 偏 擺	< 0.005mm
加 工 硬 度	≤ HRC60

- 有效長度可依客戶需求訂製
- 非標準品可訂製
- 拿取刀具使用時，請特別小心以免傷害刃部

LV9940L/2BESM

型號 MODE	角徑 d	刃長 H	柄徑 D	全長 L	刃數 Z	有效長 M
LV9940L04012	R0.2	0.6	∅ 4	45	2	1
LV9940L04022	R0.2	0.6	∅ 4	45	2	2
LV9940L04042	R0.2	0.6	∅ 4	45	2	4
LV9940L05022	R0.25	0.75	∅ 4	45	2	2
LV9940L05042	R0.25	0.75	∅ 4	45	2	4
LV9940L060152	R0.3	0.9	∅ 4	45	2	1.5
LV9940L06022	R0.3	0.9	∅ 4	45	2	2
LV9940L06042	R0.3	0.9	∅ 4	45	2	4
LV9940L06062	R0.3	0.9	∅ 4	45	2	6
LV9940L07022	R0.35	1.05	∅ 4	45	2	2
LV9940L07042	R0.35	1.05	∅ 4	45	2	4
LV9940L08022	R0.4	1.2	∅ 4	45	2	2
LV9940L08042	R0.4	1.2	∅ 4	45	2	4
LV9940L08062	R0.4	1.2	∅ 4	45	2	6
LV9940L09022	R0.45	1.35	∅ 4	45	2	2
LV9940L09042	R0.45	1.35	∅ 4	45	2	4
LV9940L10022	R0.5	1.5	∅ 4	45	2	2
LV9940L10042	R0.5	1.5	∅ 4	45	2	4
LV9940L10062	R0.5	1.5	∅ 4	45	2	6
LV9940L10082	R0.5	1.5	∅ 4	45	2	8

LV INTERNATIONAL CO., LTD

LV 9938 PLUS 系列
LV 9939 PLUS 系列 高效能、高信價比
LV 9940 PLUS 系列 德製鎢鋼銑刀

研發特殊幾何設計之刀型，採用德國鎢鋼圓棒，瑞士進口五軸高精密研磨機製作，刀刃外表鍍以高硬度材質鈦矽(ALTISIN)塗層，可加工所有硬度HRC58以上之金屬。

LV, specialize for micro hole machining.The cutting geometry designed for great milling needs.The raw material of Tungsten Carbide is made in Germany and it made by 5 axes CNC grinding machine from Switzerland, coating with high hardness material AlTiSiN.It can be machining the metal hardness over HRC58.

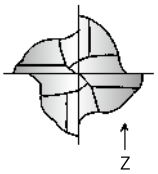
Square Type - 4 Flutes
4刃立銑刀

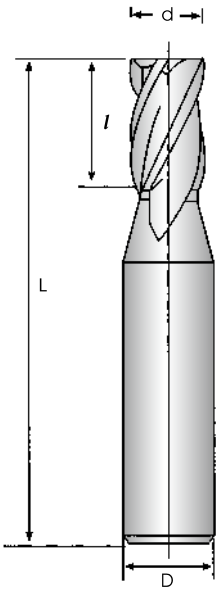
> LV 9938+

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | Ti-18 | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎





形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	LV 9338+ (NT)	LV 9338+ (USD)
0104	1	2.5	4	50	930	29.6
0154	1.5	3	4	50	930	29.6
0204	2	5	4	50	930	29.6
0254	2.5	6	4	50	930	29.6
0304	3	6	4	50	930	29.6
0354	3.5	8	4	50	930	29.6
0404	4	9	4	50	930	29.6
0454	4.5	10	6	50	1350	42.9
0504	5	12	6	50	1350	42.9
0554	5.5	12	6	50	1350	42.9
0604	6	13	6	50	1350	42.9
0654	6.5	20	8	60	2145	68.1
0704	7	20	8	60	2145	68.1
0754	7.5	20	8	60	2145	68.1
0804	8	20	8	60	2145	68.1
0854	8.5	25	10	75	2790	94.35
0904	9	25	10	75	2970	94.35
0954	9.5	25	10	75	2970	94.35
1004	10	25	10	75	2970	94.35
1054	10.5	30	12	75	3960	125.9
1104	11	30	12	75	3960	125.9
1154	11.5	30	12	75	3960	125.9
1204	12	30	12	75	3960	125.9
1404	14	30	16	100	10200	329.0
1504	15	30	16	100	10200	329.0
1604	16	40	16	100	10200	329.0
2004	20	45	20	100	16005	583.2
2504	25	45	25	100	21450	681

建議售價

> LV 9939+

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | Ti-18 | R | Dry | Wet

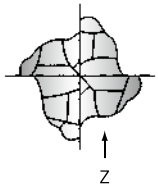
粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

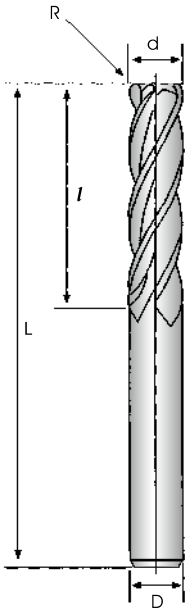
形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	LV 9339+ (NT)	LV 9339+ (USD)
01024	1	0.2R	2.5	4	50	1260	40.1
01034	1	0.3R	2.5	4	50	1260	40.1
01524	1.5	0.2R	3	4	50	1260	40.1
01534	1.5	0.3R	3	4	50	1260	40.1
02034	2	0.3R	5	4	50	1260	40.1
02054	2	0.5R	5	4	50	1260	40.1
02554	2.5	0.5R	6	4	50	1260	40.1
03024	3	0.2R	6	3	50	1260	40.1
03034	3	0.3R	6	3	50	1260	40.1
03054	3	0.5R	6	3	50	1260	40.1
03104	3	1R	6	3	50	1260	40.1
030244D	3	0.2R	6	4	50	1260	40.1
030344D	3	0.3R	6	4	50	1260	40.1
030544D	3	0.5R	6	4	50	1260	40.1
031044D	3	1R	6	4	50	1260	40.1
04024	4	0.2R	9	4	50	1260	40.1
04034	4	0.3R	9	4	50	1260	40.1
04054	4	0.5R	9	4	50	1260	40.1
04104	4	1R	9	4	50	1260	40.1
04154	4	1.5R	9	4	50	1260	40.1
05024	5	0.2R	12	6	50	1830	58.2
05034	5	0.3R	12	6	50	1830	58.2
05054	5	0.5R	12	6	50	1830	58.2
05104	5	1R	12	6	50	1830	58.2
06024	6	0.2R	16	6	50	1830	58.2
06034	6	0.3R	16	6	50	1830	58.2
06054	6	0.5R	16	6	50	1830	58.2
06104	6	1R	16	6	50	1830	58.2
06204	6	2R	16	6	50	1830	58.2
08034	8	0.3R	20	8	60	2805	89.1
08054	8	0.5R	20	8	60	2805	89.1
08104	8	1R	20	8	60	2805	89.1
08204	8	2R	20	8	60	2805	89.1
10054	10	0.5R	25	10	75	3630	115.4
10104	10	1R	25	10	75	3630	115.4
10154	10	1.5R	25	10	75	3630	115.4
10204	10	2R	25	10	75	3630	115.4
10304	10	3R	25	10	75	3630	115.4
12054	12	0.5R	30	12	75	4950	157.2
12104	12	1R	30	12	75	4950	157.2
12154	12	1.5R	30	12	75	4950	157.2
12204	12	2R	30	12	75	4950	157.2
12304	12	3R	30	12	75	4950	157.2

建議售價





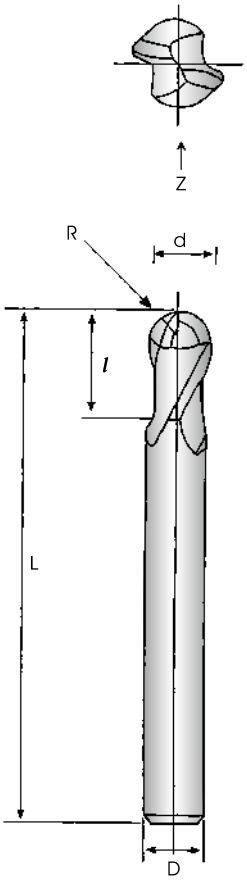
Ball Nose - 2 Flutes
2刃球型立銑刀

> LV 9940+

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | Ti-18 | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎



形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	LV 9340+ (NT)	LV 9340+ (USD)
0102	1	0.5R	1.5	4	50	1065	33.9
0152	1.5	0.75R	2.5	4	50	1065	33.9
0202	2	1R	3	4	50	1065	33.9
0252	2.5	1.25R	4	4	50	1065	33.9
0302	3	1.5R	5	4	50	1065	33.9
0402	4	2R	6	4	50	1065	33.9
0502	5	2.5R	8	6	50	1410	44.9
0602	6	3R	9	6	50	1410	44.9
0702	7	3.5R	14	8	60	2310	73.4
0802	8	4R	16	8	60	2310	73.4
0902	9	4.5R	18	10	75	3465	110.1
1002	10	5R	20	10	75	3465	110.1
1202	12	6R	24	12	75	4620	146.7
1402	14	7R	24	16	100	10065	319.7
1602	16	8R	24	16	100	10065	319.7
2002	20	10R	30	20	150	22110	702
2502	25	12.5R	35	25	150	29040	922.1

LV INTERNATIONAL CO., LTD

UP SERIES

Variable Helix and Unequal Pitch End Mill with Double U-FLUTES

UP series is our most premium products.
The cutting performance is highly improved by adopting innovative geometry design, high-quality coating, and drag polishing process.
Especially suitable for roughing and slotting.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
884L-UP	SMG	0.4um	12%	Arti-Co
994L-UP	NMG	0.3um	9%	AlTiSiN
994L-UP+	NMG	0.3um	9%	AlTiSiN
994L-UPV	NMG	0.3um	9%	AlTiSiN

UPA SERIES

Variable Helix and Unequal Pitch End Mill with Double U-FLUTES

The UPA series is our most premium products, and it's especially suitable for cutting Stainless Steel and Titanium by adopting AlCrN coating.
The AlCrN coating with the features of high-temperature resistance and small friction coefficient. It offers incredible chip removal ability.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
884L-UPA	SMG	0.4um	12%	AlCrN
994L-UPA	NMG	0.3um	9%	AlCrN

Unequal Helix and Unequal Pitch End Mill with Double U-Flute
不等螺旋&不等份雙R溝立銑刀

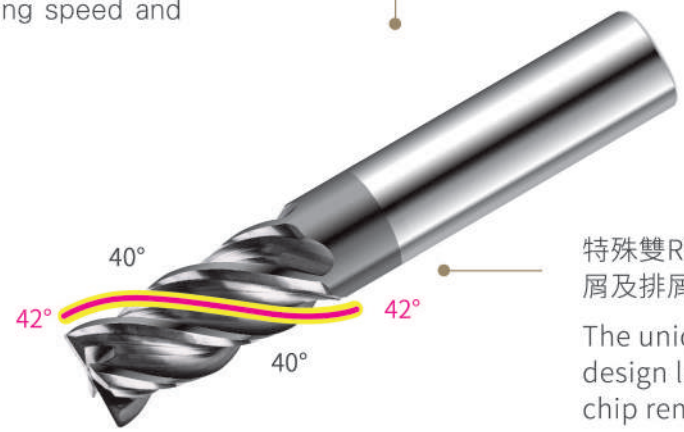
Features / 特色

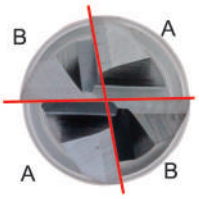
> 884L-UP

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 42°~42° 40°~40° Helix Angle | 4 Flute | Arti-Co | U-Flute | C x 45° | Dry | Wet

藉由不等份、變螺旋的設計來減少切削時所產生的振動，提高加工穩定性、加工速度及刀具壽命。
The variable helix and unequal pitch design reduces operating vibrations. It improves the cutting stability, cutting speed and lifespan.





A≠B

特殊雙R溝設計能有效進行斷屑及排屑。
The unique double U-Flute design leads to an incredible chip removal ability.

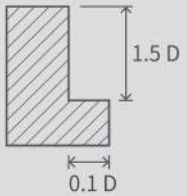
由於塗層後再次對刀具進行拋光作業，使表面塗層的耐久性得到了大幅的改善。他還可以使刀具壽命延長200%-300%，加快進給速度並縮短切削時間。
Improvement of durability for surface coating due to the drag polishing process after the coating. Not only brings a 200-300 percent increases in tool life, but also faster feed rates, and reduce cutting time cycles.

Applications / 應用

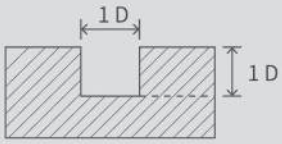
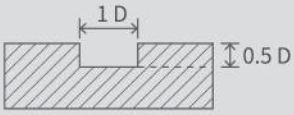
- ▶ 特別適用於碳鋼、合金鋼、模具鋼。
  It applies to Carbon Steel, Alloy Steel, Mold Steel.
- ▶ 特別適用於粗加工及開槽加工，同時也提供優異的加工表面精度。
  Especially suitable for roughing & slotting. It also provides incredible cutting surface finish & high-precision.

Cutting Condition / 884L-UP 切削條件表

側加工 Side Milling

被切削材 (Material)	碳鋼 (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	10000	1800	9000	1800	9000	1800	7500	800
4MM	9000	1800	8500	1800	8500	1800	7000	1000
5MM	8000	2000	8000	1800	8000	1800	6500	1100
6MM	7500	2000	7000	2000	7000	2000	6000	1200
8MM	7000	2200	6500	2000	6500	2000	5500	1500
10MM	6000	2500	6000	2300	6000	2200	5000	1500
12MM	5000	2000	5000	2000	5000	2000	3500	1000
16MM	3000	2000	3000	1800	3000	1800	2500	1000
切削基準量 Depth of Cutting (D = 直徑 Dia)								

開槽加工 Slotting

被切削材 (Material)	碳鋼 (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	7500	1300	7500	1300	8500	1700	8500	1700
4MM	7000	1500	7000	1500	8000	1950	8000	1950
5MM	6500	1600	6500	1600	7500	2080	7500	2080
6MM	6000	1800	6000	1600	7000	2340	7000	2340
8MM	5500	1800	5500	1600	6500	2340	6500	2340
10MM	5000	2000	5000	2000	6000	2600	6000	2600
12MM	4000	1500	4000	1500	4000	1950	4000	1950
16MM	3000	1300	3000	1300	3000	1700	3000	1700
切削基準量 Depth of Cutting (D = 直徑 Dia)								

Dimension / 884L-UP 規格表

單位(UNIT)：mm

型號(Model)	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)	倒C角 Corner Chamfered
030406	3	8	6D	4T	50L	0.06C
040406	4	11	6D	4T	50L	0.08C
050406	5	13	6D	4T	50L	0.10C
060406	6	15	6D	4T	50L	0.12C
080408	8	20	8D	4T	60L	0.16C
100410	10	25	10D	4T	75L	0.20C
120412	12	30	12D	4T	75L	0.24C
160416	16	40	16D	4T	100L	0.32C

Variable Helix and Unequal Pitch End Mill with Double U-Flute
不等份變導程雙R溝立銑刀

Features / 特色

> 994L-UP

Grain Size:0.3μm
Cobalt%:9%

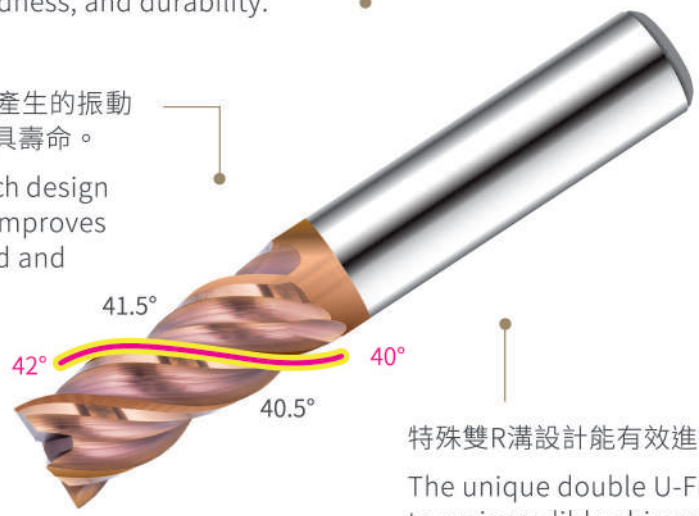
HRC ▸65 | NMG | 42°~42° 41.5°~42.5° Helix Angle | 4 Flute | AlTiSin | U-Flute | C×45° | Dry | Wet

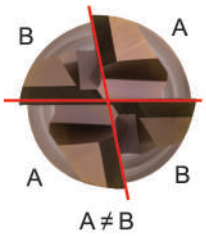
刀具被覆AlTiSiN塗層，氮化鋁鈦矽塗層相較一般塗層可承受更高溫度，硬度表現及耐磨耗性也更為優異。

Coated with high-quality AlTiSiN. Compare with the traditional TiSiN, the AlTiSiN coating provides better high-temperature resistance, hardness, and durability.

藉由變導程的設計來減少切削時所產生的振動，提高加工穩定性、加工速度及刀具壽命。

The variable helix and unequal pitch design reduces operating vibrations. It improves the cutting stability, cutting speed and lifespan.





特殊雙R溝設計能有效進行斷屑及排屑。

The unique double U-Flute design leads to an incredible chip removal ability.

由於塗層後再次對刀具進行拋光作業，使表面塗層的耐久性得到了大幅的改善。他還可以使刀具壽命延長200%-300%，加快進給速度並縮短切削時間。

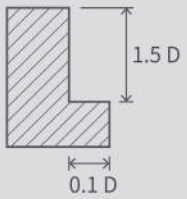
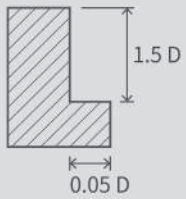
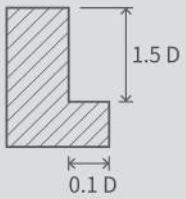
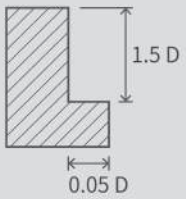
Improvement of durability for surface coating due to the drag polishing process after the coating. Not only brings a 200-300 percent increases in tool life, but also faster feed rates, and reduce cutting time cycles.

Applications / 應用

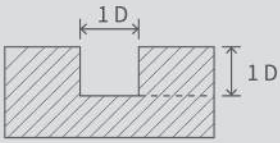
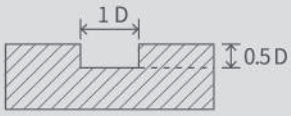
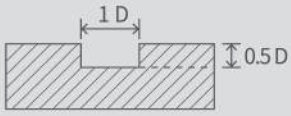
- 可應用於合金鋼、模具鋼、工具鋼、熱處理鋼材。
  It applies to Alloy Steel, Mold Steel ,Tool Steel, Heat Treatment Material.
- 特別適用於粗加工及開槽加工，同時也提供優異的加工表面精度。
  Especially suitable for roughing & slotting. It also provides incredible cutting surface finish & high-precision.

Cutting Condition / 994L-UP 切削條件表

側加工 Side Milling

被切削材 (Material)	合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)		熱處理鋼材 (HRC52-58 Heat Treatment Material)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	10000	2800	9000	2000	7500	800	7200	1600
4MM	9000	3000	8000	2000	7000	1000	6400	1600
5MM	8000	3000	7500	2000	6500	1100	6000	1600
6MM	7500	3000	7000	2000	6000	1200	5600	1600
8MM	7000	3000	6000	2000	5500	1500	4800	1600
10MM	6000	2500	5500	2000	5000	1500	4400	1600
12MM	4000	2000	4000	2000	3500	1000	3200	1600
16MM	2800	2000	2800	2000	2500	1000	2240	1600
切削基準量 Depth of Cutting (D = 直徑 Dia)								

開槽加工 Slotting

被切削材 (Material)	碳鋼 (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	7500	1800	7500	1600	8500	2340	8500	2340
4MM	7000	1800	7000	1600	8000	2340	8000	2340
5MM	6500	1800	6500	1600	7500	2340	7500	2340
6MM	6000	2000	6000	1800	7000	2600	7000	2600
8MM	5500	2200	5500	2000	6500	2860	6500	2860
10MM	5000	2500	5000	2300	6000	3250	6000	3250
12MM	4000	2000	4000	1800	4000	2600	4000	2600
16MM	3000	1800	3000	1600	3000	2340	3000	2340
切削基準量 Depth of Cutting (D = 直徑 Dia)								

Dimension / 994L-UP 規格表

單位(UNIT)：mm

型號(Model)	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)	倒C角 Corner Chamfered
030406	3	6	6D	4T	50L	0.06C
040406	4	9	6D	4T	50L	0.08C
050406	5	12	6D	4T	50L	0.10C
060406	6	13	6D	4T	50L	0.12C
080408	8	20	8D	4T	60L	0.16C
100410	10	25	10D	4T	75L	0.20C
120412	12	30	12D	4T	75L	0.24C
160416	16	40	16D	4T	100L	0.32C

Variable Helix and Unequal Pitch End Mill with Double U-Flute
不等份變導程雙R溝立銑刀

Features / 特色

> 994L-UP+

Grain Size:0.3μm
Cobalt%:9%

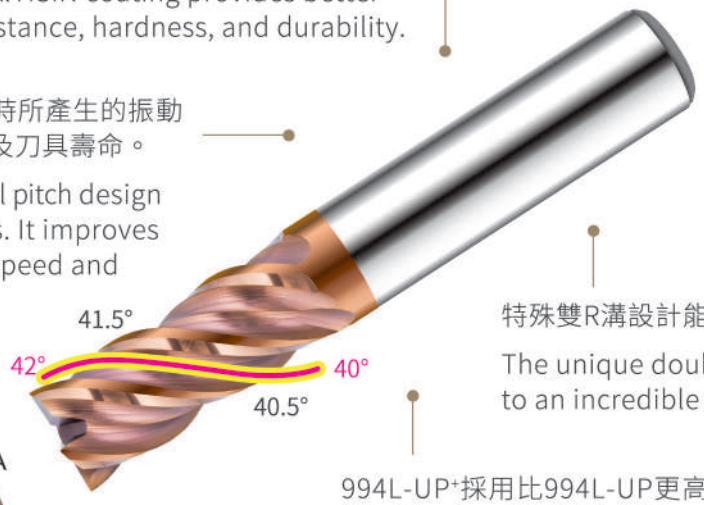
HRC ▸65 | NMG | 42°~40° 41.5°~40.5° Helix Angle | 4 Flute | AlTiSin | U-Flute | C x 45° | Dry | Wet

刀具被覆AlTiSiN塗層，氮化鋁鈦矽塗層相較一般塗層可承受更高溫度，硬度表現及耐磨耗性也更為優異。

Coated with high-quality AlTiSiN. Compare with the traditional TiSiN, the AlTiSiN coating provides better high-temperature resistance, hardness, and durability.

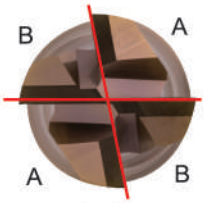
藉由變導程的設計來減少切削時所產生的振動，提高加工穩定性、加工速度及刀具壽命。

The variable helix and unequal pitch design reduces operating vibrations. It improves the cutting stability, cutting speed and lifespan.



特殊雙R溝設計能有效進行斷屑及排屑。

The unique double U-Flute design leads to an incredible chip removal ability.



A≠B

994L-UP⁺採用比994L-UP更高等級的0.3um奈米鎢鋼圓棒，加工壽命更為優異。

Compare with 994L-UP series, we choose better NMG carbide rod for 994L-UP⁺ series. Therefore, the life span is highly improved.

由於塗層後再次對刀具進行拋光作業，使表面塗層的耐久性得到了大幅的改善。他還可以使刀具壽命延長200%-300%，加快進給速度並縮短切削時間。

Improvement of durability for surface coating due to the polishing process after the coating. Not only brings a 200-300 percent increases in tool life, but also faster feed rates, and reduced cutting time cycles.

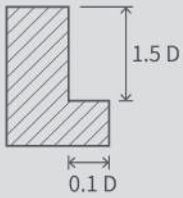
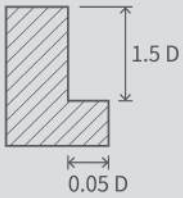
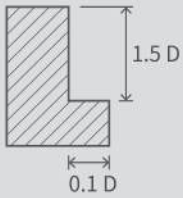
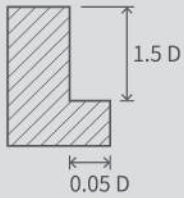
Applications / 應用

- ▶ 可應用於合金鋼、模具鋼、工具鋼、熱處理鋼材。
  It applies to Alloy Steel, Mold Steel ,Tool Steel, Heat Treatment Material.

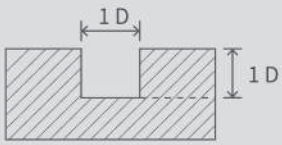
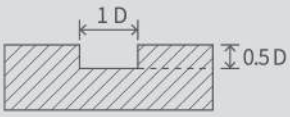
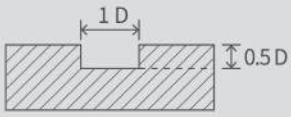
- ▶ 特別適用於粗加工及開槽加工，同時也提供優異的加工表面精度。
  Especially suitable for roughing & slotting. It also provides incredible cutting surface finish & high-precision.

Cutting Condition / 994L-UP+切削條件表

側加工 Side Milling

被切削材 (Material)	合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)		熱處理鋼材 (HRC52-58 Heat Treatment Material)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	12000	4000	12000	4000	7500	900	9600	3200
4MM	10000	4000	10000	3800	7000	1000	8000	3040
5MM	9000	3500	9000	3500	6500	1100	7200	2800
6MM	9000	3500	9000	3500	6000	1200	7200	2800
8MM	8500	4000	8000	4000	5500	1500	6400	3200
10MM	8000	4000	8000	4000	5000	1500	6400	3200
12MM	6000	3500	6000	3000	3500	1000	4800	2400
16MM	4000	2800	4000	2800	2500	1000	3200	2240
切削基準量 Depth of Cutting (D = 直徑 Dia)								

開槽加工 Slotting

被切削材 (Material)	碳鋼 (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	8000	1800	8000	1800	8500	2340	8500	2340
4MM	7000	1800	7000	1800	8000	2340	8000	2340
5MM	6500	1800	6500	1800	7500	2340	7500	2340
6MM	6000	2000	6000	1800	7000	2600	7000	2600
8MM	5500	2200	5500	2000	6500	2800	6500	2860
10MM	5000	2500	5000	2500	6000	3250	6000	3250
12MM	4000	2000	4000	1800	4000	2600	4000	2600
16MM	3000	1800	3000	1600	3000	2340	3000	2340
切削基準量 Depth of Cutting (D = 直徑 Dia)								

Dimension / 994L-UP+ 規格表

單位(UNIT)：mm

型號(Model)	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)	倒C角 Corner Chamfered
030406	3	8	6D	4T	50L	0.06C
040406	4	11	6D	4T	50L	0.08C
050406	5	13	6D	4T	50L	0.10C
060406	6	15	6D	4T	50L	0.12C
080408	8	20	8D	4T	60L	0.16C
100410	10	25	10D	4T	75L	0.20C
120412	12	30	12D	4T	75L	0.24C
160416	16	40	16D	4T	100L	0.32C

Variable Helix and Unequal Pitch End Mill with Double U-Flute
不等份變導程雙R溝立銑刀

Features / 特色

> 884L-UPA

Grain Size:0.4μm
Cobalt%:12%

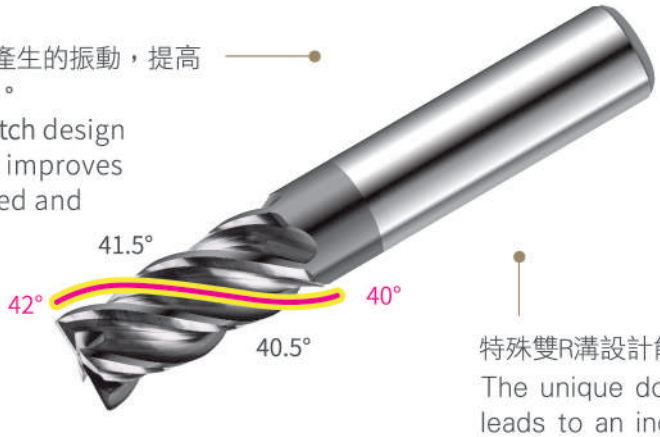
HRC ▸55 | SMG | 42°~40° 41.5°~40.5° Helix Angle | 4 Flute | AlCrN | U-Flute | C x 45° | Dry | Wet

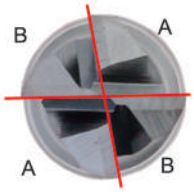
刀具被覆AlCrN塗層，氮化鋁鉻層能在高温加工的環境下產生氧化鋁保護層，延長加工壽命。同時具備光滑表面及摩擦係數小等特性，排屑性良好，特別適用於加工不鏽鋼及鈦合金。

Coated with high-quality AlCrN, it provides excellent cutting performance & tool life in high-temperature conditions. With the features of silky coating surface and small friction coefficient, it leads to excellent chip removal ability. Especially suitable for cutting Stainless Steel & Titanium.

藉由變導程的設計來減少切削時所產生的振動，提高加工穩定性、加工速度及刀具壽命。

The variable helix and unequal pitch design reduces operating vibrations. It improves the cutting stability, cutting speed and lifespan.





A≠B

特殊雙R溝設計能有效進行斷屑及排屑。

The unique double U-Flute design leads to an incredible chip removal ability.

由於塗層後再次對刀具進行拋光作業，使表面塗層的耐久性得到了大幅的改善。他還可以使刀具壽命延長200%-300%，加快進給速度並縮短切削時間。

Improvement of durability for surface coating due to the drag polishing process after the coating. Not only brings a 200-300 percent increases in tool life, but also faster feed rates, and reduce cutting time cycles.

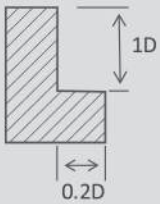
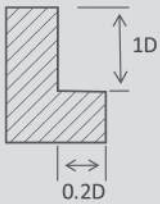
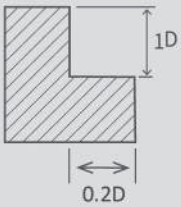
Applications / 應用

- ▶ 特別適用於粗加工及開槽加工，同時也提供優異的加工表面精度。
  Especially suitable for roughing & slotting. It also provides incredible cutting surface finish & high-precision.

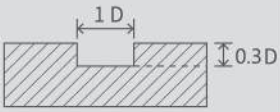
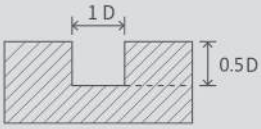
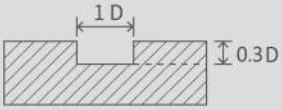
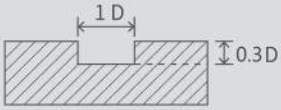
- ▶ 特別適和用於加工不鏽鋼及鈦合金。
  Especially suitable for cutting Stainless Steel and Titanium.

Cutting Condition / 884L-UPA切削條件表

側加工 Side Milling

被切削材 (Material)	鈦合金 (Titanium)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	7500	1200	6500	1100	6500	1000	7500	1200
4MM	7000	1200	6000	1200	6000	1100	7000	1200
5MM	6500	1500	5500	1200	5500	1200	6500	1500
6MM	6000	1500	5000	1300	5000	1200	6000	1500
8MM	5000	2000	4000	1500	4000	1300	5000	2000
10MM	4500	1800	3500	1200	3500	1200	4500	1800
12MM	4000	1500	3000	1000	3000	1000	4000	1500
16MM	3500	1500	2500	1000	2500	800	3500	1500
切削基準量 Depth of Cutting (D = 直徑 Dia)								

開槽加工 Slotting

被切削材 (Material)	鈦合金 (Titanium)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	6500	800	6500	900	6500	800	6500	800
4MM	6000	800	6000	900	6000	800	6000	800
5MM	5500	900	5500	1000	5500	1000	5500	900
6MM	5000	900	5000	1000	5000	1000	5000	900
8MM	4000	800	4500	900	4000	800	4000	800
10MM	3500	800	4000	900	3500	800	3500	800
12MM	3000	800	3500	800	3000	800	3000	800
16MM	2500	800	3000	800	2500	700	2500	800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

Dimension / 884L-UPA 規格表

單位(UNIT)：mm

型號(Model)	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)	倒C角 Corner Chamfered
030406	3	6	6D	4T	50L	0.06C
040406	4	11	6D	4T	50L	0.08C
050406	5	11	6D	4T	50L	0.10C
060406	6	13	6D	4T	50L	0.12C
080408	8	19	8D	4T	60L	0.16C
100410	10	22	10D	4T	75L	0.20C
120412	12	26	12D	4T	75L	0.24C
160416	16	32	16D	4T	100L	0.32C

Variable Helix and Unequal Pitch End Mill with Double U-Flute
不等份變導程雙R溝立銑刀

Features / 特色

> 994L-UPA

Grain Size:0.3μm
Cobalt%:9%

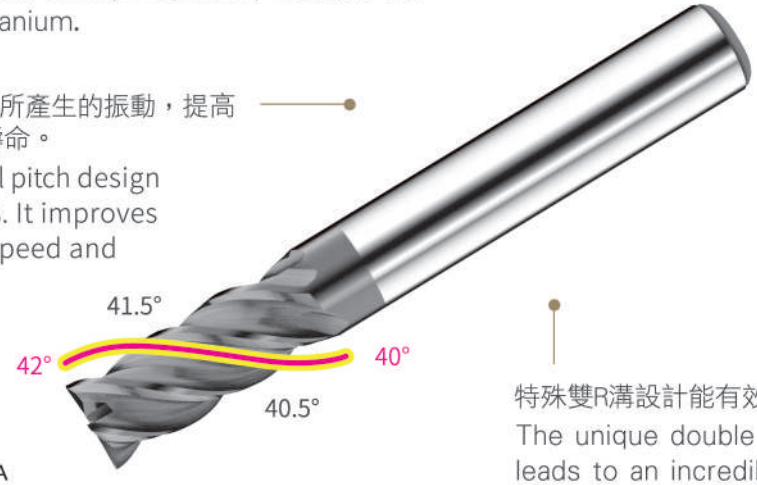
HRC ▸65 | NMG | 42°/40° Helix Angle | 4 Flute | AlCrN | U-Flute | C x 45° | Dry | Wet

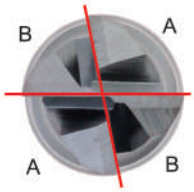
刀具被覆AlCrN塗層，氮化鋁鉻層能在高溫加工的環境下產生氧化鋁保護層，延長加工壽命。同時具備光滑表面及摩擦係數小等特性，排屑性良好，特別適用於加工不鏽鋼及鈦合金。

Coated with high-quality AlCrN, it provides excellent cutting performance & tool life in high-temperature conditions. With the features of silky coating surface and small friction coefficient, it leads to excellent chip removal ability. Especially suitable for cutting Stainless Steel & Titanium.

藉由變導程的設計來減少切削時所產生的振動，提高加工穩定性、加工速度及刀具壽命。

The variable helix and unequal pitch design reduces operating vibrations. It improves the cutting stability, cutting speed and lifespan.





A≠B

特殊雙R溝設計能有效進行斷屑及排屑。

The unique double U-Flute design leads to an incredible chip removal ability.

由於塗層後再次對刀具進行拋光作業，使表面塗層的耐久性得到了大幅的改善。他還可以使刀具壽命延長200%-300%，加快進給速度並縮短切削時間。

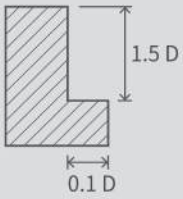
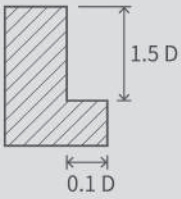
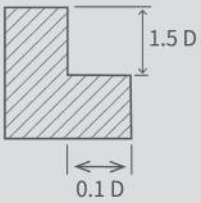
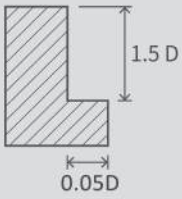
Improvement of durability for surface coating due to the drag polishing process after the coating. Not only brings a 200-300 percent increases in tool life, but also faster feed rates, and reduce cutting time cycles.

Applications / 應用

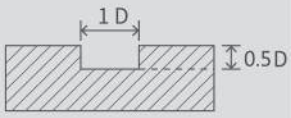
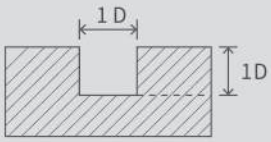
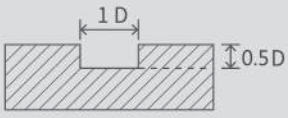
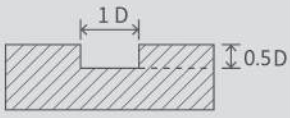
- ▶ 特別適和用於加工不鏽鋼及鈦合金。
  Especially suitable for cutting Stainless Steel and Titanium.
- ▶ 特別適用於粗加工及開槽加工，同時也提供優異的加工表面精度。
  Especially suitable for roughing & slotting. It also provides incredible cutting surface finish & high-precision.

Cutting Condition / 994L-UPA切削條件表

側加工 Side Milling

被切削材 (Material)	鈦合金 (Titanium)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)		熱處理鋼材 (HRC52-58 Heat Treatment Material)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	7500	800	9000	2000	7500	800	7500	800	7500	800
4MM	7000	1000	8000	2000	7000	1000	7000	1000	7000	1000
5MM	6500	1100	7500	2000	6500	1100	6500	1100	6500	1100
6MM	6000	1200	7000	2000	6000	1200	6000	1200	6000	1200
8MM	5500	1500	6000	2000	5500	1500	5500	1500	5500	1500
10MM	5000	1500	5500	2000	5000	1500	5000	1500	5000	1500
12MM	3500	1000	4000	2000	3500	1000	3500	1000	3500	1000
16MM	2500	1000	2800	2000	2500	1000	2500	1000	2500	1000
切削基準量 Depth of Cutting (D = 直徑 Dia)										

開槽加工 Slotting

被切削材 (Material)	鈦合金 (Titanium)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	8500	2300	7500	1600	8500	2300	8500	2300
4MM	8000	2300	7000	1600	8000	2300	8000	2300
5MM	7500	2300	6500	1600	7500	2300	7500	2300
6MM	7000	2600	6000	1800	7000	2600	7000	2600
8MM	6500	2800	5500	2000	6500	2860	6500	2800
10MM	6000	3200	5000	2300	6000	3250	6000	3200
12MM	4000	2600	4000	1800	4000	2600	4000	2600
16MM	3000	2300	3000	1600	3000	2340	3000	2300
切削基準量 Depth of Cutting (D = 直徑 Dia)								

Dimension / 994L-UPA 規格表

單位(UNIT)：mm

型號(Model)	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)	倒C角 Corner Chamfered
030406	3	6	6D	4T	50L	0.06C
040406	4	11	6D	4T	50L	0.08C
050406	5	11	6D	4T	50L	0.10C
060406	6	13	6D	4T	50L	0.12C
080408	8	19	8D	4T	60L	0.16C
100410	10	22	10D	4T	75L	0.20C
120412	12	26	12D	4T	75L	0.24C
160416	16	32	16D	4T	100L	0.32C

Variable Helix and Unequal Pitch End Mill with Double U-Flute
不等份變導程雙R溝立銑刀

Features / 特色

> 994L-UPV

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 42°/40° Helix Angle | 4 Flute | AlTiSin | U-Flute | C x 45° | Dry | Wet

刀具被覆AlTiSiN塗層，氮化鋁鈦矽塗層相較一般塗層可承受更高溫度，硬度表現及耐磨耗性也更為優異。

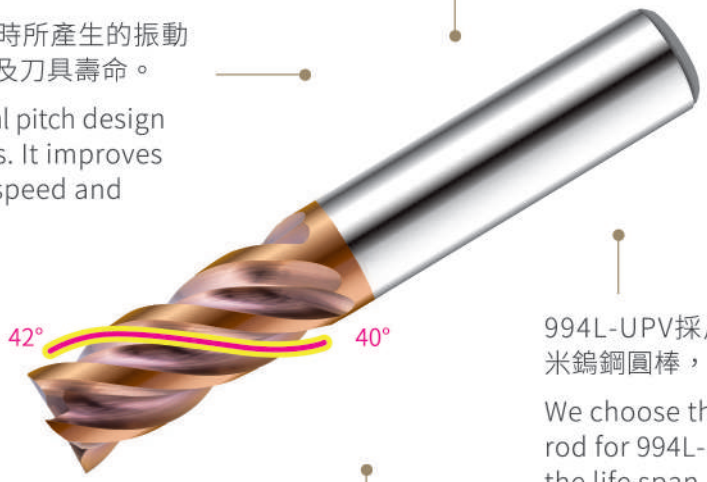
Coated with high-quality AlTiSiN. Compare with the traditional TiSiN, the AlTiSiN coating provides better high-temperature resistance, hardness, and durability.

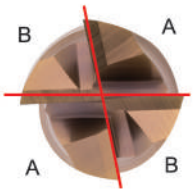
特殊雙R溝設計能有效進行斷屑及排屑。

The unique double U-Flute design leads to an incredible chip removal ability.

藉由變導程的設計來減少切削時所產生的振動，提高加工穩定性、加工速度及刀具壽命。

The variable helix and unequal pitch design reduces operating vibrations. It improves the cutting stability, cutting speed and lifespan.





A≠B

994L-UPV採用最高等級的0.3um奈米鎢鋼圓棒，加工壽命更為優異。

We choose the best NMG carbide rod for 994L-UPV series. Therefore, the life span is highly improved.

由於塗層後再次對刀具進行拋光作業，使表面塗層的耐久性得到了大幅的改善。他還可以使刀具壽命延長200%-300%，加快進給速度並縮短切削時間。

Improvement of durability for surface coating due to the polishing process after the coating. Not only brings a 200-300 percent increases in tool life, but also faster feed rates, and reduced cutting time cycles.

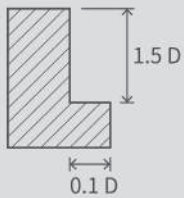
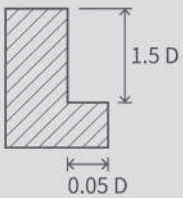
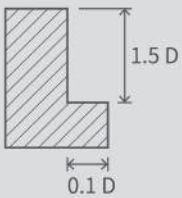
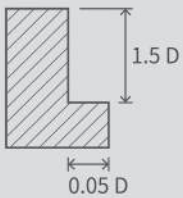
Applications / 應用

- 可應用於加工鑄鐵、工具鋼、合金鋼、不鏽鋼、鈦合金、高硬度鋼材。
  It applies to Cast Iron, Tool Steel, Alloy Steel, Stainless Steel, Titanium and high-hardness materials.

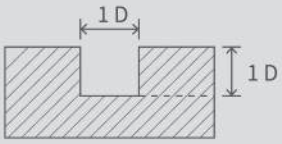
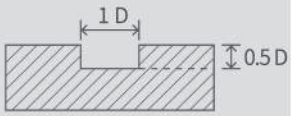
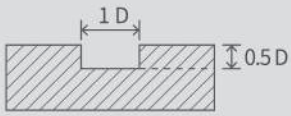
- 特別適用於粗加工及開槽加工，同時也提供優異的加工表面精度。
  Especially suitable for roughing & slotting. It also provides incredible cutting surface finish & high-precision.

Cutting Condition / 994L-UPV切削條件表

側加工 Side Milling

被切削材 (Material)	合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)		熱處理鋼材 (HRC52-58 Heat Treatment Material)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	10000	2800	9000	2000	7500	800	7200	1600
4MM	9000	3000	8000	2000	7000	1000	6400	1600
5MM	8000	3000	7500	2000	6500	1100	6000	1600
6MM	7500	3000	7000	2000	6000	1200	5600	1600
8MM	7000	3000	6000	2000	5500	1500	4800	1600
10MM	6000	2500	5500	2000	5000	1500	4400	1600
12MM	4000	2000	4000	2000	3500	1000	3200	1600
16MM	2800	2000	2800	2000	2500	1000	2240	1600
切削基準量 Depth of Cutting (D = 直徑 Dia)								

開槽加工 Slotting

被切削材 (Material)	碳鋼 (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
3MM	7500	1800	7500	1600	8500	2340	8500	2340
4MM	7000	1800	7000	1600	8000	2340	8000	2340
5MM	6500	1800	6500	1600	7500	2340	7500	2340
6MM	6000	2000	6000	1800	7000	2600	7000	2600
8MM	5500	2200	5500	2000	6500	2860	6500	2860
10MM	5000	2500	5000	2300	6000	3250	6000	3250
12MM	4000	2000	4000	1800	4000	2600	4000	2600
16MM	3000	1800	3000	1600	3000	2340	3000	2340
切削基準量 Depth of Cutting (D = 直徑 Dia)								

Dimension / 994L-UPV 規格表

單位(UNIT)：mm

型號(Model)	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)	倒C角 Corner Chamfered
030406	3	8	6D	4T	50L	0.06C
040406	4	11	6D	4T	50L	0.08C
050406	5	13	6D	4T	50L	0.10C
060406	6	15	6D	4T	50L	0.12C
080408	8	20	8D	4T	60L	0.16C
100410	10	25	10D	4T	75L	0.20C
120412	12	30	12D	4T	75L	0.24C
160416	16	40	16D	4T	100L	0.32C

884L-UN / 884L-UNS

Variable End Mill

The variable series is used for cutting stainless steel and general materials with an HRC below 55. The variable design reduces operating vibrations. It provides stable, high-speed milling ability and excellent tool life.

Especially suitable for finishing and side milling.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
884L-UN	SMG	0.4um	12%	Arti-Co
884L-UNS	SMG	0.4um	12%	S-FIRE

General Purpose End Mill For Universal Application
泛用型不等導程立銑刀

Features / 特色

> 884L-UNS — Grain Size:0.4μm, Cobalt%:12%

> 884L-UNR — Corner Radius

SMG | 30°~34° Helix Angle | 4 Flute | U-Flute | S-Fire | Dry | Wet

高品質的塗層Arti-Co 特別適用於溼式切削，薄膜表面滑的特性可減少加工毛邊。

High quality of S-FIRE coating is especially suitable for wet-type machining. The silky coating surface feature reduces the metal burrs.

藉由不等導程的設計來減少切削時所產生的振動，以及加快排屑速度提高加工穩定性、速度及刀具壽命。

The variable design reduces operating vibrations. It improves cutting stability, cutting speed and lifespan.

Applications / 應用

- 泛用型針對HRC55以下材質，鋼 、 不銹鋼 、 鈦合金 、銅合金等，擁有絕佳的切削表現。
  It applies to workpiece hardness below 55 HRC with universal application, including Steel, Stainless Steel, Titanium Alloy, and Copper Alloy.
- 可廣泛應用於粗加工及精加工，並且提供了優異的切削表現。
  The new product provides excellent cutting performance in both roughing and finishing.

Dimension / 884L-UNS 規格表

型號 (Model)	直徑 (d)	刃長 (t)	柄徑 (D)	刃數 (z)	全長 (L)	倒C角 Corner Chamfered
040404	4	12	4D	4T	50L	0.07C
060406	6	18	6D	4T	50L	0.1C
080408	8	24	8D	4T	60L	0.13C
100410	10	30	10D	4T	75L	0.13C
120412	12	36	12D	4T	75L	0.16C
160416	16	48	16D	4T	100L	0.2C

General Purpose Variable Helix End Mill For Universal Application
泛用型變導程立銑刀

Features / 特色

> 884L-UN
> 884L-UNR

Grain Size:0.4μm
Cobalt%:12%
Corner Radius

SMG | 30°~34° Helix Angle | 4 Flute | U-Flute | Arti-Co | Dry | Wet

高品質的塗層S-Fire 特別適用於溼式切削，薄膜表面滑的特性可減少加工毛邊。

High quality of S-FIRE coating is especially suitable for wet-type machining. The fine coating surface feature reduces the metal burrs.

藉由不等導程的設計來減少切削時所產生的振動，以及加快排屑速度提高加工穩定性、速度及刀具壽命。

The variable design reduces operating vibrations. It improves cutting stability, cutting speed and lifespan.

Applications / 應用

- 泛用型針對HRC55以下材質，碳鋼 、 不銹鋼 、 鈦、銅、鋁合金等，擁有絕佳的切削表現
  It applies to workpiece hardness below 55 HRC , including Carbon Steel, Stainless Steel, Titanium Alloy, and Copper Alloy, and Aluminium Alloy.
- 可廣泛應用於粗加工及精加工，並且提供了優異的切削表現。
  It provides excellent cutting performance in both roughing and finishing.

Dimension / 884L-UN 規格表

型號 (Model)	直徑 (d)	刃長 (t)	柄徑 (D)	刃數 (z)	全長 (L)	倒C角 Corner Chamfered
040404	4	8	4D	4T	50L	0.07C
060406	6	12	6D	4T	50L	0.1C
080408	8	16	8D	4T	60L	0.13C
100410	10	20	10D	4T	75L	0.13C
120412	12	24	12D	4T	75L	0.16C
160416	16	32	16D	4T	100L	0.2C

LV INTERNATIONAL CO., LTD

884L-M / 884L-MS

U-FLUTE End Mill for Aluminum

The 884L-M / 884L-MS type is our most advanced products for Stainless steel material milling. The specular geometric is good for roughing and finishing. It applies 2D & 3D in fluting length and C corner.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
884L-M	SMG	0.4um	12%	Arti-Co
884L-MS	SMG	0.4um	12%	S-FIRE

Unequal Helix and Pitch End Mill - Rigidity Type
4刃立銑刀(不等份&不等螺旋) 不鏽鋼專用刀

Features / 特色

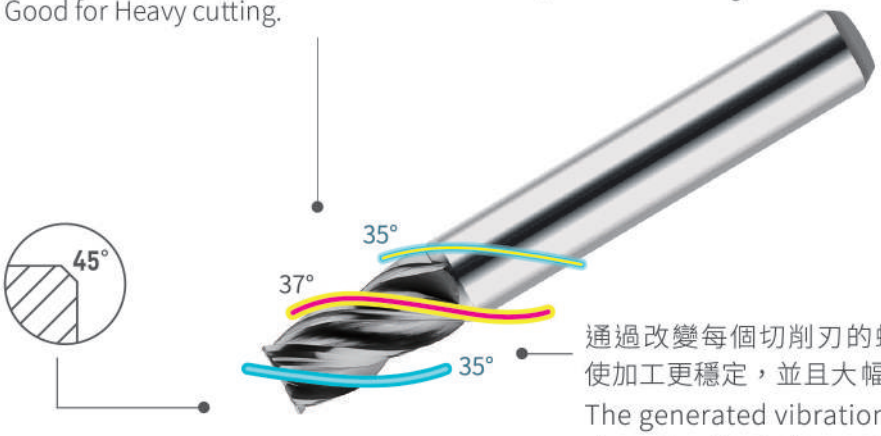
> 884L-M	Grain Size:0.4μm Cobalt%:12%	(豪華版)
> 994L-M	AlTiSiN(頂級版)	
> 994L-M+	AlTiSiN(旗艦版)	

HRC ▸55 | SMG | 35°~37° Helix Angle | 4 Flute | Arti-Co | C x 45° | Dry | Wet

採用優質硬質合金棒材，具有優良的耐磨性和抗張力。
Excellent wear resistance and tensility by adopting high-quality carbide rod.

兩倍外徑的刃長，使加工剛性更好應用於白鐵，不銹鋼的加工，適合重切削。
2D flute length more rigid for stainless steel application. Good for Heavy cutting.

藉由刀刃不等分割的設計來減少加工時帶來的振動。
The tool vibrations reduced by making the unequal pitch at the bottom of the blade.



通過改變每個切削刃的螺旋角度可以有效地抑制振動的產生，使加工更穩定，並且大幅提高加工效率及使用壽命。
The generated vibrations are suppressed effectively by changing the helix angle of each cutting edge.
It provides stable, high-speed milling ability and excellent tool life.

Applications / 應用

- ▶ 側銑加工時給予絕佳切削能力，特別適用於精修，並改善工件表面精度。
  It provides incredible cutting performance in side milling. Especially suitable for finishing, also improving the surface precision workpiece.
- ▶ 不只應用於加工不鏽鋼，更可廣泛應用於鐵、碳鋼、合金鋼、工具鋼及中低硬度鋼材，且適用於重切削。
  884L-M not only apply to stainless steel but also apply to Steel Carbon Steel, Alloy Steel, Tool Steel, Medium Hardness Material.
  Apply to heavy slotting and side aitting.

Dimension / 884L-M/994L-M / 994L-M+ 規格表

2D	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)	倒C角 Corner Chamfered
	4	8	4D	4T	50L	0.15C
	4	8	6D	4T	50L	0.15C
	5	10	6D	4T	50L	0.15C
	6	12	6D	4T	50L	0.2C
	8	16	8D	4T	60L	0.2C
	10	20	10D	4T	75L	0.3C
	12	24	12D	4T	75L	0.35C
	16	32	16D	4T	100L	0.4C

3D	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)	倒C角 Corner Chamfered
	4	12	4D	4T	50L	0.15C
	4	12	6D	4T	50L	0.15C
	5	15	6D	4T	50L	0.15C
	6	18	6D	4T	50L	0.2C
	8	24	8D	4T	60L	0.2C
	10	30	10D	4T	75L	0.3C
	12	36	12D	4T	75L	0.35C
	16	48	16D	4T	100L	0.4C

Unequal Helix and Pitch End Mill - Rigidity Type
4刃立銑刀(不等份&不等螺旋)不鏽鋼專用刀

Features / 特色

> 884L-MS	Grain Size:0.4μm Cobalt%:12%	(豪華版)
> 994L-MS	AlTiSiN(頂級版)	
> 994L-MS+	AlTiSiN(旗艦版)	

HRC ▸55 | SMG | 35°~37° Helix Angle | 4 Flute | S-Fire | C x 45° | Dry | Wet

採用優質硬質合金棒材，具有優良的耐磨性和抗張力。

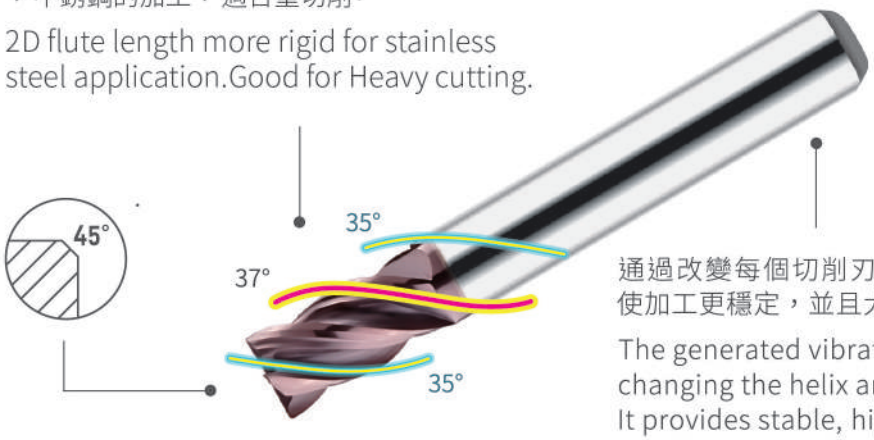
Excellent wear resistance and tensility by adopting high-quality carbide rod.

藉由刀刃不等分割的設計來減少加工時帶來的振動。

The tool vibrations reduced by making the unequal pitch at the bottom of the blade.

兩倍外徑的刃長，使加工剛性更好應用於白鐵，不銹鋼的加工，適合重切削。

2D flute length more rigid for stainless steel application.Good for Heavy cutting.



通過改變每個切削刃的螺旋角度可以有效地抑制振動的產生，使加工更穩定，並且大幅提高加工效率及使用壽命。

The generated vibrations are suppressed effectively by changing the helix angle of each cutting edge.
It provides stable, high-speed milling ability and excellent tool life.

Applications / 應用

- ▶ 側銑加工時給予絕佳切削能力，特別適用於精修，並改善工件表面精度。
  It provides incredible cutting performance in side milling. Especially suitable for finishing, also improving the surface precision workpiece.
- ▶ 不只應用於加工不鏽鋼，更可廣泛應用於鐵、碳鋼、合金鋼、工具鋼及中低硬度鋼材，且適用於重切削。
  884L-MS not only apply to stainless steel but also apply to Steel Carbon Steel, Alloy Steel, Tool Steel, Medium Hardness Material.
  Apply to heavy slotting and side aitting.

Dimension / 884L-MS/994L-MS / 994L-MS+ 規格表

2D	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)	倒C角 Corner Chamfered
	4	8	4D	4T	50L	0.15C
	4	8	6D	4T	50L	0.15C
	5	10	6D	4T	50L	0.15C
	6	12	6D	4T	50L	0.2C
	8	16	8D	4T	60L	0.2C
	10	20	10D	4T	75L	0.3C
	12	24	12D	4T	75L	0.35C
	16	32	16D	4T	100L	0.4C

3D	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)	倒C角 Corner Chamfered
	4	12	4D	4T	50L	0.15C
	4	12	6D	4T	50L	0.15C
	5	15	6D	4T	50L	0.15C
	6	18	6D	4T	50L	0.2C
	8	24	8D	4T	60L	0.2C
	10	30	10D	4T	75L	0.3C
	12	36	12D	4T	75L	0.35C
	16	48	16D	4T	100L	0.4C

884L-Z / 884L-ZRS
884L-ZZLV

Variable End Mill

The variable series is used for cutting stainless steel and general materials with an HRC below 55. The variable design reduces operating vibrations. It provides stable, high-speed milling ability and excellent tool life.

Especially suitable for finishing and side milling.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
884L-Z	SMG	0.4um	12%	S-FIRE
884L-ZRS	SMG	0.4um	12%	TixSiN
884L-ZZLV	SMG	0.4um	12%	ZrN-A

LV INTERNATIONAL CO., LTD

883L-AEP

U-FLUTE End Mill for Aluminum

The 883L-AEP type is our most advanced products for cutting Aluminum.
It offers excellent chip removal ability by U-FLUTE design.
The specular design leads to perfect cutting performance and workpiece without cutting result. It applies to both roughing and finishing.

Item Code	Carbide Materal	Grain Size	Cobalt Percentage	Coating
883L-AEP	SMG	0.4um	12%	
883L-AEPZLV	SMG	0.4um	12%	ZrN

Unequal Helix and Pitch End Mill with Double S-Fire Coating
4刃立銑刀(不等份&不等螺旋)

Features / 特色

> 884L-Z

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 42°/40° Helix Angle | 4 Flute | S-Fire | Dry | Wet

採用優質硬質合金棒材，具有優良的耐磨性和抗張力。

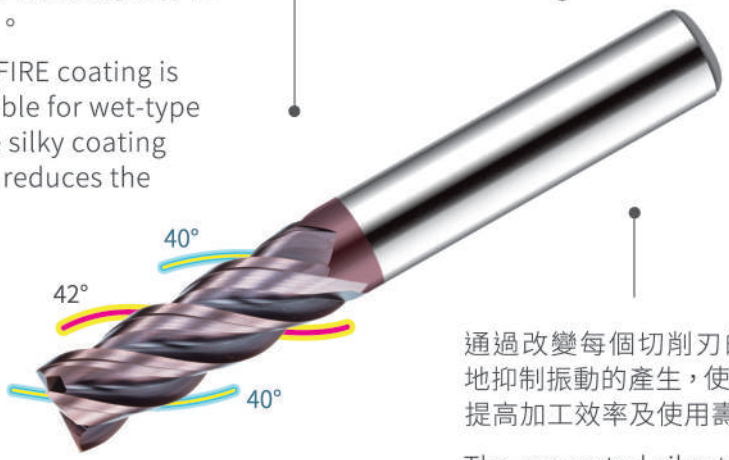
Excellent wear resistance and tensility by adopting high-quality carbide rod.

藉由刀刃不等分割的設計來減少加工時帶來的振動。

The tool vibrations reduced by making the unequal pitch at the bottom of the blade.

高品質的S-FIRE塗層特別適合用於濕式切削，薄膜表面光滑的特性可減少加工毛邊。

High-quality S-FIRE coating is especially suitable for wet-type machining. The silky coating surface feature reduces the metal burrs.



通過改變每個切削刃的螺旋角度可以有效地抑制振動的產生，使加工更穩定，並且大幅提高加工效率及使用壽命。

The generated vibrations are suppressed effectively by changing the helix angle of each cutting edge. It provides stable, high-speed milling ability and excellent tool life.

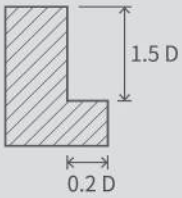
Applications / 應用

- ▶ 側銑加工時給予絕佳切削能力，特別適用於精修，並改善工件表面精度。
  It provides incredible cutting performance in side milling. Especially suitable for finishing, also improving the surface precision workpiece.

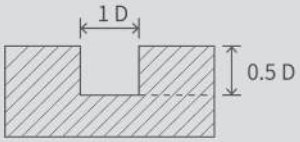
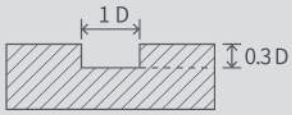
- ▶ 不只應用於加工不鏽鋼，更可廣泛應用於鐵、碳鋼、合金鋼、工具鋼及中低硬度鋼材。
  884L-Z not only apply to stainless steel but also apply to Steel, Carbon Steel, Alloy Steel, Tool Steel, Medium Hardness Material.

Cutting Condition / 884L-Z切削條件表

側加工 Side Milling

被切削材 (Material)	碳鋼 (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
4 MM	9600	1200	8000	1000	6400	760	6000	700
5 MM	8300	1300	7000	1100	5700	920	5500	900
6 MM	6900	1500	5800	1300	4800	1,000	4500	900
7 MM	6000	1500	5100	1300	4200	1,000	4000	900
8 MM	5200	1500	4400	1300	3600	1,000	3500	900
9 MM	4700	1500	4000	1300	3300	960	3250	900
10 MM	4200	1500	3500	1300	3000	920	3000	900
11 MM	3850	1400	3200	1200	2700	840	2700	800
12 MM	3500	1400	2900	1200	2400	760	2400	700
16 MM	2600	1200	2200	1000	1800	680	1800	600
切削基準量 Depth of Cutting (D = 直徑 Dia)								

開槽加工 Slotting

被切削材 (Material)	碳鋼 (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
4 MM	9600	840	8000	700	5600	500	5000	500
5 MM	8300	1100	7000	880	4500	560	4000	520
6 MM	6900	1200	5800	950	3700	600	3500	600
7 MM	6100	1200	5100	950	3250	600	3000	600
8 MM	5200	1200	4400	950	2800	600	2500	650
9 MM	4700	1100	4000	880	2500	550	2350	550
10 MM	4200	1000	3500	800	2200	500	2200	500
11 MM	3850	950	3200	750	2050	500	2100	500
12 MM	3500	950	2900	700	1900	500	2000	500
16 MM	2600	700	2200	610	1400	380	1600	380
切削基準量 Depth of Cutting (D = 直徑 Dia)								

Dimension / 884L-Z 規格表

單位(UNIT)：mm

型號(Model)	直徑(d)	刃長(t)	全長(L)	柄徑(D)	刃數(z)
040406	4	11	50	6	4
050406	5	13	50	6	4
060406	6	15	50	6	4
070408	7	16	60	8	4
080408	8	20	60	8	4
090410	9	20	75	10	4
100410	10	25	75	10	4
110412	11	30	75	12	4
120412	12	30	75	12	4
160416	16	40	100	16	4

Unequal Helix and Pitch End Mill - With ZrN Coating
4刃立銑刀(不等份&不等螺旋) - 星光金塗層

Features / 特色

> 884L-ZZLV

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 42°/40° Helix Angle | 4 Flute | ZrN

採用優質硬質合金棒材，具有優良的耐磨性和抗張力

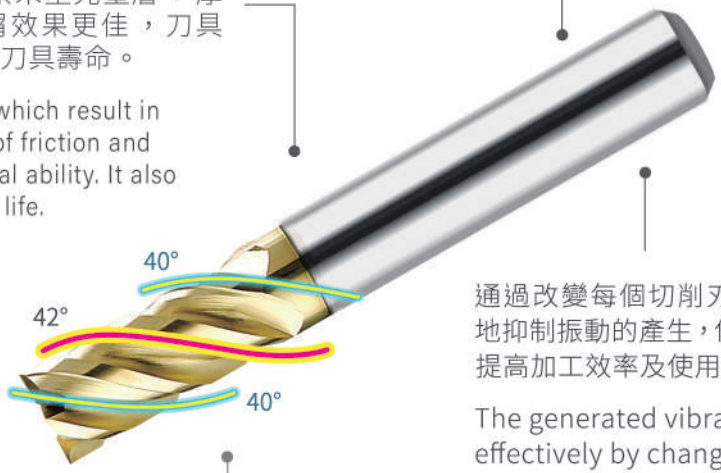
Excellent wear resistance and tensility by adopting high-quality carbide rod.

藉由刀刃不等分割的設計來減少加工時帶來的振動。

The tool vibrations reduced by making the unequal pitch at the bottom of the blade.

刀具被覆 ZrN 奈米星光塗層，摩擦係數小，排屑效果更佳，刀具不沾黏，並增加刀具壽命。

Coated with ZrN which result in lower coefficient of friction and better chip removal ability. It also improved the tool life.



通過改變每個切削刃的螺旋角度可以有效地抑制振動的產生，使加工更穩定，並且大幅提高加工效率及使用壽命。

The generated vibrations are suppressed effectively by changing the helix angle of each cutting edge. It provides stable, high-speed milling ability and excellent tool life.

刀具被覆ZrN奈米星光塗層, 摩擦係數小, 排屑效果更佳, 刀具不沾黏, 並增加刀具壽命。

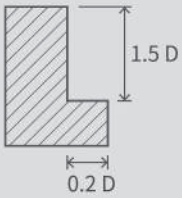
Coated with ZrN which result in lower coefficient of friction and better chip removal ability. It also improved the tool life.

Applications / 應用

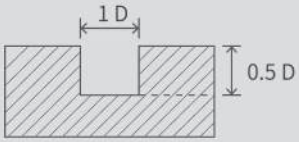
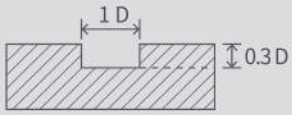
- ▶ 側銑加工時給予絕佳切削能力，特別適用於精修，並改善工件表面精度。
  It provides incredible cutting performance in side milling. Especially suitable for finishing, also improving the surface precision workpiece.
- ▶ 不只應用於加工不鏽鋼，更可廣泛應用於鐵、碳鋼、合金鋼、工具鋼及中低硬度鋼材。
  884L-ZZL not only apply to stainless steel but also apply to Steel, Carbon Steel, Alloy Steel, Tool Steel, Medium Hardness Material.

Cutting Condition / 884L-ZZLV切削條件表

側加工 Side Milling

被切削材 (Material)	碳鋼 (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
4 MM	9600	1200	8000	1000	6400	760	6000	700
5 MM	8300	1300	7000	1100	5700	920	5500	900
6 MM	6900	1500	5800	1300	4800	1,000	4500	900
7 MM	6000	1500	5100	1300	4200	1,000	4000	900
8 MM	5200	1500	4400	1300	3600	1,000	3500	900
9 MM	4700	1500	4000	1300	3300	960	3250	900
10 MM	4200	1500	3500	1300	3000	920	3000	900
11 MM	3850	1400	3200	1200	2700	840	2700	800
12 MM	3500	1400	2900	1200	2400	760	2400	700
16 MM	2600	1200	2200	1000	1800	680	1800	600
切削基準量 Depth of Cutting (D = 直徑 Dia)								

開槽加工 Slotting

被切削材 (Material)	碳鋼 (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		不銹鋼 (Stainless Steel)	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
4 MM	9600	840	8000	700	5600	500	5000	500
5 MM	8300	1100	7000	880	4500	560	4000	520
6 MM	6900	1200	5800	950	3700	600	3500	600
7 MM	6100	1200	5100	950	3250	600	3000	600
8 MM	5200	1200	4400	950	2800	600	2500	650
9 MM	4700	1100	4000	880	2500	550	2350	550
10 MM	4200	1000	3500	800	2200	500	2200	500
11 MM	3850	950	3200	750	2050	500	2100	500
12 MM	3500	950	2900	700	1900	500	2000	500
16 MM	2600	700	2200	610	1400	380	1600	380
切削基準量 Depth of Cutting (D = 直徑 Dia)								

Dimension / 884L-ZZLV 規格表

單位(UNIT)：mm

型號(Model)	直徑(d)	刃長(t)	全長(L)	柄徑(D)	刃數(z)
040406	4	11	50	6	4
050406	5	13	50	6	4
060406	6	15	50	6	4
070408	7	16	60	8	4
080408	8	20	60	8	4
090410	9	20	75	10	4
100410	10	25	75	10	4
110412	11	30	75	12	4
120412	12	30	75	12	4
160416	16	40	100	16	4

Unequal Helix and Pitch End Mill - Corner Radius With TixSiN Coating
4刃圓鼻立銑刀(不等份割&不等螺旋)

Features / 特色

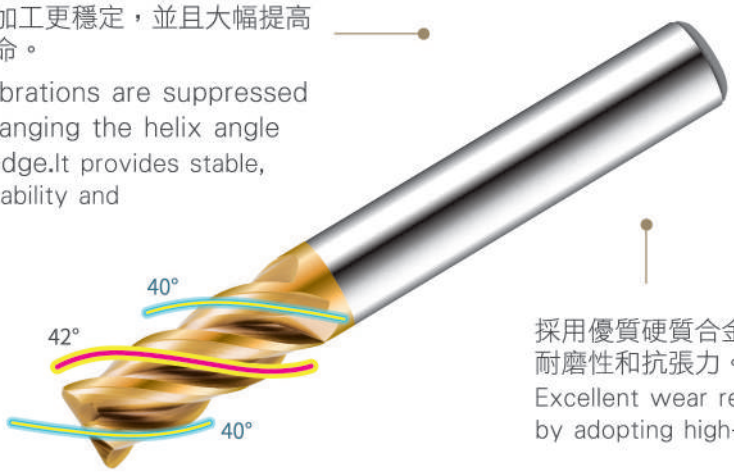
> 884L-ZRS

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 42°/40° Helix Angle | 4 Flute | TiXSiN | R | Dry | Wet

藉由刀刃不等分割的設計來減少加工時帶來的振動。
The tool vibrations reduced by making the unequal pitch at the bottom of the blade.

通過改變每個切削刃的螺旋角度可以有效地抑制振動的產生，使加工更穩定，並且大幅提高加工效率及使用壽命。
The generated vibrations are suppressed effectively by changing the helix angle of each cutting edge.It provides stable, high-speed milling ability and excellent tool life.



採用優質硬質合金棒材，具有優良的耐磨性和抗張力。
Excellent wear resistance and tensility by adopting high-quality carbide rod.

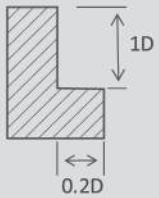
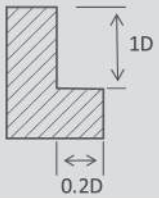
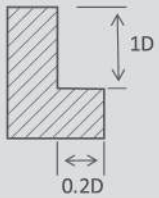
刀具被覆TixSiN塗層，塗層成分含矽，具備耐高温和耐磨耗等特性。
Coated with TixSiN, it contains Si which has high temperature-resistance & durability.

Applications / 應用

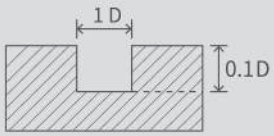
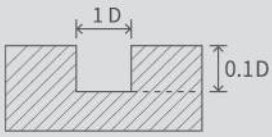
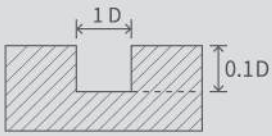
- ▶ 側銑加工時給予絕佳切削能力，特別適用於精修，並改善工件表面精度。
  It provides incredible cutting performance in side milling. Especially suitable for finishing, also improving the surface precision workpiece.
- ▶ 不只應用於加工不鏽鋼，更可廣泛應用於工具鋼、合金鋼及中低硬度鋼材。
  884L-Z not only apply to stainless steel but also apply to tool steel, alloy steel, and carbon steel.

Cutting Condition / 884L-ZRS 切削條件表

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM	
硬度(Strength)			20-30HRC		30-45 HRC	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
4 MM	7000	2000	6500	1200	6000	1000
5 MM	6500	2000	6000	1200	5500	1000
6 MM	6000	2000	5000	1500	5000	1200
8 MM	5000	1800	4000	1500	4000	1200
10 MM	4000	1600	3000	1000	3000	800
12 MM	3000	1500	2500	1000	2500	800
切削基準量 Depth of Cutting (D = 直徑 Dia)						

開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM	
硬度(Strength)			20-30HRC		30-45 HRC	
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
4 MM	7000	1200	6500	1500	6500	1000
5 MM	6500	1500	6000	1500	6000	1200
6 MM	6000	1800	5000	1300	5000	1200
8 MM	5000	1500	4000	1200	4000	1000
10 MM	4000	1500	3000	1000	3000	800
12 MM	3000	1500	2500	1000	2500	800
切削基準量 Depth of Cutting (D = 直徑 Dia)						

Dimension / 884L-ZRS 規格表

單位(UNIT)：mm

型號MODE	直徑d	角徑R	刃長 *l*	全長L	柄徑D	刃數Z
040054	4	0.5	8	50	4	4
0400246D	4	0.2	11	50	6	4
050024	5	0.2	13	50	6	4
050054	5	0.5	13	50	6	4
060024	6	0.2	15	50	6	4
060054	6	0.5	15	50	6	4
060104	6	1.0	15	50	6	4
080034	8	0.3	20	60	8	4
080054	8	0.5	20	60	8	4
080104	8	1.0	20	60	8	4
100054	10	0.5	25	75	10	4
100104	10	1.0	25	75	10	4
120054	12	0.5	30	75	12	4
120104	12	1.0	30	75	12	4

Optimized U-Flute End Mill For Aluminum
鋁合金專用R溝銑刀

Features / 特色

> 883L-AEP

Grain Size:0.4μm
Cobalt%:12%

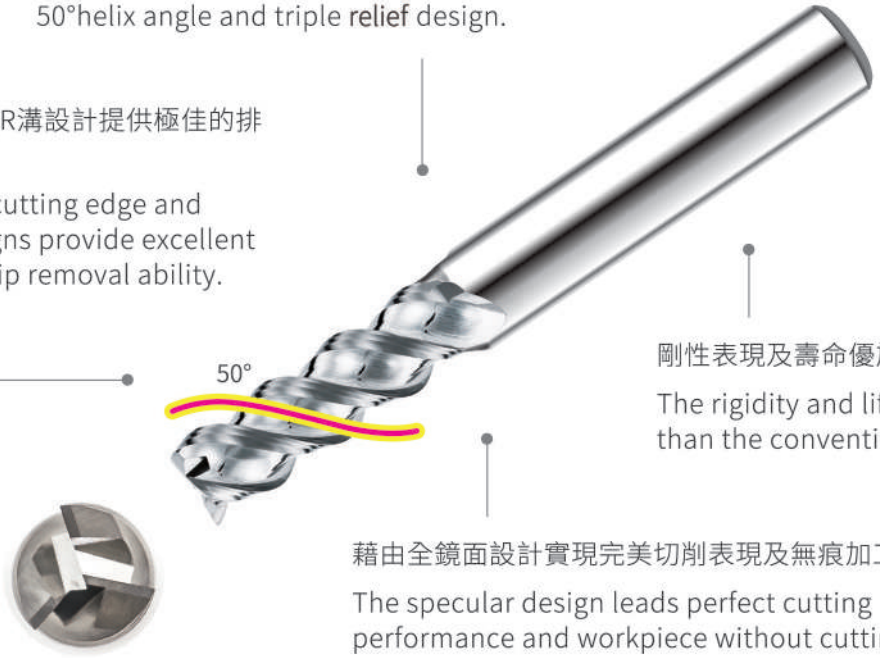
SMG | 50° Helix Angle | 3 Flute | U-Flute | Dry | Wet

50度螺旋角，三刀刃設計。

50°helix angle and triple relief design.

特殊的刃口及R溝設計提供極佳的排屑能力。

The Special cutting edge and U-Flute designs provide excellent Optimized chip removal ability.



剛性表現及壽命優於一般鋁用銑刀。

The rigidity and lifespan are better than the conventional products.

藉由全鏡面設計實現完美切削表現及無痕加工。

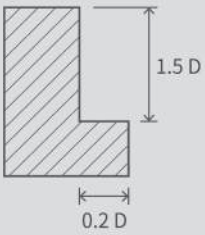
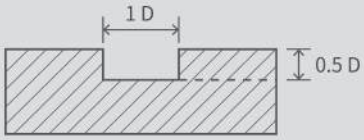
The specular design leads perfect cutting performance and workpiece without cutting result-Mirror face.

Applications / 應用

- 可應用於鋁合金、銅合金、塑膠、非鐵材質金屬。
  It applies to aluminum, copper, plastic, non-metal materials.

- 可廣泛應用於粗加工及精加工，並且提供了優異的切削表現。
  The new product provides excellent cutting performance in both roughing and finishing.

Cutting Condition / 883L-AEP 切削條件表

被切削材 (Material)	鋁合金-側銑 (Aluminum-Side Milling)		鋁合金-溝銑 (Aluminum-Slotting)	
直徑(Diameter)	回轉速度(Speed)	進給速度(Feed)	回轉速度(Speed)	進給速度(Feed)
1 MM	17000	3000	14000	2200
1.5 MM	16000	3000	13000	2200
2 MM	15000	3000	12000	2200
2.5 MM	14000	3000	11000	2200
3 MM	13000	3000	10000	2000
4 MM	12000	3000	9000	2200
5 MM	9000	2800	8000	2200
6 MM	8000	2500	7000	2000
7 MM	7800	2300	6500	1800
8 MM	7500	2300	6000	1800
9 MM	7200	2300	5800	1700
10 MM	7000	2000	5500	1700
11 MM	6500	2000	5200	1500
12 MM	6000	2000	5000	1500
14 MM	5500	2000	4500	1300
16 MM	5000	1800	4000	1300
20 MM	4000	1500	3000	1200
切削基準量 Depth of Cutting (D = 直徑 Dia)				

以上數據為建議值，適當的條件仍需視機台狀況，夾治具品質，冷卻系統...等改變。實際加工時請考慮加工條件、目的、使用機床等因素來進行調整。
The FEED and Speed may be changed depending on the M/C conditions, tool holder and cooling system. The condition should be adjusted according to the machining shape, purpose and the machine type.

Dimension / 883L-AEP 規格表

單位(UNIT)：mm

型號(Model)	直徑(d)	刃長(t)	全長(L)	柄徑(D)	刃數(z)
010304	1	3	50	4	3
015304	1.5	5	50	4	3
020304	2	6	50	4	3
025304	2.5	8	50	4	3
030304	3	9	50	4	3
040304	4	12	50	4	3
050306	5	15	50	6	3
060306	6	18	50	6	3
070308	7	21	60	8	3
080308	8	24	60	8	3
090310	9	27	75	10	3
100310	10	30	75	10	3
110312	11	33	75	12	3
120312	12	36	75	12	3
140316	14	45	100	16	3
160316	16	50	100	16	3
200320	20	50	100	20	3

Optimized U-Flute End Mill For Aluminum with ZrN coating
鋁合金專用R溝銑刀 - 星光金塗層

Features / 特色

> 883L-AEPZLV

Grain Size:0.4μm
Cobalt%:12%

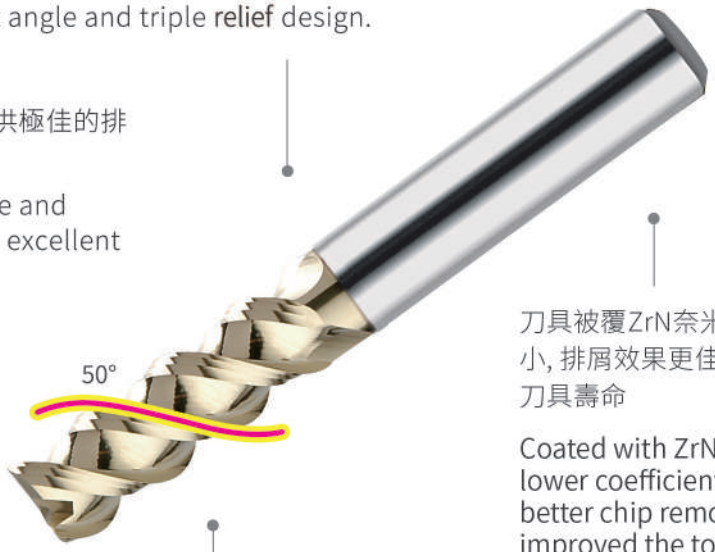
SMG | 50° Helix Angle | 3 Flute | U-Flute | ZrN | Dry | Wet

50度螺旋角，三刀刃設計。

50°helix angle and triple relief design.

特殊的刃口及R溝設計提供極佳的排屑能力。

The Special cutting edge and U-Flute designs provide excellent chip removal ability.



刀具被覆ZrN奈米星光塗層, 摩擦係數小, 排屑效果更佳, 刀具不沾黏, 並增加刀具壽命

Coated with ZrN which result in lower coefficient of friction and better chip removal ability. It also improved the tool life.

藉由全鏡面設計實現完美切削表現及無痕加工。

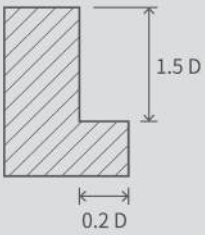
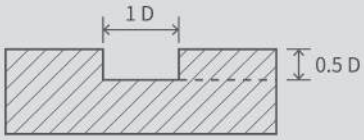
The specular design leads perfect cutting performance and workpiece without cutting result-Mirror face.

Applications / 應用

▶ 可應用於鋁合金、銅合金、塑膠、非鐵材質金屬。
It applies to aluminum, copper, plastic, non-metal materials.

▶ 可廣泛應用於粗加工及精加工，並且提供了優異的切削表現。
The new product provides excellent cutting performance in both roughing and finishing.

Cutting Condition / 883L-AEPZLV 切削條件表

被切削材 (Material)	鋁合金-側銑 (Aluminum-Side Milling)		鋁合金-溝銑 (Aluminum-Slotting)	
直徑(Diameter)	回轉速度(Speed)	進給速度(Feed)	回轉速度(Speed)	進給速度(Feed)
1 MM	17000	3000	14000	2200
1.5 MM	16000	3000	13000	2200
2 MM	15000	3000	12000	2200
2.5 MM	14000	3000	11000	2200
3 MM	13000	3000	10000	2000
4 MM	12000	3000	9000	2200
5 MM	9000	2800	8000	2200
6 MM	8000	2500	7000	2000
7 MM	7800	2300	6500	1800
8 MM	7500	2300	6000	1800
9 MM	7200	2300	5800	1700
10 MM	7000	2000	5500	1700
11 MM	6500	2000	5200	1500
12 MM	6000	2000	5000	1500
14 MM	5500	2000	4500	1300
16 MM	5000	1800	4000	1300
20 MM	4000	1500	3000	1200
切削基準量 Depth of Cutting (D = 直徑 Dia)				

以上數據為建議值，適當的條件仍需視機台狀況，夾治具品質，冷卻系統...等改變。實際加工時請考慮加工條件、目的、使用機床等因素來進行調整。
The FEED and Speed may be changed depending on the M/C conditions, tool holder and cooling system. The condition should be adjusted according to the machining shape, purpose and the machine type.

Dimension / 883L-AEPZLV 規格表

單位(UNIT)：mm

型號(Model)	直徑(d)	刃長(t)	全長(L)	柄徑(D)	刃數(z)
010304	1	3	50	4	3
015304	1.5	5	50	4	3
020304	2	6	50	4	3
025304	2.5	8	50	4	3
030304	3	9	50	4	3
040304	4	12	50	4	3
050306	5	15	50	6	3
060306	6	18	50	6	3
070308	7	21	60	8	3
080308	8	24	60	8	3
090310	9	27	75	10	3
100310	10	30	75	10	3
110312	11	33	75	12	3
120312	12	36	75	12	3
140316	14	45	100	16	3
160316	16	50	100	16	3
200320	20	50	100	20	3

Unequal Helix and Pitch End Mill For Aluminum
不等螺旋&不等分三刃鋁用刀 - 星光金塗層 with ZrN coating

Features / 特色

> 883L-AEKZLV

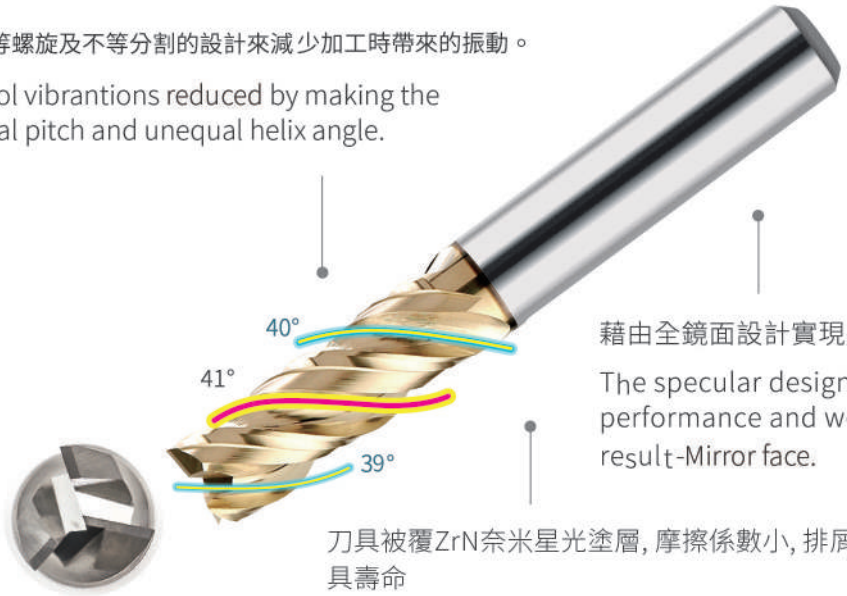
> 883L-AEK

Grain Size:0.4μm
Cobalt%:12%

SMG | 39°/41°/40° Helix Angle | 3 Flute | U-Flute | ZrN | Dry | Wet

藉由不等螺旋及不等分割的設計來減少加工時帶來的振動。

The tool vibrantions reduced by making the unequal pitch and unequal helix angle.



藉由全鏡面設計實現完美切削表現及無痕加工。

The specular design leads perfect cutting performance and workpiece without cutting result-Mirror face.

刀具被覆ZrN奈米星光塗層, 摩擦係數小, 排屑效果更佳, 刀具不沾黏, 並增加刀具壽命

Coated with ZrN which result in lower coefficient of friction and better chip removal ability. It also improved the tool lifespan.

Applications / 應用

- ▶ 可應用於鋁合金、銅合金、塑膠、非鐵材質金屬。
  It applies to aluminum, copper, plastic, non-ferrous materials.
- ▶ 可廣泛應用於粗加工及精加工，並且提供了優異的切削表現。
  The new product provides excellent cutting performance in both roughing and finishing.

Dimension / 883L-AEK、883L-AEKZLV 規格表

型號(Model)	直徑(d)	刃長(t)	柄徑(D)	刃數(z)	全長(L)
040304	4	12	4D	3T	50L
050306	5	15	6D	3T	50L
060306	6	18	6D	3T	50L
070308	7	21	8D	3T	60L
080308	8	24	8D	3T	60L
090310	9	27	10D	3T	75L
100310	10	30	10D	3T	75L
110312	11	33	12D	3T	75L
120312	12	12	12D	3T	75L
140316	14	15	16D	3T	100L
160316	16	50	16D	3T	100L
200320	20	50	12D	3T	100L

SQUARE TYPE FOR ALUMINUM - 3 FLUTES

3刃鋁用立銑刀

> 883L-AEG

Grain Size:0.4μm
Cobalt%:12%

SMG

50° Helix Angle | 3 Flute

Wet | Dry

粗銑 Roughing	◎
中銑 Semi Finishing	◎
精修 Finishing	◎

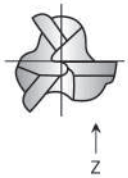
形狀寸表法 Dimensions

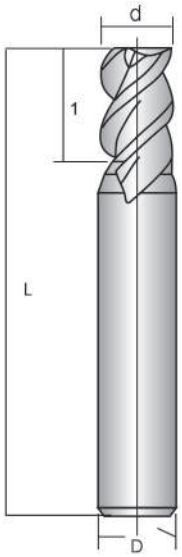
單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L
0303	3	9	6	3	50
0403	4	12	6	3	50
0503	5	15	6	3	50
0603	6	18	6	3	50
0803	8	20	8	3	60
1003	10	30	10	3	75
1203	12	32	12	3	75

建議售價

883L-AEG (NT)	(USD)
520	16.6
520	16.6
520	16.6
520	16.6
1000	31.8
1760	55.9
2400	76.2





SQUARE TYPE FOR ALUMINUM - 3 FLUTES

3刃鋁用立銑刀 - 星光金塗層

> 883L-AEGZLV

Grain Size:0.4μm
Cobalt%:12%

SMG | ZrN | 50° Helix Angle | 3 Flute | Wet | Dry

粗銑 Roughing	◎
中銑 Semi Finishing	◎
精修 Finishing	◎

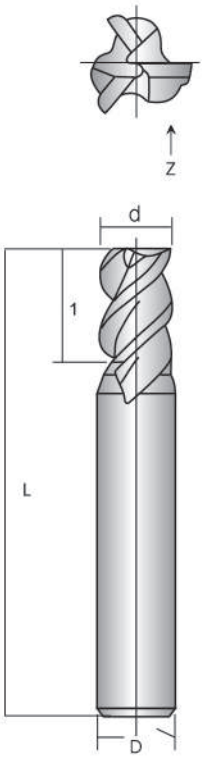
▶ 刀具被覆ZrN奈米星光塗層, 摩擦係數小, 排屑效果更佳, 刀具不沾黏, 並增加刀具壽命。

Coated with ZrN which result in lower coefficient of friction and better chip removal ability. It also improved the tool life.

形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L
0303	3	9	6	3	50
0403	4	12	6	3	50
0503	5	15	6	3	50
0603	6	18	6	3	50
0803	8	20	8	3	60
1003	10	30	10	3	75
1203	12	32	12	3	75



SQUARE TYPE FOR ALUMINUM / PLASTIC / WOOD - 1 FLUTE

1 刃鋁、塑膠、木工用立銑刀

> 662-1

Grain Size:0.6μm
Cobalt%:12%

MG

30° Helix Angle | 1 Flute

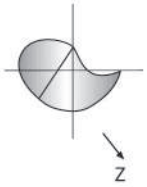
Dry | Wet

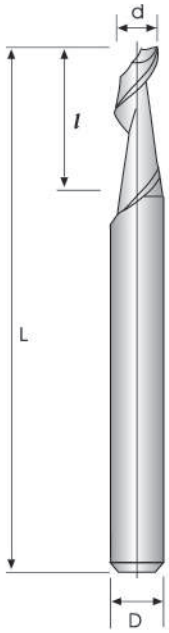
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z	662-1 (NT)	662-1 (USD)
0100	1	4	50	3	1	2220	41.0
0150	1.5	6	50	3	1	2220	41.0
0200	2	8	50	2	1	2220	41.0
0201	2	8	60	2	1	2220	41.0
0202	2	8	50	3	1	2220	41.0
0250	2.5	8	50	3	1	2220	41.0
0251	2.5	8	60	3	1	1420	45.1
0300	3	10	50	3	1	2220	41.0
0301	3	10	60	3	1	1420	45.1
0302	3	10	80	6	1	1590	50.5
0310	3.17	12.7	60	6.35	1	2450	77.8
0400	4	12	60	4	1	2220	41.0
0401	4	20	70	4	1	1420	45.1
0402	4	30	80	4	1	1550	49.3
0403	4	12	60	6	1	1590	50.5
0470	4.765	15.9	70	6.35	1	2450	77.8
0500	5	16	70	5	1	1590	50.5
0501	5	30	80	5	1	1720	54.7
0600	6	16	60	6	1	1590	50.5
0601	6	25	75	6	1	1720	54.7
0602	6	30	75	6	1	1850	58.8
0603	6	38	100	6	1	1980	62.9
0630	6.35	15.8	70	6.35	1	2450	77.8
0800	8	22	75	8	1	2940	93.4
0801	8	38	100	8	1	3100	98.5
1000	10	30	80	10	1	3860	122.6
1200	12	30	100	12	1	4540	144.2





* 切削條件表參考請見第220頁
* Cutting condition please refer page 220.

SQUARE TYPE FOR ALUMINUM - 3 FLUTES
/ 3刃鋁合金專用立銑刀

高效能系列
High-Efficient Series

> 663L-AE

Grain Size:0.6μm
Cobalt%:12%

MG
55° Helix Angle
3 Flute
Dry
Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

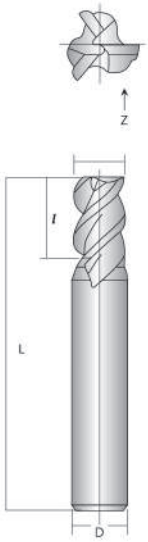
形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	663L-AE (NT)	663L-AE (USD)
0303	3	9	6	3	50	550	17.5
0403	4	12	6	3	50	550	17.5
0503	5	15	6	3	50	550	17.5
0603	6	18	6	3	50	550	17.5
0803	8	20	8	3	60	1110	35.3
1003	10	30	10	3	75	1680	53.4
1203	12	32	12	3	75	2160	68.6
1603	16	45	16	3	100	5150	163.5
2003	20	45	20	3	100	8720	276.9

★ 切削條件表參考請見第218頁
★ Cutting condition please refer page 218.

建議售價



SQUARE TYPE FOR ALUMINUM - LONG TYPE - 3 FLUTES
/ 3刃鋁合金專用立銑刀 - 加長型

> 663L-AEL

Grain Size:0.6μm
Cobalt%:12%

MG
55° Helix Angle
3 Flute
Dry
Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

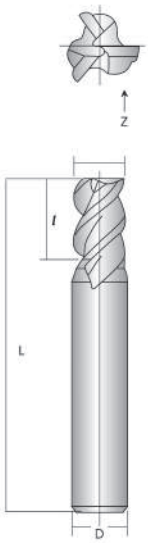
形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	663L-AEL (NT)	663L-AEL (USD)
0303	3	12	6	3	60	680	22.0
0403	4	16	6	3	60	680	22.0
0503	5	20	6	3	60	680	22.0
0603	6	25	6	3	75	770	24.5
0803	8	32	8	3	75	1320	42.0
1003	10	45	10	3	100	1980	62.9
1203	12	45	12	3	100	2540	80.7
1603	16	65	16	3	150	8190	260.0
2003	20	75	20	3	150	10560	335.3

★ 切削條件表參考請見第219頁
★ Cutting condition please refer page 219.

建議售價



> 663L-X

Grain Size:0.6μm
Cobalt%:12%

MG

45° Helix Angle | 3 Flute

Wet | Dry

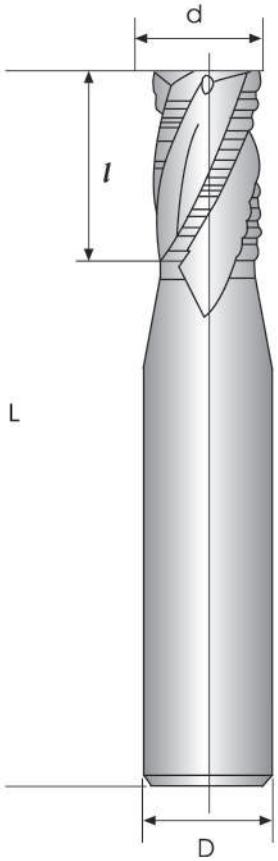
粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z	663L-X (NT)	663L-X (USD)
0403	4	8	50	6	3	1210	38.5
0503	5	13	50	6	3	1210	38.5
0603	6	15	50	6	3	1210	38.5
0653	6.5	16	60	8	3	2020	64.2
0703	7	16	60	8	3	2020	64.2
0753	7.5	20	60	8	3	2020	64.2
0803	8	20	60	8	3	2020	64.2
0853	8.5	20	75	10	3	2680	85.1
0903	9	20	75	10	3	2680	85.1
0953	9.5	22	75	10	3	2680	85.1
1003	10	25	75	10	3	2680	85.1
1103	11	30	75	12	3	3390	107.7
1203	12	30	75	12	3	3390	107.7
1303	13	30	75	14	3	6470	205.4
1403	14	32	75	16	3	6470	205.4
1503	15	32	75	16	3	6470	205.4
1603	16	35	100	16	3	8060	255.9
1703	17	35	100	20	3	10700	339.7
1803	18	35	100	20	3	10700	339.7
2003	20	45	100	20	3	10700	339.7
2503	25	50	105	25	3	15840	502.9

★ 切削條件表參考請見第228頁
★ Cutting condition please refer page 228.



LV INTERNATIONAL CO., LTD

Diamond Coated End Mill

The diamond coating has features of high-hardness, excellent thermal conductivity, and low coefficient of friction. Therefore, the tools life of diamond coating end mills is overwhelmingly greater than normal end mills.
Especially suitable for cutting **Graphite**, **Fiberglass materials**, **and Composites**.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
Diamond Coated End Mill	NMG	0.4um	6%	Diamond

BALL NOSE - 2 FLUTES

/ 2刃深溝石墨加工用鑽石塗層球型立銑刀

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	角徑 R	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1
002 010 050	0.1R	0.2	1	4	2	50	-
003 012 050	0.15R	0.3	1.2	4	2	50	-
004 015 050	0.2R	0.4	1.5	4	2	50	-
004 030 050	0.2R	0.4	1.5	4	2	50	3
005 020 050	0.25R	0.5	2	4	2	50	-
005 050 050	0.25R	0.5	2	4	2	50	5
006 020 050	0.3R	0.6	2	4	2	50	-
006 050 050	0.3R	0.6	2	4	2	50	5
006 080 050	0.3R	0.6	2	4	2	50	8
006 100 050	0.3R	0.6	2	4	2	50	10
008 030 050	0.4R	0.8	3	4	2	50	-
008 050 050	0.4R	0.8	3	4	2	50	5
008 100 050	0.4R	0.8	3	4	2	50	10
008 150 050	0.4R	0.8	3	4	2	50	15
008 200 050	0.4R	0.8	3	4	2	50	20
010 030 050	0.5R	1	3	4	2	50	-
010 050 050	0.5R	1	3	4	2	50	5
010 100 050	0.5R	1	3	4	2	50	10
010 150 050	0.5R	1	3	4	2	50	15
010 200 050	0.5R	1	3	4	2	50	20
010 250 075	0.5R	1	3	4	2	75	25
010 300 075	0.5R	1	3	4	2	75	30
015 050 050	0.75R	1.5	5	4	2	50	-
015 100 075	0.75R	1.5	5	4	2	75	10
015 150 075	0.75R	1.5	5	4	2	75	15
015 200 075	0.75R	1.5	5	4	2	75	20
015 250 075	0.75R	1.5	5	4	2	75	25
015 300 075	0.75R	1.5	5	4	2	75	30
020 060 050	1R	2	6	4	2	50	-
020 100 075	1R	2	6	4	2	75	10
020 150 075	1R	2	6	4	2	75	15
020 200 075	1R	2	6	4	2	75	20
020 300 075	1R	2	6	4	2	75	30
020 400 100	1R	2	6	4	2	100	40
020 500 100	1R	2	6	4	2	100	50
030 080 050	1.5R	3	8	4	2	50	-
030 150 100	1.5R	3	8	4	2	100	15
030 200 100	1.5R	3	8	4	2	100	20
030 300 100	1.5R	3	8	4	2	100	30
030 400 100	1.5R	3	8	4	2	100	40
030 500 100	1.5R	3	8	4	2	100	50
040 160 050	2R	4	16	4	2	50	-
040 160 075	2R	4	16	4	2	75	-
040 160 100	2R	4	16	4	2	100	-
040 160 150	2R	4	16	4	2	150	-
050 200 100	2.5R	5	16	6	2	100	20
060 250 075	3R	6	16	6	2	75	25
060 250 100	3R	6	16	6	2	100	25
060 300 150	3R	6	16	6	2	150	30
080 300 075	4R	8	20	8	2	75	30
080 300 100	4R	8	20	8	2	100	30
080 350 150	4R	8	20	8	2	150	35
080 400 200	4R	8	20	8	2	200	40
100 350 075	5R	10	22	10	2	75	35
100 350 100	5R	10	22	10	2	100	35
100 400 150	5R	10	22	10	2	150	40
100 500 200	5R	10	22	10	2	200	50
120 500 100	6R	12	25	12	2	100	50
120 500 150	6R	12	25	12	2	150	50
120 600 200	6R	12	25	12	2	200	60

> 2D-DMRS

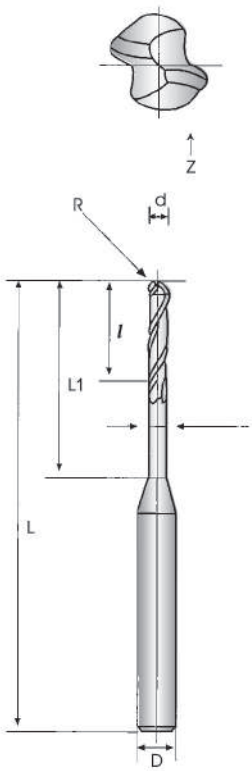
Grain Size:0.4μm
Cobalt%:6%

NMG

30° Helix Angle | 2 Flute | DIA

Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎



BALL NOSE - 4 FLUTES
/4刃深溝石墨加工用鑽石塗層球型立銑刀

> 4D-DMRS

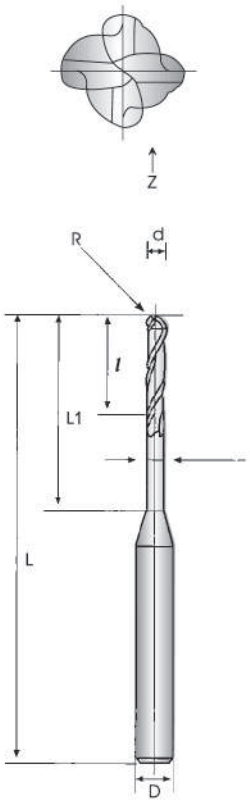
Grain Size:0.4μm
Cobalt%:6%

NMG

30° Helix Angle | 4 Flute | DIA

Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎



形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	角徑 R	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1
010030050	0.5R	1	3	4	4	50	-
010050050	0.5R	1	3	4	4	50	5
010100050	0.5R	1	3	4	4	50	10
010150050	0.5R	1	3	4	4	50	15
010200050	0.5R	1	3	4	4	50	20
010250050	0.5R	1	3	4	4	50	25
015050050	0.75R	1.5	5	4	4	50	-
015100050	0.75R	1.5	5	4	4	50	10
015150050	0.75R	1.5	5	4	4	50	15
015200050	0.75R	1.5	5	4	4	50	20
015250050	0.75R	1.5	5	4	4	50	25
020060050	1R	2	6	4	4	50	-
020100075	1R	2	6	4	4	75	10
020200075	1R	2	6	4	4	75	20
020300075	1R	2	6	4	4	75	30
020400075	1R	2	6	4	4	75	40
030080050	1.5R	3	8	4	4	50	-
030150100	1.5R	3	8	4	4	100	15
030200100	1.5R	3	8	4	4	100	20
030300100	1.5R	3	8	4	4	100	30
030400100	1.5R	3	8	4	4	100	40
030500100	1.5R	3	8	4	4	100	50
040160050	2R	4	16	4	4	50	-
040160075	2R	4	16	4	4	75	-
040160100	2R	4	16	4	4	100	-
060250075	3R	6	16	6	4	75	25
060250100	3R	6	16	6	4	100	25
060300150	3R	6	16	6	4	150	30
080300075	4R	8	20	8	4	75	30
080300100	4R	8	20	8	4	100	30
080350150	4R	8	20	8	4	150	35
080400200	4R	8	20	8	4	200	40
100350075	5R	10	22	10	4	75	35
100350100	5R	10	22	10	4	100	35
100400150	5R	10	22	10	4	150	40
100500200	5R	10	22	10	4	200	50
120500100	6R	12	25	12	4	100	50
120500150	6R	12	25	12	4	150	50
120600200	6R	12	25	12	4	200	60

CORNER RADIUS - 2 FLUTES
/2刃深溝石墨加工用鑽石塗層圓鼻立銑刀

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1
002 0002 015	0.2	0.02R	0.5	4	2	50	1.5
003 0002 015	0.3	0.02R	0.6	4	2	50	1.5
003 0002 030	0.3	0.02R	0.6	4	2	50	3
003 0002 045	0.3	0.02R	0.6	4	2	50	4.5
003 0002 060	0.3	0.02R	0.6	4	2	50	6
004 0002 020	0.4	0.02R	0.8	4	2	50	2
004 0002 040	0.4	0.02R	0.8	4	2	50	4
004 0002 060	0.4	0.02R	0.8	4	2	50	6
004 0002 080	0.4	0.02R	0.8	4	2	50	8
005 0005 010	0.5	0.05R	1	4	2	50	-
005 0005 025	0.5	0.05R	1	4	2	50	2.5
005 0005 035	0.5	0.05R	1	4	2	50	3.5
005 0005 050	0.5	0.05R	1	4	2	50	5
005 0005 075	0.5	0.05R	1	4	2	50	7.5
005 0005 100	0.5	0.05R	1	4	2	50	10
006 0005 012	0.6	0.05R	1.2	4	2	50	-
006 0005 030	0.6	0.05R	1.2	4	2	50	3
006 0005 060	0.6	0.05R	1.2	4	2	50	6
006 0005 090	0.6	0.05R	1.2	4	2	50	9
006 0005 120	0.6	0.05R	1.2	4	2	50	12
008 0005 016	0.8	0.05R	1.6	4	2	50	-
008 0005 040	0.8	0.05R	1.6	4	2	50	4
008 0005 080	0.8	0.05R	1.6	4	2	50	8
008 0005 100	0.8	0.05R	1.6	4	2	50	10
008 0005 160	0.8	0.05R	1.6	4	2	50	16
010 0005 020	1	0.05R	2	4	2	50	-
010 0005 050	1	0.05R	2	4	2	50	5
010 0005 100	1	0.05R	2	4	2	50	10
010 0005 150	1	0.05R	2	4	2	50	15
010 0005 200	1	0.05R	2	4	2	50	20
010 001 020	1	0.1R	2	4	2	50	-
010 001 050	1	0.1R	2	4	2	50	5
010 001 100	1	0.1R	2	4	2	50	10
010 001 150	1	0.1R	2	4	2	50	15
010 001 200	1	0.1R	2	4	2	50	20
010 002 020	1	0.2R	2	4	2	50	-
010 002 050	1	0.2R	2	4	2	50	5
010 002 100	1	0.2R	2	4	2	50	10
010 002 150	1	0.2R	2	4	2	50	15
010 002 200	1	0.2R	2	4	2	50	20
015 0005 030	1.5	0.05R	3	4	2	50	-
015 0005 050	1.5	0.05R	3	4	2	50	5
015 0005 100	1.5	0.05R	3	4	2	50	10
015 0005 150	1.5	0.05R	3	4	2	50	15
015 0005 200	1.5	0.05R	3	4	2	50	20
015 001 030	1.5	0.1R	3	4	2	50	-
015 001 050	1.5	0.1R	3	4	2	50	5
015 001 100	1.5	0.1R	3	4	2	50	10
015 001 150	1.5	0.1R	3	4	2	50	15
015 001 200	1.5	0.1R	3	4	2	50	20
015 0015 030	1.5	0.15R	3	4	2	50	-
015 0015 050	1.5	0.15R	3	4	2	50	5
015 0015 100	1.5	0.15R	3	4	2	50	10
015 0015 150	1.5	0.15R	3	4	2	50	15
015 0015 200	1.5	0.15R	3	4	2	50	20
015 002 030	1.5	0.2R	3	4	2	50	-
015 002 050	1.5	0.2R	3	4	2	50	5
015 002 100	1.5	0.2R	3	4	2	50	10
015 002 150	1.5	0.2R	3	4	2	50	15
015 002 200	1.5	0.2R	3	4	2	50	20

> 2D-DMS

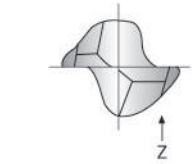
Grain Size:0.4μm
Cobalt%:6%

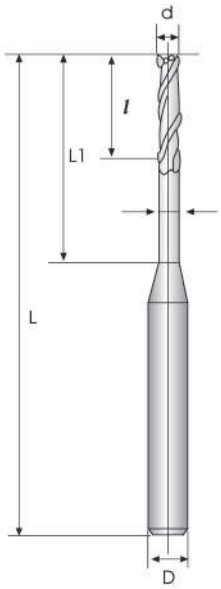
NMG

30° Helix Angle | 2 Flute | DIA

R | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎





CORNER RADIUS - 2 FLUTES
/2刃深溝石墨加工用鑽石塗層圓鼻立銑刀

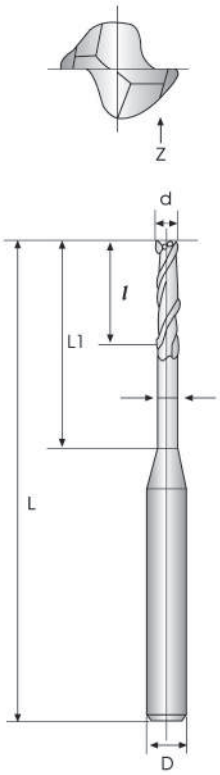
> 2D-DMS

Grain Size:0.4μm
Cobalt%:6%

NMG

30° Helix Angle | 2 Flute | DIA | R | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎



形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1
015 003 030	1.5	0.3R	3	4	2	50	-
015 003 050	1.5	0.3R	3	4	2	50	5
015 003 100	1.5	0.3R	3	4	2	50	10
015 003 150	1.5	0.3R	3	4	2	50	15
015 003 200	1.5	0.3R	3	4	2	50	20
020 0005 035	2	0.05R	3.5	4	2	50	-
020 0005 060	2	0.05R	3.5	4	2	50	6
020 0005 120	2	0.05R	3.5	4	2	50	12
020 0005 180	2	0.05R	3.5	4	2	50	18
020 0005 250	2	0.05R	3.5	4	2	50	25
020 0005 300	2	0.05R	3.5	4	2	50	30
020 002 035	2	0.2R	3.5	4	2	50	-
020 002 060	2	0.2R	3.5	4	2	50	6
020 002 120	2	0.2R	3.5	4	2	50	12
020 002 180	2	0.2R	3.5	4	2	50	18
020 002 250	2	0.2R	3.5	4	2	50	25
020 002 300	2	0.2R	3.5	4	2	50	30
020 003 035	2	0.3R	3.5	4	2	50	-
020 003 060	2	0.3R	3.5	4	2	50	6
020 003 120	2	0.3R	3.5	4	2	50	12
020 003 180	2	0.3R	3.5	4	2	50	18
020 003 250	2	0.3R	3.5	4	2	50	25
020 003 300	2	0.3R	3.5	4	2	50	30
020 005 035	2	0.5R	3.5	4	2	50	-
020 005 060	2	0.5R	3.5	4	2	50	6
020 005 120	2	0.5R	3.5	4	2	50	12
020 005 180	2	0.5R	3.5	4	2	50	18
020 005 250	2	0.5R	3.5	4	2	50	25
020 005 300	2	0.5R	3.5	4	2	50	30
030 0005 040	3	0.05R	4	4	2	75	-
030 0005 100	3	0.05R	4	4	2	75	10
030 0005 200	3	0.05R	4	4	2	75	20
030 0005 300	3	0.05R	4	4	2	75	30
030 0005 400	3	0.05R	4	4	2	75	40
030 002 040	3	0.2R	4	4	2	75	-
030 002 100	3	0.2R	4	4	2	75	10
030 002 200	3	0.2R	4	4	2	75	20
030 002 300	3	0.2R	4	4	2	75	30
030 002 400	3	0.2R	4	4	2	75	40
030 003 040	3	0.3R	4	4	2	75	-
030 003 100	3	0.3R	4	4	2	75	10
030 003 200	3	0.3R	4	4	2	75	20
030 003 300	3	0.3R	4	4	2	75	30
030 003 400	3	0.3R	4	4	2	75	40
030 005 040	3	0.5R	4	4	2	75	-
030 005 100	3	0.5R	4	4	2	75	10
030 005 200	3	0.5R	4	4	2	75	20
030 005 300	3	0.5R	4	4	2	75	30
030 005 400	3	0.5R	4	4	2	75	40
030 010 040	3	1R	4	4	2	75	-
030 010 100	3	1R	4	4	2	75	10
030 010 200	3	1R	4	4	2	75	20
030 010 300	3	1R	4	4	2	75	30
030 010 400	3	1R	4	4	2	75	40
040 0005 050	4	0.05R	5	4	2	75	-
040 0005 150	4	0.05R	5	4	2	75	15
040 0005 250	4	0.05R	5	4	2	75	25
040 0005 400	4	0.05R	5	4	2	75	40
040 002 050	4	0.2R	5	4	2	75	-
040 002 150	4	0.2R	5	4	2	75	15

CORNER RADIUS - 2 FLUTES
/2刃深溝石墨加工用鑽石塗層圓鼻立銑刀

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1
040 002 250	4	0.2R	5	4	2	75	25
040 002 400	4	0.2R	5	4	2	75	40
040 005 050	4	0.5R	5	4	2	75	-
040 005 150	4	0.5R	5	4	2	75	15
040 005 250	4	0.5R	5	4	2	75	25
040 005 400	4	0.5R	5	4	2	75	40
040 010 050	4	1R	5	4	2	75	-
040 010 150	4	1R	5	4	2	75	15
040 010 250	4	1R	5	4	2	75	25
040 010 400	4	1R	5	4	2	75	40
050 0005 060	5	0.05R	6	6	2	100	-
050 0005 150	5	0.05R	6	6	2	100	15
050 0005 300	5	0.05R	6	6	2	100	30
050 0005 500	5	0.05R	6	6	2	100	50
050 002 060	5	0.2R	6	6	2	100	-
050 002 150	5	0.2R	6	6	2	100	15
050 002 300	5	0.2R	6	6	2	100	30
050 002 500	5	0.2R	6	6	2	100	50
050 005 060	5	0.5R	6	6	2	100	-
050 005 150	5	0.5R	6	6	2	100	15
050 005 300	5	0.5R	6	6	2	100	30
050 005 500	5	0.5R	6	6	2	100	50
060 0005 070	6	0.05R	7	6	2	100	-
060 0005 200	6	0.05R	7	6	2	100	20
060 0005 300	6	0.05R	7	6	2	100	30
060 0005 500	6	0.05R	7	6	2	100	50
060 002 070	6	0.2R	7	6	2	100	-
060 002 200	6	0.2R	7	6	2	100	20
060 002 300	6	0.2R	7	6	2	100	30
060 002 500	6	0.2R	7	6	2	100	50
060 005 070	6	0.5R	7	6	2	100	-
060 005 200	6	0.5R	7	6	2	100	20
060 005 300	6	0.5R	7	6	2	100	30
060 005 500	6	0.5R	7	6	2	100	50
060 010 070	6	1R	7	6	2	100	-
060 010 200	6	1R	7	6	2	100	20
060 010 300	6	1R	7	6	2	100	30
060 010 500	6	1R	7	6	2	100	50

> 2D-DMS

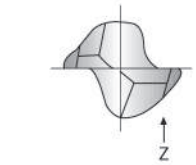
Grain Size:0.4μm
Cobalt%:6%

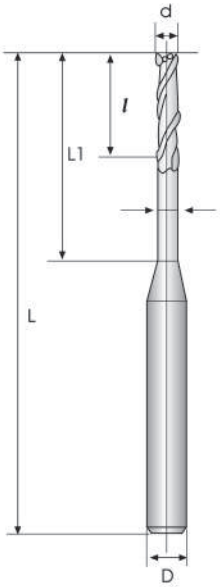
NMG

30° Helix Angle | 2 Flute | DIA

R | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎





鑽石石墨刀系列
Diamond Coated End Mill

SQUARE TYPE - 2 FLUTES
/2刃石墨加工用鑽石塗層立銑刀

鑽石石墨刀系列
Diamond Coated End Mill

> 2D-DM

Grain Size:0.4μm
Cobalt%:6%

NMG

30° Helix Angle | 2 Flute | DIA

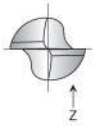
Dry | Wet

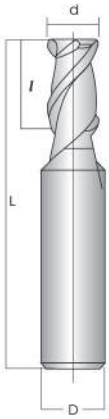
粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L
002 004 050	0.2	0.4	4	2	50
003 006 050	0.3	0.6	4	2	50
004 008 050	0.4	0.8	4	2	50
005 010 050	0.5	1	4	2	50
006 012 050	0.6	1.2	4	2	50
007 015 050	0.7	1.5	4	2	50
008 020 050	0.8	2	4	2	50
009 025 050	0.9	2.5	4	2	50
010 032 050	1	3.2	4	2	50
020 060 050	2	6	4	2	50
030 090 050	3	9	6	2	50
040 120 050	4	12	6	2	50
050 150 050	5	15	6	2	50
060 180 050	6	18	6	2	50
080 240 075	8	24	8	2	75
100 250 075	10	25	10	2	75
120 250 075	12	25	12	2	75





SQUARE TYPE - LONG TYPE 2 FLUTES
/2刃石墨加工用鑽石塗層立銑刀加長型

> 2D-DML

Grain Size:0.4μm
Cobalt%:6%

NMG

30° Helix Angle | 2 Flute | DIA

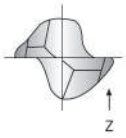
Dry | Wet

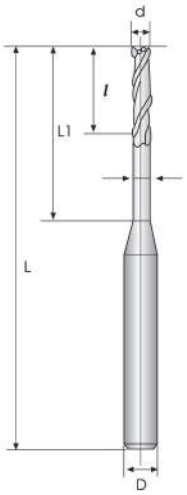
粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1
010 030 050	1	3	4	2	50	-
010 050 050	1	3	4	2	50	5
010 100 050	1	3	4	2	50	10
010 150 050	1	3	4	2	50	15
010 200 050	1	3	4	2	50	20
010 250 050	1	3	4	2	50	25
015 060 050	1.5	6	4	2	50	-
015 100 050	1.5	6	4	2	50	10
015 150 050	1.5	6	4	2	50	15
015 200 050	1.5	6	4	2	50	20
015 250 050	1.5	6	4	2	50	25
020 080 075	2	8	4	2	75	-
020 120 075	2	8	4	2	75	12
020 150 075	2	8	4	2	75	15
020 200 075	2	8	4	2	75	20
020 250 075	2	8	4	2	75	25
020 300 075	2	8	4	2	75	30
020 400 075	2	8	4	2	75	40
030 120 075	3	12	4	2	75	-
030 200 075	3	12	4	2	75	20
030 250 075	3	12	4	2	75	25
030 300 075	3	12	4	2	75	30
030 400 075	3	12	4	2	75	40
040 160 075	4	16	4	2	75	-
050 200 100	5	20	6	2	100	-
060 250 100	6	25	6	2	100	-
060 250 150	6	25	6	2	150	-
080 400 150	8	25	8	2	150	40
100 500 150	10	25	10	2	150	50
120 600 150	12	25	12	2	150	60





CORNER RADIUS - 4 FLUTES
/4刃深溝石墨加工用鑽石塗層圓鼻立銑刀

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1
020 0005 035	2	0.05R	3.5	4	4	50	-
020 0005 060	2	0.05R	3.5	4	4	50	6
020 0005 120	2	0.05R	3.5	4	4	50	12
020 0005 180	2	0.05R	3.5	4	4	50	18
020 0005 250	2	0.05R	3.5	4	4	50	25
020 0005 300	2	0.05R	3.5	4	4	50	30
020 002 035	2	0.2R	3.5	4	4	50	-
020 002 060	2	0.2R	3.5	4	4	50	6
020 002 120	2	0.2R	3.5	4	4	50	12
020 002 180	2	0.2R	3.5	4	4	50	18
020 002 250	2	0.2R	3.5	4	4	50	25
020 002 300	2	0.2R	3.5	4	4	50	30
020 003 035	2	0.3R	3.5	4	4	50	-
020 003 060	2	0.3R	3.5	4	4	50	6
020 003 120	2	0.3R	3.5	4	4	50	12
020 003 180	2	0.3R	3.5	4	4	50	18
020 003 250	2	0.3R	3.5	4	4	50	25
020 003 300	2	0.3R	3.5	4	4	50	30
020 005 035	2	0.5R	3.5	4	4	50	-
020 005 060	2	0.5R	3.5	4	4	50	6
020 005 120	2	0.5R	3.5	4	4	50	12
020 005 180	2	0.5R	3.5	4	4	50	18
020 005 250	2	0.5R	3.5	4	4	50	25
020 005 300	2	0.5R	3.5	4	4	50	30
030 0005 040	3	0.05R	4	4	4	75	-
030 0005 100	3	0.05R	4	4	4	75	10
030 0005 200	3	0.05R	4	4	4	75	20
030 0005 300	3	0.05R	4	4	4	75	30
030 0005 400	3	0.05R	4	4	4	75	40
030 002 040	3	0.2R	4	4	4	75	-
030 002 100	3	0.2R	4	4	4	75	10
030 002 200	3	0.2R	4	4	4	75	20
030 002 300	3	0.2R	4	4	4	75	30
030 002 400	3	0.2R	4	4	4	75	40
030 003 040	3	0.3R	4	4	4	75	-
030 003 100	3	0.3R	4	4	4	75	10
030 003 200	3	0.3R	4	4	4	75	20
030 003 300	3	0.3R	4	4	4	75	30
030 003 400	3	0.3R	4	4	4	75	40
030 005 040	3	0.5R	4	4	4	75	-
030 005 100	3	0.5R	4	4	4	75	10
030 005 200	3	0.5R	4	4	4	75	20
030 005 300	3	0.5R	4	4	4	75	30
030 005 400	3	0.5R	4	4	4	75	40
030 010 040	3	1R	4	4	4	75	-
030 010 100	3	1R	4	4	4	75	10
030 010 200	3	1R	4	4	4	75	20
030 010 300	3	1R	4	4	4	75	30
030 010 400	3	1R	4	4	4	75	40
040 003 200	4	0.3R	6	4	4	100	20
040 005 200	4	0.5R	6	4	4	100	20
040 010 200	4	1R	6	4	4	100	20
060 003 250	6	0.3R	9	6	4	100	25
060 005 250	6	0.5R	9	6	4	100	25
060 005 300	6	0.5R	9	6	4	150	30
060 010 250	6	1R	9	6	4	100	25
060 010 300	6	1R	9	6	4	150	30
080 003 300	8	0.3R	12	8	4	100	30
080 005 300	8	0.5R	12	8	4	100	30
080 005 400	8	0.5R	12	8	4	150	40
080 010 300	8	1R	12	8	4	100	30
080 010 400	8	1R	12	8	4	150	40
100 005 350	10	0.5R	15	10	4	100	35
100 005 450	10	0.5R	15	10	4	150	45
100 010 350	10	1R	15	10	4	100	35
100 010 450	10	1R	15	10	4	150	45
120 005 400	12	0.5R	18	12	4	100	40
120 005 450	12	0.5R	18	12	4	150	45
120 010 400	12	1R	18	12	4	100	40
120 010 450	12	1R	18	12	4	150	45

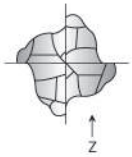
> 4D-DMS

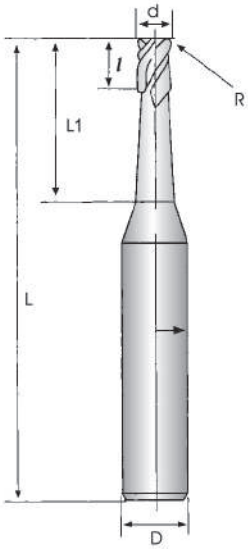
Grain Size:0.4μm
Cobalt%:6%

NMG

30° Helix Angle | 4 Flute | DIA | R | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎





SQUARE TYPE - 4 FLUTES
/4刃石墨加工用鑽石塗層立銑刀

> 4D-DMH

Grain Size:0.4μm
Cobalt%:6%

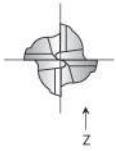
NMG | 30° Helix Angle | 4 Flute | DIA | Dry | Wet

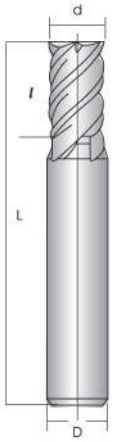
粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L
020 060 050	2	6	4	4	50
020 100 050	2	10	4	4	50
030 090 050	3	9	6	4	50
030 150 050 030	3	15	3	4	50
030 150 050	3	15	4	4	50
040 120 050	4	12	6	4	50
040 200 050	4	20	4	4	50
060 180 050	6	18	6	4	50
060 250 100	6	25	6	4	100
060 250 150	6	25	6	4	150
080 240 075	8	24	8	4	75
080 350 100	8	35	8	4	100
080 350 150	8	35	8	4	150
100 250 075	10	25	10	4	75
100 400 100	10	40	10	4	100
120 250 075	12	25	12	4	75
120 450 100	12	45	12	4	100





SQUARE TYPE - 6 FLUTES
/6刃石墨加工用鑽石塗層立銑刀

> 6D-DMH

Grain Size:0.4μm
Cobalt%:6%

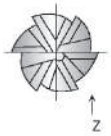
NMG | 45° Helix Angle | 6 Flute | DIA | Dry | Wet

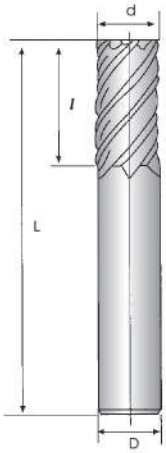
粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L
100 400 100	10	40	10	6	100
100 400 150	10	40	10	6	150
120 450 100	12	45	12	6	100
120 450 150	12	45	12	6	150
160 500 100	16	50	16	6	100
160 500 150	16	50	16	6	150





BALL NOSE - 2 FLUTES
/2刃石墨加工用鑽石塗層球型立銑刀

> 2D-DMR

Grain Size:0.4μm
Cobalt%:6%

NMG

30° Helix Angle | 2 Flute | DIA

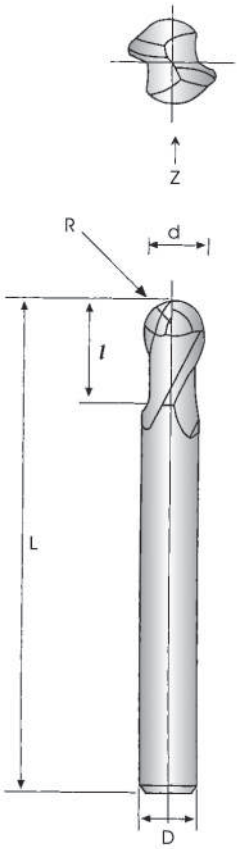
Wet | Dry

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 *l*	柄徑 D	刃數 Z	全長 L
0054050	0.5	0.25R	1	4	2	50
0064050	0.6	0.3R	1.2	4	2	50
0084050	0.8	0.4R	2	4	2	50
0104050	1	0.5R	2.5	4	2	50
0154050	1.5	0.75R	4	4	2	50
0204050	2	1R	5	4	2	50
0254050	2.5	1.25R	6	4	2	50
0306060	3	1.5R	8	6	2	60
0406075	4	2R	8	6	2	75
0506075	5	2.5R	10	6	2	75
0606075	6	3R	12	6	2	75
0606100	6	3R	12	6	2	100
0808075	8	4R	14	8	2	75
0808100	8	4R	14	8	2	100
1010075	10	5R	18	10	2	75
1010100	10	5R	18	10	2	100
1212075	12	6R	22	12	2	75
1212100	12	6R	22	12	2	100



66/88 SERIES

The 66 series is used for cutting generals materials with an HRC below 45.

Coated with Arti-Co. It provides great toughness, stable cutting performance, and durability.

The 88 series is used for cutting of materials with an HRC below 55.

Coated with Arti-Co. It offers better cutting performance and tool life span than 66 series by adopting better carbide material.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
66 Series	MG	0.6um	12%	Arti-co
88 Series	SMG	0.4um	12%	Arti-co

MINIATURE SQUARE TYPE - 2 FLUTES
/2刃微小徑立銑刀

> 662L-CW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Dry | Wet

> 662L-C

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 882L-C

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

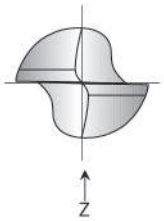
形狀寸表法 Dimensions

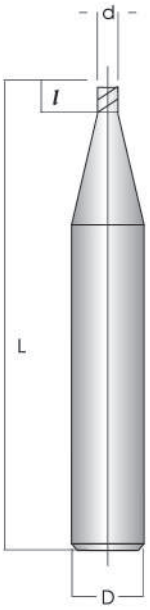
單位(Unit):mm

建議售價

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z	662L-CW (NT)	662L-CW (USD)	662L-C (NT)	662L-C (USD)	882L-C (NT)	882L-C (USD)
0022	0.2	0.4	50	4	2	870	27.7	910	28.9	1190	37.8
0032	0.3	0.6	50	4	2	580	18.5	630	20.0	820	26.1
0042	0.4	0.8	50	4	2	580	18.5	630	20.0	820	26.1
0052	0.5	1	50	4	2	450	14.3	500	15.9	650	20.7
0062	0.6	1.2	50	4	2	530	16.9	570	18.1	750	23.9
0072	0.7	1.4	50	4	2	530	16.9	570	18.1	750	23.9
0082	0.8	1.6	50	4	2	530	16.9	570	18.1	750	23.9
0092	0.9	1.8	50	4	2	530	16.9	570	18.1	750	23.9
0112	1.1	3	50	4	2	530	16.9	570	18.1	750	23.9
0122	1.2	3	50	4	2	530	16.9	570	18.1	750	23.9
0132	1.3	3	50	4	2	530	16.9	570	18.1	750	23.9
0142	1.4	3	50	4	2	530	16.9	570	18.1	750	23.9
0162	1.6	4	50	4	2	530	16.9	570	18.1	750	23.9
0172	1.7	4	50	4	2	530	16.9	570	18.1	750	23.9
0182	1.8	4	50	4	2	530	16.9	570	18.1	750	23.9
0192	1.9	4	50	4	2	530	16.9	570	18.1	750	23.9
0212	2.1	6	50	4	2	530	16.9	570	18.1	750	23.9
0222	2.2	6	50	4	2	530	16.9	570	18.1	750	23.9
0232	2.3	6	50	4	2	530	16.9	570	18.1	750	23.9
0242	2.4	6	50	4	2	530	16.9	570	18.1	750	23.9
0262	2.6	8	50	4	2	530	16.9	570	18.1	750	23.9
0272	2.7	8	50	4	2	530	16.9	570	18.1	750	23.9
0282	2.8	8	50	4	2	530	16.9	570	18.1	750	23.9
0292	2.9	8	50	4	2	530	16.9	570	18.1	750	23.9

★ 切削條件表參考請見第198頁
★ Cutting condition please refer page 198.





SQUARE TYPE - 2 FLUTES
/2刃立銑刀

> 662L-AW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Dry | Wet

> 662L-A

Grain Size:0.6μm
Cobalt%:12%

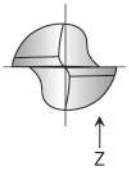
HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

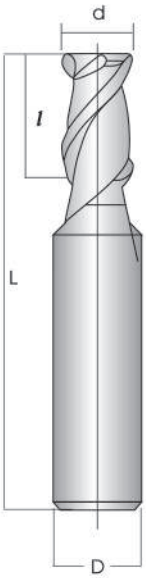
> 882L-A

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○





形狀寸表法 Dimensions

單位(Unit):mm

建議售價

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z	662L-AW (NT)	662L-AW (USD)	662L-A (NT)	662L-A (USD)	882L-A (NT)	882L-A (USD)
010203	1	3	50	3	2	280	8.9	310	9.9	410	13.1
010204	1	3	50	4	2	280	8.9	310	9.9	410	13.1
010206	1	3	50	6	2	330	10.5	450	14.3	550	17.5
015203	1.5	4	50	3	2	280	8.9	310	9.9	410	13.1
015204	1.5	4	50	4	2	280	8.9	310	9.9	410	13.1
015206	1.5	4	50	6	2	330	10.5	450	14.3	550	17.5
020203	2	6	50	3	2	280	8.9	310	9.9	410	13.1
020204	2	6	50	4	2	280	8.9	310	9.9	410	13.1
020206	2	6	50	6	2	330	10.5	450	14.3	550	17.5
025203	2.5	8	50	3	2	280	8.9	310	9.9	410	13.1
025204	2.5	8	50	4	2	280	8.9	310	9.9	410	13.1
025206	2.5	8	50	6	2	330	10.5	450	14.3	550	17.5
030203	3	8	50	3	2	280	8.9	310	9.9	410	13.1
030204	3	8	50	4	2	280	8.9	310	9.9	410	13.1
030206	3	8	50	6	2	330	10.5	450	14.3	550	17.5
035204	3.5	10	50	4	2	280	8.9	310	9.9	410	13.1
035206	3.5	10	50	6	2	330	10.5	450	14.3	550	17.5
040204	4	11	50	4	2	280	8.9	310	9.9	410	13.1
040206	4	11	50	6	2	330	10.5	450	14.3	550	17.5
045206	4.5	13	50	6	2	330	10.5	450	14.3	550	17.5
050206	5	13	50	6	2	330	10.5	450	14.3	550	17.5
055206	5.5	13	50	6	2	330	10.5	450	14.3	550	17.5
060206	6	16	50	6	2	330	10.5	450	14.3	550	17.5
065208	6.5	16	60	8	2	810	25.8	930	29.6	1220	38.8
070208	7	16	60	8	2	810	25.8	930	29.6	1220	38.8
075208	7.5	19	60	8	2	810	25.8	930	29.6	1220	38.8
080208	8	20	60	8	2	810	25.8	930	29.6	1220	38.8
085210	8.5	20	75	10	2	1190	37.8	1320	42.0	1720	54.7
090210	9	20	75	10	2	1190	37.8	1320	42.0	1720	54.7
095210	9.5	25	75	10	2	1190	37.8	1320	42.0	1720	54.7
100210	10	25	75	10	2	1190	37.8	1320	42.0	1720	54.7
105212	10.5	25	75	12	2	1680	53.4	1850	58.8	2420	76.9
110212	11	30	75	12	2	1680	53.4	1850	58.8	2420	76.9
115212	11.5	30	75	12	2	1680	53.4	1850	58.8	2420	76.9
120212	12	32	75	12	2	1680	53.4	1850	58.8	2420	76.9
140216	14	40	100	16	2	4100	130.2	4490	142.6	5850	185.8
160216	16	40	100	16	2	4100	130.2	4490	142.6	5850	185.8
180220	18	45	100	20	2	5250	166.7	5660	179.7	7360	233.7
200220	20	45	100	20	2	5250	166.7	5660	179.7	7360	233.7
250225	25	45	100	25	2	7800	247.7	10070	319.7	13200	419.1

* 切削條件表參考請見第199、200 頁
* Cutting condition please refer page199、200.

> 664L-BW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | Dry | Wet

> 664L-B

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

> 884L-B

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

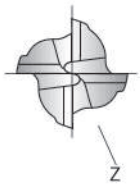
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

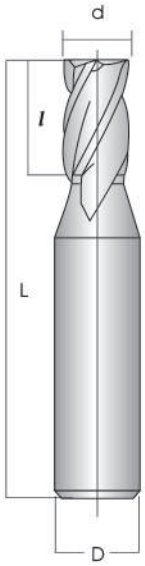
形狀寸表法 Dimensions

單位(Unit):mm

建議售價

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z	664L-BW (NT)	664L-BW (USD)	664L-B (NT)	664L-B (USD)	884L-B (NT)	884L-B (USD)
010403	1	3	50	3	4	280	8.9	310	9.9	410	13.1
010404	1	3	50	4	4	280	8.9	310	9.9	410	13.1
010406	1	3	50	6	4	330	10.5	450	14.3	550	17.5
015403	1.5	4	50	3	4	280	8.9	310	9.9	410	13.1
015404	1.5	4	50	4	4	280	8.9	310	9.9	410	13.1
015406	1.5	4	50	6	4	330	10.5	450	14.3	550	17.5
020403	2	6	50	3	4	280	8.9	310	9.9	410	13.1
020404	2	6	50	4	4	280	8.9	310	9.9	410	13.1
020406	2	6	50	6	4	330	10.5	450	14.3	550	17.5
025403	2.5	8	50	3	4	280	8.9	310	9.9	410	13.1
025404	2.5	8	50	4	4	280	8.9	310	9.9	410	13.1
025406	2.5	8	50	6	4	330	10.5	450	14.3	550	17.5
030403	3	8	50	3	4	280	8.9	310	9.9	410	13.1
030404	3	8	50	4	4	280	8.9	310	9.9	410	13.1
030406	3	8	50	6	4	330	10.5	450	14.3	550	17.5
035404	3.5	10	50	4	4	280	8.9	310	9.9	410	13.1
035406	3.5	10	50	6	4	330	10.5	450	14.3	550	17.5
040404	4	11	50	4	4	280	8.9	310	9.9	410	13.1
040406	4	11	50	6	4	330	10.5	450	14.3	550	17.5
045406	4.5	13	50	6	4	330	10.5	450	14.3	550	17.5
050406	5	13	50	6	4	330	10.5	450	14.3	550	17.5
055406	5.5	13	50	6	4	330	10.5	450	14.3	550	17.5
060406	6	16	50	6	4	330	10.5	450	14.3	550	17.5
065408	6.5	16	60	8	4	810	25.8	930	29.6	1220	38.8
070408	7	16	60	8	4	810	25.8	930	29.6	1220	38.8
075408	7.5	19	60	8	4	810	25.8	930	29.6	1220	38.8
080408	8	20	60	8	4	810	25.8	930	29.6	1220	38.8
085410	8.5	20	75	10	4	1190	37.8	1320	42.0	1720	54.7
090410	9	20	75	10	4	1190	37.8	1320	42.0	1720	54.7
095410	9.5	25	75	10	4	1190	37.8	1320	42.0	1720	54.7
100410	10	30	75	10	4	1190	37.8	1320	42.0	1720	54.7
105412	10.5	30	75	12	4	1680	53.4	1850	58.8	2420	76.9
110412	11	30	75	12	4	1680	53.4	1850	58.8	2420	76.9
115412	11.5	30	75	12	4	1680	53.4	1850	58.8	2420	76.9
120412	12	32	75	12	4	1680	53.4	1850	58.8	2420	76.9
140416	14	40	100	16	4	4100	130.2	4490	142.6	5850	185.8
160416	16	40	100	16	4	4100	130.2	4490	142.6	5850	185.8
180420	18	45	100	20	4	5250	166.7	5660	179.7	7360	233.7
200420	20	45	100	20	4	5250	166.7	5660	179.7	7360	233.7
250425	25	45	100	25	4	7800	247.7	10070	319.7	13200	419.1





* 切削條件表參考請見第201、202 頁
* Cutting condition please refer page201、202.

SQUARE TYPE LONG SHANK - 2 FLUTES
/ 2刃長柄立銑刀

> 662L-2ALW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Dry | Wet

> 662L-2AL

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 882L-2AL

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

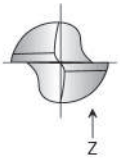
形狀寸表法 Dimensions

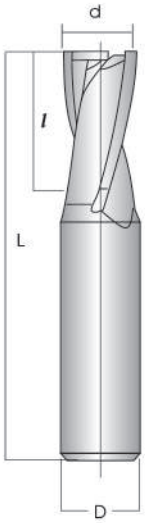
單位(Unit):mm

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z
0302075	3	8	75	3	2
0402075	4	11	75	4	2
0402100	4	11	100	4	2
0502075	5	13	75	6	2
0502100	5	13	100	6	2
0602075	6	16	75	6	2
0602100	6	16	100	6	2
0802075	8	20	75	8	2
0802100	8	20	100	8	2
1002100	10	25	100	10	2
1002150	10	25	150	10	2
1202100	12	32	100	12	2
1202150	12	32	150	12	2
1602150	16	40	150	16	2
2002150	20	45	150	20	2

建議售價

662L-2ALW		662L-2AL		882L-2AL	
(NT)	(USD)	(NT)	(USD)	(NT)	(USD)
340	10.8	365	11.6	465	14.8
340	10.8	365	11.6	465	14.8
410	13.1	430	13.7	535	17.0
450	14.3	550	17.5	720	22.9
570	18.1	670	21.3	880	28.0
450	14.3	550	17.5	720	22.9
570	18.1	670	21.3	880	28.0
1010	32.1	1170	37.2	1530	48.6
1190	37.8	1310	41.6	1710	54.3
1590	50.5	1770	56.2	2310	73.4
2490	79.1	2730	86.7	3560	113.1
2130	67.7	2320	73.7	3020	95.9
3090	98.1	3390	107.7	4410	140.0
5900	187.4	6340	201.3	8250	262.0
9840	312.4	10320	327.7	13060	414.7





* 切削條件表參考請見第203頁
* Cutting condition please refer page 203.

SQUARE TYPE LONG SHANK - 4 FLUTES
/ 4刃長柄立銑刀

> 664L-4BLW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | Dry | Wet

> 664L-4BL

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

> 884L-4BL

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

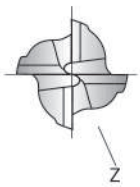
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

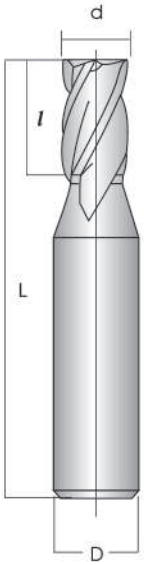
形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z	664L-4BLW (NT)	664L-4BLW (USD)	664L-4BL (NT)	664L-4BL (USD)	884L-4BL (NT)	884L-4BL (USD)
0304075	3	8	75	3	4	340	10.8	365	11.6	465	14.8
0404075	4	11	75	4	4	340	10.8	365	11.6	465	14.8
0404100	4	11	100	4	4	410	13.1	430	13.7	535	17.0
0504075	5	13	75	6	4	450	14.3	550	17.5	720	22.9
0504100	5	13	100	6	4	570	18.1	670	21.3	880	28.0
0604075	6	16	75	6	4	450	14.3	550	17.5	720	22.9
0604100	6	16	100	6	4	570	18.1	670	21.3	880	28.0
0804075	8	20	75	8	4	1010	32.1	1170	37.2	1530	48.6
0804100	8	20	100	8	4	1190	37.8	1310	41.6	1710	54.3
1004100	10	30	100	10	4	1590	50.5	1770	56.2	2310	73.4
1004150	10	30	150	10	4	2490	79.1	2730	86.7	3560	113.1
1204100	12	32	100	12	4	2130	67.7	2320	73.7	3020	95.9
1204150	12	32	150	12	4	3090	98.1	3390	107.7	4410	140.0
1604150	16	40	150	16	4	5900	187.4	6340	201.3	8250	262.0
2004150	20	45	150	20	4	9840	312.4	10320	327.7	13060	414.7





* 切削條件表參考請見第204頁
* Cutting condition please refer page 204.

SQUARE TYPE LONG FLUTE - 2 FLUTES
/2刃長刃立銑刀

> 662LL-2AW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Dry | Wet

> 662LL-2A

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 882LL-2A

Grain Size:0.4μm
Cobalt%:12%

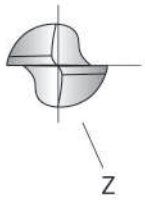
HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

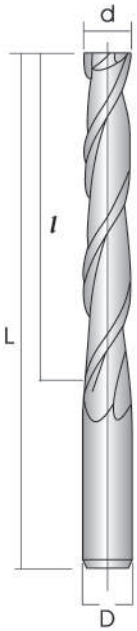
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z
0102	1	7	50	4	2
0152	1.5	9	50	4	2
0202	2	12	50	4	2
0252	2.5	12	50	4	2
0302	3	15	60	6	2
0352	3.5	15	60	6	2
0402	4	20	75	6	2
0452	4.5	20	75	6	2
0502	5	25	75	6	2
0552	5.5	25	75	6	2
0602	6	30	75	6	2
0702	7	30	100	8	2
0802	8	40	100	8	2
0902	9	40	100	10	2
1002	10	40	100	10	2
1102	11	40	100	12	2
1202	12	50	100	12	2
1402	14	50	150	16	2
1602	16	65	150	16	2
2002	20	75	200	20	2





* 切削條件表參考請見第205、206 頁
* Cutting condition please refer page205、206.

建議售價

662LL-2AW (NT)	662LL-2AW (USD)	662LL-2A (NT)	662LL-2A (USD)	882LL-2A (NT)	882LL-2A (USD)
410	13.1	450	14.3	590	18.8
410	13.1	450	14.3	590	18.8
410	13.1	450	14.3	590	18.8
410	13.1	450	14.3	590	18.8
480	15.3	540	17.2	710	22.6
480	15.3	540	17.2	710	22.6
560	17.8	660	21.0	860	27.4
560	17.8	660	21.0	860	27.4
560	17.8	660	21.0	860	27.4
560	17.8	660	21.0	860	27.4
560	17.8	660	21.0	860	27.4
1430	45.4	1580	50.2	2060	65.4
1430	45.4	1580	50.2	2060	65.4
1950	62.0	2150	68.3	2800	88.9
1950	62.0	2150	68.3	2800	88.9
2560	81.3	2790	88.6	3630	115.3
2560	81.3	2790	88.6	3630	115.3
7080	224.8	7610	241.6	9900	314.3
7080	224.8	7610	241.6	9900	314.3
15050	477.8	15620	495.9	20300	644.5

SQUARE TYPE LONG FLUTE - 4 FLUTES
/ 4 刃長刃立銑刀

> 664LL-4BW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | Dry | Wet

> 664LL-4B

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

> 884LL-4B

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z
0104	1	7	50	4	4
0154	1.5	9	50	4	4
0204	2	12	50	4	4
0254	2.5	12	50	4	4
0304	3	15	60	6	4
0354	3.5	15	60	6	4
0404	4	20	75	6	4
0454	4.5	20	75	6	4
0504	5	25	75	6	4
0554	5.5	25	75	6	4
0604	6	30	75	6	4
0704	7	30	100	8	4
0804	8	40	100	8	4
0904	9	40	100	10	4
1004	10	40	100	10	4
1104	11	40	100	12	4
1204	12	50	100	12	4
1404	14	50	150	16	4
1604	16	60	150	16	4
2004	20	90	200	20	4

建議售價

664LL-4BW		664LL-4B		884LL-4B	
(NT)	(USD)	(NT)	(USD)	(NT)	(USD)
410	13.1	450	14.3	590	18.8
410	13.1	450	14.3	590	18.8
410	13.1	450	14.3	590	18.8
410	13.1	450	14.3	590	18.8
480	15.3	540	17.2	710	22.6
480	15.3	540	17.2	710	22.6
560	17.8	660	21.0	860	27.4
560	17.8	660	21.0	860	27.4
560	17.8	660	21.0	860	27.4
560	17.8	660	21.0	860	27.4
560	17.8	660	21.0	860	27.4
1430	45.4	1580	50.2	2060	65.4
1430	45.4	1580	50.2	2060	65.4
1950	62.0	2150	68.3	2800	88.9
1950	62.0	2150	68.3	2800	88.9
2560	81.3	2790	88.6	3630	115.3
2560	81.3	2790	88.6	3630	115.3
7080	224.8	7610	241.6	9900	314.3
7080	224.8	7610	241.6	9900	314.3
15050	477.8	15620	495.9	20300	644.5

* 切削條件表參考請見第207、208 頁
* Cutting condition please refer page207、208.

SQUARE TYPE - 3 FLUTES
/ 3刃立銑刀

> 663L-AW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 45° Helix Angle | 3 Flute | Dry | Wet

> 663L-A

Grain Size:0.6μm
Cobalt%:12%

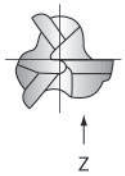
HRC ▸45 | MG | 45° Helix Angle | 3 Flute | Arti-Co | Dry | Wet

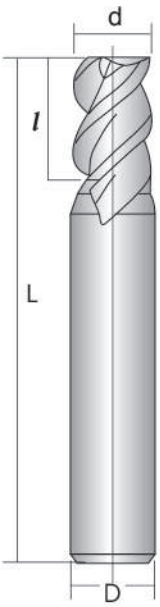
> 883L-A

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 45° Helix Angle | 3 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○





形狀寸表法 Dimensions

單位(Unit):mm

建議售價

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z	663L-AW (NT)	663L-AW (USD)	663L-A (NT)	663L-A (USD)	883L-A (NT)	883L-A (USD)
010304	1	3	50	4	3	280	8.9	310	9.9	410	13.1
010306	1	3	50	6	3	330	10.5	450	14.3	550	17.5
015304	1.5	4	50	4	3	280	8.9	310	9.9	410	13.1
015306	1.5	4	50	6	3	330	10.5	450	14.3	550	17.5
020304	2	6	50	4	3	280	8.9	310	9.9	410	13.1
020306	2	6	50	6	3	330	10.5	450	14.3	550	17.5
025304	2.5	8	50	4	3	280	8.9	310	9.9	410	13.1
025306	2.5	8	50	6	3	330	10.5	450	14.3	550	17.5
030303	3	8	50	3	3	280	8.9	310	9.9	410	13.1
030304	3	8	50	4	3	280	8.9	310	9.9	410	13.1
030306	3	8	50	6	3	330	10.5	450	14.3	550	17.5
035304	3.5	10	50	4	3	280	8.9	310	9.9	410	13.1
035306	3.5	10	50	6	3	330	10.5	450	14.3	550	17.5
040304	4	11	50	4	3	280	8.9	310	9.9	410	13.1
040306	4	11	50	6	3	330	10.5	450	14.3	550	17.5
045306	4.5	13	50	6	3	330	10.5	450	14.3	550	17.5
050306	5	13	50	6	3	330	10.5	450	14.3	550	17.5
055306	5.5	13	50	6	3	330	10.5	450	14.3	550	17.5
060306	6	16	50	6	3	330	10.5	450	14.3	550	17.5
065308	6.5	16	60	8	3	810	25.8	930	29.6	1220	38.8
070308	7	16	60	8	3	810	25.8	930	29.6	1220	38.8
075308	7.5	19	60	8	3	810	25.8	930	29.6	1220	38.8
080308	8	20	60	8	3	810	25.8	930	29.6	1220	38.8
085310	8.5	20	75	10	3	1190	37.8	1320	42.0	1720	54.7
090310	9	20	75	10	3	1190	37.8	1320	42.0	1720	54.7
095310	9.5	25	75	10	3	1190	37.8	1320	42.0	1720	54.7
100310	10	30	75	10	3	1190	37.8	1320	42.0	1720	54.7
105312	10.5	30	75	12	3	1680	53.4	1850	58.8	2420	76.9
110312	11	30	75	12	3	1680	53.4	1850	58.8	2420	76.9
115312	11.5	30	75	12	3	1680	53.4	1850	58.8	2420	76.9
120312	12	32	75	12	3	1680	53.4	1850	58.8	2420	76.9
140316	14	40	100	16	3	4100	130.2	4490	142.6	5850	185.8
160316	16	40	100	16	3	4100	130.2	4490	142.6	5850	185.8
180320	18	45	100	20	3	5250	166.7	5660	179.7	7360	233.7
200320	20	45	100	20	3	5250	166.7	5660	179.7	7360	233.7

* 切削條件表參考請見第209、210 頁
* Cutting condition please refer page209、210.

> 664L-AW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 4 Flute | 45° Helix Angle | Dry | Wet

> 664L-A

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 4 Flute | 45° Helix Angle | Arti-Co | Dry | Wet

> 884L-A

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 4 Flute | 45° Helix Angle | Arti-Co | Dry | Wet

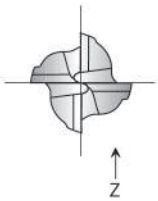
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

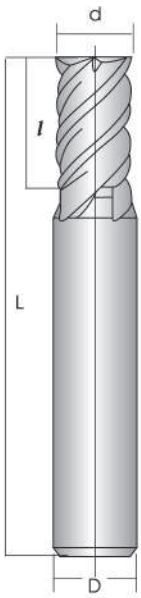
形狀寸表法 Dimensions

單位(Unit):mm

建議售價

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z	664L-AW (NT)	664L-AW (USD)	664L-A (NT)	664L-A (USD)	884L-A (NT)	884L-A (USD)
010404	1	3	50	4	4	280	8.9	310	9.9	410	13.1
010406	1	3	50	6	4	330	10.5	450	14.3	550	17.5
015404	1.5	4	50	4	4	280	8.9	310	9.9	410	13.1
015406	1.5	4	50	6	4	330	10.5	450	14.3	550	17.5
020404	2	6	50	4	4	280	8.9	310	9.9	410	13.1
020406	2	6	50	6	4	330	10.5	450	14.3	550	17.5
025404	2.5	8	50	4	4	280	8.9	310	9.9	410	13.1
025406	2.5	8	50	6	4	330	10.5	450	14.3	550	17.5
030403	3	8	50	3	4	280	8.9	310	9.9	410	13.1
030404	3	8	50	4	4	280	8.9	310	9.9	410	13.1
030406	3	8	50	6	4	330	10.5	450	14.3	550	17.5
035404	3.5	10	50	4	4	280	8.9	310	9.9	410	13.1
035406	3.5	10	50	6	4	330	10.5	450	14.3	550	17.5
040404	4	11	50	4	4	280	8.9	310	9.9	410	13.1
040406	4	11	50	6	4	330	10.5	450	14.3	550	17.5
045406	4.5	13	50	6	4	330	10.5	450	14.3	550	17.5
050406	5	13	50	6	4	330	10.5	450	14.3	550	17.5
055406	5.5	13	50	6	4	330	10.5	450	14.3	550	17.5
060406	6	16	50	6	4	330	10.5	450	14.3	550	17.5
065408	6.5	16	60	8	4	810	25.8	930	29.6	1220	38.8
070408	7	16	60	8	4	810	25.8	930	29.6	1220	38.8
075408	7.5	19	60	8	4	810	25.8	930	29.6	1220	38.8
080408	8	20	60	8	4	810	25.8	930	29.6	1220	38.8
085410	8.5	20	75	10	4	1190	37.8	1320	42.0	1720	54.7
090410	9	20	75	10	4	1190	37.8	1320	42.0	1720	54.7
095410	9.5	25	75	10	4	1190	37.8	1320	42.0	1720	54.7
100410	10	30	75	10	4	1190	37.8	1320	42.0	1720	54.7
105412	10.5	30	75	12	4	1680	53.4	1850	58.8	2420	76.9
110412	11	30	75	12	4	1680	53.4	1850	58.8	2420	76.9
115412	11.5	30	75	12	4	1680	53.4	1850	58.8	2420	76.9
120412	12	32	75	12	4	1680	53.4	1850	58.8	2420	76.9
140416	14	40	100	16	4	4100	130.2	4490	142.6	5850	185.8
160416	16	40	100	16	4	4100	130.2	4490	142.6	5850	185.8
180420	18	45	100	20	4	5250	166.7	5660	179.7	7360	233.7
200420	20	45	100	20	4	5250	166.7	5660	179.7	7360	233.7





★ 切削條件表參考請見第211、212 頁
★ Cutting condition please refer page211、212.

SQUARE TYPE LONG NECK- 2 FLUTES
/2刃深溝專用長頸立銑刀

> 662L-DW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Dry | Wet

> 662L-D

Grain Size:0.6μm
Cobalt%:12%

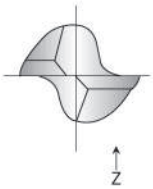
HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

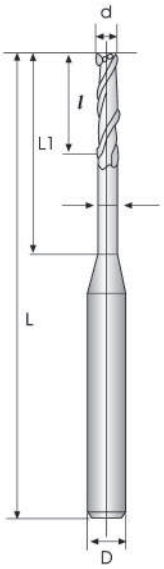
> 882L-D

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○





形狀寸表法 Dimensions

單位(Unit):mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1	662L-DW (NT)	662L-DW (USD)	662L-D (NT)	662L-D (USD)	882L-D (NT)	882L-D (USD)
05022	0.5	0.75	4	2	50	2	900	28.6	990	31.5	1290	41.0
05042	0.5	0.75	4	2	50	4	900	28.6	990	31.5	1290	41.0
05062	0.5	0.75	4	2	50	6	900	28.6	990	31.5	1290	41.0
06022	0.6	0.9	4	2	50	2	830	26.4	920	29.3	1200	38.1
06042	0.6	0.9	4	2	50	4	830	26.4	920	29.3	1200	38.1
06062	0.6	0.9	4	2	50	6	830	26.4	920	29.3	1200	38.1
07042	0.7	1.1	4	2	50	4	830	26.4	920	29.3	1200	38.1
07062	0.7	1.1	4	2	50	6	830	26.4	920	29.3	1200	38.1
08042	0.8	1.2	4	2	50	4	830	26.4	920	29.3	1200	38.1
08062	0.8	1.2	4	2	50	6	830	26.4	920	29.3	1200	38.1
08082	0.8	1.2	4	2	50	8	830	26.4	920	29.3	1200	38.1
09062	0.9	1.4	4	2	50	6	830	26.4	920	29.3	1200	38.1
09082	0.9	1.4	4	2	50	8	830	26.4	920	29.3	1200	38.1
09102	0.9	1.4	4	2	50	10	830	26.4	920	29.3	1200	38.1
10062	1	1.5	4	2	50	6	610	19.4	680	21.6	890	28.3
10082	1	1.5	4	2	50	8	610	19.4	680	21.6	890	28.3
10102	1	1.5	4	2	50	10	610	19.4	680	21.6	890	28.3
10122	1	1.5	4	2	50	12	610	19.4	680	21.6	890	28.3
10162	1	1.5	4	2	50	16	610	19.4	680	21.6	890	28.3
12062	1.2	1.8	4	2	50	6	830	26.4	920	29.3	1200	38.1
12082	1.2	1.8	4	2	50	8	830	26.4	920	29.3	1200	38.1
12102	1.2	1.8	4	2	50	10	830	26.4	920	29.3	1200	38.1
12122	1.2	1.8	4	2	50	12	830	26.4	920	29.3	1200	38.1
14062	1.4	2.1	4	2	50	6	830	26.4	920	29.3	1200	38.1
14102	1.4	2.1	4	2	50	10	830	26.4	920	29.3	1200	38.1
14162	1.4	2.1	4	2	50	16	830	26.4	920	29.3	1200	38.1
15062	1.5	2.3	4	2	50	6	610	19.4	680	21.6	890	28.3
15082	1.5	2.3	4	2	50	8	610	19.4	680	21.6	890	28.3
15102	1.5	2.3	4	2	50	10	610	19.4	680	21.6	890	28.3
15122	1.5	2.3	4	2	50	12	610	19.4	680	21.6	890	28.3
15142	1.5	2.3	4	2	50	14	610	19.4	680	21.6	890	28.3
15162	1.5	2.3	4	2	50	16	610	19.4	680	21.6	890	28.3
15182	1.5	2.3	4	2	50	18	610	19.4	680	21.6	890	28.3
15202	1.5	2.3	4	2	50	20	610	19.4	680	21.6	890	28.3
16062	1.6	2.4	4	2	50	6	830	26.4	920	29.3	1200	38.1
16082	1.6	2.4	4	2	50	8	830	26.4	920	29.3	1200	38.1
16102	1.6	2.4	4	2	50	10	830	26.4	920	29.3	1200	38.1
16122	1.6	2.4	4	2	50	12	830	26.4	920	29.3	1200	38.1

★ 切削條件表參考請見第213頁
★ Cutting condition please refer page 213.

SQUARE TYPE LONG NECK- 2 FLUTES
/2刃深溝專用長頸立銑刀

>662L-DW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Dry | Wet

>662L-D

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

>882L-D

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

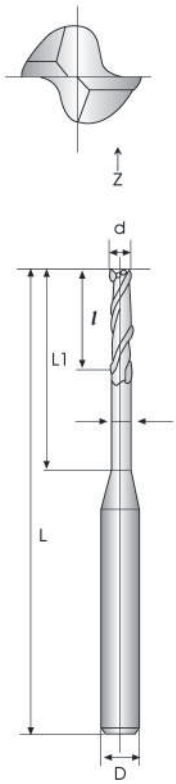
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1	662L-DW (NT)	662L-DW (USD)	662L-D (NT)	662L-D (USD)	882L-D (NT)	882L-D (USD)
16142	1.6	2.4	4	2	50	14	830	26.4	920	29.3	1200	38.1
16162	1.6	2.4	4	2	50	16	830	26.4	920	29.3	1200	38.1
16182	1.6	2.4	4	2.	50	18	830	26.4	920	29.3	1200	38.1
18082	1.8	2.7	4	2	50	8	830	26.4	920	29.3	1200	38.1
18142	1.8	2.7	4	2	50	14	830	26.4	920	29.3	1200	38.1
18202	1.8	2.7	4	2	50	20	830	26.4	920	29.3	1200	38.1
20062	2	3	4	2	50	6	610	19.4	680	21.6	890	28.3
20082	2	3	4	2	50	8	610	19.4	680	21.6	890	28.3
20102	2	3	4	2	50	10	610	19.4	680	21.6	890	28.3
20122	2	3	4	2	50	12	610	19.4	680	21.6	890	28.3
20142	2	3	4	2	50	14	610	19.4	680	21.6	890	28.3
20162	2	3	4	2	50	16	610	19.4	680	21.6	890	28.3
20182	2	3	4	2	50	18	610	19.4	680	21.6	890	28.3
20202	2	3	4	2	50	20	610	19.4	680	21.6	890	28.3
25082	2.5	4	4	2	50	8	610	19.4	680	21.6	890	28.3
25102	2.5	4	4	2	50	10	610	19.4	680	21.6	890	28.3
25122	2.5	4	4	2	50	12	610	19.4	680	21.6	890	28.3
25142	2.5	4	4	2	50	14	610	19.4	680	21.6	890	28.3
25162	2.5	4	4	2	50	16	610	19.4	680	21.6	890	28.3
25202	2.5	4	4	2	50	20	610	19.4	680	21.6	890	28.3
30082	3	4.5	6	2	50	8	720	22.9	800	25.4	1040	33.1
30102	3	4.5	6	2	50	10	720	22.9	800	25.4	1040	33.1
30122	3	4.5	6	2	50	12	720	22.9	800	25.4	1040	33.1
30162	3	4.5	6	2	60	16	760	24.2	840	26.7	1100	35.0
30202	3	4.5	6	2	60	20	760	24.2	840	26.7	1100	35.0
30252	3	6	6	2	75	25	830	26.4	920	29.3	1200	38.1
35122	3.5	6	6	2	50	12	720	22.9	800	25.4	1040	33.1
35162	3.5	6	6	2	60	16	760	24.2	840	26.7	1100	35.0
35202	3.5	6	6	2	75	20	830	26.4	920	29.3	1200	38.1
35252	3.5	6	6	2	75	25	830	26.4	920	29.3	1200	38.1
35302	3.5	6	6	2	75	30	830	26.4	920	29.3	1200	38.1
40122	4	6	6	2	50	12	720	22.9	800	25.4	1040	33.1
40162	4	6	6	2	60	16	760	24.2	840	26.7	1100	35.0
40202	4	6	6	2	75	20	830	26.4	920	29.3	1200	38.1
40252	4	6	6	2	75	25	830	26.4	920	29.3	1200	38.1
40302	4	6	6	2	75	30	830	26.4	920	29.3	1200	38.1
40352	4	6	6	2	75	35	830	26.4	920	29.3	1200	38.1



* 切削條件表參考請見第213頁
* Cutting condition please refer page 213.

CORNER RADIUS - 2 FLUTES
/ 2 刃圓鼻立銑刀

> 668V-RW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | R | Dry | Wet

> 668V-R

Grain Size:0.6μm
Cobalt%:12%

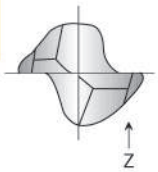
HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | R | Dry | Wet

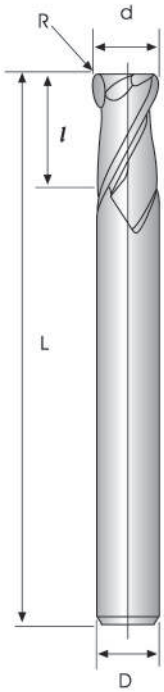
> 888V-R

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | R | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○





形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	角徑 R	刃長 l	全長 L	柄徑 D	刃數 Z	668V-RW (NT)	668V-RW (USD)	668V-R (NT)	668V-R (USD)	888V-R (NT)	888V-R (USD)
010012	1	0.1R	3	50	4	2	550	17.5	590	18.8	770	24.5
010022	1	0.2R	3	50	4	2	550	17.5	590	18.8	770	24.5
010032	1	0.3R	3	50	4	2	550	17.5	590	18.8	770	24.5
015022	1.5	0.2R	4	50	4	2	550	17.5	590	18.8	770	24.5
015032	1.5	0.3R	4	50	4	2	550	17.5	590	18.8	770	24.5
020022	2	0.2R	6	50	4	2	550	17.5	590	18.8	770	24.5
020032	2	0.3R	6	50	4	2	550	17.5	590	18.8	770	24.5
020052	2	0.5R	6	50	4	2	550	17.5	590	18.8	770	24.5
025022	2.5	0.2R	8	50	4	2	550	17.5	590	18.8	770	24.5
030022	3	0.2R	8	50	3	2	550	17.5	590	18.8	770	24.5
030032	3	0.3R	8	50	3	2	550	17.5	590	18.8	770	24.5
030052	3	0.5R	8	50	3	2	550	17.5	590	18.8	770	24.5
030102	3	1R	8	50	3	2	550	17.5	590	18.8	770	24.5
0300224D	3	0.2R	8	50	4	2	550	17.5	590	18.8	770	24.5
0300324D	3	0.3R	8	50	4	2	550	17.5	590	18.8	770	24.5
0300524D	3	0.5R	8	50	4	2	550	17.5	590	18.8	770	24.5
0301024D	3	1R	8	50	4	2	550	17.5	590	18.8	770	24.5
040022	4	0.2R	10	50	4	2	550	17.5	590	18.8	770	24.5
040032	4	0.3R	10	50	4	2	550	17.5	590	18.8	770	24.5
040052	4	0.5R	10	50	4	2	550	17.5	590	18.8	770	24.5
040102	4	1R	10	50	4	2	550	17.5	590	18.8	770	24.5
040152	4	1.5R	10	50	4	2	550	17.5	590	18.8	770	24.5
050022	5	0.2R	13	50	6	2	620	19.7	660	21.0	860	27.4
050032	5	0.3R	13	50	6	2	620	19.7	660	21.0	860	27.4
050052	5	0.5R	13	50	6	2	620	19.7	660	21.0	860	27.4
050102	5	1R	13	50	6	2	620	19.7	660	21.0	860	27.4
060022	6	0.2R	15	50	6	2	620	19.7	660	21.0	860	27.4
060032	6	0.3R	15	50	6	2	620	19.7	660	21.0	860	27.4
060052	6	0.5R	15	50	6	2	620	19.7	660	21.0	860	27.4
060102	6	1R	15	50	6	2	620	19.7	660	21.0	860	27.4
060152	6	1.5R	15	50	6	2	620	19.7	660	21.0	860	27.4
060202	6	2R	15	50	6	2	620	19.7	660	21.0	860	27.4
080032	8	0.3R	20	60	8	2	1060	33.7	1170	37.2	1530	48.6
080052	8	0.5R	20	60	8	2	1060	33.7	1170	37.2	1530	48.6
080102	8	1R	20	60	8	2	1060	33.7	1170	37.2	1530	48.6

* 切削條件表參考請見第214頁
* Cutting condition please refer page 214.

> 668V-RW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | R | Dry | Wet

> 668V-R

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | R | Dry | Wet

> 888V-R

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | R | Dry | Wet

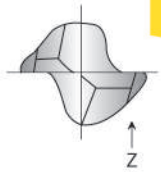
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

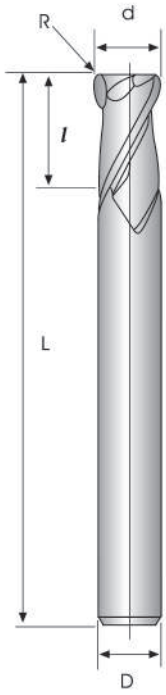
形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	角 徑 R	刃長 l	全長 L	柄徑 D	刃數 Z	668V-RW (NT)	668V-RW (USD)	668V-R (NT)	668V-R (USD)	888V-R (NT)	888V-R (USD)
080152	8	1.5R	20	60	8	2	1060	33.7	1170	37.2	1530	48.6
080202	8	2R	20	60	8	2	1060	33.7	1170	37.2	1530	48.6
080252	8	2.5R	20	60	8	2	1060	33.7	1170	37.2	1530	48.6
080302	8	3R	20	60	8	2	1060	33.7	1170	37.2	1530	48.6
100032	10	0.3R	25	75	10	2	1490	47.4	1620	51.5	2120	67.4
100052	10	0.5R	25	75	10	2	1490	47.4	1620	51.5	2120	67.4
100102	10	1R	25	75	10	2	1490	47.4	1620	51.5	2120	67.4
100152	10	1.5R	25	75	10	2	1490	47.4	1620	51.5	2120	67.4
100202	10	2R	25	75	10	2	1490	47.4	1620	51.5	2120	67.4
100252	10	2.5R	25	75	10	2	1490	47.4	1620	51.5	2120	67.4
100302	10	3R	25	75	10	2	1490	47.4	1620	51.5	2120	67.4
120032	12	0.3R	30	75	12	2	2070	65.8	2250	71.5	2930	93.1
120052	12	0.5R	30	75	12	2	2070	65.8	2250	71.5	2930	93.1
120102	12	1R	30	75	12	2	2070	65.8	2250	71.5	2930	93.1
120152	12	1.5R	30	75	12	2	2070	65.8	2250	71.5	2930	93.1
120202	12	2R	30	75	12	2	2070	65.8	2250	71.5	2930	93.1
120252	12	2.5R	30	75	12	2	2070	65.8	2250	71.5	2930	93.1
120302	12	3R	30	75	12	2	2070	65.8	2250	71.5	2930	93.1





* 切削條件表參考請見第214頁
* Cutting condition please refer page 214.

CORNER RADIUS - 4 FLUTES
/ 4 刃圓鼻立銑刀

> 668V-RSW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | R | Dry | Wet

> 668V-RS

Grain Size:0.6μm
Cobalt%:12%

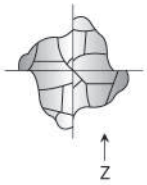
HRC ▸45 | MG | 35° Helix Angle | 4 Flute | Arti-Co | R | Dry | Wet

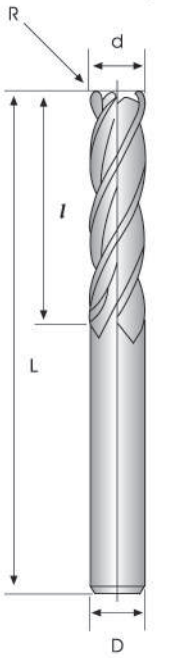
> 888V-RS

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 4 Flute | Arti-Co | R | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○





形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	角徑 R	刃長 l	全長 L	柄徑 D	刃數 Z	668V-RSW (NT)	668V-RSW (USD)	668V-RS (NT)	668V-RS (USD)	888V-RS (NT)	888V-RS (USD)
010014	1	0.1R	3	50	4	4	550	17.5	590	18.8	770	24.5
010024	1	0.2R	3	50	4	4	550	17.5	590	18.8	770	24.5
010034	1	0.3R	3	50	4	4	550	17.5	590	18.8	770	24.5
015024	1.5	0.2R	4	50	4	4	550	17.5	590	18.8	770	24.5
015034	1.5	0.3R	4	50	4	4	550	17.5	590	18.8	770	24.5
020024	2	0.2R	6	50	4	4	550	17.5	590	18.8	770	24.5
020034	2	0.3R	6	50	4	4	550	17.5	590	18.8	770	24.5
020054	2	0.5R	6	50	4	4	550	17.5	590	18.8	770	24.5
025024	2.5	0.2R	8	50	4	4	550	17.5	590	18.8	770	24.5
030024	3	0.2R	8	50	3	4	550	17.5	590	18.8	770	24.5
030034	3	0.3R	8	50	3	4	550	17.5	590	18.8	770	24.5
030054	3	0.5R	8	50	3	4	550	17.5	590	18.8	770	24.5
030104	3	1R	8	50	3	4	550	17.5	590	18.8	770	24.5
0300244D	3	0.2R	8	50	4	4	550	17.5	590	18.8	770	24.5
0300344D	3	0.3R	8	50	4	4	550	17.5	590	18.8	770	24.5
0300544D	3	0.5R	8	50	4	4	550	17.5	590	18.8	770	24.5
0301044D	3	1R	8	50	4	4	550	17.5	590	18.8	770	24.5
040024	4	0.2R	10	50	4	4	550	17.5	590	18.8	770	24.5
040034	4	0.3R	10	50	4	4	550	17.5	590	18.8	770	24.5
040054	4	0.5R	10	50	4	4	550	17.5	590	18.8	770	24.5
040104	4	1R	10	50	4	4	550	17.5	590	18.8	770	24.5
040154	4	1.5R	10	50	4	4	550	17.5	590	18.8	770	24.5
050024	5	0.2R	13	50	6	4	620	19.7	660	21.0	860	27.4
050034	5	0.3R	13	50	6	4	620	19.7	660	21.0	860	27.4
050054	5	0.5R	13	50	6	4	620	19.7	660	21.0	860	27.4
050104	5	1R	13	50	6	4	620	19.7	660	21.0	860	27.4
060024	6	0.2R	15	50	6	4	620	19.7	660	21.0	860	27.4
060034	6	0.3R	15	50	6	4	620	19.7	660	21.0	860	27.4
060054	6	0.5R	15	50	6	4	620	19.7	660	21.0	860	27.4
060104	6	1R	15	50	6	4	620	19.7	660	21.0	860	27.4
060154	6	1.5R	15	50	6	4	620	19.7	660	21.0	860	27.4
060204	6	2R	15	50	6	4	620	19.7	660	21.0	860	27.4
080034	8	0.3R	20	60	8	4	1060	33.7	1170	37.2	1530	48.6
080054	8	0.5R	20	60	8	4	1060	33.7	1170	37.2	1530	48.6
080104	8	1R	20	60	8	4	1060	33.7	1170	37.2	1530	48.6
080154	8	1.5R	20	60	8	4	1060	33.7	1170	37.2	1530	48.6

* 切削條件表參考請見第215頁
* Cutting condition please refer page 215.

> 668V-RSW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | R | Dry | Wet

> 668V-RS

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | Arti-Co | R | Dry | Wet

> 888V-RS

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 4 Flute | Arti-Co | R | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

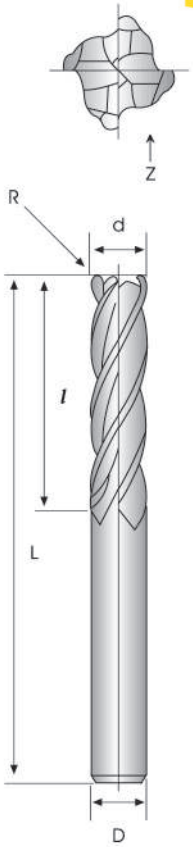
形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	角徑 R	刃長 l	全長 L	柄徑 D	刃數 Z	668V-RSW (NT)	668V-RSW (USD)	668V-RS (NT)	668V-RS (USD)	888V-RS (NT)	888V-RS (USD)
080204	8	2R	20	60	8	4	1060	33.7	1170	37.2	1530	48.6
080254	8	2.5R	20	60	8	4	1060	33.7	1170	37.2	1530	48.6
080304	8	3R	20	60	8	4	1060	33.7	1170	37.2	1530	48.6
100034	10	0.3R	25	75	10	4	1490	47.4	1620	51.5	2120	67.4
100054	10	0.5R	25	75	10	4	1490	47.4	1620	51.5	2120	67.4
100104	10	1R	25	75	10	4	1490	47.4	1620	51.5	2120	67.4
100154	10	1.5R	25	75	10	4	1490	47.4	1620	51.5	2120	67.4
100204	10	2R	25	75	10	4	1490	47.4	1620	51.5	2120	67.4
100254	10	2.5R	25	75	10	4	1490	47.4	1620	51.5	2120	67.4
100304	10	3R	25	75	10	4	1490	47.4	1620	51.5	2120	67.4
120034	12	0.3R	30	75	12	4	2070	65.8	2250	71.5	2930	93.1
120054	12	0.5R	30	75	12	4	2070	65.8	2250	71.5	2930	93.1
120104	12	1R	30	75	12	4	2070	65.8	2250	71.5	2930	93.1
120154	12	1.5R	30	75	12	4	2070	65.8	2250	71.5	2930	93.1
120204	12	2R	30	75	12	4	2070	65.8	2250	71.5	2930	93.1
120254	12	2.5R	30	75	12	4	2070	65.8	2250	71.5	2930	93.1
120304	12	3R	30	75	12	4	2070	65.8	2250	71.5	2930	93.1

* 切削條件表參考請見第215頁
* Cutting condition please refer page 215.



CORNER RADIUS LONG SHANK - 2 FLUTES
/ 2 刃長柄圓鼻立銑刀

> 668V-2RL

Grain Size:0.6μm
Cobalt%:12%

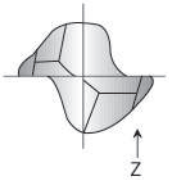
HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | R | Dry | Wet

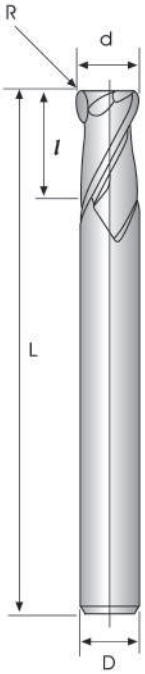
> 888V-2RL

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | R | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○





形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	全長 L	柄徑 D	刃數 Z
030032	3	0.3R	8	75	3	2
030052	3	0.5R	8	75	3	2
030102	3	1R	8	75	3	2
040032	4	0.3R	10	75	4	2
040052	4	0.5R	10	75	4	2
040102	4	1R	10	75	4	2
040152	4	1.5R	10	75	4	2
060032	6	0.3R	15	100	6	2
060052	6	0.5R	15	100	6	2
060102	6	1R	15	100	6	2
060152	6	1.5R	15	100	6	2
060202	6	2R	15	100	6	2
080032	8	0.3R	20	100	8	2
080052	8	0.5R	20	100	8	2
080102	8	1R	20	100	8	2
080152	8	1.5R	20	100	8	2
080202	8	2R	20	100	8	2
080252	8	2.5R	20	100	8	2
080302	8	3R	20	100	8	2
100032	10	0.3R	25	100	10	2
100052	10	0.5R	25	100	10	2
100102	10	1R	25	100	10	2
100152	10	1.5R	25	100	10	2
100202	10	2R	25	100	10	2
100252	10	2.5R	25	100	10	2
100302	10	3R	25	100	10	2
120032	12	0.3R	30	100	12	2
120052	12	0.5R	30	100	12	2
120102	12	1R	30	100	12	2
120152	12	1.5R	30	100	12	2
120202	12	2R	30	100	12	2
120252	12	2.5R	30	100	12	2
120302	12	3R	30	100	12	2

建議售價

668V-2RL (NT)	668V-2RL (USD)	888V-2RL (NT)	888V-2RL (USD)
690	22.0	900	28.6
690	22.0	900	28.6
690	22.0	900	28.6
690	22.0	900	28.6
690	22.0	900	28.6
690	22.0	900	28.6
690	22.0	900	28.6
910	28.9	1190	37.8
910	28.9	1190	37.8
910	28.9	1190	37.8
910	28.9	1190	37.8
910	28.9	1190	37.8
1660	52.7	2160	68.6
1660	52.7	2160	68.6
1660	52.7	2160	68.6
1660	52.7	2160	68.6
1660	52.7	2160	68.6
1660	52.7	2160	68.6
1660	52.7	2160	68.6
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2640	83.9	3440	109.3
2640	83.9	3440	109.3
2640	83.9	3440	109.3
2640	83.9	3440	109.3
2640	83.9	3440	109.3
2640	83.9	3440	109.3
2640	83.9	3440	109.3

* 切削條件表參考請見第216頁
* Cutting condition please refer page 216.

CORNER RADIUS LONG SHANK - 4 FLUTES
/ 4 刃長柄圓鼻立銑刀

> 668V-4RL

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | Arti-Co | R | Dry | Wet

> 888V-4RL

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 4 Flute | Arti-Co | R | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

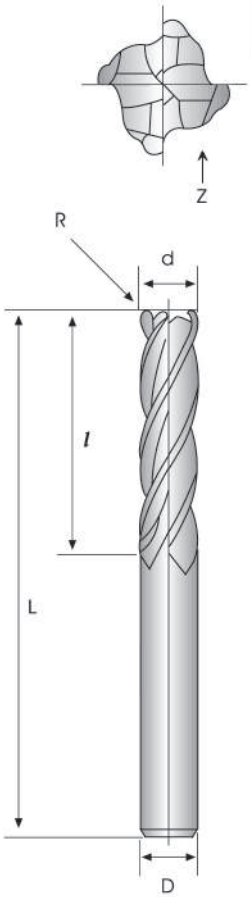
形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	全長 L	柄徑 D	刃數 Z
030034	3	0.3R	8	75	3	4
030054	3	0.5R	8	75	3	4
030104	3	1R	8	75	3	4
040034	4	0.3R	10	75	4	4
040054	4	0.5R	10	75	4	4
040104	4	1R	10	75	4	4
040154	4	1.5R	10	75	4	4
060034	6	0.3R	15	100	6	4
060054	6	0.5R	15	100	6	4
060104	6	1R	15	100	6	4
060154	6	1.5R	15	100	6	4
060204	6	2R	15	100	6	4
080034	8	0.3R	20	100	8	4
080054	8	0.5R	20	100	8	4
080104	8	1R	20	100	8	4
080154	8	1.5R	20	100	8	4
080204	8	2R	20	100	8	4
080254	8	2.5R	20	100	8	4
080304	8	3R	20	100	8	4
100034	10	0.3R	25	100	10	4
100054	10	0.5R	25	100	10	4
100104	10	1R	25	100	10	4
100154	10	1.5R	25	100	10	4
100204	10	2R	25	100	10	4
100254	10	2.5R	25	100	10	4
100304	10	3R	25	100	10	4
120034	12	0.3R	30	100	12	4
120054	12	0.5R	30	100	12	4
120104	12	1R	30	100	12	4
120154	12	1.5R	30	100	12	4
120204	12	2R	30	100	12	4
120254	12	2.5R	30	100	12	4
120304	12	3R	30	100	12	4

建議售價

668V-4RL (NT)	668V-4RL (USD)	888V-4RL (NT)	888V-4RL (USD)
690	22.0	900	28.6
690	22.0	900	28.6
690	22.0	900	28.6
690	22.0	900	28.6
690	22.0	900	28.6
690	22.0	900	28.6
690	22.0	900	28.6
910	28.9	1190	37.8
910	28.9	1190	37.8
910	28.9	1190	37.8
910	28.9	1190	37.8
910	28.9	1190	37.8
1660	52.7	2160	68.6
1660	52.7	2160	68.6
1660	52.7	2160	68.6
1660	52.7	2160	68.6
1660	52.7	2160	68.6
1660	52.7	2160	68.6
1660	52.7	2160	68.6
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2100	66.7	2740	87.0
2640	83.9	3440	109.3
2640	83.9	3440	109.3
2640	83.9	3440	109.3
2640	83.9	3440	109.3
2640	83.9	3440	109.3
2640	83.9	3440	109.3
2640	83.9	3440	109.3



★ 切削條件表參考請見第217頁
★ Cutting condition please refer page 217.

SQUARE TYPE FOR COPPER ALUMINUM -2 FLUTES
/2刃銅鋁合金專用立銑刀

> 662L-2EE

Grain Size:0.6μm
Cobalt%:12%

MG
25° Helix Angle
2 Flute
Dry
Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

> 662L-2EEG

Grain Size:0.6μm
Cobalt%:12%

MG
25° Helix Angle
2 Flute
CRN
Dry
Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

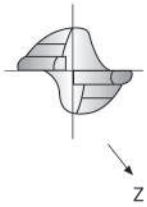
形狀寸表法 Dimensions

單位(Unit):mm

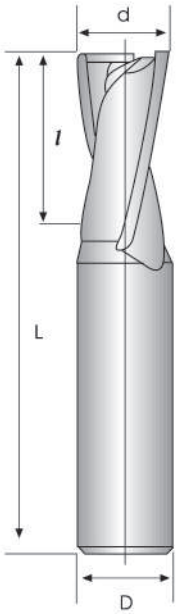
型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z
0102	1	3	50	4	2
0152	1.5	4	50	4	2
0202	2	6	50	4	2
0302	3	9	50	6	2
0402	4	12	50	6	2
0502	5	15	50	6	2
0602	6	15	50	6	2
0802	8	20	60	8	2
1002	10	30	75	10	2
1202	12	32	75	12	2
1602	16	45	100	16	2
2002	20	45	100	20	2

建議售價

662L-2EE (NT)	662L-2EE (USD)	662L-2EEG (NT)	662L-2EEG (USD)
450	14.3	540	17.2
450	14.3	540	17.2
450	14.3	540	17.2
550	17.5	640	20.4
550	17.5	640	20.4
550	17.5	640	20.4
550	17.5	640	20.4
1050	33.4	1230	39.1
1590	50.5	1820	57.8
2070	65.8	2300	73.1
6210	197.2	6580	208.9
8960	284.5	9510	302.0



★ 切削條件表參考請見第221頁
★ Cutting condition please refer page 221.



FINE PITCH ROUGHING END MILLS - 3 FLUTES
/3刃粗精銑刀

> 663L-GV

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 40° Helix Angle | 3 Flute | Arti-Co | Dry | Wet

> 883L-GV

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 40° Helix Angle | 3 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

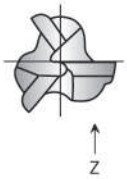
形狀寸表法 Dimensions

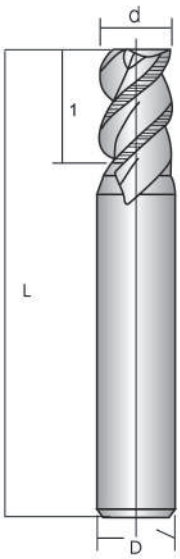
單位(Unit):mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	663L-GV (NT)	663L-GV (USD)	883L-GV (NT)	883L-GV (USD)
0403	4	8	6	3	50	1080	34.3	1410	44.8
0503	5	13	6	3	50	1080	34.3	1410	44.8
0603	6	16	6	3	50	1080	34.3	1410	44.8
0703	7	16	8	3	60	1610	51.2	2100	66.7
0803	8	19	8	3	60	1610	51.2	2100	66.7
0903	9	25	10	3	75	2200	69.9	2860	90.8
1003	10	25	10	3	75	2200	69.9	2860	90.8
1103	11	30	12	3	75	2720	86.4	3530	112.1
1203	12	30	12	3	75	2720	86.4	3530	112.1
1603	16	35	16	3	100	6450	204.8	8390	266.4
2003	20	45	20	3	100	8580	272.4	11160	354.3

* 切削條件表參考請見第223頁
* Cutting condition please refer page 223.





FINE PITCH ROUGHING END MILLS - 4 FLUTES
/4刃粗精銑刀

> 664L-GV

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 40° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

> 884L-GV

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 40° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

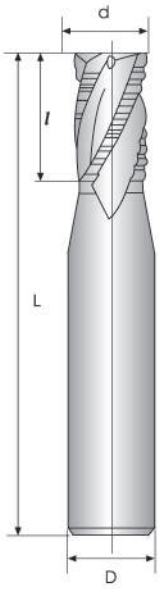
形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	664L-GV (NT)	664L-GV (USD)	884L-GV (NT)	884L-GV (USD)
0504	5	13	6	4	50	1080	34.3	1410	44.8
0604	6	16	6	4	50	1080	34.3	1410	44.8
0704	7	16	8	4	60	1610	51.2	2100	66.7
0804	8	19	8	4	60	1610	51.2	2100	66.7
0904	9	25	10	4	75	2200	69.9	2860	90.8
1004	10	25	10	4	75	2200	69.9	2860	90.8
1104	11	30	12	4	75	2720	86.4	3530	112.1
1204	12	30	12	4	75	2720	86.4	3530	112.1
1404	14	35	16	4	100	6450	204.8	8390	266.4
1504	15	35	16	4	100	6450	204.8	8390	266.4
1604	16	35	16	4	100	6450	204.8	8390	266.4
2004	20	45	20	4	100	8580	272.4	11160	354.3

* 切削條件表參考請見第224頁
* Cutting condition please refer page 224.



ROUGHING END MILLS - 3 FLUTES
/3刃粗銑刀

> 663L-G

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 25° Helix Angle | 3 Flute | Arti-Co | Dry | Wet

> 883L-G

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 25° Helix Angle | 3 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

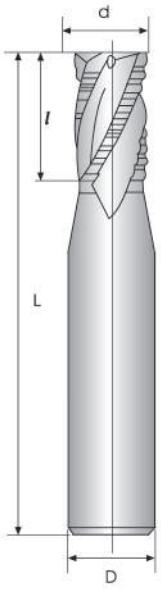
形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	663L-G (NT)	663L-G (USD)	883L-G (NT)	883L-G (USD)
0403	4	8	6	3	50	1080	34.3	1410	44.8
0503	5	13	6	3	50	1080	34.3	1410	44.8
0603	6	16	6	3	50	1080	34.3	1410	44.8
0703	7	16	8	3	60	1610	51.2	2100	66.7
0803	8	19	8	3	60	1610	51.2	2100	66.7
0903	9	25	10	3	75	2200	69.9	2860	90.8
1003	10	25	10	3	75	2200	69.9	2860	90.8
1103	11	30	12	3	75	2720	86.4	3530	112.1
1203	12	30	12	3	75	2720	86.4	3530	112.1
1603	16	35	16	3	100	6450	204.8	8390	266.4
2003	20	45	20	3	100	8580	272.4	11160	354.3

* 切削條件表參考請見第225頁
* Cutting condition please refer page 225.



ROUGHING END MILLS - 4 FLUTES
/4刃粗銑刀

> 664L-G

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 25° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

> 884L-G

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 25° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

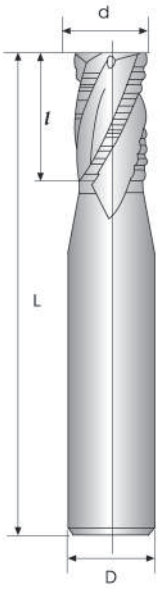
粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	全長 L	柄徑 D	刃數 Z	664L-G (NT)	664L-G (USD)	884L-G (NT)	884L-G (USD)
0504	5	13	50	6	4	1080	34.3	1410	44.8
0604	6	16	50	6	4	1080	34.3	1410	44.8
0704	7	16	60	8	4	1610	51.2	2100	66.7
0804	8	19	60	8	4	1610	51.2	2100	66.7
0904	9	25	75	10	4	2200	69.9	2860	90.8
1004	10	25	75	10	4	2200	69.9	2860	90.8
1104	11	30	75	12	4	2720	86.4	3530	112.1
1204	12	30	75	12	4	2720	86.4	3530	112.1
1604	16	35	100	16	4	6450	204.8	8390	266.4
2004	20	45	100	20	4	8580	272.4	11160	354.3

★ 切削條件表參考請見第226頁
★ Cutting condition please refer page 226.



>888L-GY

Grain Size:0.6μm
Cobalt%:12%

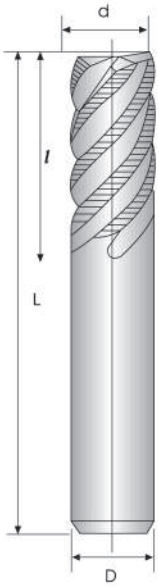
HRC ▸45 | MG | 25° elix Angle | 3 Flute | Arti-Co | Dry | Wet | R

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	角徑 R	刃長 *l*	全長 L	柄徑 D	刃數 Z
0406	4	0.3R	11	50	6	4
0506	5	0.3R	13	50	6	4
0606	6	0.3R	16	50	6	4
0808	8	0.3R	16	60	8	4
1010	10	0.5R	22	75	10	4
1212	12	0.5R	26	75	12	4
1616	16	0.5R	32	100	16	4



SQUARE TYPE - MULTIPLE FLUTES
/多刃高硬度用立銑刀

> 666H-D

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 45° Helix Angle | 6 Flute | Arti-Co | Wet | Dry

> 888H-D

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 45° Helix Angle | 6 Flute | Arti-Co | Wet | Dry

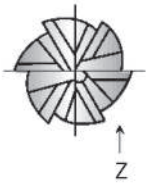
粗銑 Roughing	×
中銑 Semi Finishing	×
精修 Finishing	◎

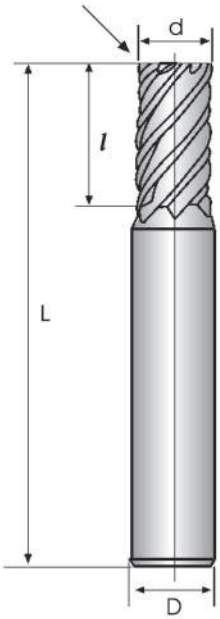
形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L
0606	6	15	6	6	50
0806	8	20	8	6	60
1006	10	30	10	6	75
1206	12	32	12	6	75
1606	16	40	16	6	100
2008	20	45	20	6	100
2508	25	45	25	6	100

* 切削條件表參考請見第222頁
* Cutting condition please refer page 222.





SQUARE TYPE - MULTIPLE FLUTES
/多刃高硬度用立銑刀(刃長加長型)(Long Fluting Length)

> 666H-DL

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 45° Helix Angle | 6 Flute | Arti-Co | Wet | Dry

> 888H-DL

Grain Size:0.4μm
Cobalt%:12%

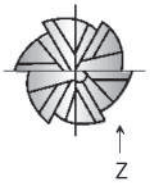
HRC ▸55 | SMG | 45° Helix Angle | 6 Flute | Arti-Co | Wet | Dry

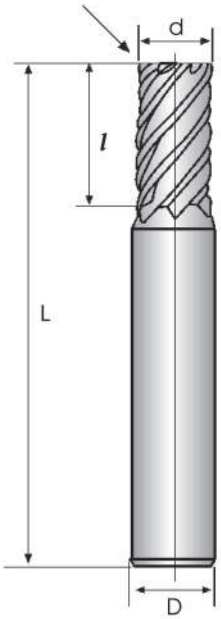
粗銑 Roughing	×
中銑 Semi Finishing	×
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L
0606	6	25	6	6	75
0806	8	30	8	6	75
1006	10	40	10	6	100
1206	12	45	12	6	100
1606	16	65	16	6	150
2008	20	75	20	6	150
2508	25	80	25	6	150





MINIATURE BALL NOSE - 2 FLUTES
/2刃微小徑球型立銑刀

> 668V-BW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Dry | Wet

> 668V-B

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 888V-B

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

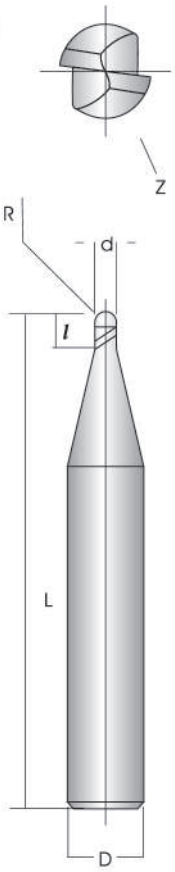
粗銑 Roughing	×
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	角徑 R	刃長 l	全長 L	柄徑 D	刃數 Z	668V-BW (NT)	668V-BW (USD)	668V-B (NT)	668V-B (USD)	888V-B (NT)	888V-B (USD)
0032	0.3	0.15R	0.6	50	4	2	1080	34.3	1120	35.6	1460	46.4
0042	0.4	0.2R	0.8	50	4	2	980	31.2	1020	32.4	1330	42.3
0052	0.5	0.25R	1	50	4	2	700	22.3	750	23.9	980	31.2
0062	0.6	0.3R	1.2	50	4	2	700	22.3	750	23.9	980	31.2
0072	0.7	0.35R	1.4	50	4	2	700	22.3	750	23.9	980	31.2
0082	0.8	0.4R	1.6	50	4	2	640	20.4	680	21.6	890	28.3
0092	0.9	0.45R	1.8	50	4	2	640	20.4	680	21.6	890	28.3
0112	1.1	0.55R	2.2	50	4	2	640	20.4	680	21.6	890	28.3
0122	1.2	0.6R	2.4	50	4	2	640	20.4	680	21.6	890	28.3
0132	1.3	0.65R	2.6	50	4	2	640	20.4	680	21.6	890	28.3
0142	1.4	0.7R	2.8	50	4	2	640	20.4	680	21.6	890	28.3
0162	1.6	0.8R	3.2	50	4	2	640	20.4	680	21.6	890	28.3
0172	1.7	0.85R	3.4	50	4	2	640	20.4	680	21.6	890	28.3
0182	1.8	0.9R	3.6	50	4	2	640	20.4	680	21.6	890	28.3
0192	1.9	0.95R	3.8	50	4	2	640	20.4	680	21.6	890	28.3
0212	2.1	1.05R	4.2	50	4	2	640	20.4	680	21.6	890	28.3
0222	2.2	1.1R	4.4	50	4	2	640	20.4	680	21.6	890	28.3
0232	2.3	1.15R	4.6	50	4	2	640	20.4	680	21.6	890	28.3
0242	2.4	1.2R	4.8	50	4	2	640	20.4	680	21.6	890	28.3
0262	2.6	1.3R	5.2	50	4	2	640	20.4	680	21.6	890	28.3
0272	2.7	1.35R	5.4	50	4	2	640	20.4	680	21.6	890	28.3
0282	2.8	1.4R	5.6	50	4	2	640	20.4	680	21.6	890	28.3
0292	2.9	1.45R	5.8	50	4	2	640	20.4	680	21.6	890	28.3



* 切削條件表參考請見第229頁
* Cutting condition please refer page 229.

BALL NOSE - 2 FLUTES
/2刃球型立銑刀

> 668V-AW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG
30° Helix Angle | 2 Flute
Dry | Wet

> 668V-A

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG
30° Helix Angle | 2 Flute | Arti-Co
Dry | Wet

> 888V-A

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG
30° Helix Angle | 2 Flute | Arti-Co
Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

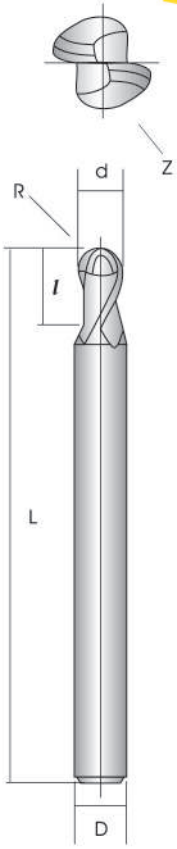
■ 形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 *l*	全長 L	柄徑 D	刃數 Z
010203	1	0.5R	2	50	3	2
010204	1	0.5R	2	50	4	2
010206	1	0.5R	2	50	6	2
015203	1.5	0.75R	3	50	3	2
015204	1.5	0.75R	3	50	4	2
015206	1.5	0.75R	3	50	6	2
020203	2	1R	4	50	3	2
020204	2	1R	4	50	4	2
020206	2	1R	4	50	6	2
025203	2.5	1.25R	5	50	3	2
025204	2.5	1.25R	5	50	4	2
025206	2.5	1.25R	5	50	6	2
030203	3	1.5R	6	50	3	2
030204	3	1.5R	6	50	4	2
030206	3	1.5R	6	50	6	2
035204	3.5	1.75R	7	50	4	2
035206	3.5	1.75R	7	50	6	2
040204	4	2R	8	50	4	2
040206	4	2R	8	50	6	2
045206	4.5	2.25R	9	50	6	2
050206	5	2.5R	10	50	6	2
055206	5.5	2.75R	11	50	6	2
060206	6	3R	12	50	6	2
070208	7	3.5R	14	60	8	2
080208	8	4R	16	60	8	2
090210	9	4.5R	18	75	10	2
100210	10	5R	20	75	10	2
110212	11	5.5R	22	75	12	2
120212	12	6R	24	75	12	2
140216	14	7R	28	100	16	2
160216	16	8R	32	100	16	2
180220	18	9R	36	100	20	2
200220	20	10R	40	100	20	2

■ 建議售價

668V-AW		668V-A		888V-A	
(NT)	(USD)	(NT)	(USD)	(NT)	(USD)
350	11.2	400	12.7	520	16.6
350	11.2	400	12.7	520	16.6
470	15.0	530	16.9	690	22.0
350	11.2	400	12.7	520	16.6
350	11.2	400	12.7	520	16.6
470	15.0	530	16.9	690	22.0
350	11.2	400	12.7	520	16.6
350	11.2	400	12.7	520	16.6
470	15.0	530	16.9	690	22.0
350	11.2	400	12.7	520	16.6
350	11.2	400	12.7	520	16.6
470	15.0	530	16.9	690	22.0
350	11.2	400	12.7	520	16.6
350	11.2	400	12.7	520	16.6
470	15.0	530	16.9	690	22.0
350	11.2	400	12.7	520	16.6
470	15.0	530	16.9	690	22.0
350	11.2	400	12.7	520	16.6
470	15.0	530	16.9	690	22.0
470	15.0	530	16.9	690	22.0
470	15.0	530	16.9	690	22.0
470	15.0	530	16.9	690	22.0
470	15.0	530	16.9	690	22.0
930	29.6	1050	33.4	1370	43.5
930	29.6	1050	33.4	1370	43.5
1460	46.4	1560	49.6	2030	64.5
1460	46.4	1560	49.6	2030	64.5
2080	66.1	2250	71.5	2930	93.1
2080	66.1	2250	71.5	2930	93.1
4430	140.7	4620	146.7	6020	191.2
4430	140.7	4620	146.7	6020	191.2
7530	239.1	7920	251.5	10300	327.0
7530	239.1	7920	251.5	10300	327.0



★ 切削條件表參考請見第230頁
★ Cutting condition please refer page 230.

BALL NOSE - 4 FLUTES
/4刃球型立銑刀

> 668V-AAW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 4 Flute | Dry | Wet

> 668V-AA

Grain Size:0.6μm
Cobalt%:12%

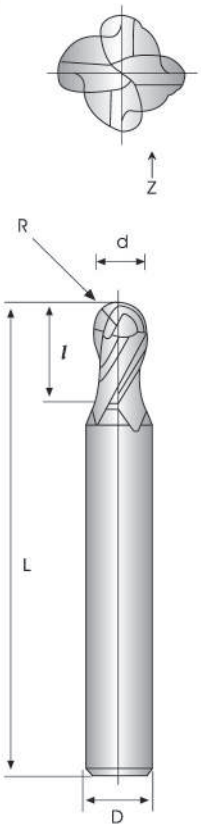
HRC ▸45 | MG | 30° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

> 888V-AA

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 30° Helix Angle | 4 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○



形狀寸表法 Dimensions / 建議售價

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	全長 L	柄徑 D	刃數 Z	668V-AAW (NT)	668V-AAW (USD)	668V-AA (NT)	668V-AA (USD)	888V-AA (NT)	888V-AA (USD)
010403	1	0.5R	2	50	3	4	350	11.2	400	12.7	520	16.6
010404	1	0.5R	2	50	4	4	350	11.2	400	12.7	520	16.6
010406	1	0.5R	2	50	6	4	470	15.0	530	16.9	690	22.0
015403	1.5	0.75R	3	50	3	4	350	11.2	400	12.7	520	16.6
015404	1.5	0.75R	3	50	4	4	350	11.2	400	12.7	520	16.6
015406	1.5	0.75R	3	50	6	4	470	15.0	530	16.9	690	22.0
020403	2	1R	4	50	3	4	350	11.2	400	12.7	520	16.6
020404	2	1R	4	50	4	4	350	11.2	400	12.7	520	16.6
020406	2	1R	4	50	6	4	470	15.0	530	16.9	690	22.0
025404	2.5	1.25R	5	50	4	4	350	11.2	400	12.7	520	16.6
025406	2.5	1.25R	5	50	6	4	470	15.0	530	16.9	690	22.0
030403	3	1.5R	6	50	3	4	350	11.2	400	12.7	520	16.6
030404	3	1.5R	6	50	4	4	350	11.2	400	12.7	520	16.6
030406	3	1.5R	6	50	6	4	470	15.0	530	16.9	690	22.0
035404	3.5	1.75R	7	50	4	4	350	11.2	400	12.7	520	16.6
035406	3.5	1.75R	7	50	6	4	470	15.0	530	16.9	690	22.0
040404	4	2R	8	50	4	4	350	11.2	400	12.7	520	16.6
040406	4	2R	8	50	6	4	470	15.0	530	16.9	690	22.0
045406	4.5	2.25R	9	50	6	4	470	15.0	530	16.9	690	22.0
050406	5	2.5R	10	50	6	4	470	15.0	530	16.9	690	22.0
055406	5.5	2.75R	11	50	6	4	470	15.0	530	16.9	690	22.0
060406	6	3R	12	50	6	4	470	15.0	530	16.9	690	22.0
070408	7	3.5R	14	60	8	4	930	29.6	1050	33.4	1370	43.5
080408	8	4R	16	60	8	4	930	29.6	1050	33.4	1370	43.5
090410	9	4.5R	18	75	10	4	1460	46.4	1560	49.6	2030	64.5
100410	10	5R	20	75	10	4	1460	46.4	1560	49.6	2030	64.5
110412	11	5.5R	22	75	12	4	2080	66.1	2250	71.5	2930	93.1
120412	12	6R	24	75	12	4	2080	66.1	2250	71.5	2930	93.1
140416	14	7R	28	100	16	4	4430	140.7	4620	146.7	6020	191.2
160416	16	8R	32	100	16	4	4430	140.7	4620	146.7	6020	191.2
180420	18	9R	36	100	20	4	7530	239.1	7920	251.5	10300	327.0
200420	20	10R	40	100	20	4	7530	239.1	7920	251.5	10300	327.0

* 切削條件表參考請見第231頁
* Cutting condition please refer page 231.

BALL NOSE LONG SHANK - 2 FLUTES
/2刃長柄球型立銑刀

>668V-2ALW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Dry | Wet

>668V-2AL

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

>888V-2AL

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

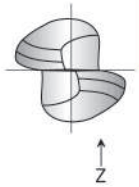
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

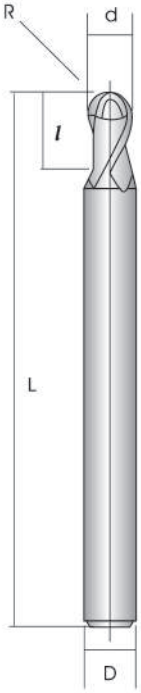
形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	角徑 R	刃長 l	全長 L	柄徑 D	刃數 Z	668V-2ALW (NT)	668V-2ALW (USD)	668V-2AL (NT)	668V-2AL (USD)	888V-2AL (NT)	888V-2AL (USD)
0102075	1	0.5R	2	75	6	2	590	18.8	680	21.6	890	28.3
0102100	1	0.5R	2	100	6	2	720	22.9	790	25.1	1030	32.7
0152075	1.5	0.75R	3	75	6	2	590	18.8	680	21.6	890	28.3
0152100	1.5	0.75R	3	100	6	2	720	22.9	790	25.1	1030	32.7
0202075	2	1R	4	75	6	2	590	18.8	680	21.6	890	28.3
0202100	2	1R	4	100	6	2	720	22.9	790	25.1	1030	32.7
0252075	2.5	1.25R	5	75	6	2	590	18.8	680	21.6	890	28.3
0252100	2.5	1.25R	5	100	6	2	720	22.9	790	25.1	1030	32.7
0302075	3	1.5R	6	75	6	2	590	18.8	680	21.6	890	28.3
0302100	3	1.5R	6	100	6	2	720	22.9	790	25.1	1030	32.7
0352075	3.5	1.75R	7	75	6	2	590	18.8	680	21.6	890	28.3
0352100	3.5	1.75R	7	100	6	2	720	22.9	790	25.1	1030	32.7
0402075	4	2R	8	75	6	2	590	18.8	680	21.6	890	28.3
0402100	4	2R	8	100	6	2	720	22.9	790	25.1	1030	32.7
0502075	5	2.5R	10	75	6	2	590	18.8	680	21.6	890	28.3
0502100	5	2.5R	10	100	6	2	720	22.9	790	25.1	1030	32.7
0602075	6	3R	12	75	6	2	590	18.8	680	21.6	890	28.3
0602100	6	3R	12	100	6	2	720	22.9	790	25.1	1030	32.7
0602150	6	3R	12	150	6	2	1080	34.3	1270	40.4	1660	52.7
0802075	8	4R	16	75	8	2	1100	35.0	1190	37.8	1550	49.3
0802100	8	4R	16	100	8	2	1320	42.0	1500	47.7	1960	62.3
0802150	8	4R	16	150	8	2	1850	58.8	2080	66.1	2700	85.8
1002100	10	5R	20	100	10	2	1790	56.9	1980	62.9	2580	82.0
1002150	10	5R	20	150	10	2	2280	72.4	2510	79.7	3270	103.9
1002200	10	5R	20	200	10	2	3040	96.6	3300	104.8	4300	136.6
1202100	12	6R	24	100	12	2	2430	77.2	2620	83.2	3410	108.3
1202150	12	6R	24	150	12	2	2780	88.3	2980	94.7	3880	123.2
1202200	12	6R	24	200	12	2	4130	131.2	4520	143.5	5870	186.4
1602150	16	8R	32	150	16	2	5420	172.1	5750	182.6	7480	237.5
1602200	16	8R	32	200	16	2	7300	231.8	7660	243.2	9960	316.2





* 切削條件表參考請見第232頁
* Cutting condition please refer page 232.

BALL NOSE -TAPER NECK - 2 FLUTES
/深溝斜度頸球型立銑刀

> 668L-S

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 888L-S

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

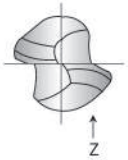
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

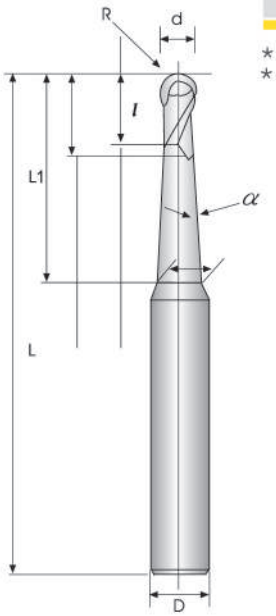
形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	角徑 R	直徑 d	刃長 l	柄徑 D	錐度 α	刃數 Z	全長 L	有效長 L1	668L-S (NT)	668L-S (USD)	888L-S (NT)	888L-S (USD)
0101	0.5R	1	2	6	1°	2	75	30	1235	39.3	1610	51.2
0151	0.75R	1.5	3	6	1°	2	75	30	1235	39.3	1610	51.2
0201	1R	2	4	6	1°	2	75	30	1235	39.3	1610	51.2
0205	1R	2	12	8	5°	2	100	30	2260	71.8	2940	93.4
0301	1.5R	3	6	6	1°	2	75	30	1235	39.3	1610	51.2
0305	1.5R	3	8	8	5°	2	100	30	2260	71.8	2940	93.4
0401	2R	4	8	6	1°	2	75	30	1235	39.3	1610	51.2
0405	2R	4	10	8	5°	2	100	30	2260	71.8	2940	93.4
0605	3R	6	12	10	5°	2	100	30	2640	83.9	3440	109.3
0603	3R	6	16	12	3°	2	150	30	3770	119.7	4910	155.9
0805	4R	8	16	12	5°	2	100	30	3200	101.6	4160	132.1
0803	4R	8	20	12	3°	2	150	30	3770	119.7	4910	155.9

建議售價





★ 切削條件表參考請見第233頁
★ Cutting condition please refer page 233.

BALL NOSE - FOR COPPER / ALUMINUM - 2 FLUTES
/ 2 刃銅鋁合金專用球型立銑刀

> 668V-2EX

Grain Size:0.6μm
Cobalt%:12%

MG
25° Helix Angle
2 Flute
Dry
Wet

> 668V-2EXD

Grain Size:0.6μm
Cobalt%:12%

MG
25° Helix Angle
2 Flute
DLC
Dry
Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

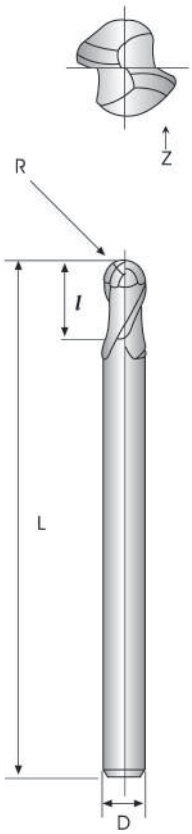
單位(Unit):mm

型號 MODE	角徑 R	直徑 d	刃長 *l*	柄徑 D	刃數 Z	全長 L
0102	0.5R	1	2	4	2	50
0152	0.75R	1.5	3	4	2	50
0202	1R	2	4	4	2	50
0252	1.25R	2.5	5	4	2	50
0302	1.5R	3	6	4	2	50
0352	1.75R	3.5	7	4	2	50
0402	2R	4	8	4	2	50
0452	2.25R	4.5	9	6	2	50
0502	2.5R	5	10	6	2	50
0552	2.75R	5.5	11	6	2	50
0602	3R	6	12	6	2	50
0802	4R	8	16	8	2	60
1002	5R	10	20	10	2	75
1202	6R	12	24	12	2	75

* 切削條件表參考請見第234頁
* Cutting condition please refer page 234.

建議售價

668V-2EX (NT)	668V-2EX (USD)	668V-2EXD (NT)	668V-2EXD (USD)
530	16.9	930	29.6
530	16.9	930	29.6
530	16.9	930	29.6
530	16.9	930	29.6
530	16.9	930	29.6
530	16.9	930	29.6
530	16.9	930	29.6
660	21.0	1130	35.9
660	21.0	1130	35.9
660	21.0	1130	35.9
660	21.0	1130	35.9
1260	40.0	2160	68.6
1760	55.9	2980	94.7
2540	80.7	4170	132.4



BALL NOSE LONG NECK - 2 FLUTES
/2刃深溝專用長頸球型立銑刀

> 668V-DW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Dry | Wet

> 668V-D

Grain Size:0.6μm
Cobalt%:12%

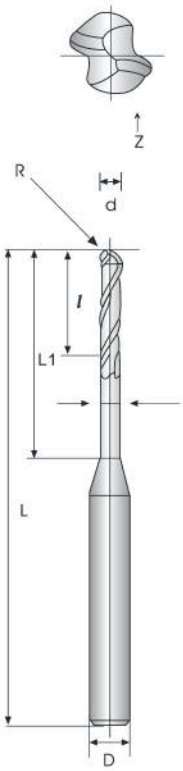
HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 888V-D

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○



形狀寸表法 Dimensions

單位(Unit):mm

建議售價

型號 MODE	角徑 R	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1	668V-DW (NT)	668V-DW (USD)	668V-D (NT)	668V-D (USD)	888V-D (NT)	888V-D (USD)
05022	0.25R	0.5	0.75	4	2	50	2	990	31.5	1090	34.7	1420	45.1
05042	0.25R	0.5	0.75	4	2	50	4	990	31.5	1090	34.7	1420	45.1
05062	0.25R	0.5	0.75	4	2	50	6	990	31.5	1090	34.7	1420	45.1
06022	0.3R	0.6	0.9	4	2	50	2	920	29.3	1020	32.4	1320	42.0
06042	0.3R	0.6	0.9	4	2	50	4	920	29.3	1020	32.4	1320	42.0
06062	0.3R	0.6	0.9	4	2	50	6	920	29.3	1020	32.4	1320	42.0
08042	0.4R	0.8	1.2	4	2	50	4	920	29.3	1020	32.4	1320	42.0
08062	0.4R	0.8	1.2	4	2	50	6	920	29.3	1020	32.4	1320	42.0
08082	0.4R	0.8	1.2	4	2	50	8	920	29.3	1020	32.4	1320	42.0
10062	0.5R	1	1.5	4	2	50	6	680	21.6	750	23.9	980	31.2
10082	0.5R	1	1.5	4	2	50	8	680	21.6	750	23.9	980	31.2
10102	0.5R	1	1.5	4	2	50	10	680	21.6	750	23.9	980	31.2
10122	0.5R	1	1.5	4	2	50	12	680	21.6	750	23.9	980	31.2
12062	0.6R	1.2	1.8	4	2	50	6	920	29.3	1020	32.4	1320	42.0
12082	0.6R	1.2	1.8	4	2	50	8	920	29.3	1020	32.4	1320	42.0
12102	0.6R	1.2	1.8	4	2	50	10	920	29.3	1020	32.4	1320	42.0
12122	0.6R	1.2	1.8	4	2	50	12	920	29.3	1020	32.4	1320	42.0
14062	0.7R	1.4	2.1	4	2	50	6	920	29.3	1020	32.4	1320	42.0
14102	0.7R	1.4	2.1	4	2	50	10	920	29.3	1020	32.4	1320	42.0
14162	0.7R	1.4	2.1	4	2	50	16	920	29.3	1020	32.4	1320	42.0
15062	0.75R	1.5	2.3	4	2	50	6	680	21.6	750	23.9	980	31.2
15082	0.75R	1.5	2.3	4	2	50	8	680	21.6	750	23.9	980	31.2
15102	0.75R	1.5	2.3	4	2	50	10	680	21.6	750	23.9	980	31.2
15122	0.75R	1.5	2.3	4	2	50	12	680	21.6	750	23.9	980	31.2
15142	0.75R	1.5	2.3	4	2	50	14	680	21.6	750	23.9	980	31.2
15162	0.75R	1.5	2.3	4	2	50	16	680	21.6	750	23.9	980	31.2
15182	0.75R	1.5	2.3	4	2	50	18	680	21.6	750	23.9	980	31.2
15202	0.75R	1.5	2.3	4	2	50	20	680	21.6	750	23.9	980	31.2
16062	0.8R	1.6	2.4	4	2	50	6	920	29.3	1020	32.4	1320	42.0
16082	0.8R	1.6	2.4	4	2	50	8	920	29.3	1020	32.4	1320	42.0

* 切削條件表參考請見第235頁
* Cutting condition please refer page 235.

BALL NOSE LONG NECK - 2 FLUTES
/2刃深溝專用長頸球型立銑刀

> 668V-DW

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Dry | Wet

> 668V-D

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 888V-D

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

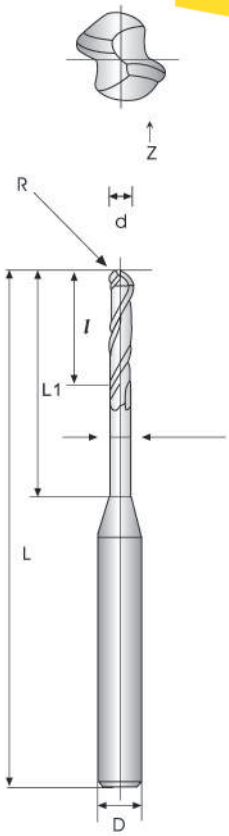
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit):mm

建議售價

型號 MODE	角徑 R	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1	668V-DW (NT)	668V-DW (USD)	668V-D (NT)	668V-D (USD)	888V-D (NT)	888V-D (USD)
16102	0.8R	1.6	2.4	4	2	50	10	920	29.3	1020	32.4	1320	42.0
16122	0.8R	1.6	2.4	4	2	50	12	920	29.3	1020	32.4	1320	42.0
16142	0.8R	1.6	2.4	4	2	50	14	920	29.3	1020	32.4	1320	42.0
16162	0.8R	1.6	2.4	4	2	50	16	920	29.3	1020	32.4	1320	[illegible]
16182	0.8R	1.6	2.4	4	2	50	18	920	29.3	1020	32.4	1320	[illegible]
16202	0.8R	1.6	2.4	4	2	50	20	920	29.3	1020	32.4	1320	42.0
18082	0.9R	1.8	2.7	4	2	50	8	920	29.3	1020	32.4	1320	42.0
18142	0.9R	1.8	2.7	4	2	50	14	920	29.3	1020	32.4	1320	42.0
18202	0.9R	1.8	2.7	4	2	50	20	920	29.3	1020	32.4	1320	42.0
20082	1R	2	3	4	2	50	8	680	21.6	750	23.9	980	31.2
20102	1R	2	3	4	2	50	10	680	21.6	750	23.9	980	31.2
20122	1R	2	3	4	2	50	12	680	21.6	750	23.9	980	31.2
20142	1R	2	3	4	2	50	14	680	21.6	750	23.9	980	31.2
20162	1R	2	3	4	2	50	16	680	21.6	750	23.9	980	31.2
20182	1R	2	3	4	2	50	18	680	21.6	750	23.9	980	31.2
20202	1R	2	3	4	2	50	20	680	21.6	750	23.9	980	31.2
25082	1.25R	2.5	4	4	2	50	8	680	21.6	750	23.9	980	31.2
25122	1.25R	2.5	4	4	2	50	12	680	21.6	750	23.9	980	31.2
25162	1.25R	2.5	4	4	2	50	16	680	21.6	750	23.9	980	31.2
25202	1.25R	2.5	4	4	2	50	20	680	21.6	750	23.9	980	31.2
30102	1.5R	3	4.5	6	2	50	10	800	25.4	880	28.0	1150	36.6
30122	1.5R	3	4.5	6	2	50	12	800	25.4	880	28.0	1150	36.6
30162	1.5R	3	4.5	6	2	60	16	840	26.7	930	29.6	1210	38.5
30202	1.5R	3	4.5	6	2	60	20	840	26.7	930	29.6	1210	38.5
30252	1.5R	3	4.5	6	2	75	25	920	29.3	1020	32.4	1320	42.0
40122	2R	4	6	6	2	50	12	800	25.4	880	28.0	1150	36.6
40162	2R	4	6	6	2	60	16	840	26.7	930	29.6	1210	38.5
40202	2R	4	6	6	2	75	20	920	29.3	1020	32.4	1320	42.0
40252	2R	4	6	6	2	75	25	920	29.3	1020	32.4	1320	42.0
40302	2R	4	6	6	2	75	30	920	29.3	1020	32.4	1320	42.0



* 切削條件表參考請見第235頁
* Cutting condition please refer page 235.

BALL NOSE - FOR COPPER / ALUMINUM - 2 FLUTES

/2刃銅鋁用高速球型立銑刀

> 668V-I

Grain Size:0.6μm
Cobalt%:12%

MG

50° Helix Angle | 2 Flute | DLC

Dry | Wet

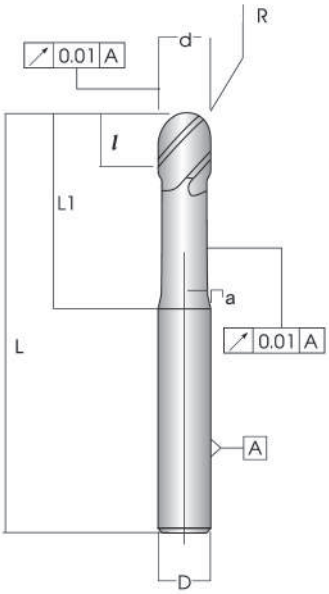
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	角徑 R	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	有效長 L1	建議售價 668V-I (NT)	(USD
02008	1R	2	1.5	6	2	50	8	1580	50.2
02510	1.25R	2.5	2	6	2	50	10	1580	50.2
03012	1.5R	3	2.5	6	2	50	12	1580	50.2
04016	2R	4	3.5	6	2	50	16	1580	50.2
05020	2.5R	5	4.5	6	2	60	20	1580	50.2
06025	3R	6	5.5	6	2	60	25	1580	50.2
08030	4R	8	7	8	2	75	30	2690	85.4
10035	5R	10	8.5	10	2	75	35	3770	119.7
12040	6R	12	10.5	12	2	75	40	4830	153.4
16050	8R	16	14	16	2	100	50	11980	380.4
20050	10R	20	17	20	2	100	50	16640	528.3

* 切削條件表參考請見第236頁
* Cutting condition please refer page 236.



TAPERED SQUARE TYPE - 2 FLUTES
/2刃斜度立銑刀

> 662L-S

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 882L-S

Grain Size:0.4μm
Cobalt%:12%

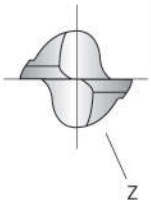
HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

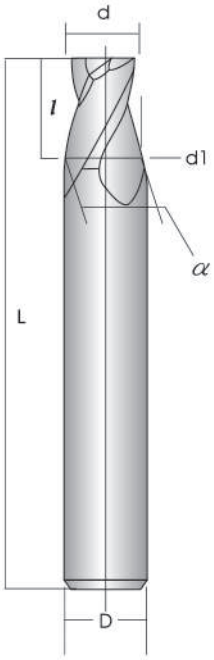
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit)：mm

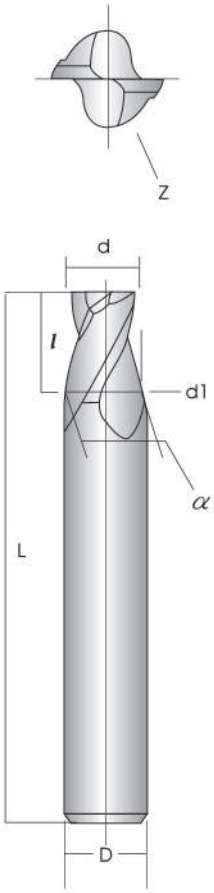
型號 MODE	直徑 d	刃長 l	柄徑 D	錐度 α	頂錐度 d1	刃數 Z	全長 L	662L-S (NT)	662L-S (USD)	882L-S (NT)	882L-S (USD)
005005	0.5	2	4	30"	0.53	2	50	1340	42.6	1750	55.6
005010	0.5	2	4	1°	0.57	2	50	1340	42.6	1750	55.6
005015	0.5	2	4	1°30"	0.60	2	50	1340	42.6	1750	55.6
005020	0.5	2	4	2°	0.64	2	50	1340	42.6	1750	55.6
005025	0.5	2	4	2°30"	0.67	2	50	1340	42.6	1750	55.6
005030	0.5	2	4	3°	0.71	2	50	1340	42.6	1750	55.6
005050	0.5	2	4	5°	0.85	2	50	1340	42.6	1750	55.6
005070	0.5	2	4	7°	0.99	2	50	1340	42.6	1750	55.6
005100	0.5	2	4	10°	1.21	2	50	1340	42.6	1750	55.6
010005	1	4	4	30"	1.07	2	50	740	23.5	970	30.8
010010	1	4	4	1°	1.14	2	50	740	23.5	970	30.8
010015	1	4	4	1°30"	1.21	2	50	740	23.5	970	30.8
010020	1	4	4	2°	1.28	2	50	740	23.5	970	30.8
010025	1	4	4	2°30"	1.35	2	50	740	23.5	970	30.8
010030	1	4	4	3°	1.42	2	50	740	23.5	970	30.8
010050	1	4	4	5°	1.70	2	50	1100	35.0	1430	45.4
010070	1	4	4	7°	1.98	2	50	1100	35.0	1430	45.4
010100	1	4	4	10°	2.41	2	50	1100	35.0	1430	45.4
015005	1.5	5	4	30"	1.59	2	50	740	23.5	970	30.8
015010	1.5	5	4	1°	1.67	2	50	740	23.5	970	30.8
015015	1.5	5	4	1°30"	1.76	2	50	740	23.5	970	30.8
015020	1.5	5	4	2°	1.85	2	50	740	23.5	970	30.8
015025	1.5	5	4	2°30"	1.93	2	50	740	23.5	970	30.8
015030	1.5	5	4	3°	2.02	2	50	740	23.5	970	30.8
015050	1.5	5	4	5°	2.37	2	50	1100	35.0	1430	45.4
015070	1.5	5	4	7°	2.73	2	50	1100	35.0	1430	45.4
015100	1.5	5	4	10°	3.26	2	50	1100	35.0	1430	45.4
020005	2	6	4	30"	2.10	2	50	740	23.5	970	30.8
020010	2	6	4	1°	2.21	2	50	740	23.5	970	30.8
020015	2	6	4	1°30"	2.31	2	50	740	23.5	970	30.8
020020	2	6	4	2°	2.41	2	50	740	23.5	970	30.8
020025	2	6	4	2°30"	2.52	2	50	740	23.5	970	30.8
020030	2	6	4	3°	2.62	2	50	740	23.5	970	30.8
020050	2	6	4	5°	3.05	2	50	1100	35.0	1430	45.4
020070	2	6	4	7°	3.47	2	50	1100	35.0	1430	45.4
020100	2	6	6	10°	4.11	2	50	1100	35.0	1430	45.4
025005	2.5	8	4	30"	2.64	2	50	740	23.5	970	30.8





TAPERED SQUARE TYPE - 2 FLUTES

/2刃斜度立銑刀



形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	錐度 α	頂錐度 d1	刃數 Z	全長 L	662L-S (NT)	662L-S (USD)	882L-S (NT)	882L-S (USD)
025010	2.5	8	4	1°	2.78	2	50	740	23.5	970	30.8
025015	2.5	8	4	1°30"	2.91	2	50	740	23.5	970	30.8
025020	2.5	8	4	2°	3.05	2	50	740	23.5	970	30.8
025025	2.5	8	4	2°30"	3.20	2	50	740	23.5	970	30.8
025030	2.5	8	4	3°	3.33	2	50	740	23.5	970	30.8
025050	2.5	8	4	5°	3.90	2	50	1100	35.0	1430	45.4
025070	2.5	8	6	7°	4.46	2	50	1100	35.0	1430	45.4
025100	2.5	8	6	10°	5.32	2	50	1100	35.0	1430	45.4
030005	3	10	6	30"	3.17	2	50	910	28.9	1190	37.8
030010	3	10	6	1°	3.35	2	50	910	28.9	1190	37.8
030015	3	10	6	1°30"	3.52	2	50	910	28.9	1190	37.8
030020	3	10	6	2°	3.69	2	50	910	28.9	1190	37.8
030025	3	10	6	2°30"	3.87	2	50	910	28.9	1190	37.8
030030	3	10	6	3°	4.05	2	50	910	28.9	1190	37.8
030050	3	10	6	5°	4.72	2	50	1190	37.8	1550	49.3
030070	3	10	6	7°	5.45	2	50	1190	37.8	1550	49.3
030100	3	10	8	10°	6.53	2	60	2210	70.2	2880	91.5
040005	4	15	6	30"	4.26	2	50	910	28.9	1190	37.8
040010	4	15	6	1°	4.52	2	50	910	28.9	1190	37.8
040015	4	15	6	1°30"	4.79	2	50	910	28.9	1190	37.8
040020	4	15	6	2°	5.04	2	50	910	28.9	1190	37.8
040025	4	15	6	2°30"	5.31	2	50	910	28.9	1190	37.8
040030	4	15	6	3°	5.57	2	50	910	28.9	1190	37.8
040050	4	15	8	5°	6.62	2	60	2060	65.4	2680	85.1
040070	4	15	8	7°	7.68	2	60	2390	75.9	3110	98.8
050005	5	20	6	30"	5.34	2	60	1190	37.8	1550	49.3
050010	5	20	6	1°	5.70	2	60	1190	37.8	1550	49.3
050015	5	20	8	1°30"	6.04	2	60	1610	51.2	2100	66.7
050020	5	20	8	2°	6.39	2	60	1610	51.2	2100	66.7
050025	5	20	8	2°30"	6.74	2	60	1610	51.2	2100	66.7
050030	5	20	8	3°	7.10	2	60	1610	51.2	2100	66.7
050050	5	20	10	5°	8.50	2	75	2210	70.2	2880	91.5
050070	5	20	10	7°	9.91	2	75	2540	80.7	3300	104.8
060005	6	20	8	30"	6.35	2	60	1610	51.2	2100	66.7
060010	6	20	8	1°	6.70	2	60	1610	51.2	2100	66.7
060015	6	20	8	1°30"	7.05	2	60	1610	51.2	2100	66.7
060020	6	20	8	2°	7.40	2	60	1610	51.2	2100	66.7
060025	6	20	8	2°30"	7.75	2	60	2090	66.4	2730	86.7
060030	6	20	10	3°	8.10	2	75	2090	66.4	2730	86.7
060050	6	20	10	5°	9.50	2	75	2610	82.9	3400	108.0
080005	8	25	10	30"	8.44	2	75	2610	82.9	3400	108.0
080010	8	25	10	1°	8.87	2	75	2610	82.9	3400	108.0
080015	8	25	10	1°30"	9.31	2	75	2610	82.9	3400	108.0
080020	8	25	10	2°	9.74	2	75	2610	82.9	3400	108.0
080025	8	25	12	2°30"	10.15	2	75	3480	110.5	4530	143.9
080030	8	25	12	3°	10.62	2	75	3480	110.5	4530	143.9
080050	8	25	16	5°	12.37	2	100	4060	128.9	5280	167.7
100005	10	35	12	30"	10.61	2	100	3640	115.6	4730	150.2
100010	10	35	12	1°	11.22	2	100	3640	115.6	4730	150.2
100015	10	35	12	1°30"	11.83	2	100	3640	115.6	4730	150.2
100020	10	35	16	2°	12.44	2	100	4410	140.0	5740	182.3
100025	10	35	16	2°30"	13.06	2	100	4840	152.4	6240	198.1
100030	10	35	16	3°	13.67	2	100	5150	163.5	6700	212.7
100050	10	35	20	5°	16.12	2	100	6450	204.8	8390	266.4

TAPERED SQUARE TYPE LONG FLUTE- 2 FLUTES
/2刃長刃斜度立銑刀

> 662L-SL

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 882L-SL

Grain Size:0.4μm
Cobalt%:12%

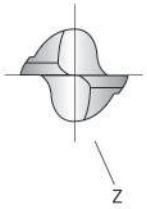
HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

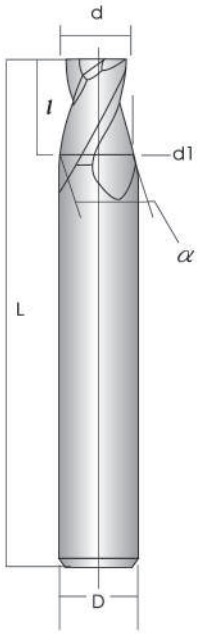
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	錐度 α	頂錐度 d1	刃數 Z	全長 L	662L-SL (NT)	662L-SL (USD)	882L-SL (NT)	882L-SL (USD)
010005	1	10	4	30"	1.17	2	50	1330	42.3	1730	55.0
010010	1	10	4	1°	1.35	2	50	1330	42.3	1730	55.0
010015	1	10	4	1°30"	1.52	2	50	1330	42.3	1730	55.0
010020	1	10	4	2°	1.70	2	50	1330	42.3	1730	55.0
010025	1	10	4	2°30"	1.87	2	50	1330	42.3	1730	55.0
010030	1	10	4	3°	2.05	2	50	1330	42.3	1730	55.0
010050	1	10	4	5°	2.74	2	50	1730	55.0	2250	71.5
010070	1	10	4	7°	3.44	2	50	1730	55.0	2250	71.5
015005	1.5	10	4	30"	1.67	2	50	1200	38.1	1560	49.6
015010	1.5	10	4	1°	1.85	2	50	1200	38.1	1560	49.6
015015	1.5	10	4	1°30"	2.02	2	50	1200	38.1	1560	49.6
015020	1.5	10	4	2°	2.20	2	50	1200	38.1	1560	49.6
015025	1.5	10	4	2°30"	2.37	2	50	1200	38.1	1560	49.6
015030	1.5	10	4	3°	2.55	2	50	1200	38.1	1560	49.6
015050	1.5	10	4	5°	3.24	2	50	1730	55.0	2250	71.5
015070	1.5	10	4	7°	3.94	2	50	1730	55.0	2250	71.5
020005	2	13	4	30"	2.22	2	50	1200	38.1	1560	49.6
020010	2	13	4	1°	2.45	2	50	1200	38.1	1560	49.6
020015	2	13	4	1°30"	2.68	2	50	1200	38.1	1560	49.6
020020	2	13	4	2°	2.90	2	50	1200	38.1	1560	49.6
020025	2	13	4	2°30"	3.13	2	50	1200	38.1	1560	49.6
020030	2	13	4	3°	3.36	2	50	1200	38.1	1560	49.6
020050	2	13	6	5°	4.27	2	50	1730	55.0	2250	71.5
020070	2	13	6	7°	5.17	2	50	1730	55.0	2250	71.5
025005	2.5	15	4	30"	2.76	2	50	1330	42.3	1730	55.0
025010	2.5	15	4	1°	3.03	2	50	1330	42.3	1730	55.0
025015	2.5	15	4	1°30"	3.29	2	50	1330	42.3	1730	55.0
025020	2.5	15	4	2°	3.56	2	50	1330	42.3	1730	55.0
025025	2.5	15	4	2°30"	3.81	2	50	1330	42.3	1730	55.0
025030	2.5	15	6	3°	4.07	2	50	1330	42.3	1730	55.0





* 切削條件表參考請見第237頁
* Cutting condition please refer page 237.

TAPERED SQUARE TYPE LONG FLUTE- 2 FLUTES
/2刃長刃斜度立銑刀

> 662L-SL

Grain Size:0.6μm
Cobalt%:12%

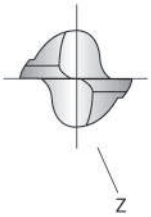
HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

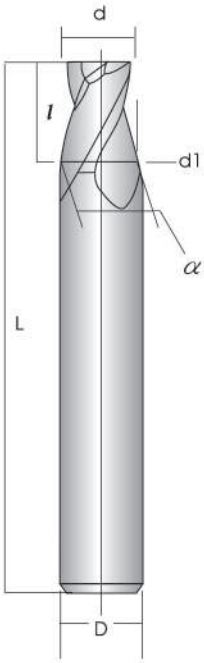
> 882L-SL

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○





形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	錐度 α	頂錐度 d1	刃數 Z	全長 L	662L-SL (NT)	662L-SL (USD)	882L-SL (NT)	882L-SL (USD)
025050	2.5	15	6	5°	5.13	2	50	1730	55.0	2250	71.5
030005	3	20	6	30"	3.35	2	60	1470	46.7	1920	61.0
030010	3	20	6	1°	3.70	2	60	1470	46.7	1920	61.0
030015	3	20	6	1°30"	4.05	2	60	1470	46.7	1920	61.0
030020	3	20	6	2°	4.39	2	60	1470	46.7	1920	61.0
030025	3	20	6	2°30"	4.65	2	60	1470	46.7	1920	61.0
030030	3	20	6	3°	5.10	2	60	1470	46.7	1920	61.0
030050	3	20	8	5°	6.50	2	60	2000	63.5	2600	82.6
040005	4	25	6	30"	4.44	2	60	1750	55.6	2280	72.4
040010	4	25	6	1°	4.88	2	60	1750	55.6	2280	72.4
040015	4	25	6	1°30"	5.13	2	60	1750	55.6	2280	72.4
040020	4	25	6	2°	5.75	2	60	1750	55.6	2280	72.4
040025	4	25	8	2°30"	6.19	2	60	2100	66.7	2740	87.0
040030	4	25	8	3°	6.62	2	60	2600	82.6	3380	107.4
040050	4	25	10	5°	8.38	2	75	2920	92.7	3840	120.7
050005	5	30	8	30"	5.52	2	75	2150	68.3	2840	88.9
050010	5	30	8	1°	6.05	2	75	2150	68.3	2840	88.9
050015	5	30	8	1°30"	6.57	2	75	2600	82.6	3380	107.4
050020	5	30	8	2°	7.09	2	75	2600	82.6	3380	107.4
050025	5	30	8	2°30"	7.62	2	75	2600	82.6	3380	107.4
050030	5	30	10	3°	8.14	2	75	2600	82.6	3380	107.4
050050	5	30	12	5°	10.25	2	75	3470	110.2	4520	143.5
060005	6	35	8	30"	6.61	2	75	2850	90.5	3710	117.8
060010	6	35	8	1°	7.22	2	75	2850	90.5	3710	117.8
060015	6	35	8	1°30"	7.83	2	75	2850	90.5	3710	117.8
060020	6	35	10	2°	8.44	2	75	3470	110.2	4520	143.5
060025	6	35	10	2°30"	9.05	2	100	3860	122.6	5020	159.4
060030	6	35	10	3°	9.67	2	100	4060	128.9	5280	167.7
060050	6	35	16	5°	12.12	2	100	5510	175.0	7170	227.7

★ 切削條件表參考請見第237頁
★ Cutting condition please refer page 237.

TAPERED BALL NOSE - 2 FLUTES
/2刃球型斜度立銑刀

> 668V-SX

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 888V-SX

Grain Size:0.4μm
Cobalt%:12%

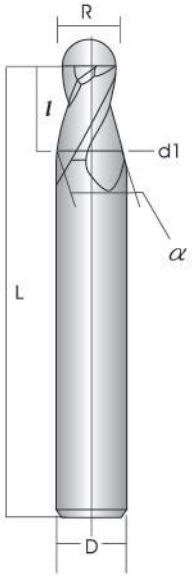
HRC ▸55 | SMG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	角徑 R	刃長 l	柄徑 D	大徑 d1	單角 α	刃數 Z	全長 L	668V-SX (NT)	668V-SX (USD)	888V-SX (NT)	888V-SX (USD)
050005	0.5R	10	4	1.17	30"	2	50	1870	59.4	2440	77.5
050010	0.5R	10	4	1.35	1°	2	50	1870	59.4	2440	77.5
050015	0.5R	10	4	1.52	1°30"	2	50	1870	59.4	2440	77.5
050020	0.5R	10	4	1.70	2°	2	50	1870	59.4	2440	77.5
050030	0.5R	10	4	1.87	3°	2	50	1870	59.4	2440	77.5
050040	0.5R	10	4	2.05	4°	2	50	1870	59.4	2440	77.5
050050	0.5R	10	4	2.74	5°	2	50	1870	59.4	2440	77.5
050070	0.5R	10	4	3.44	7°	2	50	1870	59.4	2440	77.5
050100	0.5R	10	6	4.51	10°	2	50	1870	59.4	2440	77.5
075005	0.75R	10	4	1.67	30"	2	50	1820	57.8	2370	75.3
075010	0.75R	10	4	1.85	1°	2	50	1820	57.8	2370	75.3
075015	0.75R	10	4	2.02	1°30"	2	50	1820	57.8	2370	75.3
075020	0.75R	10	4	2.20	2°	2	50	1820	57.8	2370	75.3
075030	0.75R	10	4	2.37	3°	2	50	1820	57.8	2370	75.3
075040	0.75R	10	4	2.55	4°	2	50	1820	57.8	2370	75.3
075050	0.75R	10	4	3.24	5°	2	50	1820	57.8	2370	75.3
075070	0.75R	10	4	3.94	7°	2	50	1820	57.8	2370	75.3
075100	0.75R	10	6	5.02	10°	2	50	2350	74.7	3060	97.2
100005	1R	13	4	2.22	30"	2	50	1660	52.7	2160	68.6
100010	1R	13	4	2.45	1°	2	50	1660	52.7	2160	68.6
100015	1R	13	4	2.68	1°30"	2	50	1660	52.7	2160	68.6
100020	1R	13	4	3.90	2°	2	50	1660	52.7	2160	68.6
100030	1R	13	4	3.13	3°	2	50	1660	52.7	2160	68.6



★ 切削條件表參考請見第238頁
★ Cutting condition please refer page 238.

TAPERED BALL NOSE - 2 FLUTES
/2刃球型斜度立銑刀

> 668V-SX

Grain Size:0.6μm
Cobalt%:12%

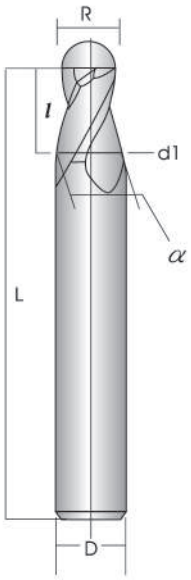
HRC ▸45 | MG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

> 888V-SX

Grain Size:0.4μm
Cobalt%:12%

HRC ▸55 | SMG | 30° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○



形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	角徑 R	刃長 l	柄徑 D	大徑 d1	單角 α	刃數 Z	全長 L	668V-SX (NT)	668V-SX (USD)	888V-SX (NT)	888V-SX (USD)
100040	1R	13	4	3.36	4°	2	50	1870	59.4	2440	77.5
100050	1R	13	6	4.27	5°	2	50	1870	59.4	2440	77.5
100070	1R	13	6	5.17	7°	2	50	1870	59.4	2440	77.5
100100	1R	13	8	6.56	10°	2	50	2420	76.9	3150	100.0
125005	1.25R	15	4	2.76	30"	2	50	1820	57.8	2370	75.3
125010	1.25R	15	4	3.03	1°	2	50	1820	57.8	2370	75.3
125015	1.25R	15	4	3.29	1°30"	2	50	1820	57.8	2370	75.3
125020	1.25R	15	4	3.56	2°	2	50	1820	57.8	2370	75.3
125030	1.25R	15	6	3.81	3°	2	50	1820	57.8	2370	75.3
125040	1.25R	15	6	4.07	4°	2	50	1820	57.8	2370	75.3
125050	1.25R	15	6	5.13	5°	2	50	1870	59.4	2440	77.5
125070	1.25R	15	8	6.17	7°	2	60	1870	59.4	2440	77.5
125100	1.25R	15	8	7.77	10°	2	60	2910	92.4	3780	120.0
150005	1.5R	20	4	3.34	30"	2	50	1820	57.8	2370	75.3
150010	1.5R	20	4	3.60	1°	2	50	1820	57.8	2370	75.3
150015	1.5R	20	6	4.04	1°30"	2	60	1820	57.8	2370	75.3
150020	1.5R	20	6	4.39	2°	2	60	1820	57.8	2370	75.3
150030	1.5R	20	6	5.08	3°	2	60	1820	57.8	2370	75.3
150040	1.5R	20	6	5.78	4°	2	60	1870	59.4	2440	77.5
150050	1.5R	20	8	6.48	5°	2	60	2640	83.9	3440	109.3
150070	1.5R	20	8	7.90	7°	2	60	2640	83.9	3440	109.3
150100	1.5R	20	12	10.04	10°	2	75	3020	95.9	3930	124.8

* 切削條件表參考請見第238頁
* Cutting condition please refer page 238.

LV INTERNATIONAL CO., LTD

77 SERIES

The 77 series is used for cutting general materials with an HRC below 45.

Coated with S-FIRE. With the features of a silky coating surface, small friction coefficient, it leads to fewer metal burrs and especially suitable for wet-type machining.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
77 Series	MG	0.6um	12%	S-FIRE

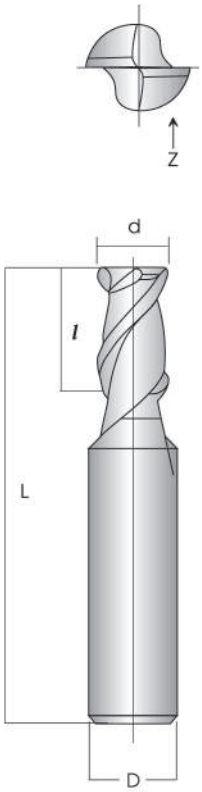
SQUARE TYPE - 2 FLUTES
/2刃立銑刀

> 772L-A

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | S-Fire | Wet | Dry

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎



形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	772L-A (NT)	772L-A (USD)
010203	1	3	3	2	50	310	9.9
010204	1	3	4	2	50	310	9.9
010206	1	3	6	2	50	450	14.3
015203	1.5	4	3	2	50	310	9.9
015204	1.5	4	4	2	50	310	9.9
015206	1.5	4	6	2	50	450	14.3
020203	2	6	3	2	50	310	9.9
020204	2	6	4	2	50	310	9.9
020206	2	6	6	2	50	450	14.3
025203	2.5	8	3	2	50	310	9.9
025204	2.5	8	4	2	50	310	9.9
025206	2.5	8	6	2	50	450	14.3
030203	3	8	3	2	50	310	9.9
030204	3	8	4	2	50	310	9.9
030206	3	8	6	2	50	450	14.3
035204	3.5	10	4	2	50	310	9.9
035206	3.5	10	6	2	50	450	14.3
040204	4	11	4	2	50	310	9.9
040206	4	11	6	2	50	450	14.3
045206	4.5	13	6	2	50	450	14.3
050206	5	13	6	2	50	450	14.3
055206	5.5	13	6	2	50	450	14.3
060206	6	16	6	2	50	450	14.3
065208	6.5	16	8	2	60	930	29.6
070208	7	16	8	2	60	930	29.6
075208	7.5	19	8	2	60	930	29.6
080208	8	20	8	2	60	930	29.6
085210	8.5	20	10	2	75	1320	42.0
090210	9	20	10	2	75	1320	42.0
095210	9.5	25	10	2	75	1320	42.0
100210	10	25	10	2	75	1320	42.0
105212	10.5	25	12	2	75	1850	58.8
110212	11	30	12	2	75	1850	58.8
115212	11.5	30	12	2	75	1850	58.8
120212	12	32	12	2	75	1850	58.8
140216	14	40	16	2	100	4490	142.6
160216	16	40	16	2	100	4490	142.6
180220	18	45	20	2	100	5660	179.7
200220	20	45	20	2	100	5660	179.7
250225	25	45	25	2	100	10070	319.7

* 切削條件表參考請見第240、241 頁
* Cutting condition please refer page240、241.

> 774L-A

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 45° Helix Angle | 4 Flute | S-Fire | Wet | Dry

> 774L-B

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 4 Flute | S-Fire | Wet | Dry

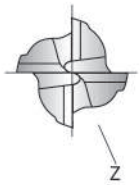
粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

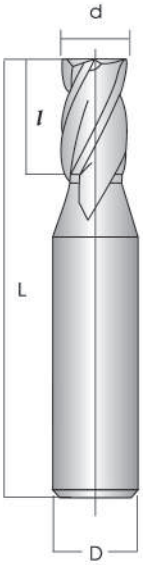
形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	774L-A (NT)	774L-A (USD)	774L-B (NT)	774L-B (USD)
010403	1	3	3	4	50	310	9.9	310	9.9
010404	1	3	4	4	50	310	9.9	310	9.9
010406	1	3	6	4	50	450	14.3	450	14.3
015403	1.5	4	3	4	50	310	9.9	310	9.9
015404	1.5	4	4	4	50	310	9.9	310	9.9
015406	1.5	4	6	4	50	450	14.3	450	14.3
020403	2	6	3	4	50	310	9.9	310	9.9
020404	2	6	4	4	50	310	9.9	310	9.9
020406	2	6	6	4	50	450	14.3	450	14.3
025403	2.5	8	3	4	50	310	9.9	310	9.9
025404	2.5	8	4	4	50	310	9.9	310	9.9
025406	2.5	8	6	4	50	450	14.3	450	14.3
030404	3	8	4	4	50	310	9.9	310	9.9
030406	3	8	6	4	50	450	14.3	450	14.3
035404	3.5	10	4	4	50	310	9.9	310	9.9
035406	3.5	10	6	4	50	450	14.3	450	14.3
040404	4	11	4	4	50	310	9.9	310	9.9
040406	4	11	6	4	50	450	14.3	450	14.3
045406	4.5	13	6	4	50	450	14.3	450	14.3
050406	5	13	6	4	50	450	14.3	450	14.3
055406	5.5	13	6	4	50	450	14.3	450	14.3
060406	6	16	6	4	50	450	14.3	450	14.3
065408	6.5	16	8	4	60	930	29.6	930	29.6
070408	7	16	8	4	60	930	29.6	930	29.6
075408	7.5	19	8	4	60	930	29.6	930	29.6
080408	8	20	8	4	60	930	29.6	930	29.6
085410	8.5	20	10	4	75	1320	42.0	1320	42.0
090410	9	20	10	4	75	1320	42.0	1320	42.0
095410	9.5	25	10	4	75	1320	42.0	1320	42.0
100410	10	30	10	4	75	1320	42.0	1320	42.0
105412	10.5	30	12	4	75	1850	58.8	1850	58.8
110412	11	30	12	4	75	1850	58.8	1850	58.8
115412	11.5	30	12	4	75	1850	58.8	1850	58.8
120412	12	32	12	4	75	1850	58.8	1850	58.8
140416	14	40	16	4	100	4490	142.6	4490	142.6
160416	16	40	16	4	100	4490	142.6	4490	142.6
180420	18	45	20	4	100	5660	179.7	5660	179.7
200420	20	45	20	4	100	5660	179.7	5660	179.7
250425	25	45	25	4	100	10070	319.7	10070	319.7





* 切削條件表參考請見第242、243 頁
* Cutting condition please refer page242、243.

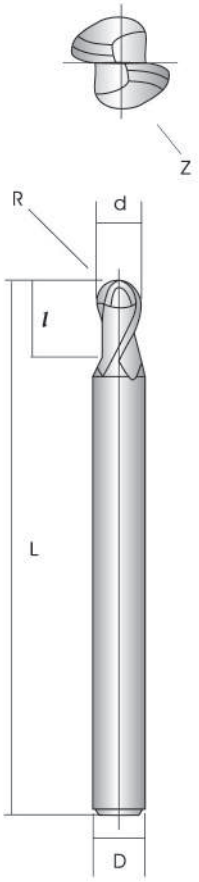
BALL NOSE - 2 FLUTES
/2刃球型立銑刀

> 778V-A

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 30° Helix Angle | 2 Flute | S-Fire | Wet | Dry

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎



形狀寸表法 Dimensions

單位(Unit):mm

型號 MODE	角徑 R	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	建議售價 778V-A (NT)	(USD)
010203	0.5R	1	2	3	2	50	400	12.7
010204	0.5R	1	2	4	2	50	400	12.7
010206	0.5R	1	2	6	2	50	530	16.9
015203	0.75R	1.5	3	3	2	50	400	12.7
015204	0.75R	1.5	3	4	2	50	400	12.7
015206	0.75R	1.5	3	6	2	50	530	16.9
020203	1R	2	4	3	2	50	400	12.7
020204	1R	2	4	4	2	50	400	12.7
020206	1R	2	4	6	2	50	530	16.9
025203	1.25R	2.5	5	3	2	50	400	12.7
025204	1.25R	2.5	5	4	2	50	400	12.7
025206	1.25R	2.5	5	6	2	50	530	16.9
030203	1.5R	3	6	3	2	50	400	12.7
030204	1.5R	3	6	4	2	50	400	12.7
030206	1.5R	3	6	6	2	50	530	16.9
035204	1.75R	3.5	7	4	2	50	400	12.7
035206	1.75R	3.5	7	6	2	50	530	16.9
040204	2R	4	8	4	2	50	400	12.7
040206	2R	4	8	6	2	50	530	16.9
045206	2.25R	4.5	9	6	2	50	530	16.9
050206	2.5R	5	10	6	2	50	530	16.9
055206	2.75R	5.5	11	6	2	50	530	16.9
060206	3R	6	12	6	2	50	530	16.9
070208	3.5R	7	14	8	2	60	1050	33.4
080208	4R	8	16	8	2	60	1050	33.4
090210	4.5R	9	18	10	2	75	1560	49.6
100210	5R	10	20	10	2	75	1560	49.6
110212	5.5R	11	22	12	2	75	2250	71.5
120212	6R	12	24	12	2	75	2250	71.5
140216	7R	14	28	16	2	100	4620	146.7
160216	8R	16	32	16	2	100	4620	146.7
180220	9R	18	36	20	2	100	7920	251.5
200220	10R	20	40	20	2	100	7920	251.5

★ 切削條件表參考請見第244頁
★ Cutting condition please refer page 244.

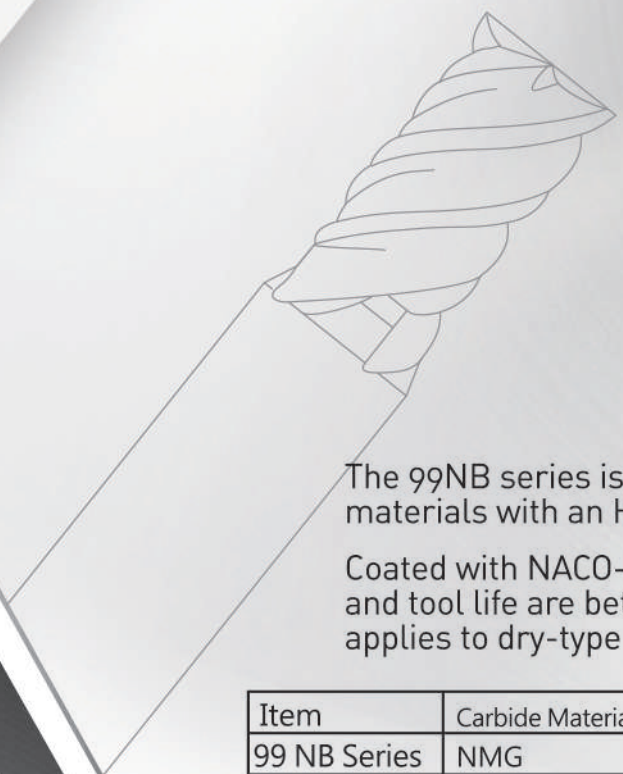
LV INTERNATIONAL CO., LTD

99 SERIES

The 99 series is used for cutting high-hardness materials with an HRC between 55-65.
Coated with TixSiN, it contains Si which has high-temperature-resistance and durability.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
99 Series	NMG	0.3um	9%	TixSiN

99NB SERIES



The 99NB series is used for cutting high-hardness materials with an HRC between 55-65.

Coated with NACO-BLUE. The cutting performance and tool life are better than 99 series but it only applies to dry-type machining.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
99 NB Series	NMG	0.3um	9%	NACO-BLUE

MINIATURE SQUARE TYPE - 2FLUTES
/2刃微小徑立銑刀

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	992L-C (NT)	992L-C (USD)	992L-CNB (NT)	992L-CNB (USD)
0023	0.2	0.4	3	38	910	28.9	1100	35.0
0024	0.2	0.4	4	50	1130	35.9	1360	43.2
0033	0.3	0.6	3	38	680	21.6	820	26.1
0034	0.3	0.6	4	50	910	28.9	1100	35.0
0043	0.4	0.8	3	38	680	21.6	820	26.1
0044	0.4	0.8	4	50	910	28.9	1100	35.0
0053	0.5	1.0	3	38	680	21.6	820	26.1
0054	0.5	1.0	4	50	910	28.9	1100	35.0
0063	0.6	1.2	3	38	570	18.1	690	22.0
0064	0.6	1.2	4	50	740	23.5	890	28.3
0073	0.7	1.4	3	38	570	18.1	690	22.0
0074	0.7	1.4	4	50	740	23.5	890	28.3
0083	0.8	1.6	3	38	570	18.1	690	22.0
0084	0.8	1.6	4	50	740	23.5	890	28.3
0093	0.9	1.8	3	38	570	18.1	690	22.0
0094	0.9	1.8	4	50	740	23.5	890	28.3
0113	1.1	2.0	3	38	570	18.1	690	22.0
0114	1.1	2.0	4	50	740	23.5	890	28.3
0123	1.2	2.5	3	38	570	18.1	690	22.0
0124	1.2	2.5	4	50	740	23.5	890	28.3
0133	1.3	2.5	3	38	570	18.1	690	22.0
0134	1.3	2.5	4	50	740	23.5	890	28.3
0143	1.4	3.0	3	38	570	18.1	690	22.0
0144	1.4	3.0	4	50	740	23.5	890	28.3
0163	1.6	3.5	3	38	570	18.1	690	22.0
0164	1.6	3.5	4	50	740	23.5	890	28.3
0173	1.7	3.5	3	38	570	18.1	690	22.0
0174	1.7	3.5	4	50	740	23.5	890	28.3
0183	1.8	4.0	3	38	570	18.1	690	22.0
0184	1.8	4.0	4	50	740	23.5	890	28.3
0193	1.9	4.0	3	38	570	18.1	690	22.0
0194	1.9	4.0	4	50	740	23.5	890	28.3
0213	2.1	4.0	3	38	570	18.1	690	22.0
0214	2.1	4.0	4	50	740	23.5	890	28.3
0223	2.2	4.5	3	38	570	18.1	690	22.0
0224	2.2	4.5	4	50	740	23.5	890	28.3
0233	2.3	4.5	3	38	570	18.1	690	22.0
0234	2.3	4.5	4	50	740	23.5	890	28.3
0243	2.4	5.0	3	38	570	18.1	690	22.0
0244	2.4	5.0	4	50	740	23.5	890	28.3
0263	2.6	5.0	3	38	570	18.1	690	22.0
0264	2.6	5.0	4	50	740	23.5	890	28.3
0273	2.7	5.5	3	38	570	18.1	690	22.0
0274	2.7	5.5	4	50	740	23.5	890	28.3
0283	2.8	5.5	3	38	570	18.1	690	22.0
0284	2.8	5.5	4	50	740	23.5	890	28.3
0293	2.9	6.0	3	38	570	18.1	690	22.0
0294	2.9	6.0	4	50	740	23.5	890	28.3

★ 切削條件表參考請見第245頁
★ Cutting condition please refer page 245.

> 992L-C

Grain Size:0.3μm
Cobalt%:9%

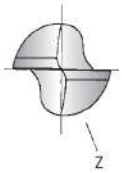
HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | TiXSiN | Dry | Wet

> 992L-CNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○



SQUARE TYPE - 2 FLUTES
/2刃立銑刀

> 992L-A

Grain Size:0.3μm
Cobalt%:9%

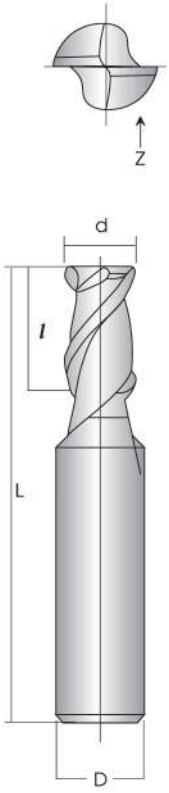
HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | TiXSiN | Dry | Wet

> 992L-ANB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎



形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	992L-A (NT)	992L-A (USD)	992L-ANB (NT)	992L-ANB (USD)
0102	1	2.5	4	50	620	19.7	750	23.9
0152	1.5	3	4	50	620	19.7	750	23.9
0202	2	5	4	50	620	19.7	750	23.9
0252	2.5	6	4	50	620	19.7	750	23.9
0302	3	6	4	50	620	19.7	750	23.9
0352	3.5	8	4	50	620	19.7	750	23.9
0402	4	9	4	50	620	19.7	750	23.9
0452	4.5	10	6	50	900	28.6	1080	34.3
0502	5	12	6	50	900	28.6	1080	34.3
0552	5.5	12	6	50	900	28.6	1080	34.3
0602	6	13	6	50	900	28.6	1080	34.3
0652	6.5	20	8	60	1430	45.4	1720	54.7
0702	7	20	8	60	1430	45.4	1720	54.7
0752	7.5	20	8	60	1430	45.4	1720	54.7
0802	8	20	8	60	1430	45.4	1720	54.7
0852	8.5	25	10	75	1980	62.9	2020	64.2
0902	9	25	10	75	1980	62.9	2020	64.2
0952	9.5	25	10	75	1980	62.9	2020	64.2
1002	10	25	10	75	1980	62.9	2020	64.2
1052	10.5	30	12	75	2640	83.9	3170	100.7
1102	11	30	12	75	2640	83.9	3170	100.7
1152	11.5	30	12	75	2640	83.9	3170	100.7
1202	12	30	12	75	2640	83.9	3170	100.7
1402	14	30	16	100	6800	219.3	8160	259.1
1502	15	30	16	100	6800	219.3	8160	259.1
1602	16	40	16	100	6800	219.3	8160	259.1
2002	20	45	20	100	10670	388.8	12810	406.7
2502	25	45	25	100	14300	454.0	17160	544.8

* 切削條件表參考請見第246、247 頁
* Cutting condition please refer page246、247.

> 994L-B

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | TiXSiN | Dry | Wet

> 994L-BNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

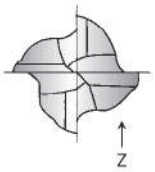
形狀寸表法 Dimensions

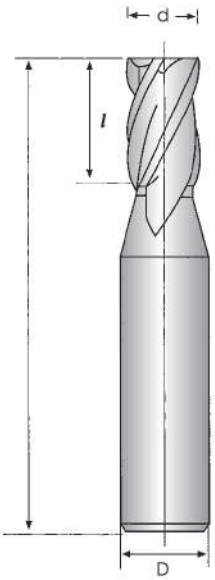
單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
0104	1	2.5	4	50
0154	1.5	3	4	50
0204	2	5	4	50
0254	2.5	6	4	50
0304	3	6	4	50
0354	3.5	8	4	50
0404	4	9	4	50
0454	4.5	10	6	50
0504	5	12	6	50
0554	5.5	12	6	50
0604	6	13	6	50
0654	6.5	20	8	60
0704	7	20	8	60
0754	7.5	20	8	60
0804	8	20	8	60
0854	8.5	25	10	75
0904	9	25	10	75
0954	9.5	25	10	75
1004	10	25	10	75
1054	10.5	30	12	75
1104	11	30	12	75
1154	11.5	30	12	75
1204	12	30	12	75
1404	14	30	16	100
1504	15	30	16	100
1604	16	40	16	100
2004	20	45	20	100
2504	25	45	25	100

建議售價

994L-B (NT)	994L-B (USD)	994L-BNB (NT)	994L-BNB (USD)
620	19.7	750	23.9
620	19.7	750	23.9
620	19.7	750	23.9
620	19.7	750	23.9
620	19.7	750	23.9
620	19.7	750	23.9
620	19.7	750	23.9
900	28.6	1080	34.3
900	28.6	1080	34.3
900	28.6	1080	34.3
900	28.6	1080	34.3
1430	45.4	1720	54.7
1430	45.4	1720	54.7
1430	45.4	1720	54.7
1430	45.4	1720	54.7
1980	62.9	2020	64.2
1980	62.9	2020	64.2
1980	62.9	2020	64.2
1980	62.9	2020	64.2
2640	83.9	3170	100.7
2640	83.9	3170	100.7
2640	83.9	3170	100.7
2640	83.9	3170	100.7
6800	219.3	8160	259.1
6800	219.3	8160	259.1
6800	219.3	8160	259.1
10670	388.8	12810	406.7
14300	454.0	17160	544.8





★ 切削條件表參考請見第248、249 頁
★ Cutting condition please refer page248、249.

SQUARE TYPE LONG FLUTE - 2 FLUTES
/2刃長刃立銑刀

> 992LL-2A

Grain Size:0.3μm
Cobalt%:9%

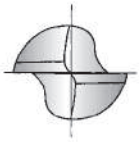
HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | TiXSiN | Dry | Wet

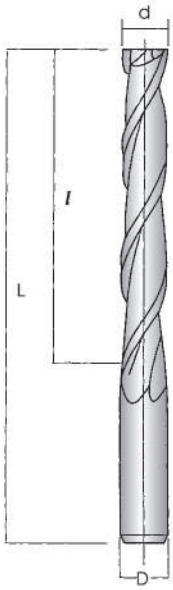
> 992LL-2ANB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎





形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	992LL-2A (NT)	992LL-2A (USD)	992LL-2ANB (NT)	992LL-2ANB (USD)
0102	1	4	4	50	750	23.9	900	28.6
0152	1.5	6	4	50	750	23.9	900	28.6
0202	2	8	4	50	750	23.9	900	28.6
0302	3	11	6	60	940	29.9	1130	35.9
0402	4	14	6	60	940	29.9	1130	35.9
0452	4.5	16	6	60	940	29.9	1130	35.9
0502	5	18	6	60	940	29.9	1130	35.9
0552	5.5	20	6	60	940	29.9	1130	35.9
0602	6	25	6	75	1080	34.3	1300	41.3
0652	6.5	25	8	75	1710	54.3	2060	65.4
0702	7	25	8	75	1710	54.3	2060	65.4
0752	7.5	25	8	75	1710	54.3	2060	65.4
0802	8	25	8	75	1710	54.3	2060	65.4
0812	8	35	8	100	2270	72.1	2730	86.7
0852	8.5	35	10	100	3080	97.8	3700	117.5
0902	9	35	10	100	3080	97.8	3700	117.5
0952	9.5	40	10	100	3080	97.8	3700	117.5
1002	10	40	10	100	3080	97.8	3700	117.5
1052	10.5	40	12	100	4000	127.0	4800	152.4
1102	11	40	12	100	4000	127.0	4800	152.4
1152	11.5	45	12	100	4000	127.0	4800	152.4
1202	12	45	12	100	4000	127.0	4800	152.4
1402	14	45	16	100	8060	255.9	9680	307.4
1502	15	45	16	100	8060	255.9	9680	307.4
1602	16	45	16	100	8060	255.9	9680	307.4

★ 切削條件表參考請見第250、251 頁
★ Cutting condition please refer page250、251.

SQUARE TYPE LONG FLUTE - 4 FLUTES
/4刃長刃立銑刀

> 994LL-4B

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | TiXSiN | Dry | Wet

> 994LL-4BNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

形狀寸表法 Dimensions

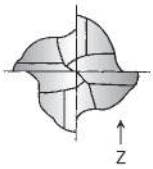
單位(Unit)：mm

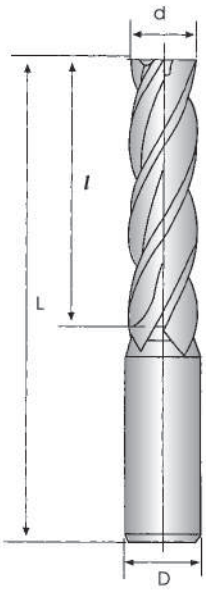
型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
0104	1	4	4	50
0154	1.5	6	4	50
0204	2	8	4	50
0304	3	12	6	60
0404	4	16	6	60
0504	5	20	6	75
0604	6	25	6	75
0704	7	30	8	75
0804	8	30	8	75
1004	10	40	10	100
1204	12	45	12	100
1404	14	45	16	100
1604	16	65	16	150
2004	20	75	20	150
2504	25	80	25	150

★ 切削條件表參考請見第252、253 頁
★ Cutting condition please refer page252、253.

建議售價

994LL-4B		994LL-4BNB	
(NT)	(USD)	(NT)	(USD)
750	23.9	900	28.6
750	23.9	900	28.6
750	23.9	900	28.6
940	29.9	1130	35.9
940	29.9	1130	35.9
1080	34.3	1300	41.3
1080	34.3	1300	41.3
1710	54.3	2060	65.4
1710	54.3	2060	65.4
3080	97.8	3700	117.5
4000	127.0	4800	152.4
8060	255.9	9680	307.4
12090	383.9	14510	460.7
14850	471.5	17820	565.8
19360	614.7	23240	737.8





SQUARE TYPE LONG NECK - 2 FLUTES
/2刃深溝專用長頸立銑刀

> 992L-D

Grain Size:0.3μm
Cobalt%:9%

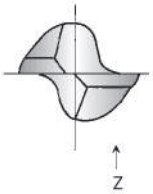
HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | TiXSiN | Dry | Wet

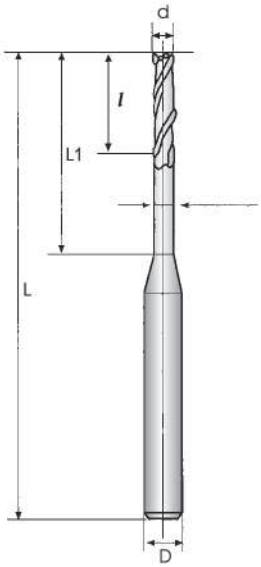
> 992L-DNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○





形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	有效長 L1	992L-D (NT)	992L-D (USD)	992L-DNB (NT)	992L-DNB (USD)
05022	0.5	0.75	4	50	2	1420	45.1	1710	54.3
05042	0.5	0.75	4	50	4	1420	45.1	1710	54.3
05062	0.5	0.75	4	50	6	1420	45.1	1710	54.3
06022	0.6	0.9	4	50	2	1320	42.0	1590	50.5
06042	0.6	0.9	4	50	4	1320	42.0	1590	50.5
06062	0.6	0.9	4	50	6	1320	42.0	1590	50.5
07042	0.7	1.1	4	50	4	1320	42.0	1590	50.5
07062	0.7	1.1	4	50	6	1320	42.0	1590	50.5
08042	0.8	1.2	4	50	4	1320	42.0	1590	50.5
08062	0.8	1.2	4	50	6	1320	42.0	1590	50.5
08082	0.8	1.2	4	50	8	1320	42.0	1590	50.5
10062	1	1.5	4	50	6	980	31.2	1180	37.5
10082	1	1.5	4	50	8	980	31.2	1180	37.5
10102	1	1.5	4	50	10	980	31.2	1180	37.5
10122	1	1.5	4	50	12	980	31.2	1180	37.5
10162	1	1.5	4	50	16	980	31.2	1180	37.5
15062	1.5	2.3	4	50	6	980	31.2	1180	37.5
15082	1.5	2.3	4	50	8	980	31.2	1180	37.5
15102	1.5	2.3	4	50	10	980	31.2	1180	37.5
15122	1.5	2.3	4	50	12	980	31.2	1180	37.5
15142	1.5	2.3	4	50	14	980	31.2	1180	37.5
15162	1.5	2.3	4	50	16	980	31.2	1180	37.5
15182	1.5	2.3	4	50	18	980	31.2	1180	37.5
15202	1.5	2.3	4	50	20	980	31.2	1180	37.5
20062	2	3	4	50	6	980	31.2	1180	37.5
20082	2	3	4	50	8	980	31.2	1180	37.5
20102	2	3	4	50	10	980	31.2	1180	37.5
20122	2	3	4	50	12	980	31.2	1180	37.5
20142	2	3	4	50	14	980	31.2	1180	37.5
20162	2	3	4	50	16	980	31.2	1180	37.5
20182	2	3	4	50	18	980	31.2	1180	37.5
20202	2	3	4	50	20	980	31.2	1180	37.5
25082	2.5	4	4	50	8	980	31.2	1180	37.5
25102	2.5	4	4	50	10	980	31.2	1180	37.5
25122	2.5	4	4	50	12	980	31.2	1180	37.5
25142	2.5	4	4	50	14	980	31.2	1180	37.5
25162	2.5	4	4	50	16	980	31.2	1180	37.5
25202	2.5	4	4	50	20	980	31.2	1180	37.5
30082	3	4.5	6	50	8	1150	36.6	1380	43.9
30102	3	4.5	6	50	10	1150	36.6	1380	43.9
30122	3	4.5	6	50	12	1150	36.6	1380	43.9
30162	3	4.5	6	60	16	1210	38.5	1460	46.4
30202	3	4.5	6	60	20	1210	38.5	1460	46.4
30252	3	4.5	6	75	25	1320	42.0	1590	50.5
40122	4	6	6	50	12	1150	36.6	1380	43.9
40162	4	6	6	60	16	1210	38.5	1460	46.4
40202	4	6	6	75	20	1320	42.0	1590	50.5
40252	4	6	6	75	25	1320	42.0	1590	50.5
40302	4	6	6	75	30	1320	42.0	1590	50.5
40352	4	6	6	75	35	1320	42.0	1590	50.5

* 切削條件表參考請見第254頁
* Cutting condition please refer page 254.

CORNER RADIUS - 4 FLUTES
/4刃圓鼻立銑刀

> 998V-RS

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | TiXSiN | R | Dry | Wet

> 998V-RSNB

Grain Size:0.3μm
Cobalt%:9%

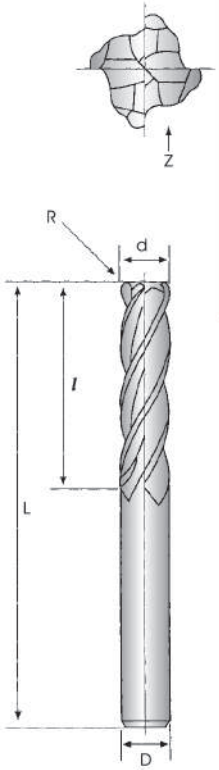
HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | Naco-Blue | R | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	998V-RS (NT)	998V-RS (USD)	998V-RSNB (NT)	998V-RSNB (USD)
01024	1	0.2R	2.5	4	50	840	26.7	1010	32.1
01034	1	0.3R	2.5	4	50	840	26.7	1010	32.1
01524	1.5	0.2R	3	4	50	840	26.7	1010	32.1
01534	1.5	0.3R	3	4	50	840	26.7	1010	32.1
02034	2	0.3R	5	4	50	840	26.7	1010	32.1
02054	2	0.5R	5	4	50	840	26.7	1010	32.1
02554	2.5	0.5R	6	4	50	840	26.7	1010	32.1
03024	3	0.2R	6	3	50	840	26.7	1010	32.1
03034	3	0.3R	6	3	50	840	26.7	1010	32.1
03054	3	0.5R	6	3	50	840	26.7	1010	32.1
03104	3	1R	6	3	50	840	26.7	1010	32.1
030244D	3	0.2R	6	4	50	840	26.7	1010	32.1
030344D	3	0.3R	6	4	50	840	26.7	1010	32.1
030544D	3	0.5R	6	4	50	840	26.7	1010	32.1
031044D	3	1R	6	4	50	840	26.7	1010	32.1
04024	4	0.2R	9	4	50	840	26.7	1010	32.1
04034	4	0.3R	9	4	50	840	26.7	1010	32.1
04054	4	0.5R	9	4	50	840	26.7	1010	32.1
04104	4	1R	9	4	50	840	26.7	1010	32.1
04154	4	1.5R	9	4	50	840	26.7	1010	32.1
05024	5	0.2R	12	6	50	1220	38.8	1470	46.7
05034	5	0.3R	12	6	50	1220	38.8	1470	46.7
05054	5	0.5R	12	6	50	1220	38.8	1470	46.7
05104	5	1R	12	6	50	1220	38.8	1470	46.7
06024	6	0.2R	16	6	50	1220	38.8	1470	46.7
06034	6	0.3R	16	6	50	1220	38.8	1470	46.7
06054	6	0.5R	16	6	50	1220	38.8	1470	46.7
06104	6	1R	16	6	50	1220	38.8	1470	46.7
06204	6	2R	16	6	50	1220	38.8	1470	46.7
08034	8	0.3R	20	8	60	1870	59.4	2250	71.5
08054	8	0.5R	20	8	60	1870	59.4	2250	71.5
08104	8	1R	20	8	60	1870	59.4	2250	71.5
08204	8	2R	20	8	60	1870	59.4	2250	71.5
10054	10	0.5R	25	10	75	2420	76.9	2910	92.4
10104	10	1R	25	10	75	2420	76.9	2910	92.4
10154	10	1.5R	25	10	75	2420	76.9	2910	92.4
10204	10	2R	25	10	75	2420	76.9	2910	92.4
10304	10	3R	25	10	75	2420	76.9	2910	92.4
12054	12	0.5R	30	12	75	3300	104.8	3960	125.8
12104	12	1R	30	12	75	3300	104.8	3960	125.8
12154	12	1.5R	30	12	75	3300	104.8	3960	125.8
12204	12	2R	30	12	75	3300	104.8	3960	125.8
12304	12	3R	30	12	75	3300	104.8	3960	125.8



99系列 99 Series

* 切削條件表參考請見第255頁
* Cutting condition please refer page 255.

CORNER RADIUS LONG SHANK - 2 FLUTES
/2刃長柄圓鼻立銑刀

> 998V-RD

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | TiXSiN | R | Dry | Wet

> 998V-RDNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | Naco-Blue | R | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

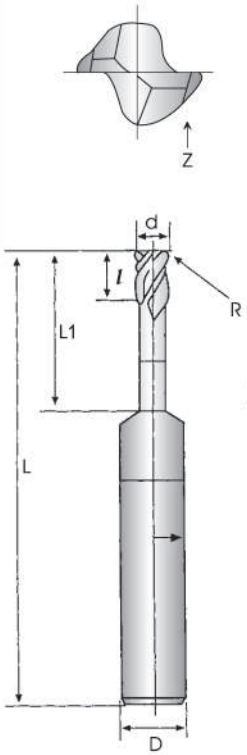
形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	有效長 L1
060022	6	0.2R	9	6	75	18
060032	6	0.3R	9	6	75	18
060052	6	0.5R	9	6	75	18
060102	6	1R	9	6	75	18
060202	6	2R	9	6	75	18
080032	8	0.3R	12	8	100	20
080052	8	0.5R	12	8	100	20
080102	8	1R	12	8	100	20
080202	8	2R	12	8	100	20
100052	10	0.5R	15	10	100	25
100102	10	1R	15	10	100	25
100152	10	1.5R	15	10	100	25
100202	10	2R	15	10	100	25
100302	10	3R	15	10	100	25
120052	12	0.5R	18	12	100	30
120102	12	1R	18	12	100	30
120152	12	1.5R	18	12	100	30
120202	12	2R	18	12	100	30
120302	12	3R	18	12	100	30

建議售價

998V-RD (NT)	998V-RD (USD)	998V-RDNB (NT)	998V-RDNB (USD)
1360	43.2	1640	52.1
1360	43.2	1640	52.1
1360	43.2	1640	52.1
1360	43.2	1640	52.1
1360	43.2	1640	52.1
2590	82.3	3110	98.8
2590	82.3	3110	98.8
2590	82.3	3110	98.8
2590	82.3	3110	98.8
3250	103.2	3900	123.9
3250	103.2	3900	123.9
3250	103.2	3900	123.9
3250	103.2	3900	123.9
3250	103.2	3900	123.9
3960	125.8	4760	151.2
3960	125.8	4760	151.2
3960	125.8	4760	151.2
3960	125.8	4760	151.2
3960	125.8	4760	151.2



* 切削條件表參考請見第256頁
* Cutting condition please refer page 256.

CORNER RADIUS LONG SHANK - 4 FLUTES

/ 4刃長柄圓鼻立銑刀

> 998V-R5D

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | TiXSiN | R | Dry | Wet

> 998V-R5DNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | Naco-Blue | R | Dry

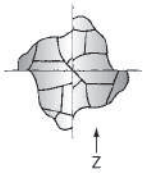
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

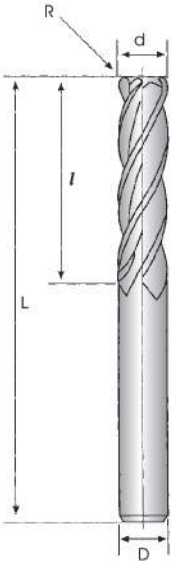
形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	有效長 L1
060024	6	0.2R	9	6	75	18
060034	6	0.3R	9	6	75	18
060054	6	0.5R	9	6	75	18
060104	6	1R	9	6	75	18
060204	6	2R	9	6	75	18
080034	8	0.3R	12	8	100	20
080054	8	0.5R	12	8	100	20
080104	8	1R	12	8	100	20
080204	8	2R	12	8	100	20
100054	10	0.5R	15	10	100	25
100104	10	1R	15	10	100	25
100154	10	1.5R	15	10	100	25
100204	10	2R	15	10	100	25
100304	10	3R	15	10	100	25
120054	12	0.5R	18	12	100	30
120104	12	1R	18	12	100	30
120154	12	1.5R	18	12	100	30
120204	12	2R	18	12	100	30
120304	12	3R	18	12	100	30

* 切削條件表參考請見第257頁
* Cutting condition please refer page 257.





MINIATURE BALL NOSE - 2 FLUTES
/ 2刃微小徑球型立銑刀

> 998V-B

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | TiXSiN | Wet | Dry

> 998V-BNB

Grain Size:0.3μm
Cobalt%:9%

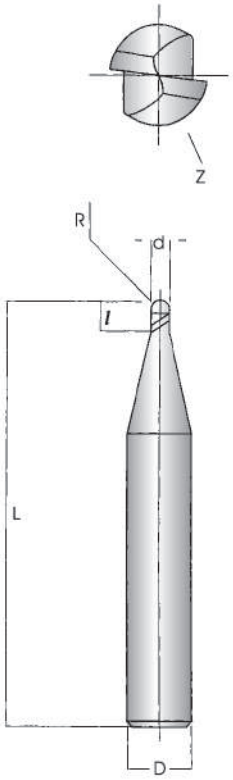
HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	998V-B (NT)	998V-B (USD)	998V-BNB (NT)	998V-BNB (USD)
0033	0.3	0.15R	0.6	3	38	1130	35.9	1360	43.2
0034	0.3	0.15R	0.6	4	50	1610	51.2	1940	61.6
0043	0.4	0.2R	0.8	3	38	1020	32.4	1230	39.1
0044	0.4	0.2R	0.8	4	50	1470	46.7	1770	56.2
0053	0.5	0.25R	1.0	3	38	800	25.4	960	30.5
0054	0.5	0.25R	1.0	4	50	1080	34.3	1300	41.3
0063	0.6	0.3R	1.2	3	38	800	25.4	960	30.5
0064	0.6	0.3R	1.2	4	50	1080	34.3	1300	41.3
0073	0.7	0.35R	1.4	3	38	800	25.4	960	30.5
0074	0.7	0.35R	1.4	4	50	1080	34.3	1300	41.3
0083	0.8	0.4R	1.6	3	38	680	21.6	820	26.1
0084	0.8	0.4R	1.6	4	50	980	31.2	1180	37.5
0103	1.0	0.5R	2.0	3	38	680	21.6	820	26.1
0123	1.2	0.6R	2.5	3	38	680	21.6	820	26.1
0124	1.2	0.6R	2.5	4	50	980	31.2	1180	37.5
0143	1.4	0.7R	3.0	3	38	680	21.6	820	26.1
0144	1.4	0.7R	3.0	4	50	980	31.2	1180	37.5
0153	1.5	0.75R	3.0	3	38	680	21.6	820	26.1
0163	1.6	0.8R	3.5	3	38	680	21.6	820	26.1
0164	1.6	0.8R	3.5	4	50	980	31.2	1180	37.5
0183	1.8	0.9R	4.0	3	38	680	21.6	820	26.1
0184	1.8	0.9R	4.0	4	50	980	31.2	1180	37.5
0203	2.0	1R	4.0	3	38	680	21.6	820	26.1
0223	2.2	1.1R	4.5	3	38	680	21.6	820	26.1
0224	2.2	1.1R	4.5	4	50	980	31.2	1180	37.5
0243	2.4	1.2R	5.0	3	38	380	21.6	820	26.1
0244	2.4	1.2R	5.0	4	50	980	31.2	1180	37.5
0253	2.5	1.25R	5.0	3	38	680	21.6	820	26.1
0303	3.0	1.5R	6.0	3	38	680	21.6	820	26.1



★ 切削條件表參考請見第258頁
★ Cutting condition please refer page 258.

BALL NOSE - 2 FLUTES
/2刃球型立銑刀

> 998V-A

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | TiXSiN | Dry | Wet

> 998V-ANB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

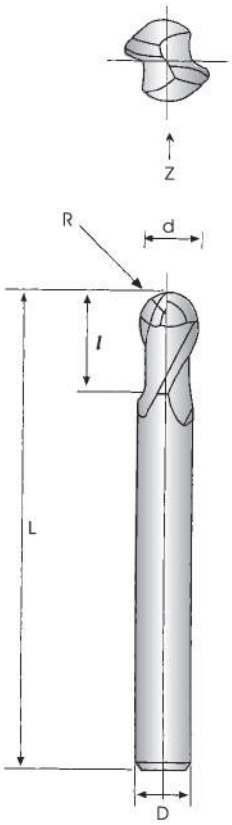
形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L
0102	1	0.5R	1.5	4	50
0152	1.5	0.75R	2.5	4	50
0202	2	1R	3	4	50
0252	2.5	1.25R	4	4	50
0302	3	1.5R	5	4	50
0402	4	2R	6	4	50
0502	5	2.5R	8	6	50
0602	6	3R	9	6	50
0702	7	3.5R	14	8	60
0802	8	4R	16	8	60
0902	9	4.5R	18	10	75
1002	10	5R	20	10	75
1202	12	6R	24	12	75
1402	14	7R	24	16	100
1602	16	8R	24	16	100
2002	20	10R	30	20	150
2502	25	12.5R	35	25	150

建議售價

998V-A (NT)	998V-A (USD)	998V-ANB (NT)	998V-ANB (USD)
710	22.6	860	27.4
710	22.6	860	27.4
710	22.6	860	27.4
710	22.6	860	27.4
710	22.6	860	27.4
710	22.6	860	27.4
940	29.9	1130	35.9
940	29.9	1130	35.9
1540	48.9	1850	58.8
1540	48.9	1850	58.8
2310	73.4	2780	88.3
2310	73.4	2780	88.3
3080	97.8	3700	117.5
6710	213.1	8060	255.9
6710	213.1	8060	255.9
14740	468.0	17690	561.6
19360	614.7	23240	737.8



* 切削條件表參考請見第258頁
* Cutting condition please refer page 258.

BALL NOSE - 4 FLUTES
/ 4刃球型立銑刀

> 998V-AA

Grain Size:0.3μm
Cobalt%:9%

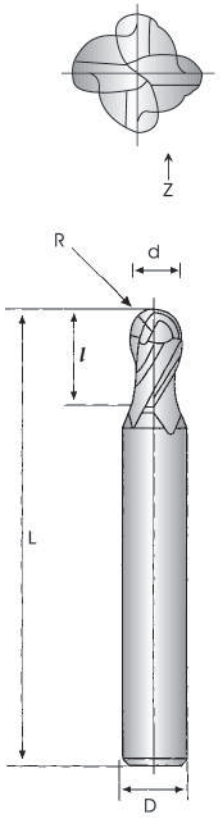
HRC ▸65 | NMG | 30° Helix Angle | 4 Flute | TiXSiN | Dry | Wet

> 998V-AANB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 4 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎



形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	998V-AA (NT)	998V-AA (USD)	998V-AANB (NT)	998V-AANB (USD)
0104	1	0.5R	1.5	4	50	710	22.6	860	27.4
0154	1.5	0.75R	2.5	4	50	710	22.6	860	27.4
0204	2	1R	3	4	50	710	22.6	860	27.4
0254	2.5	1.25R	4	4	50	710	22.6	860	27.4
0304	3	1.5R	5	4	50	710	22.6	860	27.4
0404	4	2R	6	4	50	710	22.6	860	27.4
0504	5	2.5R	8	6	50	940	29.9	1130	35.9
0604	6	3R	9	6	50	940	29.9	1130	35.9
0614	6	3R	9	6	75	1360	43.2	1640	52.1
0804	8	4R	16	8	75	1930	61.3	2320	73.7
1004	10	5R	20	10	75	2310	73.4	2780	88.3
1014	10	5R	20	10	100	3080	97.8	3700	117.5
1204	12	6R	24	12	75	3080	97.8	3700	117.5
1214	12	6R	24	12	100	3850	122.3	4620	146.7
1404	14	7R	24	16	100	6710	213.1	8060	255.9
1604	16	8R	32	16	100	6710	213.1	8060	255.9
2004	20	10R	40	20	150	14740	468.0	17690	561.6
2504	25	12.5R	50	25	150	19360	614.7	23240	737.8

★ 切削條件表參考請見第260頁
★ Cutting condition please refer page 260.

BALL NOSE LONG SHANK - 2 FLUTES
/2刃長柄球型立銑刀

> 998V-2AL

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | TiXSiN | Dry | Wet

> 998V-2ALNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

形狀寸表法 Dimensions

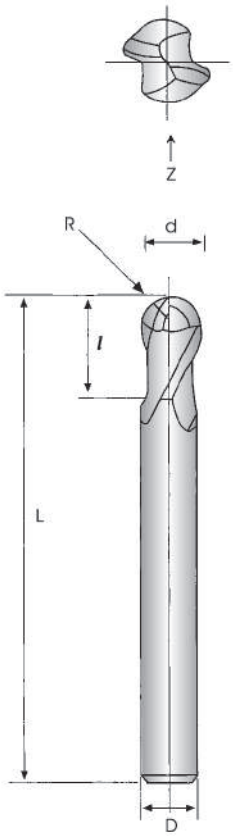
單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L
0102	1	0.5R	3	6	75
0202	2	1R	4	6	75
0302	3	1.5R	5	6	75
0402	4	2R	6	6	75
0502	5	2.5R	8	6	75
0602	6	3R	9	6	75
0612	6	3R	9	6	100
0702	7	3.5R	14	8	75
0802	8	4R	16	8	75
0812	8	4R	16	8	100
0902	9	4.5R	18	10	100
1002	10	5R	20	10	100
1012	10	5R	20	10	150
1202	12	6R	24	12	100
1212	12	6R	24	12	150
1402	14	7R	28	16	100
1602	16	8R	32	16	150
1612	16	8R	32	16	200
2002	20	10R	40	20	200
2502	25	12.5R	50	25	200

* 切削條件表參考請見第261頁
* Cutting condition please refer page 261.

建議售價

998V-2AL		998V-2ALNB	
(NT)	(USD)	(NT)	(USD)
1220	38.8	1470	46.7
1220	38.8	1470	46.7
1220	38.8	1470	46.7
1220	38.8	1470	46.7
1220	38.8	1470	46.7
1220	38.8	1470	46.7
1500	47.7	1800	57.2
1760	55.9	2120	67.4
1760	55.9	2120	67.4
2420	76.9	2910	92.4
3080	97.8	3700	117.5
3080	97.8	3700	117.5
3910	124.2	4700	149.3
3740	118.8	4490	142.6
4620	146.7	5550	176.2
6710	213.1	8060	255.9
8030	255.0	9640	306.1
9570	303.9	11490	364.8
19910	632.1	23900	758.8
25960	824.2	31160	989.3



BALL NOSE LONG NECK - 2 FLUTES
/2刃深溝專用長頸球型立銑刀

> 998V-D

Grain Size:0.3μm
Cobalt%:9%

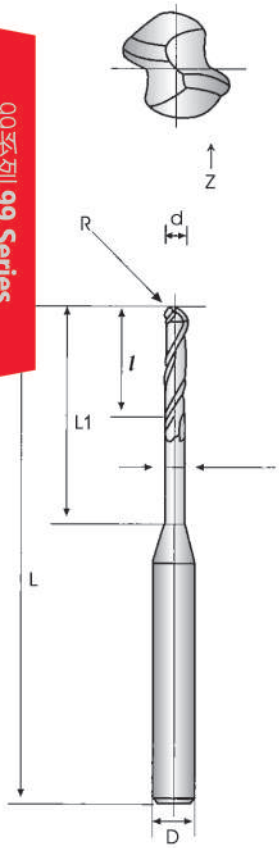
HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | TiXSiN | Dry | Wet

> 998V-DNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○



形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	有效長 L1	998V-D (NT)	998V-D (USD)	998V-DNB (NT)	998V-DNB (USD)
05022	0.5	0.25R	0.75	4	50	2	1540	48.9	1850	58.8
05042	0.5	0.25R	0.75	4	50	4	1540	48.9	1850	58.8
05062	0.5	0.25R	0.75	4	50	6	1540	48.9	1850	58.8
06022	0.6	0.3R	0.9	4	50	2	1460	46.4	1760	55.9
06042	0.6	0.3R	0.9	4	50	4	1460	46.4	1760	55.9
06062	0.6	0.3R	0.9	4	50	6	1460	46.4	1760	55.9
08042	0.8	0.4R	1.2	4	50	4	1460	46.4	1760	55.9
08062	0.8	0.4R	1.2	4	50	6	1460	46.4	1760	55.9
08082	0.8	0.4R	1.2	4	50	8	1460	46.4	1760	55.9
10062	1.0	0.5R	1.5	4	50	6	1080	34.3	1300	41.3
10082	1.0	0.5R	1.5	4	50	8	1080	34.3	1300	41.3
10102	1.0	0.5R	1.5	4	50	10	1080	34.3	1300	41.3
10122	1.0	0.5R	1.5	4	50	12	1080	34.3	1300	41.3
15062	1.5	0.75R	2.3	4	50	6	1080	34.3	1300	41.3
15082	1.5	0.75R	2.3	4	50	8	1080	34.3	1300	41.3
15102	1.5	0.75R	2.3	4	50	10	1080	34.3	1300	41.3
15122	1.5	0.75R	2.3	4	50	12	1080	34.3	1300	41.3
15142	1.5	0.75R	2.3	4	50	14	1080	34.3	1300	41.3
15162	1.5	0.75R	2.3	4	50	16	1080	34.3	1300	41.3
15182	1.5	0.75R	2.3	4	50	18	1080	34.3	1300	41.3
15202	1.5	0.75R	2.3	4	50	20	1080	34.3	1300	41.3
20082	2.0	1R	3	4	50	8	1080	34.3	1300	41.3
20102	2.0	1R	3	4	50	10	1080	34.3	1300	41.3
20122	2.0	1R	3	4	50	12	1080	34.3	1300	41.3
20142	2.0	1R	3	4	50	14	1080	34.3	1300	41.3
20162	2.0	1R	3	4	50	16	1080	34.3	1300	41.3
20182	2.0	1R	3	4	50	18	1080	34.3	1300	41.3
20202	2.0	1R	3	4	50	20	1080	34.3	1300	41.3
25082	2.5	1.25R	4	4	50	8	1080	34.3	1300	41.3
25102	2.5	1.25R	4	4	50	10	1080	34.3	1300	41.3
25122	2.5	1.25R	4	4	50	12	1080	34.3	1300	41.3
25162	2.5	1.25R	4	4	50	16	1080	34.3	1300	41.3
30102	3.0	1.5R	4.5	6	50	10	1270	40.4	1530	48.6
30122	3.0	1.5R	4.5	6	50	12	1270	40.4	1530	48.6
30162	3.0	1.5R	4.5	6	60	16	1340	42.6	1610	51.2
30202	3.0	1.5R	4.5	6	60	20	1340	42.6	1610	51.2
30252	3.0	1.5R	4.5	6	75	25	1590	50.5	1910	60.7
40122	4.0	2R	6	6	50	12	1270	40.4	1530	48.6
40162	4.0	2R	6	6	60	16	1340	42.6	1610	51.2
40202	4.0	2R	6	6	75	20	1590	50.5	1910	60.7
40252	4.0	2R	6	6	75	25	1590	50.5	1910	60.7
40302	4.0	2R	6	6	75	30	1590	50.5	1910	60.7

★ 切削條件表參考請見第264頁
★ Cutting condition please refer page 264.

BALL NOSE - 2 FLUTES
/ 2刃短刃強力球型立銑刀

> 998V-AS

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | TiXSiN | Dry | Wet

> 998V-ASNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

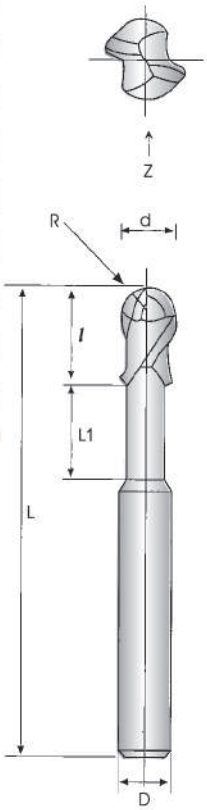
形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	角徑 R	刃長 *l*	柄徑 D	全長 L	有效長 L1	998V-AS (NT)	998V-AS (USD)	998V-ASNB (NT)	998V-ASNB (USD)
010	1	0.5R	1	4	50	2.5	850	27.0	1020	32.4
015	1.5	0.75R	1.5	4	50	4	850	27.0	1020	32.4
020	2	1R	2	4	50	5	850	27.0	1020	32.4
620	2	1R	2	6	50	5	1090	34.7	1310	41.6
025	2.5	1.25R	2.5	4	50	6	850	27.0	1020	32.4
030	3	1.5R	3	4	50	8	850	27.0	1020	32.4
630	3	1.5R	3	6	50	8	1090	34.7	1310	41.6
035	3.5	1.75R	3.5	4	50	8	850	27.0	1020	32.4
040	4	2R	4	4	50	10	850	27.0	1020	32.4
640	4	2R	4	6	50	10	1090	34.7	1310	41.6
045	4.5	2.25R	4.5	6	50	11	1090	34.7	1310	41.6
050	5	2.5R	5	6	50	13	1090	34.7	1310	41.6
055	5.5	2.75R	5.5	6	50	14	1090	34.7	1310	41.6
060	6	3R	6	6	50	15	1090	34.7	1310	41.6
070	7	3.5R	7	8	60	16	1750	55.6	2100	66.7
080	8	4R	8	8	60	20	1750	55.6	2100	66.7
090	9	4.5R	9	10	75	22	2520	80.0	3030	96.2
100	10	5R	10	10	75	25	2520	80.0	3030	96.2
120	12	6R	12	12	75	30	3350	106.4	4020	127.7
140	14	7R	14	16	75	35	6540	207.7	7850	249.3
160	16	8R	16	16	100	40	6960	221.0	8360	265.4

* 切削條件表參考請見第265頁
* Cutting condition please refer page 265.



CORNER RADIUS TAPER NECK - 2 FLUTES
/2刃短刃圓鼻斜頸立銑刀

> 998V-RHP

Grain Size:0.3μm
Cobalt%:9%

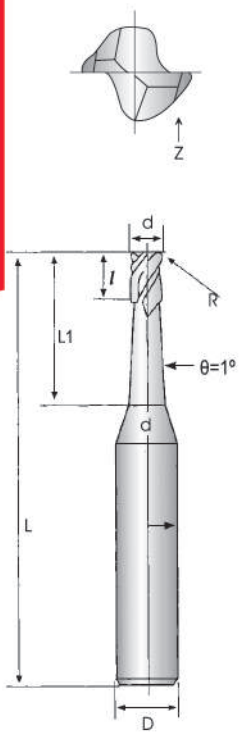
HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | TiXSiN | R | Dry | Wet

> 998V-RHPNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | Naco-Blue | R | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○



形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	有效長 L1	998V-RHP (NT)	998V-RHP (USD)	998V-RHPNB (NT)	998V-RHPNB (USD)
020022	2	0.2R	2	4	50	6	940	29.9	1130	35.9
020032	2	0.3R	2	4	50	6	940	29.9	1130	35.9
020052	2	0.5R	2	4	50	6	940	29.9	1130	35.9
030022	3	0.2R	3	6	50	9	1110	35.3	1340	42.6
030032	3	0.3R	3	6	50	9	1110	35.3	1340	42.6
030052	3	0.5R	3	6	50	9	1110	35.3	1340	42.6
030102	3	1R	3	6	50	9	1110	35.3	1340	42.6
040022	4	0.2R	4	6	50	12	1110	35.3	1340	42.6
040032	4	0.3R	4	6	50	12	1110	35.3	1340	42.6
040052	4	0.5R	4	6	50	12	1110	35.3	1340	42.6
040102	4	1R	4	6	50	12	1110	35.3	1340	42.6
050032	5	0.3R	5	6	50	15	1110	35.3	1340	42.6
050052	5	0.5R	5	6	50	15	1110	35.3	1340	42.6
050102	5	1R	5	6	50	15	1110	35.3	1340	42.6
060022	6	0.2R	6	6	50	18	1110	35.3	1340	42.6
060032	6	0.3R	6	6	50	18	1110	35.3	1340	42.6
060052	6	0.5R	6	6	50	18	1110	35.3	1340	42.6
060102	6	1R	6	6	50	18	1110	35.3	1340	42.6
060202	6	2R	6	6	50	18	1110	35.3	1340	42.6
080032	8	0.3R	8	8	60	20	1870	59.4	2250	71.5
080052	8	0.5R	8	8	60	20	1870	59.4	2250	71.5
080102	8	1R	8	8	60	20	1870	59.4	2250	71.5
080202	8	2R	8	8	60	20	1870	59.4	2250	71.5
100052	10	0.5R	10	10	75	25	2420	76.9	2910	92.4
100102	10	1R	10	10	75	25	2420	76.9	2910	92.4
100152	10	1.5R	10	10	75	25	2420	76.9	2910	92.4
100202	10	2R	10	10	75	25	2420	76.9	2910	92.4
100302	10	3R	10	10	75	25	2420	76.9	2910	92.4
120052	12	0.5R	12	12	75	30	3300	104.8	3960	125.8
120102	12	1R	12	12	75	30	3300	104.8	3960	125.8
120152	12	1.5R	12	12	75	30	3300	104.8	3960	125.8
120202	12	2R	12	12	75	30	3300	104.8	3960	125.8
120302	12	3R	12	12	75	30	3300	104.8	3960	125.8

* 切削條件表參考請見第264頁
* Cutting condition please refer page 264.

CORNER RADIUS TAPER NECK - 4 FLUTES

/ 4刃短刃圓鼻斜頸立銑刀

> 998V-RSHP

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | TiXSiN | R | Dry | Wet

> 998V-RSHPNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | Naco-Blue | R | Dry

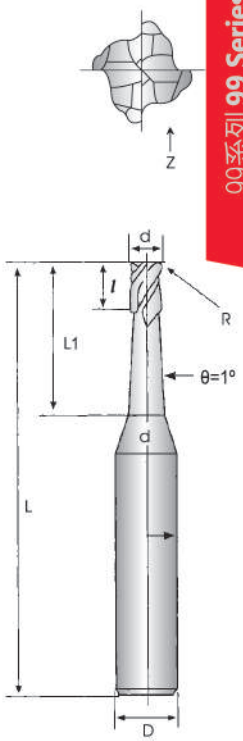
粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

建議售價

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 *l*	柄徑 D	全長 L	有效長 L1	998V-RSHP (NT)	998V-RSHP (USD)	998V-RSHPNB (NT)	998V-RSHPNB (USD)
020024	2	0.2R	2	4	50	6	940	29.9	1130	35.9
020034	2	0.3R	2	4	50	6	940	29.9	1130	35.9
020054	2	0.5R	2	4	50	6	940	29.9	1130	35.9
030024	3	0.2R	3	6	50	9	1110	35.3	1340	42.6
030034	3	0.3R	3	6	50	9	1110	35.3	1340	42.6
030054	3	0.5R	3	6	50	9	1110	35.3	1340	42.6
030104	3	1R	3	6	50	9	1110	35.3	1340	42.6
040024	4	0.2R	4	6	50	12	1110	35.3	1340	42.6
040034	4	0.3R	4	6	50	12	1110	35.3	1340	42.6
040054	4	0.5R	4	6	50	12	1110	35.3	1340	42.6
040104	4	1R	4	6	50	12	1110	35.3	1340	42.6
050034	5	0.3R	5	6	50	15	1110	35.3	1340	42.6
050054	5	0.5R	5	6	50	15	1110	35.3	1340	42.6
050104	5	1R	5	6	50	15	1110	35.3	1340	42.6
060024	6	0.2R	6	6	50	18	1110	35.3	1340	42.6
060034	6	0.3R	6	6	50	18	1110	35.3	1340	42.6
060054	6	0.5R	6	6	50	18	1110	35.3	1340	42.6
060104	6	1R	6	6	50	18	1110	35.3	1340	42.6
060204	6	2R	6	6	50	18	1110	35.3	1340	42.6
080034	8	0.3R	8	8	60	20	1870	59.4	2250	71.5
080054	8	0.5R	8	8	60	20	1870	59.4	2250	71.5
080104	8	1R	8	8	60	20	1870	59.4	2250	71.5
080204	8	2R	8	8	60	20	1870	59.4	2250	71.5
100054	10	0.5R	10	10	75	25	2420	76.9	2910	92.4
100104	10	1R	10	10	75	25	2420	76.9	2910	92.4
100154	10	1.5R	10	10	75	25	2420	76.9	2910	92.4
100204	10	2R	10	10	75	25	2420	76.9	2910	92.4
100304	10	3R	10	10	75	25	2420	76.9	2910	92.4
120054	12	0.5R	12	12	75	30	3300	104.8	3960	125.8
120104	12	1R	12	12	75	30	3300	104.8	3960	125.8
120154	12	1.5R	12	12	75	30	3300	104.8	3960	125.8
120204	12	2R	12	12	75	30	3300	104.8	3960	125.8
120304	12	3R	12	12	75	30	3300	104.8	3960	125.8



* 切削條件表參考請見第265頁
* Cutting condition please refer page 265.

SQUARE TYPE - MULTIPLE FLUTES
/ 多刃高硬度用立銑刀

> 999H-D

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 45° Helix Angle | 6 Flute | TiXSiN | Dry | Wet

> 999H-DNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 45° Helix Angle | 6 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

形狀寸表法 Dimensions

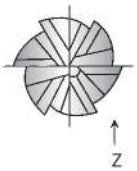
單位(Unit)：mm

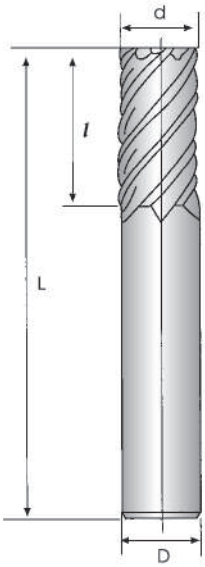
型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L
0606	6	15	6	6	60
0806	8	20	8	6	60
1006	10	25	10	6	75
1206	12	30	12	6	75
1606	16	45	16	6	100
2008	20	45	20	8	100
2508	25	45	25	8	100

* 切削條件表參考請見第266頁
* Cutting condition please refer page 266.

建議售價

999H-D (NT)	999H-D (USD)	999H-DNB (NT)	999H-DNB (USD)
1250	39.7	1500	47.7
1900	61.4	2280	72.4
3080	97.8	3700	117.5
3520	111.8	4230	134.3
7150	227.0	8580	272.4
11330	359.7	13600	431.8
14850	471.5	17820	565.8





SQUARE TYPE LONG FLUTE - MULTIPLE FLUTES
/ 多刃長刃強力立銑刀

> 999HL-D

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 45° Helix Angle | 6 Flute | TiXSiN | Dry | Wet

> 999HL-DNB

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 45° Helix Angle | 6 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

形狀寸表法 Dimensions

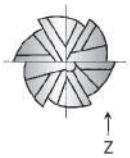
單位(Unit)：mm

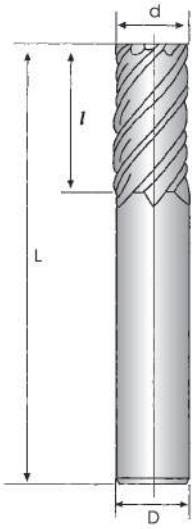
型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L
0606	6	25	6	6	75
0806	8	35	8	6	100
1006	10	45	10	6	100
1206	12	50	12	6	100
1606	16	65	16	6	150
2008	20	75	20	8	150
2508	25	80	25	8	150

★ 切削條件表參考請見第267頁
★ Cutting condition please refer page 267.

建議售價

999HL-D (NT)	999HL-D (USD)	999HL-DNB (NT)	999HL-DNB (USD)
1410	44.8	1700	54.0
2200	69.9	2640	83.9
3520	111.8	4230	134.3
4020	127.7	4830	153.4
8140	258.5	9770	310.2
15400	488.9	18480	586.7
19910	632.1	23900	758.8





LV INTERNATIONAL CO., LTD

99 PLUS SERIES

The 99 Plus series is used for cutting high-hardness materials with an HRC between 55-65.

Coated with high-quality Ti18. With the features of high Si contained, it provides excellent durability. Moreover, we choose the best carbide material for 99 Plus series.

Item	Carbide Material	Grain Size	Cobalt Percentage	Coating
99 Plus Series	NMG	0.3um	9%	Ti18

> 992L-A+

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 2 Flute | Ti-18 | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

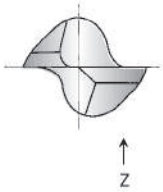
形狀寸表法 Dimensions

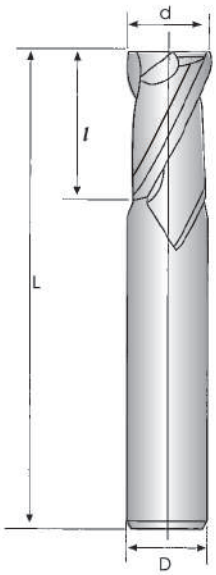
單位(Unit):mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	992L-A+ (NT)	992L-A+ (USD)
0102	1	2.5	4	50	620	19.7
0152	1.5	3	4	50	620	19.7
0202	2	5	4	50	620	19.7
0252	2.5	6	4	50	620	19.7
0302	3	6	4	50	620	19.7
0352	3.5	8	4	50	620	19.7
0402	4	9	4	50	620	19.7
0452	4.5	10	6	50	900	28.6
0502	5	12	6	50	900	28.6
0552	5.5	12	6	50	900	28.6
0602	6	13	6	50	900	28.6
0652	6.5	20	8	60	1430	45.4
0702	7	20	8	60	1430	45.4
0752	7.5	20	8	60	1430	45.4
0802	8	20	8	60	1430	45.4
0852	8.5	25	10	75	1980	62.9
0902	9	25	10	75	1980	62.9
0952	9.5	25	10	75	1980	62.9
1002	10	25	10	75	1980	62.9
1052	10.5	30	12	75	2640	83.9
1102	11	30	12	75	2640	83.9
1152	11.5	30	12	75	2640	83.9
1202	12	30	12	75	2640	83.9
1402	14	30	16	100	6800	219.3
1502	15	30	16	100	6800	219.3
1602	16	40	16	100	6800	219.3
2002	20	45	20	100	10670	388.8
2502	25	45	25	100	14300	454.0

* 切削條件表參考請見第268、269 頁
* Cutting condition please refer page268、269.





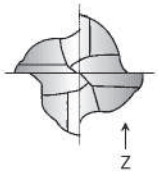
SQUARE TYPE - 4 FLUTES
/ 魔神99 Plus 4刃立銑刀

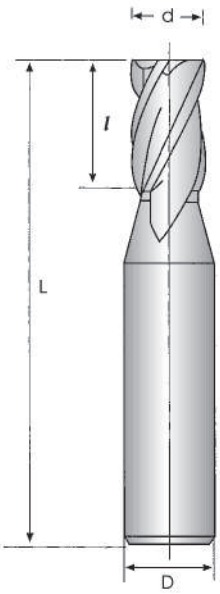
> 994L-B+

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | Ti-18 | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎





形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	994L-B+ (NT)	994L-B+ (USD)
0104	1	2.5	4	50	620	19.7
0154	1.5	3	4	50	620	19.7
0204	2	5	4	50	620	19.7
0254	2.5	6	4	50	620	19.7
0304	3	6	4	50	620	19.7
0354	3.5	8	4	50	620	19.7
0404	4	9	4	50	620	19.7
0454	4.5	10	6	50	900	28.6
0504	5	12	6	50	900	28.6
0554	5.5	12	6	50	900	28.6
0604	6	13	6	50	900	28.6
0654	6.5	20	8	60	1430	45.4
0704	7	20	8	60	1430	45.4
0754	7.5	20	8	60	1430	45.4
0804	8	20	8	60	1430	45.4
0854	8.5	25	10	75	1980	62.9
0904	9	25	10	75	1980	62.9
0954	9.5	25	10	75	1980	62.9
1004	10	25	10	75	1980	62.9
1054	10.5	30	12	75	2640	83.9
1104	11	30	12	75	2640	83.9
1154	11.5	30	12	75	2640	83.9
1204	12	30	12	75	2640	83.9
1404	14	30	16	100	6800	219.3
1504	15	30	16	100	6800	219.3
1604	16	40	16	100	6800	219.3
2004	20	45	20	100	10670	388.8
2504	25	45	25	100	14300	454.0

* 切削條件表參考請見第270、271 頁
* Cutting condition please refer page270、271.

CORNER RADIUS - 4 FLUTES
/ 魔神99 Plus 4刃圓鼻立銑刀

> 998V-RS+

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 35° Helix Angle | 4 Flute | Ti-18 | R | Dry | Wet

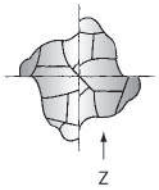
粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

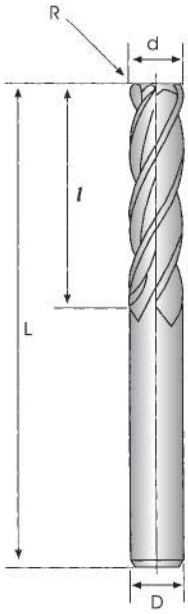
形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	998V-RS+ (NT)	998V-RS+ (USD)
01024	1	0.2R	2.5	4	50	840	26.7
01034	1	0.3R	2.5	4	50	840	26.7
01524	1.5	0.2R	3	4	50	840	26.7
01534	1.5	0.3R	3	4	50	840	26.7
02034	2	0.3R	5	4	50	840	26.7
02054	2	0.5R	5	4	50	840	26.7
02554	2.5	0.5R	6	4	50	840	26.7
03024	3	0.2R	6	3	50	840	26.7
03034	3	0.3R	6	3	50	840	26.7
03054	3	0.5R	6	3	50	840	26.7
03104	3	1R	6	3	50	840	26.7
030244D	3	0.2R	6	4	50	840	26.7
030344D	3	0.3R	6	4	50	840	26.7
030544D	3	0.5R	6	4	50	840	26.7
031044D	3	1R	6	4	50	840	26.7
04024	4	0.2R	9	4	50	840	26.7
04034	4	0.3R	9	4	50	840	26.7
04054	4	0.5R	9	4	50	840	26.7
04104	4	1R	9	4	50	840	26.7
04154	4	1.5R	9	4	50	840	26.7
05024	5	0.2R	12	6	50	1220	38.8
05034	5	0.3R	12	6	50	1220	38.8
05054	5	0.5R	12	6	50	1220	38.8
05104	5	1R	12	6	50	1220	38.8
06024	6	0.2R	16	6	50	1220	38.8
06034	6	0.3R	16	6	50	1220	38.8
06054	6	0.5R	16	6	50	1220	38.8
06104	6	1R	16	6	50	1220	38.8
06204	6	2R	16	6	50	1220	38.8
08034	8	0.3R	20	8	60	1870	59.4
08054	8	0.5R	20	8	60	1870	59.4
08104	8	1R	20	8	60	1870	59.4
08204	8	2R	20	8	60	1870	59.4
10054	10	0.5R	25	10	75	2420	76.9
10104	10	1R	25	10	75	2420	76.9
10154	10	1.5R	25	10	75	2420	76.9
10204	10	2R	25	10	75	2420	76.9
10304	10	3R	25	10	75	2420	76.9
12054	12	0.5R	30	12	75	3300	104.8
12104	12	1R	30	12	75	3300	104.8
12154	12	1.5R	30	12	75	3300	104.8
12204	12	2R	30	12	75	3300	104.8
12304	12	3R	30	12	75	3300	104.8

建議售價





* 切削條件表參考請見第272頁
* Cutting condition please refer page 272.

BALL NOSE - 2 FLUTES
/魔神99 Plus 2刃球型立銑刀

> 998V-A+

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 2 Flute | Ti-18 | Dry | Wet

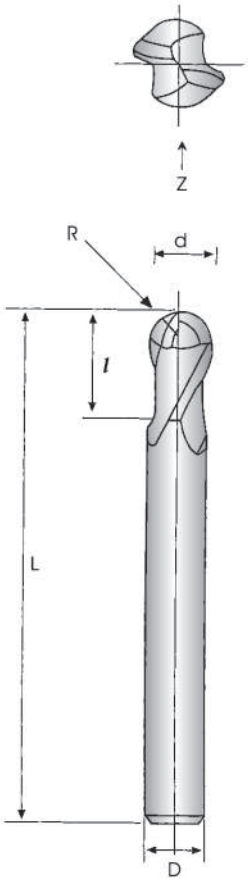
粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	角徑 R	刃長 l	柄徑 D	全長 L	998V-A+ (NT)	998V-A+ (USD)
0102	1	0.5R	1.5	4	50	710	22.6
0152	1.5	0.75R	2.5	4	50	710	22.6
0202	2	1R	3	4	50	710	22.6
0252	2.5	1.25R	4	4	50	710	22.6
0302	3	1.5R	5	4	50	710	22.6
0402	4	2R	6	4	50	710	22.6
0502	5	2.5R	8	6	50	940	29.9
0602	6	3R	9	6	50	940	29.9
0702	7	3.5R	14	8	60	1540	48.9
0802	8	4R	16	8	60	1540	48.9
0902	9	4.5R	18	10	75	2310	73.4
1002	10	5R	20	10	75	2310	73.4
1202	12	6R	24	12	75	3080	97.8
1402	14	7R	24	16	100	6710	213.1
1602	16	8R	24	16	100	6710	213.1
2002	20	10R	30	20	150	14740	468.0
2502	25	12.5R	35	25	150	19360	614.7



★ 切削條件表參考請見第273頁
★ Cutting condition please refer page 273.

BALL NOSE - 4 FLUTES

/ 魔神99 Plus 4刃球型立銑刀

> 998V-AA+

Grain Size:0.3μm
Cobalt%:9%

HRC ▸65 | NMG | 30° Helix Angle | 4 Flute | Ti-18 | Dry | Wet

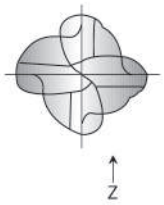
粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

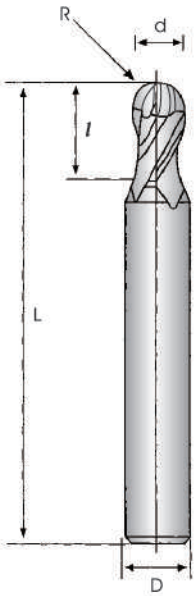
形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	角徑 R	刃長 *l*	柄徑 D	全長 L
0104	1	0.5R	1.5	4	50
0154	1.5	0.75R	2.5	4	50
0204	2	1R	3	4	50
0254	2.5	1.25R	4	4	50
0304	3	1.5R	5	4	50
0404	4	2R	6	4	50
0504	5	2.5R	8	6	50
0604	6	3R	9	6	50
0614	6	3R	9	6	75
0804	8	4R	16	8	75
1004	10	5R	20	10	75
1014	10	5R	20	10	100
1204	12	6R	24	12	75
1214	12	6R	24	12	100
1404	14	7R	24	16	100
1604	16	8R	24	16	100
2004	20	10R	30	20	150
2504	25	12.5R	35	25	150

* 切削條件表參考請見第274頁
* Cutting condition please refer page 274.





Anti-Vibration Tool Holder & Replaceable Mill Head

- Its outstanding hardness reduces operating vibration.
- Reducing the cost of production and excellent tool life.
- Emphasis on its cutter exchange variability.
- Significant extends depth on high cavity operation.

LV INTERNATIONAL CO., LTD

Anti-Vibration Tapered Tool Holder
/鎢鋼錐度抗震刀桿

形狀寸表法 Dimensions

型號 MODEL	規 格 SPECIFICATION	NLVP (NT)
10100M3	D10-100-M03	5600
10130M3	D10-130-M03	6800
10160M3	D10-160-M03	7500
10200M3	D10-200-M03	8250

單位(Unit)：mm

*目錄中的所有規格尺寸，僅供參考，一切都依現品為準。

建議售價

> NLVP

Anti-Vibration Tool Holder
/鎢鋼抗震刀桿

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODEL	外徑 D	全長 L	牙孔 M	內孔 d	NLV (NT)
08100M04	8	100	M04 x 0.7	-	3080
08150M04	8	150	M04 x 0.7	-	3420
10100M05	10	100	M05 x 0.8	2	4500
10150M05	10	150	M05 x 0.8	2	5100
10200M05	10	200	M05 x 0.8	2	6600
12100M06	12	100	M06 x 1.0	2.5	5500
12150M06	12	150	M06 x 1.0	2.5	6700
12200M06	12	200	M06 x 1.0	2.5	8900
16100M08	16	100	M08 x 1.25	3.5	6800
16150M08	16	150	M08 x 1.25	3.5	8400
16200M08	16	200	M08 x 1.25	3.5	10200
16250M08	16	250	M08 x 1.25	3.5	10700
20100M10	20	100	M10 x 1.5	4	8700
20150M10	20	150	M10 x 1.5	4	10400
20200M10	20	200	M10 x 1.5	4	12700
20250M10	20	250	M10 x 1.5	4	13700
25100M12	25	100	M12 x 1.75	5	15000
25150M12	25	150	M12 x 1.75	5	17000
25200M12	25	200	M12 x 1.75	5	19000
25250M12	25	250	M12 x 1.75	5	21100
32150M16	32	150	M16 x 2.0	-	24000
32200M16	32	200	M16 x 2.0	-	27000
32250M16	32	250	M16 x 2.0	-	32000
32300M16	32	300	M16 x 2.0	-	39000
32350M16	32	350	M16 x 2.0	-	48000
32400M16	32	400	M16 x 2.0	-	59000
32450M16	32	450	M16 x 2.0	-	72000

*目錄中的所有規格尺寸，僅供參考，一切都依現品為準。

建議售價

> NLV

REPLACEABLE END MILL HEAD- SQUARE TYPE FOR ALUMINUM&COPPER/ 3刃銅鋁專用捨棄式抗震刀頭

> N2WLVEXNP

45° Helix Angle | 3 Flute | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	先端徑 Diameter	刃長 *l*	柄徑 D	刃數 Z	有效長 L1	頸徑 D1	連接螺旋 M	N2WLVEXNP (NT)
0803M04	8	8	8	3	19.5	7.5	M04/M05	2200
1003M05	10	10	10	3	23.5	9.9	M05	2370
1203M06	12	12	12	3	26.5	11.9	M06	2800
1603M08	16	16	16	3	31.8	15.9	M08	4000
2003M10	20	20	20	3	38.8	19.9	M10	7000
2503M12	25	25	25	3	44.8	24.9	M12	11000

*目錄中的所有規格尺寸，僅供參考，一切都依現品為準。

REPLACEABLE END MILL HEAD- SQUARE TYPE FOR STAINLESS STEEL/ 4刃不鏽鋼專用捨棄式抗震刀頭

> N2WLVNP

HRC ▸65 | 35° Helix Angle | 4 Flute | TiXSiN | Dry | Wet

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	先端徑 Diameter	刃長 *l*	柄徑 D	刃數 Z	有效長 L1	頸徑 D1	連接螺旋 M	N2WLVNP (NT)
0804M04	8	8	8	4	19.5	7.5	M04/M05	2400
1004M05	10	10	10	4	23.5	9.9	M05	2550
1204M06	12	12	12	4	26.5	11.9	M06	2920
1604M08	16	16	16	4	31.8	15.9	M08	4500
2004M10	20	20	20	4	38.8	19.9	M10	7500
2504M12	25	25	25	4	44.8	24.9	M12	11500

*目錄中的所有規格尺寸，僅供參考，一切都依現品為準。

Replaceable End Mill Head - Corner Radius For Higher Hardness material
/ 4刃高硬度專用抗震圓鼻刀頭

> N2WLVRS

HRC ▸65 | 35° Helix Angle | 4 Flute | Naco-Blue | R | Dry

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	先端徑 Diameter	角徑 R	刃長 l	柄徑 D	刃數 Z	有效長 L1	頸徑 D1	連接螺旋 M	N2WLVRS (NT)
080054M04	8	0.5R	8	8	4	19.5	7.5	M04/M05	2800
080104M04	8	1R	8	8	4	19.5	7.5	M04/M05	2800
100054M05	10	0.5R	10	10	4	23.5	9.9	M05	3100
100104M05	10	1R	10	10	4	23.5	9.9	M05	3100
110054M05	11	0.5R	11	11	4	-	10.9	M05	3100
110104M05	11	1R	11	11	4	-	10.9	M05	3100
120054M06	12	0.5R	12	12	4	26.5	11.9	M06	3500
120104M06	12	1R	12	12	4	26.5	11.9	M06	3500
120204M06	12	2R	12	12	4	26.5	11.9	M06	3500
130054M06	13	0.5R	13	13	4	-	12.9	M06	3500
130104M06	13	1R	13	13	4	-	12.9	M06	3500
160104M08	16	1R	16	16	4	31.8	15.9	M08	5600
160204M08	16	2R	16	16	4	31.8	15.9	M08	5600
170054M08	17	0.5R	17	17	4	-	16.9	M08	5600
170104M08	17	1R	17	17	4	-	16.9	M08	5600
200104M10	20	1R	20	20	4	38.8	19.9	M10	8800
200204M10	20	2R	20	20	4	38.8	19.9	M10	8800
200304M10	20	3R	20	20	4	38.8	19.9	M10	8800
210054M10	21	0.5R	21	21	4	-	20.9	M10	8800
210104M10	21	1R	21	21	4	-	20.9	M10	8800
250104M12	25	1R	25	25	4	44.8	24.9	M12	13500
250204M12	25	2R	25	25	4	44.8	24.9	M12	13500
250304M12	25	3R	25	25	4	44.8	24.9	M12	13500

REPLACEABLE END MILL HEAD - SQUARE TYPE FOR HIGHER HARDNESS MATERIAL
/ 4刃高硬度專用抗震刀頭

> N2WLVB

HRC ▸65 | 35° Helix Angle | 4 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODEL	先端徑 Diameter	刃長 *l*	柄徑 D	刃數 Z	有效長 L1	頸徑 D1	連接螺旋 M	N2WLVB (NT)
0604M03	6	12	6	4	18	5.9	M03	2500
0804M04	8	8	8	4	19.5	7.5	M04/M05	2750
1004M05	10	10	10	4	23.5	9.9	M05	2800
1104M05	11	11	11	4	-	10.9	M05	2800
1204M06	12	12	12	4	26.5	11.9	M06	3200
1304M06	13	13	13	4	-	12.9	M06	3500
1604M08	16	16	16	4	31.8	15.9	M08	5400
1704M08	17	17	17	4	-	16.9	M08	5600
2004M10	20	20	20	4	38.8	19.9	M10	8400
2104M10	21	21	21	4	-	20.9	M10	8500
2504M12	25	25	25	4	44.8	24.9	M12	12400

*目錄中的所有規格尺寸，僅供參考，一切都依現品為準。

REPLACEABLE END MILL HEAD - BALL NOSE FOR HIGHER HARDNESS MATERIAL / 2刃高硬度專用抗震球型刀頭

> N2WLVR

HRC ▸65 | 30° Helix Angle | 2 Flute | Naco-Blue | Dry

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	先端徑 Diameter	角徑 R	柄徑 D	刃數 Z	有效長 L1	頸徑 D1	連接螺旋 M	N2WLVR (NT)
0602M03	6	3R	6	2	18	5.9	M03	2600
0802M04	8	4R	8	2	19.5	7.5	M04/M05	2750
1002M05	10	5R	10	2	23.5	9.9	M05	2900
1202M06	12	6R	12	2	26.5	11.9	M06	3300
1602M08	16	8R	16	2	31.8	15.9	M08	5500
2002M10	20	10R	20	2	38.8	19.9	M10	8500
2502M12	25	12.5R	25	2	44.8	24.9	M12	13300

*目錄中的所有規格尺寸，僅供參考，一切都依現品為準。

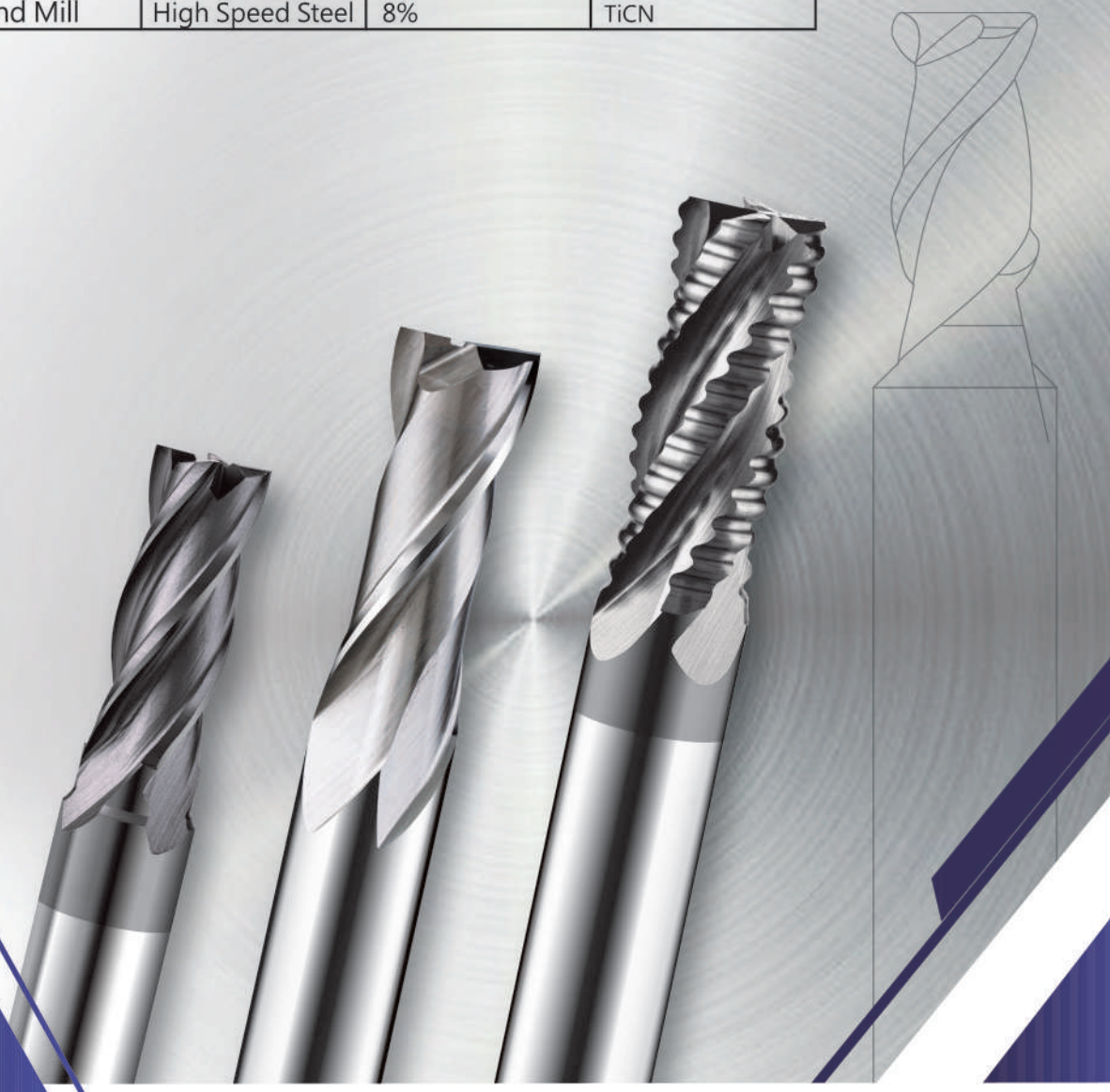
LV INTERNATIONAL CO., LTD

LASTING VICTORY

HSS SERIES

The HSS End Mill is used for cutting general materials.It provides great wear resistance and applies to both roughing & finishing.

Item	Material	Cobalt Percentage	Coating
Hss End Mill	High Speed Steel	8%	TiCN



HIGH COBALT HSS END MILL SQUARE TYPE - 2/4 FLUTES

2/4刃高鈷鋼立銑刀

> LV9932WW 2刃

> LV9934WW 4刃

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	LV9932WW/LV9934WW (NT)	(USD)
01006	1	2.5	6	55	310	9.9
01506	1.5	4	6	55	320	10.2
02006	2	6	6	55	300	9.6
02506	2.5	7	6	55	300	9.6
03006	3	10	6	55	250	8.0
03508	3.5	12	8	60	290	9.3
04006	4	12	6	55	250	8.0
04008	4	12	8	60	250	8.0
04508	4.5	15	8	65	290	9.3
05006	5	15	6	60	250	8.0
05008	5	15	8	65	250	8.0
05508	5.5	15	8	65	290	9.3
06006	6	15	6	60	250	8.0
06008	6	15	8	65	250	8.0
06510	6.5	20	10	75	320	10.2
07008	7	20	8	70	280	8.9
07010	7	20	10	75	280	8.9
07510	7.5	20	10	75	320	10.2
08008	8	20	8	70	280	8.9
08010	8	20	10	75	280	8.9
08510	8.5	25	10	75	360	11.5
09010	9	25	10	80	330	10.5
09510	9.5	25	10	80	360	11.5
10010	10	25	10	80	330	10.5
10512	10.5	30	12	90	530	16.9
11012	11	30	12	90	410	13.1
11512	11.5	30	12	90	540	17.2
12012	12	30	12	90	410	13.1
13012	13	35	12	95	590	18.8
14012	14	35	12	95	590	18.8
14016	14	35	16	100	590	18.8
15016	15	40	16	105	650	20.7
16016	16	40	16	105	650	20.7
17016	17	40	16	105	740	23.5
18016	18	40	16	105	740	23.5
19020	19	45	20	115	950	30.2
20020	20	45	20	115	950	30.2
21020	21	45	20	115	970	30.8
22020	22	45	20	115	970	30.8
23025	23	50	25	125	1150	36.6
24025	24	50	25	125	1150	36.6
25025	25	50	25	125	1150	36.6
26025	26	50	25	125	1510	48.0
27025	27	55	25	125	1780	56.6
28025	28	55	25	125	1780	56.6
29025	29	55	25	125	2110	67.0
30025	30	55	25	125	2110	67.0
31032	31	60	32	145	2710	86.1
32032	32	60	32	145	2710	86.1
33032	33	60	32	145	3240	102.9
34032	34	60	32	145	3240	102.9
35032	35	60	32	145	3360	106.7
36032	36	65	32	150	4610	146.4
37032	37	65	32	150	4610	146.4
38032	38	65	32	150	4610	146.4
39032	39	65	32	150	4900	155.6
40032	40	65	32	150	4900	155.6
41042	41	70	42	160	8450	268.3
42042	42	70	42	160	8450	268.3
43042	43	70	42	160	8450	268.3
44042	44	70	42	160	8450	268.3
45042	45	70	42	160	8450	268.3

TiCN HIGH COBALT HSS END MILL SQUARE TYPE - 2 / 4 FLUTES

2/4刃氮化鈦高鈷鋼立銑刀

> LV9932TC 2刃

> LV9934TC 4刃

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

Coating:TiCN

形狀寸表法 Dimensions

單位(Unit):mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	LV9932TC/LV9934TC (NT)	(USD)
01006	1	2.5	6	55	340	10.8
01506	1.5	4	6	55	350	11.2
02006	2	6	6	55	330	10.5
02506	2.5	7	6	55	330	10.5
03006	3	10	6	55	290	9.3
03508	3.5	12	8	60	330	10.5
04006	4	12	6	55	290	9.3
04008	4	12	8	60	290	9.3
04508	4.5	15	8	65	330	10.5
05006	5	15	6	60	290	9.3
05008	5	15	8	65	290	9.3
05508	5.5	15	8	65	330	10.5
06006	6	15	6	60	290	9.3
06008	6	15	8	65	290	9.3
06510	6.5	20	10	75	380	12.1
07008	7	20	8	70	340	10.8
07010	7	20	10	75	340	10.8
07510	7.5	20	10	75	380	12.1
08008	8	20	8	70	340	10.8
08010	8	20	10	75	340	10.8
08510	8.5	25	10	75	440	14.0
09010	9	25	10	80	410	13.1
09510	9.5	25	10	80	440	14.0
10010	10	25	10	80	410	13.1
10512	10.5	30	12	90	610	19.4
11012	11	30	12	90	490	15.6
11512	11.5	30	12	90	620	19.7
12012	12	30	12	90	490	15.6
13012	13	35	12	95	680	21.6
14012	14	35	12	95	680	21.6
14016	14	35	16	100	680	21.6
15016	15	40	16	105	750	23.9
16016	16	40	16	105	750	23.9
17016	17	40	16	105	840	26.7
18016	18	40	16	105	840	26.7
19020	19	45	20	115	1110	35.3
20020	20	45	20	115	1110	35.3
21020	21	45	20	115	1170	37.2
22020	22	45	20	115	1170	37.2
23025	23	50	25	125	1450	46.1
24025	24	50	25	125	1450	46.1
25025	25	50	25	125	1450	46.1
26025	26	50	25	125	1850	58.8
27025	27	55	25	125	2190	69.6
28025	28	55	25	125	2190	69.6
29025	29	55	25	125	2550	81.0
30025	30	55	25	125	2550	81.0
31032	31	60	32	145	3350	106.4
32032	32	60	32	145	3350	106.4
33032	33	60	32	145	3900	123.9
34032	34	60	32	145	3900	123.9
35032	35	60	32	145	4120	130.8
36032	36	65	32	150	4900	155.6
37032	37	65	32	150	4900	155.6
38032	38	65	32	150	4900	155.6
39032	39	65	32	150	5380	170.8
40032	40	65	32	150	5380	170.8
41042	41	70	42	160	9250	293.7
42042	42	70	42	160	9250	293.7
43042	43	70	42	160	9250	293.7
44042	44	70	42	160	9250	293.7
45042	45	70	42	160	9250	293.7

HIGH COBALT HSS END MILL SQUARE TYPE

2/4刃高鈷鋼長刃立銑刀 LONG FLUTE - 2 / 4 FLUTES

> LV9962WW 2刃

> LV9964WW 4刃

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	LV9962WW/LV9964WW (NT)	(USD)
03006	3	15	6	60	290	9.3
04008	4	20	8	70	290	9.3
05008	5	25	8	75	290	9.3
06008	6	25	8	75	290	9.3
07010	7	35	10	90	340	10.8
08010	8	35	10	90	340	10.8
09010	9	45	10	100	380	12.1
10010	10	45	10	100	380	12.1
11012	11	55	12	115	520	16.6
12012	12	55	12	115	520	16.6
13012	13	55	12	115	770	24.5
14016	14	55	16	120	770	24.5
15016	15	65	16	130	800	25.4
16016	16	65	16	130	800	25.4
17016	17	65	16	130	1050	33.4
18016	18	65	16	130	1050	33.4
19020	19	75	20	145	1050	33.4
20020	20	75	20	145	1050	33.4
21020	21	75	20	145	1260	40.0
22020	22	75	20	145	1260	40.0
23025	23	90	25	165	1580	50.2
24025	24	90	25	165	1580	50.2
25025	25	90	25	165	1580	50.2
26025	26	90	25	165	2130	67.7
27025	27	90	25	165	2480	78.8
28025	28	90	25	165	2480	78.8
29025	29	90	25	165	3060	97.2
30025	30	90	25	165	3060	97.2
31032	31	95	32	180	3870	122.9
32032	32	95	32	180	3870	122.9
33032	33	100	32	185	4620	146.7
34032	34	100	32	185	4620	146.7
35032	35	100	32	185	5070	161.0
36032	36	105	32	190	6430	204.2
37032	37	105	32	190	6430	204.2
38032	38	105	32	190	6430	204.2
39032	39	110	32	195	6480	205.8
40032	40	110	32	195	6480	205.8
41042	41	115	42	200	8970	284.8
42042	42	115	42	200	8970	284.8
43042	43	120	42	205	9600	304.8
44042	44	120	42	205	9600	304.8
45042	45	120	42	205	9600	304.8

TiCN HIGH COBALT HSS END MILL LONG FLUTE - 2 / 4 FLUTES

2/4刃氮化鈦高鈷鋼長刃立銑刀

> LV9962TC 2刃

> LV9964TC 4刃

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

Coating：TiCN

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	LV9962TC/LV9964TC (NT)	(USD)
03006	3	15	6	60	350	11.2
04008	4	20	8	70	350	11.2
05008	5	25	8	75	370	11.8
06008	6	25	8	75	370	11.8
07010	7	35	10	90	430	13.7
08010	8	35	10	90	430	13.7
09010	9	45	10	100	470	15.0
10010	10	45	10	100	470	15.0
11012	11	55	12	115	620	19.7
12012	12	55	12	115	620	19.7
13012	13	55	12	115	870	27.7
14016	14	55	16	120	880	28.0
15016	15	65	16	130	930	29.6
16016	16	65	16	130	930	29.6
17016	17	65	16	130	1200	38.1
18016	18	65	16	130	1200	38.1
19020	19	75	20	145	1230	39.1
20020	20	75	20	145	1240	39.4
21020	21	75	20	145	1460	46.4
22020	22	75	20	145	1480	47.0
23025	23	90	25	165	1830	58.1
24025	24	90	25	165	1860	59.1
25025	25	90	25	165	1870	59.4
26025	26	90	25	165	2440	77.5
27025	27	90	25	165	2800	88.9
28025	28	90	25	165	2820	89.6
29025	29	90	25	165	3440	109.3
30025	30	90	25	165	3460	109.9
31032	31	95	32	180	4330	137.5
32032	32	95	32	180	4330	137.5
33032	33	100	32	185	5110	162.3
34032	34	100	32	185	5150	163.5
35032	35	100	32	185	5650	179.4
36032	36	105	32	190	7200	228.6
37032	37	105	32	190	7200	228.6
38032	38	105	32	190	7200	228.6
39032	39	110	32	195	8000	254.0
40032	40	110	32	195	9200	292.1
41042	41	115	42	200	9200	292.1
42042	42	115	42	200	9200	292.1
43042	43	120	42	205	10270	326.1
44042	44	120	42	205	10270	326.1
45042	45	120	42	205	10270	326.1

HIGH COBALT HSS POWERFUL END MILL
/高鈷鋼強力高螺旋立銑刀 SQUARE TYPE - 3 FLUTES

>LV9905WW

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	◎

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	LV9905WW (NT)	LV9905WW (USD)
06006	6	13	6	3	57	345	11.0
07010	7	16	10	3	66	375	12.0
08010	8	19	10	3	69	375	12.0
09010	9	19	10	3	69	435	13.9
10010	10	22	10	3	72	435	13.9
11012	11	22	12	3	79	524	16.7
12012	12	26	12	3	83	524	16.7
13012	13	26	12	3	83	628	20.0
14012	14	26	12	3	83	628	20.0
15012	15	26	12	3	83	778	24.7
16016	16	32	16	3	92	778	24.7
17016	17	32	16	3	92	897	28.5
18016	18	38	16	3	104	897	28.5
19020	19	38	20	3	104	1107	35.2
20020	20	38	20	3	104	1107	35.2
25025	25	45	25	4	121	1615	51.3

TiCN HIGH COBALT HSS POWERFUL END MILL
/ 氮化鈦高鈷鋼強力高螺旋立銑刀 SQUARE TYPE - 3 FLUTES

>LV9905TC

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	◎

Coating：TiCN

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	LV9905TC (NT)	LV9905TC (USD)
06006	6	13	6	3	57	414	13.2
07010	7	16	10	3	66	444	14.1
08010	8	19	10	3	69	444	14.1
09010	9	19	10	3	69	529	16.8
10010	10	22	10	3	72	529	16.8
11012	11	22	12	3	79	673	21.4
12012	12	26	12	3	83	673	21.4
13012	13	26	12	3	83	766	24.4
14012	14	26	12	3	83	766	24.4
15012	15	26	12	3	83	1007	32.0
16016	16	32	16	3	92	1007	32.0
17016	17	32	16	3	92	1145	36.4
18016	18	38	16	3	104	1145	36.4
19020	19	38	20	3	104	1428	45.4
20020	20	38	20	3	104	1428	45.4
25025	25	45	25	4	121	1960	62.3

HIGH COBALT HSS END MILL BALL NOSE - 2 FLUTES
/2刃高鈷鋼球型立銑刀

>LV9991WW

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	◎

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	角徑 R	直徑 d	刃長 *l*	柄徑 D	全長 L	LV9991WW (NT)	LV9991WW (USD)
01006	0.5R	1	2.5	6	50	590	18.8
01506	0.75R	1.5	4	6	50	530	16.9
02006	1R	2	5	6	50	530	16.9
02506	1.25R	2.5	6	6	60	530	16.9
03006	1.5R	3	8	6	60	490	15.6
04006	2R	4	8	6	70	490	15.6
05006	2.5R	5	10	6	80	490	15.6
06006	3R	6	12	6	90	490	15.6
07008	3.5R	7	14	8	90	560	17.8
08008	4R	8	14	8	100	560	17.8
09010	4.5R	9	18	10	100	630	20.0
10010	5R	10	18	10	100	630	20.0
11012	5.5R	11	22	12	100	790	25.1
12012	6R	12	22	12	110	790	25.1
13012	6.5R	13	26	12	110	1030	32.7
14012	7R	14	26	12	110	1030	32.7
15012	7.5R	15	30	12	110	1230	39.1
16016	8R	16	30	16	140	1230	39.1
17016	8.5R	17	34	16	140	1450	46.1
18016	9R	18	34	16	140	1450	46.1
19016	9.5R	19	38	16	140	1560	49.6
20020	10R	20	38	20	160	1560	49.6
25025	12.5R	25	50	25	180	2200	69.9

TiCN HIGH COBALT HSS END MILL BALL NOSE - 2 FLUTES
/2刃氮化鈦高鈷鋼球型立銑刀

>LV9991TC

粗銑 Roughing	○
中銑 Semi Finishing	◎
精修 Finishing	◎

Coating：TiCN

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	角徑 R	直徑 d	刃長 *l*	柄徑 D	全長 L	LV9991TC (NT)	LV9991TC (USD)
01006	0.5R	1	2.5	6	50	650	20.7
01506	0.75R	1.5	4	6	50	600	19.1
02006	1R	2	5	6	50	600	19.1
02506	1.25R	2.5	6	6	60	600	19.1
03006	1.5R	3	8	6	60	560	17.8
04006	2R	4	8	6	70	560	17.8
05006	2.5R	5	10	6	80	560	17.8
06006	3R	6	12	6	90	560	17.8
07008	3.5R	7	14	8	90	670	21.3
08008	4R	8	14	8	100	670	21.3
09010	4.5R	9	18	10	100	740	23.5
10010	5R	10	18	10	100	740	23.5
11012	5.5R	11	22	12	100	910	28.9
12012	6R	12	22	12	110	910	28.9
13012	6.5R	13	26	12	110	1180	37.5
14012	7R	14	26	12	110	1180	37.5
15012	7.5R	15	30	12	110	1410	44.8
16016	8R	16	30	16	140	1410	44.8
17016	8.5R	17	34	16	140	1700	54.0
18016	9R	18	34	16	140	1700	54.0
19016	9.5R	19	38	16	140	1820	57.8
20020	10R	20	38	20	160	1820	57.8
25025	12.5R	25	50	25	180	2780	88.3

HIGH COBALT HSS ROUGHING END MILLS - SQUARE TYPE
/高鈷鋼粗目粗銑刀

> LV9908WW

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	LV9908WW (NT)	LV9908WW (USD)
06008	6	15	8	4	60	580	18.5
07010	7	20	10	4	65	670	21.3
08010	8	20	10	4	65	630	20.0
09012	9	25	12	4	75	770	24.5
10012	10	25	12	4	75	660	21.0
11012	11	30	12	4	80	820	26.1
12012	12	30	12	4	80	760	24.2
13016	13	35	16	4	90	930	29.6
14016	14	35	16	4	90	930	29.6
15016	15	40	16	4	95	1020	32.4
16016	16	40	16	4	95	1020	32.4
17020	17	40	20	4	105	1050	33.4
18020	18	40	20	4	105	1050	33.4
19020	19	45	20	4	110	1200	38.1
20020	20	45	20	4	110	1200	38.1
21020	21	45	20	5	110	1700	54.0
22020	22	45	20	5	110	1700	54.0
23025	23	50	25	5	120	1900	60.4
24025	24	50	25	5	120	1900	60.4
25025	25	50	25	5	120	1900	60.4
26025	26	50	25	6	120	2620	83.2
27025	27	55	25	6	125	2620	83.2
28025	28	55	25	6	125	2620	83.2
29025	29	55	25	6	125	3040	96.6
30025	30	55	25	6	125	3040	96.6
32032	32	60	32	6	145	3430	108.9
34032	34	60	32	6	145	3950	125.4
35032	35	60	32	6	145	3950	125.4
36032	36	60	32	6	145	4410	140.0
38032	38	65	32	6	150	4670	148.3
39032	39	65	32	6	150	4670	148.3
40032	40	65	32	6	150	4670	148.3
42042	42	65	42	6	155	6790	215.6
45042	45	70	42	6	160	6790	215.6

TiCN HIGH COBALT HSS ROUGHING END MILLS - SQUARE TYPE
／氮化鈦高鈷鋼粗目粗銑刀

> LV9908TC

Coating：TiCN

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	LV9908TC (NT)	LV9908TC (USD)
06008	6	15	8	4	60	670	21.3
07010	7	20	10	4	65	760	24.2
08010	8	20	10	4	65	720	22.9
09012	9	25	12	4	75	860	27.4
10012	10	25	12	4	75	750	23.9
11012	11	30	12	4	80	910	28.9
12012	12	30	12	4	80	870	27.7
13016	13	35	16	4	90	1040	33.1
14016	14	35	16	4	90	1040	33.1
15016	15	40	16	4	95	1160	36.9
16016	16	40	16	4	95	1160	36.9
17020	17	40	20	4	105	1210	38.5
18020	18	40	20	4	105	1210	38.5
19020	19	45	20	4	110	1400	44.5
20020	20	45	20	4	110	1400	44.5
21020	21	45	20	5	110	1950	62.0
22020	22	45	20	5	110	1950	62.0
23025	23	50	25	5	120	2200	69.9
24025	24	50	25	5	120	2200	69.9
25025	25	50	25	5	120	2200	69.9
26025	26	50	25	6	120	3000	95.3
27025	27	55	25	6	125	3000	95.3
28025	28	55	25	6	125	3000	95.3
29025	29	55	25	6	125	3490	110.8
30025	30	55	25	6	125	3490	110.8
32032	32	60	32	6	145	3950	125.4
34032	34	60	32	6	145	4410	140.0
35032	35	60	32	6	145	4410	140.0
36032	36	60	32	6	145	5070	161.0
38032	38	65	32	6	150	5370	170.5
39032	39	65	32	6	150	5370	170.5
40032	40	65	32	6	150	5370	170.5
42042	42	65	42	6	155	6860	217.8
45042	45	70	42	6	160	6860	217.8

HIGH COBALT HSS ROUGHING END MILL LONG FLUTE - SQUARE TYPE
/高鈷鋼粗目長刃粗銑刀

>LV9918WW

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	LV9918WW (NT)	LV9918WW (USD)
10010	10	45	10	4	95	1180	37.5
12012	12	53	12	4	110	1420	45.1
14012	14	53	12	4	110	1660	52.7
16016	16	63	16	4	123	1920	61.0
18016	18	63	16	4	123	2080	66.1
20020	20	75	20	4	141	2300	73.1
22020	22	75	20	5	141	3080	97.8
25025	25	90	25	5	166	3630	115.3
30025	30	90	25	6	166	5000	158.8

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

HIGH COBALT HSS ROUGHING END MILL LONG FLUTE - SQUARE TYPE
/ 氮化鈦高鈷鋼粗目長刃粗銑刀

>LV9918TC

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	LV9918TC (NT)	LV9918TC (USD)
10010	10	45	10	4	95	1300	41.3
12012	12	53	12	4	110	1530	48.6
14012	14	53	12	4	110	1800	57.2
16016	16	63	16	4	123	2100	66.7
18016	18	63	16	4	123	2250	71.5
20020	20	75	20	4	141	2500	79.4
22020	22	75	20	5	141	3200	101.6
25025	25	90	25	5	166	3950	125.4
30025	30	90	25	6	166	5200	165.1

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

Coating：TiCN

HIGH COBALT HSS ROUGHING END MILL
/高鈷鋼中目粗銑刀 -SQUARE TYPE

>LV9906WW

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	LV9906WW (NT)	LV9906WW (USD)
05006	5	13	6	3	57	750	23.9
06006	6	13	6	3	57	750	23.9
08008	8	19	8	3	69	780	24.8
08010	8	19	10	3	69	780	24.8
10010	10	22	10	4	72	830	26.4
11012	11	22	12	4	79	1270	40.4
12012	12	26	12	4	83	960	30.5
13012	13	26	12	4	83	1270	40.4
14012	14	26	12	4	83	1210	38.5
15012	15	26	12	4	83	1390	44.2
16016	16	32	16	4	92	1320	42.0
18016	18	32	16	4	92	1480	47.0
20020	20	38	20	4	104	1600	50.8
22020	22	38	20	5	104	2080	66.1
25025	25	45	25	5	121	2600	82.6
28025	28	45	25	6	121	3170	100.7
30025	30	45	25	6	121	3680	116.9
32032	32	53	32	6	133	4170	132.4
35032	35	53	32	6	133	5360	170.2
40032	40	63	32	6	155	5670	180.0

TiCN HIGH COBALT HSS ROUGHING END MILL
/氮化鈦高鈷鋼中目粗銑刀 SQUARE TYPE

>LV9906TC

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

Coating:TiCN

形狀寸表法 Dimensions

單位(Unit)：mm

建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	LV9906TC (NT)	LV9906TC (USD)
05006	5	13	6	3	57	840	26.7
06006	6	13	6	3	57	840	26.7
08008	8	19	8	3	69	870	27.7
08010	8	19	10	3	69	870	27.7
10010	10	22	10	4	72	920	29.3
11012	11	22	12	4	79	1350	42.9
12012	12	26	12	4	83	1070	34.0
13012	13	26	12	4	83	1350	42.9
14012	14	26	12	4	83	1320	42.0
15012	15	26	12	4	83	1560	49.6
16016	16	32	16	4	92	1460	46.4
18016	18	32	16	4	92	1640	52.1
20020	20	38	20	4	104	1800	57.2
22020	22	38	20	5	104	2290	72.7
25025	25	45	25	5	121	2900	92.1
28025	28	45	25	6	121	3600	114.3
30025	30	45	25	6	121	4080	129.6
32032	32	53	32	6	133	4740	150.5
35032	35	53	32	6	133	6090	193.4
40032	40	63	32	6	155	6440	204.5

HIGH COBALT HSS ROUGHING END MILL -SQUARE TYPE
/高鈷鋼長刃中目粗銑刀

>LV9916WW

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	LV9906WW (NT)	LV9906WW (USD)
10010	10	45	10	4	95	1300	41.3
12012	12	53	12	4	110	1440	45.8
14012	14	53	12	4	110	1980	62.9
16016	16	63	16	4	123	2090	66.4
20020	20	75	20	4	141	2580	82.0
25025	25	90	25	5	166	4000	127.0

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

TiCN HIGH COBALT HSS ROUGHING END MILL -SQUARE TYPE
/ 氮化鈦高鈷鋼長刃中目粗銑刀

>LV9916TC

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	直徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	LV9906TC (NT)	LV9906TC (USD)
10010	10	45	10	4	95	1420	45.1
12012	12	53	12	4	110	1580	49.6
14012	14	53	12	4	110	2120	67.4
16016	16	63	16	4	123	2270	72.1
20020	20	75	20	4	141	2780	88.3
25025	25	90	25	5	166	4320	137.2

粗銑 Roughing	◎
中銑 Semi Finishing	○
精修 Finishing	×

Coating：TiCN

HIGH COBALT HSS END MILL - CORNER ROUNDING SQUARE TYPE
/高鈷鋼外角R立銑刀

>LV9970WW

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	角徑 R	刃長 l	柄徑 D	全長 L	LV9970WW (NT)	LV9970WW (USD)
01010	1R	8	10	60	1500	47.7
01510	1.5R	9	10	60	1500	47.7
02010	2R	10	10	60	1500	47.7
02510	2.5R	11	10	60	1500	47.7
03012	3R	12	12	60	1500	47.7
03512	3.5R	13	12	60	1800	57.2
04012	4R	14	12	60	1800	57.2
04512	4.5R	15	12	60	2010	63.9
05012	5R	16	12	60	2010	63.9
06016	6R	20	16	67	2200	69.9
08016	8R	24	16	71	2890	91.8
10025	10R	28	25	85	3850	122.3
12025	12R	34	25	90	5240	166.4
16025	16R	48	25	100	9460	300.4

TiCN HIGH COBALT HSS END MILL - CORNER ROUNDING SQUARE TYPE
/ 氮化鈦高鈷鋼外角R立銑刀

>LV9970TC

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

Coating：TiCN

■ 形狀寸表法 Dimensions

單位(Unit)：mm

■ 建議售價

型號 MODE	角徑 R	刃長 l	柄徑 D	全長 L	LV9970TC (NT)	LV9970TC (USD)
01010	1R	8	10	60	1800	57.2
01510	1.5R	9	10	60	1800	57.2
02010	2R	10	10	60	1800	57.2
02510	2.5R	11	10	60	1800	57.2
03012	3R	12	12	60	1800	57.2
03512	3.5R	13	12	60	2160	68.6
04012	4R	14	12	60	2160	68.6
04512	4.5R	15	12	60	2420	76.9
05012	5R	16	12	60	2420	76.9
06016	6R	20	16	67	2640	83.9
08016	8R	24	16	71	3470	110.2
10025	10R	28	25	85	4620	146.7
12025	12R	34	25	90	6290	199.7
16025	16R	48	25	100	11360	360.7

LV INTERNATIONAL CO., LTD

LASTING VICTORY

Cutting Tools

- Carbide Drill
- Carbide Reamer
- HSS Machine Tap

Features / 特色

> SPAL - 3D > SPAL - 5D 鋁用外冷 Without coolant holes

> SPBL - 3D > SPBL - 5D 鋁用內冷 With coolant holes

鏡面拋光，精密溝槽，弧型尖端設計，超強剛性。

With mirror surface, finely Grooving, Drill Tip with curve, extremely rigidity.

銅鋁合金專用鑽頭。

Apply to Aluminum, Copper.

CBD | m7 | h6 | 30° | 3D | 5D

鋁合金 Aluminum Alloy	◎
銅合金 Copper Alloy	◎

形狀寸表法 Dimensions / SPAL-3D

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPAL-3D-3.0	D3.0	19	6	62
SPAL-3D-3.1	D3.1	19	6	62
SPAL-3D-3.2	D3.2	19	6	62
SPAL-3D-3.3	D3.3	19	6	62
SPAL-3D-3.4	D3.4	19	6	62
SPAL-3D-3.5	D3.5	19	6	62
SPAL-3D-3.6	D3.6	19	6	62
SPAL-3D-3.7	D3.7	19	6	62
SPAL-3D-3.8	D3.8	23	6	66
SPAL-3D-3.9	D3.9	23	6	66
SPAL-3D-4.0	D4.0	23	6	66
SPAL-3D-4.1	D4.1	23	6	66
SPAL-3D-4.2	D4.2	23	6	66
SPAL-3D-4.3	D4.3	23	6	66
SPAL-3D-4.4	D4.4	23	6	66
SPAL-3D-4.5	D4.5	23	6	66
SPAL-3D-4.6	D4.6	23	6	66
SPAL-3D-4.7	D4.7	23	6	66
SPAL-3D-4.8	D4.8	27	6	66
SPAL-3D-4.9	D4.9	27	6	66
SPAL-3D-5.0	D5.0	27	6	66
SPAL-3D-5.1	D5.1	27	6	66
SPAL-3D-5.2	D5.2	27	6	66
SPAL-3D-5.3	D5.3	27	6	66
SPAL-3D-5.4	D5.4	27	6	66
SPAL-3D-5.5	D5.5	27	6	66
SPAL-3D-5.6	D5.6	27	6	66
SPAL-3D-5.7	D5.7	27	6	66
SPAL-3D-5.8	D5.8	27	6	66
SPAL-3D-5.9	D5.9	27	6	66
SPAL-3D-6.0	D6.0	27	6	66
SPAL-3D-6.1	D6.1	33	8	79
SPAL-3D-6.2	D6.2	33	8	79
SPAL-3D-6.3	D6.3	33	8	79
SPAL-3D-6.4	D6.4	33	8	79
SPAL-3D-6.5	D6.5	33	8	79
SPAL-3D-6.6	D6.6	33	8	79
SPAL-3D-6.7	D6.7	33	8	79
SPAL-3D-6.8	D6.8	33	8	79
SPAL-3D-6.9	D6.9	33	8	79
SPAL-3D-7.0	D7.0	33	8	79
SPAL-3D-7.1	D7.1	39	8	79
SPAL-3D-7.2	D7.2	39	8	79
SPAL-3D-7.3	D7.3	39	8	79
SPAL-3D-7.4	D7.4	39	8	79
SPAL-3D-7.5	D7.5	39	8	79
SPAL-3D-7.6	D7.6	39	8	79
SPAL-3D-7.7	D7.7	39	8	79
SPAL-3D-7.8	D7.8	39	8	79
SPAL-3D-7.9	D7.9	39	8	79
SPAL-3D-8.0	D8.0	39	8	79
SPAL-3D-8.1	D8.1	45	10	89
SPAL-3D-8.2	D8.2	45	10	89
SPAL-3D-8.3	D8.3	45	10	89
SPAL-3D-8.4	D8.4	45	10	89
SPAL-3D-8.5	D8.5	45	10	89
SPAL-3D-8.6	D8.6	45	10	89
SPAL-3D-8.7	D8.7	45	10	89
SPAL-3D-8.8	D8.8	45	10	89
SPAL-3D-8.9	D8.9	45	10	89
SPAL-3D-9.0	D9.0	45	10	89
SPAL-3D-9.1	D9.1	45	10	89
SPAL-3D-9.2	D9.2	45	10	89
SPAL-3D-9.3	D9.3	45	10	89
SPAL-3D-9.4	D9.4	45	10	89
SPAL-3D-9.5	D9.5	45	10	89
SPAL-3D-9.6	D9.6	45	10	89
SPAL-3D-9.7	D9.7	45	10	89
SPAL-3D-9.8	D9.8	45	10	89
SPAL-3D-9.9	D9.9	45	10	89
SPAL-3D-10.0	D10.0	45	10	89
SPAL-3D-10.1	D10.1	53	12	102
SPAL-3D-10.2	D10.2	53	12	102
SPAL-3D-10.3	D10.3	53	12	102
SPAL-3D-10.4	D10.4	53	12	102
SPAL-3D-10.5	D10.5	53	12	102
SPAL-3D-10.6	D10.6	53	12	102
SPAL-3D-10.7	D10.7	53	12	102
SPAL-3D-10.8	D10.8	53	12	102
SPAL-3D-10.9	D10.9	53	12	102
SPAL-3D-11.0	D11.0	53	12	102
SPAL-3D-11.1	D11.1	53	12	102
SPAL-3D-11.2	D11.2	53	12	102
SPAL-3D-11.3	D11.3	53	12	102
SPAL-3D-11.4	D11.4	53	12	102
SPAL-3D-11.5	D11.5	53	12	102
SPAL-3D-11.6	D11.6	53	12	102
SPAL-3D-11.7	D11.7	53	12	102
SPAL-3D-11.8	D11.8	53	12	102
SPAL-3D-11.9	D11.9	53	12	102
SPAL-3D-12.0	D12.0	53	12	102
SPAL-3D-12.1	D12.1	58	14	107
SPAL-3D-12.2	D12.2	58	14	107
SPAL-3D-12.3	D12.3	58	14	107
SPAL-3D-12.4	D12.4	58	14	107
SPAL-3D-12.5	D12.5	58	14	107
SPAL-3D-12.6	D12.6	58	14	107
SPAL-3D-12.7	D12.7	58	14	107
SPAL-3D-12.8	D12.8	58	14	107
SPAL-3D-12.9	D12.9	58	14	107
SPAL-3D-13.0	D13.0	58	14	107
SPAL-3D-13.1	D13.1	58	14	107
SPAL-3D-13.2	D13.2	58	14	107
SPAL-3D-13.3	D13.3	58	14	107
SPAL-3D-13.4	D13.4	58	14	107
SPAL-3D-13.5	D13.5	58	14	107
SPAL-3D-13.6	D13.6	58	14	107
SPAL-3D-13.7	D13.7	58	14	107
SPAL-3D-13.8	D13.8	58	14	107
SPAL-3D-13.9	D13.9	58	14	107
SPAL-3D-14.0	D14.0	58	14	107
SPAL-3D-14.1	D14.1	62	16	115
SPAL-3D-14.2	D14.2	62	16	115
SPAL-3D-14.3	D14.3	62	16	115
SPAL-3D-14.4	D14.4	62	16	115
SPAL-3D-14.5	D14.5	62	16	115
SPAL-3D-14.6	D14.6	62	16	115
SPAL-3D-14.7	D14.7	62	16	115
SPAL-3D-14.8	D14.8	62	16	115
SPAL-3D-14.9	D14.9	62	16	115
SPAL-3D-15.0	D15.0	62	16	115
SPAL-3D-15.1	D15.1	62	16	115
SPAL-3D-15.2	D15.2	62	16	115
SPAL-3D-15.3	D15.3	62	16	115
SPAL-3D-15.4	D15.4	62	16	115
SPAL-3D-15.5	D15.5	62	16	115
SPAL-3D-15.6	D15.6	62	16	115
SPAL-3D-15.7	D15.7	62	16	115
SPAL-3D-15.8	D15.8	62	16	115
SPAL-3D-15.9	D15.9	62	16	115
SPAL-3D-16.0	D16.0	62	16	115
SPAL-3D-16.1	D16.1	73	18	123
SPAL-3D-16.2	D16.2	73	18	123
SPAL-3D-16.3	D16.3	73	18	123
SPAL-3D-16.4	D16.4	73	18	123
SPAL-3D-16.5	D16.5	73	18	123
SPAL-3D-16.6	D16.6	73	18	123
SPAL-3D-16.7	D16.7	73	18	123
SPAL-3D-16.8	D16.8	73	18	123
SPAL-3D-16.9	D16.9	73	18	123
SPAL-3D-17.0	D17.0	73	18	123
SPAL-3D-17.1	D17.1	73	18	123
SPAL-3D-17.2	D17.2	73	18	123
SPAL-3D-17.3	D17.3	73	18	123
SPAL-3D-17.4	D17.4	73	18	123
SPAL-3D-17.5	D17.5	73	18	123
SPAL-3D-17.6	D17.6	73	18	123
SPAL-3D-17.7	D17.7	73	18	123
SPAL-3D-17.8	D17.8	73	18	123
SPAL-3D-17.9	D17.9	73	18	123
SPAL-3D-18.0	D18.0	73	18	123
SPAL-3D-18.1	D18.1	79	20	131
SPAL-3D-18.2	D18.2	79	20	131
SPAL-3D-18.3	D18.3	79	20	131
SPAL-3D-18.4	D18.4	79	20	131
SPAL-3D-18.5	D18.5	79	20	131
SPAL-3D-18.6	D18.6	79	20	131
SPAL-3D-18.7	D18.7	79	20	131
SPAL-3D-18.8	D18.8	79	20	131
SPAL-3D-18.9	D18.9	79	20	131
SPAL-3D-19.0	D19.0	79	20	131
SPAL-3D-19.1	D19.1	79	20	131
SPAL-3D-19.2	D19.2	79	20	131
SPAL-3D-19.3	D19.3	79	20	131
SPAL-3D-19.4	D19.4	79	20	131
SPAL-3D-19.5	D19.5	79	20	131
SPAL-3D-19.6	D19.6	79	20	131
SPAL-3D-19.7	D19.7	79	20	131
SPAL-3D-19.8	D19.8	79	20	131
SPAL-3D-19.9	D19.9	79	20	131
SPAL-3D-20.0	D20.0	79	20	131

形狀寸表法 Dimensions / SPAL-5D

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPAL-5D-3.0	D3.0	26	6	66
SPAL-5D-3.1	D3.1	26	6	66
SPAL-5D-3.2	D3.2	26	6	66
SPAL-5D-3.3	D3.3	26	6	66
SPAL-5D-3.4	D3.4	26	6	66
SPAL-5D-3.5	D3.5	26	6	66
SPAL-5D-3.6	D3.6	26	6	66
SPAL-5D-3.7	D3.7	26	6	66
SPAL-5D-3.8	D3.8	35	6	74
SPAL-5D-3.9	D3.9	35	6	74
SPAL-5D-4.0	D4.0	35	6	74
SPAL-5D-4.1	D4.1	35	6	74
SPAL-5D-4.2	D4.2	35	6	74
SPAL-5D-4.3	D4.3	35	6	74
SPAL-5D-4.4	D4.4	35	6	74
SPAL-5D-4.5	D4.5	35	6	74
SPAL-5D-4.6	D4.6	35	6	74
SPAL-5D-4.7	D4.7	35	6	74
SPAL-5D-4.8	D4.8	43	6	82
SPAL-5D-4.9	D4.9	43	6	82
SPAL-5D-5.0	D5.0	43	6	82
SPAL-5D-5.1	D5.1	43	6	82
SPAL-5D-5.2	D5.2	43	6	82
SPAL-5D-5.3	D5.3	43	6	82
SPAL-5D-5.4	D5.4	43	6	82
SPAL-5D-5.5	D5.5	43	6	82
SPAL-5D-5.6	D5.6	43	6	82
SPAL-5D-5.7	D5.7	43	6	82
SPAL-5D-5.8	D5.8	43	6	82
SPAL-5D-5.9	D5.9	43	6	82
SPAL-5D-6.0	D6.0	43	6	82
SPAL-5D-6.1	D6.1	52	8	91
SPAL-5D-6.2	D6.2	52	8	91
SPAL-5D-6.3	D6.3	52	8	91
SPAL-5D-6.4	D6.4	52	8	91
SPAL-5D-6.5	D6.5	52	8	91
SPAL-5D-6.6	D6.6	52	8	91
SPAL-5D-6.7	D6.7	52	8	91
SPAL-5D-6.8	D6.8	52	8	91
SPAL-5D-6.9	D6.9	52	8	91
SPAL-5D-7.0	D7.0	52	8	91
SPAL-5D-7.1	D7.1	52	8	91
SPAL-5D-7.2	D7.2	52	8	91
SPAL-5D-7.3	D7.3	52	8	91
SPAL-5D-7.4	D7.4	52	8	91
SPAL-5D-7.5	D7.5	52	8	91
SPAL-5D-7.6	D7.6	52	8	91
SPAL-5D-7.7	D7.7	52	8	91
SPAL-5D-7.8	D7.8	52	8	91
SPAL-5D-7.9	D7.9	52	8	91
SPAL-5D-8.0	D8.0	52	8	91
SPAL-5D-8.1	D8.1	59	10	103
SPAL-5D-8.2	D8.2	59	10	103
SPAL-5D-8.3	D8.3	59	10	103
SPAL-5D-8.4	D8.4	59	10	103
SPAL-5D-8.5	D8.5	59	10	103
SPAL-5D-8.6	D8.6	59	10	103

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPAL-5D-8.7	D8.7	59	10	103
SPAL-5D-8.8	D8.8	59	10	103
SPAL-5D-8.9	D8.9	59	10	103
SPAL-5D-9.0	D9.0	59	10	103
SPAL-5D-9.1	D9.1	59	10	103
SPAL-5D-9.2	D9.2	59	10	103
SPAL-5D-9.3	D9.3	59	10	103
SPAL-5D-9.4	D9.4	59	10	103
SPAL-5D-9.5	D9.5	59	10	103
SPAL-5D-9.6	D9.6	59	10	103
SPAL-5D-9.7	D9.7	59	10	103
SPAL-5D-9.8	D9.8	59	10	103
SPAL-5D-9.9	D9.9	59	10	103
SPAL-5D-10.0	D10.0	59	10	103
SPAL-5D-10.1	D10.1	69	12	118
SPAL-5D-10.2	D10.2	69	12	118
SPAL-5D-10.3	D10.3	69	12	118
SPAL-5D-10.4	D10.4	69	12	118
SPAL-5D-10.5	D10.5	69	12	118
SPAL-5D-10.6	D10.6	69	12	118
SPAL-5D-10.7	D10.7	69	12	118
SPAL-5D-10.8	D10.8	69	12	118
SPAL-5D-10.9	D10.9	69	12	118
SPAL-5D-11.0	D11.0	69	12	118
SPAL-5D-11.1	D11.1	69	12	118
SPAL-5D-11.2	D11.2	69	12	118
SPAL-5D-11.3	D11.3	69	12	118
SPAL-5D-11.4	D11.4	69	12	118
SPAL-5D-11.5	D11.5	69	12	118
SPAL-5D-11.6	D11.6	69	12	118
SPAL-5D-11.7	D11.7	69	12	118
SPAL-5D-11.8	D11.8	69	12	118
SPAL-5D-11.9	D11.9	69	12	118
SPAL-5D-12.0	D12.0	69	12	118
SPAL-5D-12.1	D12.1	75	14	124
SPAL-5D-12.2	D12.2	75	14	124
SPAL-5D-12.3	D12.3	75	14	124
SPAL-5D-12.4	D12.4	75	14	124
SPAL-5D-12.5	D12.5	75	14	124
SPAL-5D-12.6	D12.6	75	14	124
SPAL-5D-12.7	D12.7	75	14	124
SPAL-5D-12.8	D12.8	75	14	124
SPAL-5D-12.9	D12.9	75	14	124
SPAL-5D-13.0	D13.0	75	14	124
SPAL-5D-13.1	D13.1	75	14	124
SPAL-5D-13.2	D13.2	75	14	124
SPAL-5D-13.3	D13.3	75	14	124
SPAL-5D-13.4	D13.4	75	14	124
SPAL-5D-13.5	D13.5	75	14	124
SPAL-5D-13.6	D13.6	75	14	124
SPAL-5D-13.7	D13.7	75	14	124
SPAL-5D-13.8	D13.8	75	14	124
SPAL-5D-13.9	D13.9	75	14	124
SPAL-5D-14.0	D14.0	75	14	124
SPAL-5D-14.1	D14.1	80	16	133
SPAL-5D-14.2	D14.2	80	16	133
SPAL-5D-14.3	D14.3	80	16	133

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPAL-5D-14.4	D14.4	80	16	133
SPAL-5D-14.5	D14.5	80	16	133
SPAL-5D-14.6	D14.6	80	16	133
SPAL-5D-14.7	D14.7	80	16	133
SPAL-5D-14.8	D14.8	80	16	133
SPAL-5D-14.9	D14.9	80	16	133
SPAL-5D-15.0	D15.0	80	16	133
SPAL-5D-15.1	D15.1	80	16	133
SPAL-5D-15.2	D15.2	80	16	133
SPAL-5D-15.3	D15.3	80	16	133
SPAL-5D-15.4	D15.4	80	16	133
SPAL-5D-15.5	D15.5	80	16	133
SPAL-5D-15.6	D15.6	80	16	133
SPAL-5D-15.7	D15.7	80	16	133
SPAL-5D-15.8	D15.8	80	16	133
SPAL-5D-15.9	D15.9	80	16	133
SPAL-5D-16.0	D16.0	80	16	133
SPAL-5D-16.1	D16.1	93	18	143
SPAL-5D-16.2	D16.2	93	18	143
SPAL-5D-16.3	D16.3	93	18	143
SPAL-5D-16.4	D16.4	93	18	143
SPAL-5D-16.5	D16.5	93	18	143
SPAL-5D-16.6	D16.6	93	18	143
SPAL-5D-16.7	D16.7	93	18	143
SPAL-5D-16.8	D16.8	93	18	143
SPAL-5D-16.9	D16.9	93	18	143
SPAL-5D-17.0	D17.0	93	18	143
SPAL-5D-17.1	D17.1	93	18	143
SPAL-5D-17.2	D17.2	93	18	143
SPAL-5D-17.3	D17.3	93	18	143
SPAL-5D-17.4	D17.4	93	18	143
SPAL-5D-17.5	D17.5	93	18	143
SPAL-5D-17.6	D17.6	93	18	143
SPAL-5D-17.7	D17.7	93	18	143
SPAL-5D-17.8	D17.8	93	18	143
SPAL-5D-17.9	D17.9	93	18	143
SPAL-5D-18.0	D18.0	93	18	143
SPAL-5D-18.1	D18.1	101	20	153
SPAL-5D-18.2	D18.2	101	20	153
SPAL-5D-18.3	D18.3	101	20	153
SPAL-5D-18.4	D18.4	101	20	153
SPAL-5D-18.5	D18.5	101	20	153
SPAL-5D-18.6	D18.6	101	20	153
SPAL-5D-18.7	D18.7	101	20	153
SPAL-5D-18.8	D18.8	101	20	153
SPAL-5D-18.9	D18.9	101	20	153
SPAL-5D-19.0	D19.0	101	20	153
SPAL-5D-19.1	D19.1	101	20	153
SPAL-5D-19.2	D19.2	101	20	153
SPAL-5D-19.3	D19.3	101	20	153
SPAL-5D-19.4	D19.4	101	20	153
SPAL-5D-19.5	D19.5	101	20	153
SPAL-5D-19.6	D19.6	101	20	153
SPAL-5D-19.7	D19.7	101	20	153
SPAL-5D-19.8	D19.8	101	20	153
SPAL-5D-19.9	D19.9	101	20	153
SPAL-5D-20.0	D20.0	101	20	153

形狀寸表法 Dimensions / SPBL-3D

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPBL-3D-3.0	D3.0	19	6	62
SPBL-3D-3.1	D3.1	19	6	62
SPBL-3D-3.2	D3.2	19	6	62
SPBL-3D-3.3	D3.3	19	6	62
SPBL-3D-3.4	D3.4	19	6	62
SPBL-3D-3.5	D3.5	19	6	62
SPBL-3D-3.6	D3.6	19	6	62
SPBL-3D-3.7	D3.7	19	6	62
SPBL-3D-3.8	D3.8	23	6	66
SPBL-3D-3.9	D3.9	23	6	66
SPBL-3D-4.0	D4.0	23	6	66
SPBL-3D-4.1	D4.1	23	6	66
SPBL-3D-4.2	D4.2	23	6	66
SPBL-3D-4.3	D4.3	23	6	66
SPBL-3D-4.4	D4.4	23	6	66
SPBL-3D-4.5	D4.5	23	6	66
SPBL-3D-4.6	D4.6	23	6	66
SPBL-3D-4.7	D4.7	23	6	66
SPBL-3D-4.8	D4.8	27	6	66
SPBL-3D-4.9	D4.9	27	6	66
SPBL-3D-5.0	D5.0	27	6	66
SPBL-3D-5.1	D5.1	27	6	66
SPBL-3D-5.2	D5.2	27	6	66
SPBL-3D-5.3	D5.3	27	6	66
SPBL-3D-5.4	D5.4	27	6	66
SPBL-3D-5.5	D5.5	27	6	66
SPBL-3D-5.6	D5.6	27	6	66
SPBL-3D-5.7	D5.7	27	6	66
SPBL-3D-5.8	D5.8	27	6	66
SPBL-3D-5.9	D5.9	27	6	66
SPBL-3D-6.0	D6.0	27	6	66
SPBL-3D-6.1	D6.1	33	8	79
SPBL-3D-6.2	D6.2	33	8	79
SPBL-3D-6.3	D6.3	33	8	79
SPBL-3D-6.4	D6.4	33	8	79
SPBL-3D-6.5	D6.5	33	8	79
SPBL-3D-6.6	D6.6	33	8	79
SPBL-3D-6.7	D6.7	33	8	79
SPBL-3D-6.8	D6.8	33	8	79
SPBL-3D-6.9	D6.9	33	8	79
SPBL-3D-7.0	D7.0	33	8	79
SPBL-3D-7.1	D7.1	39	8	79
SPBL-3D-7.2	D7.2	39	8	79
SPBL-3D-7.3	D7.3	39	8	79
SPBL-3D-7.4	D7.4	39	8	79
SPBL-3D-7.5	D7.5	39	8	79
SPBL-3D-7.6	D7.6	39	8	79
SPBL-3D-7.7	D7.7	39	8	79
SPBL-3D-7.8	D7.8	39	8	79
SPBL-3D-7.9	D7.9	39	8	79
SPBL-3D-8.0	D8.0	39	8	79
SPBL-3D-8.1	D8.1	45	10	89
SPBL-3D-8.2	D8.2	45	10	89
SPBL-3D-8.3	D8.3	45	10	89
SPBL-3D-8.4	D8.4	45	10	89
SPBL-3D-8.5	D8.5	45	10	89
SPBL-3D-8.6	D8.6	45	10	89
SPBL-3D-8.7	D8.7	45	10	89
SPBL-3D-8.8	D8.8	45	10	89
SPBL-3D-8.9	D8.9	45	10	89
SPBL-3D-9.0	D9.0	45	10	89
SPBL-3D-9.1	D9.1	45	10	89
SPBL-3D-9.2	D9.2	45	10	89
SPBL-3D-9.3	D9.3	45	10	89
SPBL-3D-9.4	D9.4	45	10	89
SPBL-3D-9.5	D9.5	45	10	89
SPBL-3D-9.6	D9.6	45	10	89
SPBL-3D-9.7	D9.7	45	10	89
SPBL-3D-9.8	D9.8	45	10	89
SPBL-3D-9.9	D9.9	45	10	89
SPBL-3D-10.0	D10.0	45	10	89
SPBL-3D-10.1	D10.1	53	12	102
SPBL-3D-10.2	D10.2	53	12	102
SPBL-3D-10.3	D10.3	53	12	102
SPBL-3D-10.4	D10.4	53	12	102
SPBL-3D-10.5	D10.5	53	12	102
SPBL-3D-10.6	D10.6	53	12	102
SPBL-3D-10.7	D10.7	53	12	102
SPBL-3D-10.8	D10.8	53	12	102
SPBL-3D-10.9	D10.9	53	12	102
SPBL-3D-11.0	D11.0	53	12	102
SPBL-3D-11.1	D11.1	53	12	102
SPBL-3D-11.2	D11.2	53	12	102
SPBL-3D-11.3	D11.3	53	12	102
SPBL-3D-11.4	D11.4	53	12	102
SPBL-3D-11.5	D11.5	53	12	102
SPBL-3D-11.6	D11.6	53	12	102
SPBL-3D-11.7	D11.7	53	12	102
SPBL-3D-11.8	D11.8	53	12	102
SPBL-3D-11.9	D11.9	53	12	102
SPBL-3D-12.0	D12.0	53	12	102
SPBL-3D-12.1	D12.1	58	14	107
SPBL-3D-12.2	D12.2	58	14	107
SPBL-3D-12.3	D12.3	58	14	107
SPBL-3D-12.4	D12.4	58	14	107
SPBL-3D-12.5	D12.5	58	14	107
SPBL-3D-12.6	D12.6	58	14	107
SPBL-3D-12.7	D12.7	58	14	107
SPBL-3D-12.8	D12.8	58	14	107
SPBL-3D-12.9	D12.9	58	14	107
SPBL-3D-13.0	D13.0	58	14	107
SPBL-3D-13.1	D13.1	58	14	107
SPBL-3D-13.2	D13.2	58	14	107
SPBL-3D-13.3	D13.3	58	14	107
SPBL-3D-13.4	D13.4	58	14	107
SPBL-3D-13.5	D13.5	58	14	107
SPBL-3D-13.6	D13.6	58	14	107
SPBL-3D-13.7	D13.7	58	14	107
SPBL-3D-13.8	D13.8	58	14	107
SPBL-3D-13.9	D13.9	58	14	107
SPBL-3D-14.0	D14.0	58	14	107
SPBL-3D-14.1	D14.1	62	16	115
SPBL-3D-14.2	D14.2	62	16	115
SPBL-3D-14.3	D14.3	62	16	115
SPBL-3D-14.4	D14.4	62	16	115
SPBL-3D-14.5	D14.5	62	16	115
SPBL-3D-14.6	D14.6	62	16	115
SPBL-3D-14.7	D14.7	62	16	115
SPBL-3D-14.8	D14.8	62	16	115
SPBL-3D-14.9	D14.9	62	16	115
SPBL-3D-15.0	D15.0	62	16	115
SPBL-3D-15.1	D15.1	62	16	115
SPBL-3D-15.2	D15.2	62	16	115
SPBL-3D-15.3	D15.3	62	16	115
SPBL-3D-15.4	D15.4	62	16	115
SPBL-3D-15.5	D15.5	62	16	115
SPBL-3D-15.6	D15.6	62	16	115
SPBL-3D-15.7	D15.7	62	16	115
SPBL-3D-15.8	D15.8	62	16	115
SPBL-3D-15.9	D15.9	62	16	115
SPBL-3D-16.0	D16.0	62	16	115
SPBL-3D-16.1	D16.1	73	18	123
SPBL-3D-16.2	D16.2	73	18	123
SPBL-3D-16.3	D16.3	73	18	123
SPBL-3D-16.4	D16.4	73	18	123
SPBL-3D-16.5	D16.5	73	18	123
SPBL-3D-16.6	D16.6	73	18	123
SPBL-3D-16.7	D16.7	73	18	123
SPBL-3D-16.8	D16.8	73	18	123
SPBL-3D-16.9	D16.9	73	18	123
SPBL-3D-17.0	D17.0	73	18	123
SPBL-3D-17.1	D17.1	73	18	123
SPBL-3D-17.2	D17.2	73	18	123
SPBL-3D-17.3	D17.3	73	18	123
SPBL-3D-17.4	D17.4	73	18	123
SPBL-3D-17.5	D17.5	73	18	123
SPBL-3D-17.6	D17.6	73	18	123
SPBL-3D-17.7	D17.7	73	18	123
SPBL-3D-17.8	D17.8	73	18	123
SPBL-3D-17.9	D17.9	73	18	123
SPBL-3D-18.0	D18.0	73	18	123
SPBL-3D-18.1	D18.1	79	20	131
SPBL-3D-18.2	D18.2	79	20	131
SPBL-3D-18.3	D18.3	79	20	131
SPBL-3D-18.4	D18.4	79	20	131
SPBL-3D-18.5	D18.5	79	20	131
SPBL-3D-18.6	D18.6	79	20	131
SPBL-3D-18.7	D18.7	79	20	131
SPBL-3D-18.8	D18.8	79	20	131
SPBL-3D-18.9	D18.9	79	20	131
SPBL-3D-19.0	D19.0	79	20	131
SPBL-3D-19.1	D19.1	79	20	131
SPBL-3D-19.2	D19.2	79	20	131
SPBL-3D-19.3	D19.3	79	20	131
SPBL-3D-19.4	D19.4	79	20	131
SPBL-3D-19.5	D19.5	79	20	131
SPBL-3D-19.6	D19.6	79	20	131
SPBL-3D-19.7	D19.7	79	20	131
SPBL-3D-19.8	D19.8	79	20	131
SPBL-3D-19.9	D19.9	79	20	131
SPBL-3D-20.0	D20.0	79	20	131

形狀寸表法 Dimensions / SPBL-5D

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPBL-5D-3.0	D3.0	26	6	66
SPBL-5D-3.1	D3.1	26	6	66
SPBL-5D-3.2	D3.2	26	6	66
SPBL-5D-3.3	D3.3	26	6	66
SPBL-5D-3.4	D3.4	26	6	66
SPBL-5D-3.5	D3.5	26	6	66
SPBL-5D-3.6	D3.6	26	6	66
SPBL-5D-3.7	D3.7	26	6	66
SPBL-5D-3.8	D3.8	35	6	74
SPBL-5D-3.9	D3.9	35	6	74
SPBL-5D-4.0	D4.0	35	6	74
SPBL-5D-4.1	D4.1	35	6	74
SPBL-5D-4.2	D4.2	35	6	74
SPBL-5D-4.3	D4.3	35	6	74
SPBL-5D-4.4	D4.4	35	6	74
SPBL-5D-4.5	D4.5	35	6	74
SPBL-5D-4.6	D4.6	35	6	74
SPBL-5D-4.7	D4.7	35	6	74
SPBL-5D-4.8	D4.8	43	6	82
SPBL-5D-4.9	D4.9	43	6	82
SPBL-5D-5.0	D5.0	43	6	82
SPBL-5D-5.1	D5.1	43	6	82
SPBL-5D-5.2	D5.2	43	6	82
SPBL-5D-5.3	D5.3	43	6	82
SPBL-5D-5.4	D5.4	43	6	82
SPBL-5D-5.5	D5.5	43	6	82
SPBL-5D-5.6	D5.6	43	6	82
SPBL-5D-5.7	D5.7	43	6	82
SPBL-5D-5.8	D5.8	43	6	82
SPBL-5D-5.9	D5.9	43	6	82
SPBL-5D-6.0	D6.0	43	6	82
SPBL-5D-6.1	D6.1	52	8	91
SPBL-5D-6.2	D6.2	52	8	91
SPBL-5D-6.3	D6.3	52	8	91
SPBL-5D-6.4	D6.4	52	8	91
SPBL-5D-6.5	D6.5	52	8	91
SPBL-5D-6.6	D6.6	52	8	91
SPBL-5D-6.7	D6.7	52	8	91
SPBL-5D-6.8	D6.8	52	8	91
SPBL-5D-6.9	D6.9	52	8	91
SPBL-5D-7.0	D7.0	52	8	91
SPBL-5D-7.1	D7.1	52	8	91
SPBL-5D-7.2	D7.2	52	8	91
SPBL-5D-7.3	D7.3	52	8	91
SPBL-5D-7.4	D7.4	52	8	91
SPBL-5D-7.5	D7.5	52	8	91
SPBL-5D-7.6	D7.6	52	8	91
SPBL-5D-7.7	D7.7	52	8	91
SPBL-5D-7.8	D7.8	52	8	91
SPBL-5D-7.9	D7.9	52	8	91
SPBL-5D-8.0	D8.0	52	8	91
SPBL-5D-8.1	D8.1	59	10	103
SPBL-5D-8.2	D8.2	59	10	103
SPBL-5D-8.3	D8.3	59	10	103
SPBL-5D-8.4	D8.4	59	10	103
SPBL-5D-8.5	D8.5	59	10	103
SPBL-5D-8.6	D8.6	59	10	103

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPBL-5D-8.7	D8.7	59	10	103
SPBL-5D-8.8	D8.8	59	10	103
SPBL-5D-8.9	D8.9	59	10	103
SPBL-5D-9.0	D9.0	59	10	103
SPBL-5D-9.1	D9.1	59	10	103
SPBL-5D-9.2	D9.2	59	10	103
SPBL-5D-9.3	D9.3	59	10	103
SPBL-5D-9.4	D9.4	59	10	103
SPBL-5D-9.5	D9.5	59	10	103
SPBL-5D-9.6	D9.6	59	10	103
SPBL-5D-9.7	D9.7	59	10	103
SPBL-5D-9.8	D9.8	59	10	103
SPBL-5D-9.9	D9.9	59	10	103
SPBL-5D-10.0	D10.0	59	10	103
SPBL-5D-10.1	D10.1	69	12	118
SPBL-5D-10.2	D10.2	69	12	118
SPBL-5D-10.3	D10.3	69	12	118
SPBL-5D-10.4	D10.4	69	12	118
SPBL-5D-10.5	D10.5	69	12	118
SPBL-5D-10.6	D10.6	69	12	118
SPBL-5D-10.7	D10.7	69	12	118
SPBL-5D-10.8	D10.8	69	12	118
SPBL-5D-10.9	D10.9	69	12	118
SPBL-5D-11.0	D11.0	69	12	118
SPBL-5D-11.1	D11.1	69	12	118
SPBL-5D-11.2	D11.2	69	12	118
SPBL-5D-11.3	D11.3	69	12	118
SPBL-5D-11.4	D11.4	69	12	118
SPBL-5D-11.5	D11.5	69	12	118
SPBL-5D-11.6	D11.6	69	12	118
SPBL-5D-11.7	D11.7	69	12	118
SPBL-5D-11.8	D11.8	69	12	118
SPBL-5D-11.9	D11.9	69	12	118
SPBL-5D-12.0	D12.0	69	12	118
SPBL-5D-12.1	D12.1	75	14	124
SPBL-5D-12.2	D12.2	75	14	124
SPBL-5D-12.3	D12.3	75	14	124
SPBL-5D-12.4	D12.4	75	14	124
SPBL-5D-12.5	D12.5	75	14	124
SPBL-5D-12.6	D12.6	75	14	124
SPBL-5D-12.7	D12.7	75	14	124
SPBL-5D-12.8	D12.8	75	14	124
SPBL-5D-12.9	D12.9	75	14	124
SPBL-5D-13.0	D13.0	75	14	124
SPBL-5D-13.1	D13.1	75	14	124
SPBL-5D-13.2	D13.2	75	14	124
SPBL-5D-13.3	D13.3	75	14	124
SPBL-5D-13.4	D13.4	75	14	124
SPBL-5D-13.5	D13.5	75	14	124
SPBL-5D-13.6	D13.6	75	14	124
SPBL-5D-13.7	D13.7	75	14	124
SPBL-5D-13.8	D13.8	75	14	124
SPBL-5D-13.9	D13.9	75	14	124
SPBL-5D-14.0	D14.0	75	14	124
SPBL-5D-14.1	D14.1	80	16	133
SPBL-5D-14.2	D14.2	80	16	133
SPBL-5D-14.3	D14.3	80	16	133

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPBL-5D-14.4	D14.4	80	16	133
SPBL-5D-14.5	D14.5	80	16	133
SPBL-5D-14.6	D14.6	80	16	133
SPBL-5D-14.7	D14.7	80	16	133
SPBL-5D-14.8	D14.8	80	16	133
SPBL-5D-14.9	D14.9	80	16	133
SPBL-5D-15.0	D15.0	80	16	133
SPBL-5D-15.1	D15.1	80	16	133
SPBL-5D-15.2	D15.2	80	16	133
SPBL-5D-15.3	D15.3	80	16	133
SPBL-5D-15.4	D15.4	80	16	133
SPBL-5D-15.5	D15.5	80	16	133
SPBL-5D-15.6	D15.6	80	16	133
SPBL-5D-15.7	D15.7	80	16	133
SPBL-5D-15.8	D15.8	80	16	133
SPBL-5D-15.9	D15.9	80	16	133
SPBL-5D-16.0	D16.0	80	16	133
SPBL-5D-16.1	D16.1	93	18	143
SPBL-5D-16.2	D16.2	93	18	143
SPBL-5D-16.3	D16.3	93	18	143
SPBL-5D-16.4	D16.4	93	18	143
SPBL-5D-16.5	D16.5	93	18	143
SPBL-5D-16.6	D16.6	93	18	143
SPBL-5D-16.7	D16.7	93	18	143
SPBL-5D-16.8	D16.8	93	18	143
SPBL-5D-16.9	D16.9	93	18	143
SPBL-5D-17.0	D17.0	93	18	143
SPBL-5D-17.1	D17.1	93	18	143
SPBL-5D-17.2	D17.2	93	18	143
SPBL-5D-17.3	D17.3	93	18	143
SPBL-5D-17.4	D17.4	93	18	143
SPBL-5D-17.5	D17.5	93	18	143
SPBL-5D-17.6	D17.6	93	18	143
SPBL-5D-17.7	D17.7	93	18	143
SPBL-5D-17.8	D17.8	93	18	143
SPBL-5D-17.9	D17.9	93	18	143
SPBL-5D-18.0	D18.0	93	18	143
SPBL-5D-18.1	D18.1	101	20	153
SPBL-5D-18.2	D18.2	101	20	153
SPBL-5D-18.3	D18.3	101	20	153
SPBL-5D-18.4	D18.4	101	20	153
SPBL-5D-18.5	D18.5	101	20	153
SPBL-5D-18.6	D18.6	101	20	153
SPBL-5D-18.7	D18.7	101	20	153
SPBL-5D-18.8	D18.8	101	20	153
SPBL-5D-18.9	D18.9	101	20	153
SPBL-5D-19.0	D19.0	101	20	153
SPBL-5D-19.1	D19.1	101	20	153
SPBL-5D-19.2	D19.2	101	20	153
SPBL-5D-19.3	D19.3	101	20	153
SPBL-5D-19.4	D19.4	101	20	153
SPBL-5D-19.5	D19.5	101	20	153
SPBL-5D-19.6	D19.6	101	20	153
SPBL-5D-19.7	D19.7	101	20	153
SPBL-5D-19.8	D19.8	101	20	153
SPBL-5D-19.9	D19.9	101	20	153
SPBL-5D-20.0	D20.0	101	20	153

CARBIDE DRILL
/ 鎢鋼鑽頭

Features / 特色

> SPA - 3D	> SPA - 5D	鋼用外冷 Without coolant holes
> SPB - 3D	> SPB - 5D	鋼用內冷 With coolant holes

Applications / 應用

- 適用於加工合金鋼, 鑄鋼, 鑄鐵, 淬火鋼。
  Apply to Alloy Steel, Cast Steel, Cast Iron, Quenching Steel.

- 鋁鈦矽塗層、精密溝槽、弧型尖端設計、超強剛性。
  With AlTiSiN coating, finely Grooving, Drill Tip with curve, extremely rigidity.

CBD | m7 | h6 | 30° | AlTiSiN

3D | 5D

碳鋼	Carbon Steel	◎
合金鋼	Alloy Steel	◎
調質鋼	Quenching Steel	◎
高硬度鋼	High Hardness Steel	◎
不銹鋼	Stainless Steel	◎
灰鑄鐵	Gray Cast Iron	◎
球墨鑄鐵	Nodular Graphite Iron	◎
鈦合金	Titanium Alloy	◎
耐熱鋼	Heat-resistant Steel	◎

形狀寸表法 Dimensions / SPA-3D

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPA-3D-3.0	D3.0	19	6	62
SPA-3D-3.1	D3.1	19	6	62
SPA-3D-3.2	D3.2	19	6	62
SPA-3D-3.3	D3.3	19	6	62
SPA-3D-3.4	D3.4	19	6	62
SPA-3D-3.5	D3.5	19	6	62
SPA-3D-3.6	D3.6	19	6	62
SPA-3D-3.7	D3.7	19	6	62
SPA-3D-3.8	D3.8	23	6	66
SPA-3D-3.9	D3.9	23	6	66
SPA-3D-4.0	D4.0	23	6	66
SPA-3D-4.1	D4.1	23	6	66
SPA-3D-4.2	D4.2	23	6	66
SPA-3D-4.3	D4.3	23	6	66
SPA-3D-4.4	D4.4	23	6	66
SPA-3D-4.5	D4.5	23	6	66
SPA-3D-4.6	D4.6	23	6	66
SPA-3D-4.7	D4.7	23	6	66
SPA-3D-4.8	D4.8	27	6	66
SPA-3D-4.9	D4.9	27	6	66
SPA-3D-5.0	D5.0	27	6	66
SPA-3D-5.1	D5.1	27	6	66
SPA-3D-5.2	D5.2	27	6	66
SPA-3D-5.3	D5.3	27	6	66
SPA-3D-5.4	D5.4	27	6	66
SPA-3D-5.5	D5.5	27	6	66
SPA-3D-5.6	D5.6	27	6	66
SPA-3D-5.7	D5.7	27	6	66
SPA-3D-5.8	D5.8	27	6	66
SPA-3D-5.9	D5.9	27	6	66
SPA-3D-6.0	D6.0	27	6	66
SPA-3D-6.1	D6.1	33	8	79
SPA-3D-6.2	D6.2	33	8	79
SPA-3D-6.3	D6.3	33	8	79
SPA-3D-6.4	D6.4	33	8	79
SPA-3D-6.5	D6.5	33	8	79
SPA-3D-6.6	D6.6	33	8	79
SPA-3D-6.7	D6.7	33	8	79
SPA-3D-6.8	D6.8	33	8	79
SPA-3D-6.9	D6.9	33	8	79
SPA-3D-7.0	D7.0	33	8	79
SPA-3D-7.1	D7.1	39	8	79
SPA-3D-7.2	D7.2	39	8	79
SPA-3D-7.3	D7.3	39	8	79
SPA-3D-7.4	D7.4	39	8	79
SPA-3D-7.5	D7.5	39	8	79
SPA-3D-7.6	D7.6	39	8	79
SPA-3D-7.7	D7.7	39	8	79
SPA-3D-7.8	D7.8	39	8	79
SPA-3D-7.9	D7.9	39	8	79
SPA-3D-8.0	D8.0	39	8	79
SPA-3D-8.1	D8.1	45	10	89
SPA-3D-8.2	D8.2	45	10	89
SPA-3D-8.3	D8.3	45	10	89
SPA-3D-8.4	D8.4	45	10	89
SPA-3D-8.5	D8.5	45	10	89
SPA-3D-8.6	D8.6	45	10	89

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPA-3D-8.7	D8.7	45	10	89
SPA-3D-8.8	D8.8	45	10	89
SPA-3D-8.9	D8.9	45	10	89
SPA-3D-9.0	D9.0	45	10	89
SPA-3D-9.1	D9.1	45	10	89
SPA-3D-9.2	D9.2	45	10	89
SPA-3D-9.3	D9.3	45	10	89
SPA-3D-9.4	D9.4	45	10	89
SPA-3D-9.5	D9.5	45	10	89
SPA-3D-9.6	D9.6	45	10	89
SPA-3D-9.7	D9.7	45	10	89
SPA-3D-9.8	D9.8	45	10	89
SPA-3D-9.9	D9.9	45	10	89
SPA-3D-10.0	D10.0	45	10	89
SPA-3D-10.1	D10.1	53	12	102
SPA-3D-10.2	D10.2	53	12	102
SPA-3D-10.3	D10.3	53	12	102
SPA-3D-10.4	D10.4	53	12	102
SPA-3D-10.5	D10.5	53	12	102
SPA-3D-10.6	D10.6	53	12	102
SPA-3D-10.7	D10.7	53	12	102
SPA-3D-10.8	D10.8	53	12	102
SPA-3D-10.9	D10.9	53	12	102
SPA-3D-11.0	D11.0	53	12	102
SPA-3D-11.1	D11.1	53	12	102
SPA-3D-11.2	D11.2	53	12	102
SPA-3D-11.3	D11.3	53	12	102
SPA-3D-11.4	D11.4	53	12	102
SPA-3D-11.5	D11.5	53	12	102
SPA-3D-11.6	D11.6	53	12	102
SPA-3D-11.7	D11.7	53	12	102
SPA-3D-11.8	D11.8	53	12	102
SPA-3D-11.9	D11.9	53	12	102
SPA-3D-12.0	D12.0	53	12	102
SPA-3D-12.1	D12.1	58	14	107
SPA-3D-12.2	D12.2	58	14	107
SPA-3D-12.3	D12.3	58	14	107
SPA-3D-12.4	D12.4	58	14	107
SPA-3D-12.5	D12.5	58	14	107
SPA-3D-12.6	D12.6	58	14	107
SPA-3D-12.7	D12.7	58	14	107
SPA-3D-12.8	D12.8	58	14	107
SPA-3D-12.9	D12.9	58	14	107
SPA-3D-13.0	D13.0	58	14	107
SPA-3D-13.1	D13.1	58	14	107
SPA-3D-13.2	D13.2	58	14	107
SPA-3D-13.3	D13.3	58	14	107
SPA-3D-13.4	D13.4	58	14	107
SPA-3D-13.5	D13.5	58	14	107
SPA-3D-13.6	D13.6	58	14	107
SPA-3D-13.7	D13.7	58	14	107
SPA-3D-13.8	D13.8	58	14	107
SPA-3D-13.9	D13.9	58	14	107
SPA-3D-14.0	D14.0	58	14	107
SPA-3D-14.1	D14.1	62	16	115
SPA-3D-14.2	D14.2	62	16	115
SPA-3D-14.3	D14.3	62	16	115

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPA-3D-14.4	D14.4	62	16	115
SPA-3D-14.5	D14.5	62	16	115
SPA-3D-14.6	D14.6	62	16	115
SPA-3D-14.7	D14.7	62	16	115
SPA-3D-14.8	D14.8	62	16	115
SPA-3D-14.9	D14.9	62	16	115
SPA-3D-15.0	D15.0	62	16	115
SPA-3D-15.1	D15.1	62	16	115
SPA-3D-15.2	D15.2	79	20	131
SPA-3D-15.3	D15.3	79	20	131
SPA-3D-15.4	D15.4	79	20	131
SPA-3D-15.5	D15.5	79	20	131
SPA-3D-15.6	D15.6	79	20	131
SPA-3D-15.7	D15.7	79	20	131
SPA-3D-15.8	D15.8	79	20	131
SPA-3D-15.9	D15.9	79	20	131
SPA-3D-16.0	D16.0	79	20	131
SPA-3D-16.1	D16.1	79	20	131
SPA-3D-16.2	D16.2	79	20	131
SPA-3D-16.3	D16.3	79	20	131
SPA-3D-16.4	D16.4	79	20	131
SPA-3D-16.5	D16.5	79	20	131
SPA-3D-16.6	D16.6	79	20	131
SPA-3D-16.7	D16.7	79	20	131
SPA-3D-16.8	D16.8	79	20	131
SPA-3D-16.9	D16.9	79	20	131
SPA-3D-17.0	D17.0	79	20	131
SPA-3D-17.1	D17.1	79	20	131
SPA-3D-17.2	D17.2	79	20	131
SPA-3D-17.3	D17.3	79	20	131
SPA-3D-17.4	D17.4	79	20	131
SPA-3D-17.5	D17.5	79	20	131
SPA-3D-17.6	D17.6	79	20	131
SPA-3D-17.7	D17.7	79	20	131
SPA-3D-17.8	D17.8	79	20	131
SPA-3D-17.9	D17.9	79	20	131
SPA-3D-18.0	D18.0	79	20	131
SPA-3D-18.1	D18.1	79	20	131
SPA-3D-18.2	D18.2	79	20	131
SPA-3D-18.3	D18.3	79	20	131
SPA-3D-18.4	D18.4	79	20	131
SPA-3D-18.5	D18.5	79	20	131
SPA-3D-18.6	D18.6	79	20	131
SPA-3D-18.7	D18.7	79	20	131
SPA-3D-18.8	D18.8	79	20	131
SPA-3D-18.9	D18.9	79	20	131
SPA-3D-19.0	D19.0	79	20	131
SPA-3D-19.1	D19.1	79	20	131
SPA-3D-19.2	D19.2	79	20	131
SPA-3D-19.3	D19.3	79	20	131
SPA-3D-19.4	D19.4	79	20	131
SPA-3D-19.5	D19.5	79	20	131
SPA-3D-19.6	D19.6	79	20	131
SPA-3D-19.7	D19.7	79	20	131
SPA-3D-19.8	D19.8	79	20	131
SPA-3D-19.9	D19.9	79	20	131
SPA-3D-20.0	D20.0	79	20	131

形狀寸表法 Dimensions / SPA-5D

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPA-5D-3.0	D3.0	26	6	66
SPA-5D-3.1	D3.1	26	6	66
SPA-5D-3.2	D3.2	26	6	66
SPA-5D-3.3	D3.3	26	6	66
SPA-5D-3.4	D3.4	26	6	66
SPA-5D-3.5	D3.5	26	6	66
SPA-5D-3.6	D3.6	26	6	66
SPA-5D-3.7	D3.7	26	6	66
SPA-5D-3.8	D3.8	35	6	74
SPA-5D-3.9	D3.9	35	6	74
SPA-5D-4.0	D4.0	35	6	74
SPA-5D-4.1	D4.1	35	6	74
SPA-5D-4.2	D4.2	35	6	74
SPA-5D-4.3	D4.3	35	6	74
SPA-5D-4.4	D4.4	35	6	74
SPA-5D-4.5	D4.5	35	6	74
SPA-5D-4.6	D4.6	35	6	74
SPA-5D-4.7	D4.7	35	6	74
SPA-5D-4.8	D4.8	43	6	82
SPA-5D-4.9	D4.9	43	6	82
SPA-5D-5.0	D5.0	43	6	82
SPA-5D-5.1	D5.1	43	6	82
SPA-5D-5.2	D5.2	43	6	82
SPA-5D-5.3	D5.3	43	6	82
SPA-5D-5.4	D5.4	43	6	82
SPA-5D-5.5	D5.5	43	6	82
SPA-5D-5.6	D5.6	43	6	82
SPA-5D-5.7	D5.7	43	6	82
SPA-5D-5.8	D5.8	43	6	82
SPA-5D-5.9	D5.9	43	6	82
SPA-5D-6.0	D6.0	43	6	82
SPA-5D-6.1	D6.1	52	8	91
SPA-5D-6.2	D6.2	52	8	91
SPA-5D-6.3	D6.3	52	8	91
SPA-5D-6.4	D6.4	52	8	91
SPA-5D-6.5	D6.5	52	8	91
SPA-5D-6.6	D6.6	52	8	91
SPA-5D-6.7	D6.7	52	8	91
SPA-5D-6.8	D6.8	52	8	91
SPA-5D-6.9	D6.9	52	8	91
SPA-5D-7.0	D7.0	52	8	91
SPA-5D-7.1	D7.1	52	8	91
SPA-5D-7.2	D7.2	52	8	91
SPA-5D-7.3	D7.3	52	8	91
SPA-5D-7.4	D7.4	52	8	91
SPA-5D-7.5	D7.5	52	8	91
SPA-5D-7.6	D7.6	52	8	91
SPA-5D-7.7	D7.7	52	8	91
SPA-5D-7.8	D7.8	52	8	91
SPA-5D-7.9	D7.9	52	8	91
SPA-5D-8.0	D8.0	52	8	91
SPA-5D-8.1	D8.1	59	10	103
SPA-5D-8.2	D8.2	59	10	103
SPA-5D-8.3	D8.3	59	10	103
SPA-5D-8.4	D8.4	59	10	103
SPA-5D-8.5	D8.5	59	10	103
SPA-5D-8.6	D8.6	59	10	103

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPA-5D-8.7	D8.7	59	10	103
SPA-5D-8.8	D8.8	59	10	103
SPA-5D-8.9	D8.9	59	10	103
SPA-5D-9.0	D9.0	59	10	103
SPA-5D-9.1	D9.1	59	10	103
SPA-5D-9.2	D9.2	59	10	103
SPA-5D-9.3	D9.3	59	10	103
SPA-5D-9.4	D9.4	59	10	103
SPA-5D-9.5	D9.5	59	10	103
SPA-5D-9.6	D9.6	59	10	103
SPA-5D-9.7	D9.7	59	10	103
SPA-5D-9.8	D9.8	59	10	103
SPA-5D-9.9	D9.9	59	10	103
SPA-5D-10.0	D10.0	59	10	103
SPA-5D-10.1	D10.1	69	12	118
SPA-5D-10.2	D10.2	69	12	118
SPA-5D-10.3	D10.3	69	12	118
SPA-5D-10.4	D10.4	69	12	118
SPA-5D-10.5	D10.5	69	12	118
SPA-5D-10.6	D10.6	69	12	118
SPA-5D-10.7	D10.7	69	12	118
SPA-5D-10.8	D10.8	69	12	118
SPA-5D-10.9	D10.9	69	12	118
SPA-5D-11.0	D11.0	69	12	118
SPA-5D-11.1	D11.1	69	12	118
SPA-5D-11.2	D11.2	69	12	118
SPA-5D-11.3	D11.3	69	12	118
SPA-5D-11.4	D11.4	69	12	118
SPA-5D-11.5	D11.5	69	12	118
SPA-5D-11.6	D11.6	69	12	118
SPA-5D-11.7	D11.7	69	12	118
SPA-5D-11.8	D11.8	69	12	118
SPA-5D-11.9	D11.9	69	12	118
SPA-5D-12.0	D12.0	69	12	118
SPA-5D-12.1	D12.1	75	14	124
SPA-5D-12.2	D12.2	75	14	124
SPA-5D-12.3	D12.3	75	14	124
SPA-5D-12.4	D12.4	75	14	124
SPA-5D-12.5	D12.5	75	14	124
SPA-5D-12.6	D12.6	75	14	124
SPA-5D-12.7	D12.7	75	14	124
SPA-5D-12.8	D12.8	75	14	124
SPA-5D-12.9	D12.9	75	14	124
SPA-5D-13.0	D13.0	75	14	124
SPA-5D-13.1	D13.1	75	14	124
SPA-5D-13.2	D13.2	75	14	124
SPA-5D-13.3	D13.3	75	14	124
SPA-5D-13.4	D13.4	75	14	124
SPA-5D-13.5	D13.5	75	14	124
SPA-5D-13.6	D13.6	75	14	124
SPA-5D-13.7	D13.7	75	14	124
SPA-5D-13.8	D13.8	75	14	124
SPA-5D-13.9	D13.9	75	14	124
SPA-5D-14.0	D14.0	75	14	124
SPA-5D-14.1	D14.1	80	16	133
SPA-5D-14.2	D14.2	80	16	133
SPA-5D-14.3	D14.3	80	16	133

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPA-5D-14.4	D14.4	80	16	133
SPA-5D-14.5	D14.5	80	16	133
SPA-5D-14.6	D14.6	80	16	133
SPA-5D-14.7	D14.7	80	16	133
SPA-5D-14.8	D14.8	80	16	133
SPA-5D-14.9	D14.9	80	16	133
SPA-5D-15.0	D15.0	80	16	133
SPA-5D-15.1	D15.1	80	16	133
SPA-5D-15.2	D15.2	80	16	133
SPA-5D-15.3	D15.3	80	16	133
SPA-5D-15.4	D15.4	80	16	133
SPA-5D-15.5	D15.5	80	16	133
SPA-5D-15.6	D15.6	80	16	133
SPA-5D-15.7	D15.7	80	16	133
SPA-5D-15.8	D15.8	80	16	133
SPA-5D-15.9	D15.9	80	16	133
SPA-5D-16.0	D16.0	80	16	133
SPA-5D-16.1	D16.1	93	18	143
SPA-5D-16.2	D16.2	93	18	143
SPA-5D-16.3	D16.3	93	18	143
SPA-5D-16.4	D16.4	93	18	143
SPA-5D-16.5	D16.5	93	18	143
SPA-5D-16.6	D16.6	93	18	143
SPA-5D-16.7	D16.7	93	18	143
SPA-5D-16.8	D16.8	93	18	143
SPA-5D-16.9	D16.9	93	18	143
SPA-5D-17.0	D17.0	93	18	143
SPA-5D-17.1	D17.1	93	18	143
SPA-5D-17.2	D17.2	93	18	143
SPA-5D-17.3	D17.3	93	18	143
SPA-5D-17.4	D17.4	93	18	143
SPA-5D-17.5	D17.5	93	18	143
SPA-5D-17.6	D17.6	93	18	143
SPA-5D-17.7	D17.7	93	18	143
SPA-5D-17.8	D17.8	93	18	143
SPA-5D-17.9	D17.9	93	18	143
SPA-5D-18.0	D18.0	93	18	143
SPA-5D-18.1	D18.1	101	20	153
SPA-5D-18.2	D18.2	101	20	153
SPA-5D-18.3	D18.3	101	20	153
SPA-5D-18.4	D18.4	101	20	153
SPA-5D-18.5	D18.5	101	20	153
SPA-5D-18.6	D18.6	101	20	153
SPA-5D-18.7	D18.7	101	20	153
SPA-5D-18.8	D18.8	101	20	153
SPA-5D-18.9	D18.9	101	20	153
SPA-5D-19.0	D19.0	101	20	153
SPA-5D-19.1	D19.1	101	20	153
SPA-5D-19.2	D19.2	101	20	153
SPA-5D-19.3	D19.3	101	20	153
SPA-5D-19.4	D19.4	101	20	153
SPA-5D-19.5	D19.5	101	20	153
SPA-5D-19.6	D19.6	101	20	153
SPA-5D-19.7	D19.7	101	20	153
SPA-5D-19.8	D19.8	101	20	153
SPA-5D-19.9	D19.9	101	20	153
SPA-5D-20.0	D20.0	101	20	153

形狀寸表法 Dimensions / SPB-3D

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPB-3D-3.0	D3.0	19	6	62
SPB-3D-3.1	D3.1	19	6	62
SPB-3D-3.2	D3.2	19	6	62
SPB-3D-3.3	D3.3	19	6	62
SPB-3D-3.4	D3.4	19	6	62
SPB-3D-3.5	D3.5	19	6	62
SPB-3D-3.6	D3.6	19	6	62
SPB-3D-3.7	D3.7	19	6	62
SPB-3D-3.8	D3.8	23	6	66
SPB-3D-3.9	D3.9	23	6	66
SPB-3D-4.0	D4.0	23	6	66
SPB-3D-4.1	D4.1	23	6	66
SPB-3D-4.2	D4.2	23	6	66
SPB-3D-4.3	D4.3	23	6	66
SPB-3D-4.4	D4.4	23	6	66
SPB-3D-4.5	D4.5	23	6	66
SPB-3D-4.6	D4.6	23	6	66
SPB-3D-4.7	D4.7	23	6	66
SPB-3D-4.8	D4.8	27	6	66
SPB-3D-4.9	D4.9	27	6	66
SPB-3D-5.0	D5.0	27	6	66
SPB-3D-5.1	D5.1	27	6	66
SPB-3D-5.2	D5.2	27	6	66
SPB-3D-5.3	D5.3	27	6	66
SPB-3D-5.4	D5.4	27	6	66
SPB-3D-5.5	D5.5	27	6	66
SPB-3D-5.6	D5.6	27	6	66
SPB-3D-5.7	D5.7	27	6	66
SPB-3D-5.8	D5.8	27	6	66
SPB-3D-5.9	D5.9	27	6	66
SPB-3D-6.0	D6.0	27	6	66
SPB-3D-6.1	D6.1	33	8	79
SPB-3D-6.2	D6.2	33	8	79
SPB-3D-6.3	D6.3	33	8	79
SPB-3D-6.4	D6.4	33	8	79
SPB-3D-6.5	D6.5	33	8	79
SPB-3D-6.6	D6.6	33	8	79
SPB-3D-6.7	D6.7	33	8	79
SPB-3D-6.8	D6.8	33	8	79
SPB-3D-6.9	D6.9	33	8	79
SPB-3D-7.0	D7.0	33	8	79
SPB-3D-7.1	D7.1	39	8	79
SPB-3D-7.2	D7.2	39	8	79
SPB-3D-7.3	D7.3	39	8	79
SPB-3D-7.4	D7.4	39	8	79
SPB-3D-7.5	D7.5	39	8	79
SPB-3D-7.6	D7.6	39	8	79
SPB-3D-7.7	D7.7	39	8	79
SPB-3D-7.8	D7.8	39	8	79
SPB-3D-7.9	D7.9	39	8	79
SPB-3D-8.0	D8.0	39	8	79
SPB-3D-8.1	D8.1	45	10	89
SPB-3D-8.2	D8.2	45	10	89
SPB-3D-8.3	D8.3	45	10	89
SPB-3D-8.4	D8.4	45	10	89
SPB-3D-8.5	D8.5	45	10	89
SPB-3D-8.6	D8.6	45	10	89
SPB-3D-8.7	D8.7	45	10	89
SPB-3D-8.8	D8.8	45	10	89
SPB-3D-8.9	D8.9	45	10	89
SPB-3D-9.0	D9.0	45	10	89
SPB-3D-9.1	D9.1	45	10	89
SPB-3D-9.2	D9.2	45	10	89
SPB-3D-9.3	D9.3	45	10	89
SPB-3D-9.4	D9.4	45	10	89
SPB-3D-9.5	D9.5	45	10	89
SPB-3D-9.6	D9.6	45	10	89
SPB-3D-9.7	D9.7	45	10	89
SPB-3D-9.8	D9.8	45	10	89
SPB-3D-9.9	D9.9	45	10	89
SPB-3D-10.0	D10.0	45	10	89
SPB-3D-10.1	D10.1	53	12	102
SPB-3D-10.2	D10.2	53	12	102
SPB-3D-10.3	D10.3	53	12	102
SPB-3D-10.4	D10.4	53	12	102
SPB-3D-10.5	D10.5	53	12	102
SPB-3D-10.6	D10.6	53	12	102
SPB-3D-10.7	D10.7	53	12	102
SPB-3D-10.8	D10.8	53	12	102
SPB-3D-10.9	D10.9	53	12	102
SPB-3D-11.0	D11.0	53	12	102
SPB-3D-11.1	D11.1	53	12	102
SPB-3D-11.2	D11.2	53	12	102
SPB-3D-11.3	D11.3	53	12	102
SPB-3D-11.4	D11.4	53	12	102
SPB-3D-11.5	D11.5	53	12	102
SPB-3D-11.6	D11.6	53	12	102
SPB-3D-11.7	D11.7	53	12	102
SPB-3D-11.8	D11.8	53	12	102
SPB-3D-11.9	D11.9	53	12	102
SPB-3D-12.0	D12.0	53	12	102
SPB-3D-12.1	D12.1	58	14	107
SPB-3D-12.2	D12.2	58	14	107
SPB-3D-12.3	D12.3	58	14	107
SPB-3D-12.4	D12.4	58	14	107
SPB-3D-12.5	D12.5	58	14	107
SPB-3D-12.6	D12.6	58	14	107
SPB-3D-12.7	D12.7	58	14	107
SPB-3D-12.8	D12.8	58	14	107
SPB-3D-12.9	D12.9	58	14	107
SPB-3D-13.0	D13.0	58	14	107
SPB-3D-13.1	D13.1	58	14	107
SPB-3D-13.2	D13.2	58	14	107
SPB-3D-13.3	D13.3	58	14	107
SPB-3D-13.4	D13.4	58	14	107
SPB-3D-13.5	D13.5	58	14	107
SPB-3D-13.6	D13.6	58	14	107
SPB-3D-13.7	D13.7	58	14	107
SPB-3D-13.8	D13.8	58	14	107
SPB-3D-13.9	D13.9	58	14	107
SPB-3D-14.0	D14.0	58	14	107
SPB-3D-14.1	D14.1	62	16	115
SPB-3D-14.2	D14.2	62	16	115
SPB-3D-14.3	D14.3	62	16	115
SPB-3D-14.4	D14.4	62	16	115
SPB-3D-14.5	D14.5	62	16	115
SPB-3D-14.6	D14.6	62	16	115
SPB-3D-14.7	D14.7	62	16	115
SPB-3D-14.8	D14.8	62	16	115
SPB-3D-14.9	D14.9	62	16	115
SPB-3D-15.0	D15.0	62	16	115
SPB-3D-15.1	D15.1	62	16	115
SPB-3D-15.2	D15.2	62	16	115
SPB-3D-15.3	D15.3	62	16	115
SPB-3D-15.4	D15.4	62	16	115
SPB-3D-15.5	D15.5	62	16	115
SPB-3D-15.6	D15.6	62	16	115
SPB-3D-15.7	D15.7	62	16	115
SPB-3D-15.8	D15.8	62	16	115
SPB-3D-15.9	D15.9	62	16	115
SPB-3D-16.0	D16.0	62	16	115
SPB-3D-16.1	D16.1	73	18	123
SPB-3D-16.2	D16.2	73	18	123
SPB-3D-16.3	D16.3	73	18	123
SPB-3D-16.4	D16.4	73	18	123
SPB-3D-16.5	D16.5	73	18	123
SPB-3D-16.6	D16.6	73	18	123
SPB-3D-16.7	D16.7	73	18	123
SPB-3D-16.8	D16.8	73	18	123
SPB-3D-16.9	D16.9	73	18	123
SPB-3D-17.0	D17.0	73	18	123
SPB-3D-17.1	D17.1	73	18	123
SPB-3D-17.2	D17.2	73	18	123
SPB-3D-17.3	D17.3	73	18	123
SPB-3D-17.4	D17.4	73	18	123
SPB-3D-17.5	D17.5	73	18	123
SPB-3D-17.6	D17.6	73	18	123
SPB-3D-17.7	D17.7	73	18	123
SPB-3D-17.8	D17.8	73	18	123
SPB-3D-17.9	D17.9	73	18	123
SPB-3D-18.0	D18.0	73	18	123
SPB-3D-18.1	D18.1	79	20	131
SPB-3D-18.2	D18.2	79	20	131
SPB-3D-18.3	D18.3	79	20	131
SPB-3D-18.4	D18.4	79	20	131
SPB-3D-18.5	D18.5	79	20	131
SPB-3D-18.6	D18.6	79	20	131
SPB-3D-18.7	D18.7	79	20	131
SPB-3D-18.8	D18.8	79	20	131
SPB-3D-18.9	D18.9	79	20	131
SPB-3D-19.0	D19.0	79	20	131
SPB-3D-19.1	D19.1	79	20	131
SPB-3D-19.2	D19.2	79	20	131
SPB-3D-19.3	D19.3	79	20	131
SPB-3D-19.4	D19.4	79	20	131
SPB-3D-19.5	D19.5	79	20	131
SPB-3D-19.6	D19.6	79	20	131
SPB-3D-19.7	D19.7	79	20	131
SPB-3D-19.8	D19.8	79	20	131
SPB-3D-19.9	D19.9	79	20	131
SPB-3D-20.0	D20.0	79	20	131

形狀寸表法 Dimensions / SPB-5D

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPB-5D-3.0	D3.0	26	6	66
SPB-5D-3.1	D3.1	26	6	66
SPB-5D-3.2	D3.2	26	6	66
SPB-5D-3.3	D3.3	26	6	66
SPB-5D-3.4	D3.4	26	6	66
SPB-5D-3.5	D3.5	26	6	66
SPB-5D-3.6	D3.6	26	6	66
SPB-5D-3.7	D3.7	26	6	66
SPB-5D-3.8	D3.8	35	6	74
SPB-5D-3.9	D3.9	35	6	74
SPB-5D-4.0	D4.0	35	6	74
SPB-5D-4.1	D4.1	35	6	74
SPB-5D-4.2	D4.2	35	6	74
SPB-5D-4.3	D4.3	35	6	74
SPB-5D-4.4	D4.4	35	6	74
SPB-5D-4.5	D4.5	35	6	74
SPB-5D-4.6	D4.6	35	6	74
SPB-5D-4.7	D4.7	35	6	74
SPB-5D-4.8	D4.8	43	6	82
SPB-5D-4.9	D4.9	43	6	82
SPB-5D-5.0	D5.0	43	6	82
SPB-5D-5.1	D5.1	43	6	82
SPB-5D-5.2	D5.2	43	6	82
SPB-5D-5.3	D5.3	43	6	82
SPB-5D-5.4	D5.4	43	6	82
SPB-5D-5.5	D5.5	43	6	82
SPB-5D-5.6	D5.6	43	6	82
SPB-5D-5.7	D5.7	43	6	82
SPB-5D-5.8	D5.8	43	6	82
SPB-5D-5.9	D5.9	43	6	82
SPB-5D-6.0	D6.0	43	6	82
SPB-5D-6.1	D6.1	52	8	91
SPB-5D-6.2	D6.2	52	8	91
SPB-5D-6.3	D6.3	52	8	91
SPB-5D-6.4	D6.4	52	8	91
SPB-5D-6.5	D6.5	52	8	91
SPB-5D-6.6	D6.6	52	8	91
SPB-5D-6.7	D6.7	52	8	91
SPB-5D-6.8	D6.8	52	8	91
SPB-5D-6.9	D6.9	52	8	91
SPB-5D-7.0	D7.0	52	8	91
SPB-5D-7.1	D7.1	52	8	91
SPB-5D-7.2	D7.2	52	8	91
SPB-5D-7.3	D7.3	52	8	91
SPB-5D-7.4	D7.4	52	8	91
SPB-5D-7.5	D7.5	52	8	91
SPB-5D-7.6	D7.6	52	8	91
SPB-5D-7.7	D7.7	52	8	91
SPB-5D-7.8	D7.8	52	8	91
SPB-5D-7.9	D7.9	52	8	91
SPB-5D-8.0	D8.0	52	8	91
SPB-5D-8.1	D8.1	59	10	103
SPB-5D-8.2	D8.2	59	10	103
SPB-5D-8.3	D8.3	59	10	103
SPB-5D-8.4	D8.4	59	10	103
SPB-5D-8.5	D8.5	59	10	103
SPB-5D-8.6	D8.6	59	10	103

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPB-5D-8.7	D8.7	59	10	103
SPB-5D-8.8	D8.8	59	10	103
SPB-5D-8.9	D8.9	59	10	103
SPB-5D-9.0	D9.0	59	10	103
SPB-5D-9.1	D9.1	59	10	103
SPB-5D-9.2	D9.2	59	10	103
SPB-5D-9.3	D9.3	59	10	103
SPB-5D-9.4	D9.4	59	10	103
SPB-5D-9.5	D9.5	59	10	103
SPB-5D-9.6	D9.6	59	10	103
SPB-5D-9.7	D9.7	59	10	103
SPB-5D-9.8	D9.8	59	10	103
SPB-5D-9.9	D9.9	59	10	103
SPB-5D-10.0	D10.0	59	10	103
SPB-5D-10.1	D10.1	69	12	118
SPB-5D-10.2	D10.2	69	12	118
SPB-5D-10.3	D10.3	69	12	118
SPB-5D-10.4	D10.4	69	12	118
SPB-5D-10.5	D10.5	69	12	118
SPB-5D-10.6	D10.6	69	12	118
SPB-5D-10.7	D10.7	69	12	118
SPB-5D-10.8	D10.8	69	12	118
SPB-5D-10.9	D10.9	69	12	118
SPB-5D-11.0	D11.0	69	12	118
SPB-5D-11.1	D11.1	69	12	118
SPB-5D-11.2	D11.2	69	12	118
SPB-5D-11.3	D11.3	69	12	118
SPB-5D-11.4	D11.4	69	12	118
SPB-5D-11.5	D11.5	69	12	118
SPB-5D-11.6	D11.6	69	12	118
SPB-5D-11.7	D11.7	69	12	118
SPB-5D-11.8	D11.8	69	12	118
SPB-5D-11.9	D11.9	69	12	118
SPB-5D-12.0	D12.0	69	12	118
SPB-5D-12.1	D12.1	75	14	124
SPB-5D-12.2	D12.2	75	14	124
SPB-5D-12.3	D12.3	75	14	124
SPB-5D-12.4	D12.4	75	14	124
SPB-5D-12.5	D12.5	75	14	124
SPB-5D-12.6	D12.6	75	14	124
SPB-5D-12.7	D12.7	75	14	124
SPB-5D-12.8	D12.8	75	14	124
SPB-5D-12.9	D12.9	75	14	124
SPB-5D-13.0	D13.0	75	14	124
SPB-5D-13.1	D13.1	75	14	124
SPB-5D-13.2	D13.2	75	14	124
SPB-5D-13.3	D13.3	75	14	124
SPB-5D-13.4	D13.4	75	14	124
SPB-5D-13.5	D13.5	75	14	124
SPB-5D-13.6	D13.6	75	14	124
SPB-5D-13.7	D13.7	75	14	124
SPB-5D-13.8	D13.8	75	14	124
SPB-5D-13.9	D13.9	75	14	124
SPB-5D-14.0	D14.0	75	14	124
SPB-5D-14.1	D14.1	80	16	133
SPB-5D-14.2	D14.2	80	16	133
SPB-5D-14.3	D14.3	80	16	133

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
SPB-5D-14.4	D14.4	80	16	133
SPB-5D-14.5	D14.5	80	16	133
SPB-5D-14.6	D14.6	80	16	133
SPB-5D-14.7	D14.7	80	16	133
SPB-5D-14.8	D14.8	80	16	133
SPB-5D-14.9	D14.9	80	16	133
SPB-5D-15.0	D15.0	80	16	133
SPB-5D-15.1	D15.1	80	16	133
SPB-5D-15.2	D15.2	80	16	133
SPB-5D-15.3	D15.3	80	16	133
SPB-5D-15.4	D15.4	80	16	133
SPB-5D-15.5	D15.5	80	16	133
SPB-5D-15.6	D15.6	80	16	133
SPB-5D-15.7	D15.7	80	16	133
SPB-5D-15.8	D15.8	80	16	133
SPB-5D-15.9	D15.9	80	16	133
SPB-5D-16.0	D16.0	80	16	133
SPB-5D-16.1	D16.1	93	18	143
SPB-5D-16.2	D16.2	93	18	143
SPB-5D-16.3	D16.3	93	18	143
SPB-5D-16.4	D16.4	93	18	143
SPB-5D-16.5	D16.5	93	18	143
SPB-5D-16.6	D16.6	93	18	143
SPB-5D-16.7	D16.7	93	18	143
SPB-5D-16.8	D16.8	93	18	143
SPB-5D-16.9	D16.9	93	18	143
SPB-5D-17.0	D17.0	93	18	143
SPB-5D-17.1	D17.1	93	18	143
SPB-5D-17.2	D17.2	93	18	143
SPB-5D-17.3	D17.3	93	18	143
SPB-5D-17.4	D17.4	93	18	143
SPB-5D-17.5	D17.5	93	18	143
SPB-5D-17.6	D17.6	93	18	143
SPB-5D-17.7	D17.7	93	18	143
SPB-5D-17.8	D17.8	93	18	143
SPB-5D-17.9	D17.9	93	18	143
SPB-5D-18.0	D18.0	93	18	143
SPB-5D-18.1	D18.1	101	20	153
SPB-5D-18.2	D18.2	101	20	153
SPB-5D-18.3	D18.3	101	20	153
SPB-5D-18.4	D18.4	101	20	153
SPB-5D-18.5	D18.5	101	20	153
SPB-5D-18.6	D18.6	101	20	153
SPB-5D-18.7	D18.7	101	20	153
SPB-5D-18.8	D18.8	101	20	153
SPB-5D-18.9	D18.9	101	20	153
SPB-5D-19.0	D19.0	101	20	153
SPB-5D-19.1	D19.1	101	20	153
SPB-5D-19.2	D19.2	101	20	153
SPB-5D-19.3	D19.3	101	20	153
SPB-5D-19.4	D19.4	101	20	153
SPB-5D-19.5	D19.5	101	20	153
SPB-5D-19.6	D19.6	101	20	153
SPB-5D-19.7	D19.7	101	20	153
SPB-5D-19.8	D19.8	101	20	153
SPB-5D-19.9	D19.9	101	20	153
SPB-5D-20.0	D20.0	101	20	153

> 55CD

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L
LV010	1.0	6	1.0	26	LV051	5.1	26	5.1	62	LV092	9.2	40	9.2	84
LV011	1.1	7	1.1	28	LV052	5.2	26	5.2	62	LV093	9.3	40	9.3	84
LV012	1.2	8	1.2	30	LV053	5.3	26	5.3	62	LV094	9.4	40	9.4	84
LV013	1.3	8	1.3	30	LV054	5.4	28	5.4	66	LV095	9.5	40	9.5	84
LV014	1.4	9	1.4	32	LV055	5.5	28	5.5	66	LV096	9.6	43	9.6	89
LV015	1.5	9	1.5	32	LV056	5.6	28	5.6	66	LV097	9.7	43	9.7	89
LV016	1.6	10	1.6	34	LV057	5.7	28	5.7	66	LV098	9.8	43	9.8	89
LV017	1.7	10	1.7	34	LV058	5.8	28	5.8	66	LV099	9.9	43	9.9	89
LV018	1.8	11	1.8	36	LV059	5.9	28	5.9	66	LV100	10.0	43	10.0	89
LV019	1.9	11	1.9	36	LV060	6.0	28	6.0	66	LV101	10.1	43	10.1	89
LV020	2.0	12	2.0	38	LV061	6.1	31	6.1	70	LV102	10.2	43	10.2	89
LV021	2.1	12	2.1	38	LV062	6.2	31	6.2	70	LV103	10.3	43	10.3	89
LV022	2.2	13	2.2	40	LV063	6.3	31	6.3	70	LV104	10.4	43	10.4	89
LV023	2.3	13	2.3	40	LV064	6.4	31	6.4	70	LV105	10.5	43	10.5	89
LV024	2.4	14	2.4	43	LV065	6.5	31	6.5	70	LV106	10.6	43	10.6	89
LV025	2.5	14	2.5	43	LV066	6.6	31	6.6	70	LV107	10.7	43	10.7	89
LV026	2.6	14	2.6	43	LV067	6.7	31	6.7	70	LV108	10.8	43	10.8	89
LV027	2.7	16	2.7	46	LV068	6.8	34	6.8	74	LV109	10.9	43	10.9	89
LV028	2.8	16	2.8	46	LV069	6.9	34	6.9	74	LV110	11.0	47	11.0	95
LV029	2.9	16	2.9	46	LV070	7.0	34	7.0	74	LV111	11.1	47	11.1	95
LV030	3.0	16	3.0	46	LV071	7.1	34	7.1	74	LV112	11.2	47	11.2	95
LV031	3.1	18	3.1	49	LV072	7.2	34	7.2	74	LV113	11.3	47	11.3	95
LV032	3.2	18	3.2	49	LV073	7.3	34	7.3	74	LV114	11.4	47	11.4	95
LV033	3.3	18	3.3	49	LV074	7.4	34	7.4	74	LV115	11.5	47	11.5	95
LV034	3.4	20	3.4	52	LV075	7.5	34	7.5	74	LV116	11.6	47	11.6	95
LV035	3.5	20	3.5	52	LV076	7.6	37	7.6	79	LV117	11.7	47	11.7	95
LV036	3.6	20	3.6	52	LV077	7.7	37	7.7	79	LV118	11.8	47	11.8	95
LV037	3.7	20	3.7	52	LV078	7.8	37	7.8	79	LV119	11.9	51	11.9	102
LV038	3.8	22	3.8	55	LV079	7.9	37	7.9	79	LV120	12.0	51	12.0	102
LV039	3.9	22	3.9	55	LV080	8.0	37	8.0	79	LV121	12.1	51	12.1	102
LV040	4.0	22	4.0	55	LV081	8.1	37	8.1	79	LV122	12.2	51	12.2	102
LV041	4.1	22	4.1	55	LV082	8.2	37	8.2	79	LV123	12.3	51	12.3	102
LV042	4.2	22	4.2	55	LV083	8.3	37	8.3	79	LV124	12.4	51	12.4	102
LV043	4.3	24	4.3	58	LV084	8.4	37	8.4	79	LV125	12.5	51	12.5	102
LV044	4.4	24	4.4	58	LV085	8.5	37	8.5	79	LV126	12.6	51	12.6	102
LV045	4.5	24	4.5	58	LV086	8.6	40	8.6	84	LV127	12.7	51	12.7	102
LV046	4.6	24	4.6	58	LV087	8.7	40	8.7	84	LV128	12.8	51	12.8	102
LV047	4.7	24	4.7	58	LV088	8.8	40	8.8	84	LV129	12.9	51	12.9	102
LV048	4.8	26	4.8	62	LV089	8.9	40	8.9	84	LV130	13.0	51	13.0	102
LV049	4.9	26	4.9	62	LV090	9.0	40	9.0	84					
LV050	5.0	26	5.0	62	LV091	9.1	40	9.1	84					

NC CENTER DRILL
/NC定點鑽頭

> 668V-NC

Grain Size:0.6μm
Cobalt%:12%

MG Arti-Co Dry Wet

粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	溝長 l	先端角 A	全長 L	668V-NC (NT)	668V-NC (USD)
03090	3	10	90°	50	440	14.0
03120	3	10	120°	50	440	14.0
04090	4	12	90°	50	520	16.6
04120	4	12	120°	50	520	16.6
05090	5	15	90°	50	570	18.1
05120	5	15	120°	50	570	18.1
06090	6	20	90°	50	590	18.8
06120	6	20	120°	50	590	18.8
08090	8	25	90°	60	950	30.2
08120	8	25	120°	60	950	30.2
10090	10	25	90°	75	1510	48.0
10120	10	25	120°	75	1510	48.0
12090	12	30	90°	75	1850	58.8
12120	12	30	120°	75	1850	58.8
14090	14	30	90°	100	3300	104.8
14120	14	30	120°	100	3300	104.8
16090	16	35	90°	100	4730	150.2
16120	16	35	120°	100	4730	150.2
20090	20	40	90°	100	6800	215.9
20120	20	40	120°	100	6800	215.9

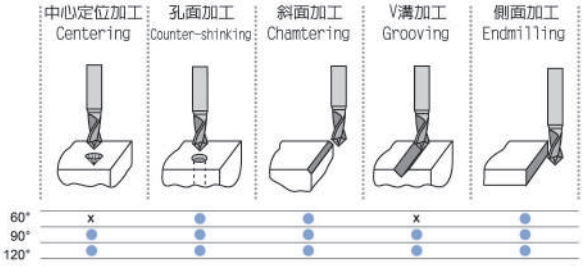
建議售價

SQUARE TYPE - MULTIFUNCTION - 2FLUTE
/ 2刃多功能立銑刀

> 662L-2X

Grain Size:0.6μm
Cobalt%:12%

HRC ▸45 | MG | 35° Helix Angle | 2 Flute | Arti-Co | Dry | Wet

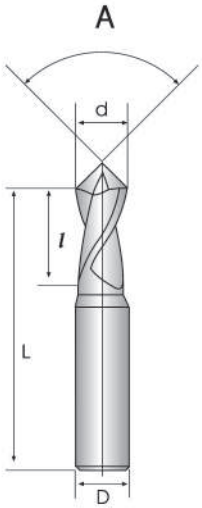


粗銑 Roughing	○
中銑 Semi Finishing	○
精修 Finishing	○

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	直徑 d	刃長 l	柄徑 D	全長 L	前端角 A	662L-2X (NT)	662L-2X (USD)
030060	3	6	4	50	60°	830	26.4
030090	3	6	4	50	90°	830	26.4
030120	3	6	4	50	120°	830	26.4
040060	4	8	6	50	60°	1050	33.5
040090	4	8	6	50	90°	1050	33.5
040120	4	8	6	50	120°	1050	33.5
050060	5	10	6	50	60°	1050	33.5
050090	5	10	6	50	90°	1050	33.5
050120	5	10	6	50	120°	1050	33.5
060060	6	12	8	60	60°	2120	67.4
060090	6	12	8	60	90°	2120	67.4
060120	6	12	8	60	120°	2120	67.4
080060	8	16	10	75	60°	2780	88.3
080090	8	16	10	75	90°	2780	88.3
080120	8	16	10	75	120°	2780	88.3
100060	10	20	12	75	60°	3040	96.6
100090	10	20	12	75	90°	3040	96.6
100120	10	20	12	75	120°	3040	96.6
120060	12	25	12	75	60°	3040	96.6
120090	12	25	12	75	90°	3040	96.6
120120	12	25	12	75	120°	3040	96.6
140060	14	28	14	100	60°	4360	138.5
140090	14	28	14	100	90°	4360	138.5
140120	14	28	14	100	120°	4360	138.5
160060	16	32	16	100	60°	6210	197.2
160090	16	32	16	100	90°	6210	197.2
160120	16	32	16	100	120°	6210	197.2
200060	20	35	20	100	60°	7660	243.2
200090	20	35	20	100	90°	7660	243.2
200120	20	35	20	100	120°	7660	243.2

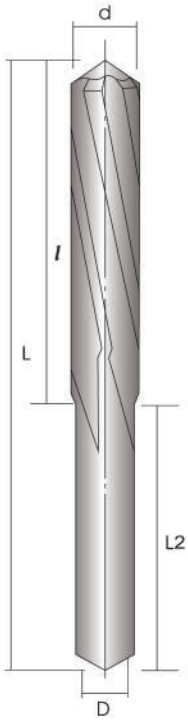


* 切削條件表參考請見第239頁
* Cutting condition please refer page 239.

CARBIDE REAMER

／鎢鋼絞刀

> 55CR



形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	刃徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	柄長 L2
010	1.0	7	1	3	50	20
011	1.1	7	1	3	50	20
012	1.2	7	1	3	50	20
013	1.3	7	1	3	50	20
014	1.4	7	1	3	50	20
015	1.5	9	1.5	3	50	20
016	1.6	9	1.5	3	50	20
017	1.7	9	1.5	3	50	20
018	1.8	9	1.5	3	50	20
019	1.9	9	1.5	3	50	20
020	2.0	11	2	4	50	20
021	2.1	11	2	4	50	20
022	2.2	11	2	4	50	20
023	2.3	11	2	4	50	20
024	2.4	11	2	4	50	20
025	2.5	14	2.5	4	60	27
026	2.6	14	2.5	4	60	27
027	2.7	14	2.5	4	60	27
028	2.8	14	2.5	4	60	27
029	2.9	14	2.5	4	60	27
030	3.0	15	3	4	65	30
031	3.1	15	3	4	65	30
032	3.2	15	3	4	65	30
033	3.3	15	3	4	65	30
034	3.4	15	3	4	65	30
035	3.5	15	3.5	4	65	30
036	3.6	15	3.5	4	65	30
037	3.7	15	3.5	4	65	30
038	3.8	15	3.5	4	65	30
039	3.9	15	3.5	4	65	30
040	4.0	19	4	6	75	32
041	4.1	19	4	6	75	32
042	4.2	19	4	6	75	32
043	4.3	19	4	6	75	32
044	4.4	19	4	6	75	32
045	4.5	21	4.5	6	80	35
046	4.6	21	4.5	6	80	35
047	4.7	21	4.5	6	80	35
048	4.8	21	4.5	6	80	35
049	4.9	21	4.5	6	80	35
050	5.0	23	5	6	86	35
051	5.1	23	5	6	86	35
052	5.2	23	5	6	86	35
053	5.3	23	5	6	86	35
054	5.4	23	5	6	86	35
055	5.5	26	5	6	93	40
056	5.6	26	5	6	93	40
057	5.7	26	5	6	93	40
058	5.8	26	5	6	93	40
059	5.9	26	5	6	93	40
060	6.0	26	6	6	93	40
061	6.1	26	6	6	93	40
062	6.2	26	6	6	93	40
063	6.3	26	6	6	93	40
064	6.4	26	6	6	93	40
065	6.5	26	6	6	93	40
065	6.5	26	6	6	93	40
065	6.5	26	6	6	93	40
065	6.5	26	6	6	93	40
065	6.5	26	6	6	93	40
065	6.5	26	6	6	93	40
065	6.5	26	6	6	93	40
065	6.5	26	6	6	93	40

建議售價

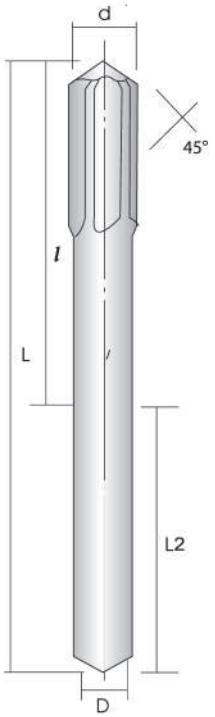
55CR (NT)	(USD)
1200	38.1
1200	38.1
1200	38.1
1200	38.1
1200	38.1
1200	38.1
1200	38.1
1200	38.1
1200	38.1
1200	38.1
1200	38.1
1300	41.3
1300	41.3
1300	41.3
1300	41.3
1300	41.3
1400	44.5
1400	44.5
1400	44.5
1400	44.5
1400	44.5
1450	46.1
1450	46.1
1450	46.1
1450	46.1
1450	46.1
1450	46.1
1450	46.1
1450	46.1
1450	46.1
1450	46.1
1500	47.7
1500	47.7
1500	47.7
1500	47.7
1500	47.7
1500	47.7
1500	47.7
1500	47.7
1500	47.7
1500	47.7
1700	54.0
1700	54.0
1700	54.0
1700	54.0
1700	54.0
1700	54.0
1700	54.0
1700	54.0
1700	54.0
1700	54.0
2150	68.3
2150	68.3
2150	68.3
2150	68.3
2150	68.3
2150	68.3
2150	68.3
2150	68.3
2150	68.3
2150	68.3
2150	68.3
2150	68.3
2150	68.3

形狀寸表法 Dimensions

單位(Unit)：mm

型號 MODE	刃徑 d	刃長 l	柄徑 D	刃數 Z	全長 L	柄長 L2	建議售價 55CR (NT)	(USD)
066	6.6	26	6	6	93	40	2150	68.3
067	6.7	26	6	6	93	40	2150	68.3
068	6.8	26	6	6	93	40	2150	68.3
069	6.9	26	6	6	93	40	2150	68.3
070	7.0	31	6	6	110	45	2300	73.1
071	7.1	31	6	6	110	45	2300	73.1
072	7.2	31	6	6	110	45	2300	73.1
073	7.3	31	6	6	110	45	2300	73.1
074	7.4	31	6	6	110	45	2300	73.1
075	7.5	31	6	6	110	45	2650	84.2
076	7.6	31	6	6	110	45	2650	84.2
077	7.7	31	6	6	110	45	2650	84.2
078	7.8	31	6	6	110	45	2650	84.2
079	7.9	31	6	6	110	45	2650	84.2
080	8.0	33	8	6	110	50	3180	101.0
081	8.1	33	8	6	110	50	3900	123.9
082	8.2	33	8	6	110	50	3900	123.9
083	8.3	33	8	6	110	50	3900	123.9
084	8.4	33	8	6	110	50	3900	123.9
085	8.5	33	8	6	117	50	3900	123.9
086	8.6	33	8	6	117	50	3900	123.9
087	8.7	33	8	6	117	50	3900	123.9
088	8.8	33	8	6	117	50	3900	123.9
089	8.9	33	8	6	117	50	3900	123.9
090	9.0	33	8	6	125	55	4830	153.4
091	9.1	33	8	6	125	55	4830	153.4
092	9.2	33	8	6	125	55	4800	152.4
093	9.3	33	8	6	125	55	4800	152.4
094	9.4	33	8	6	125	55	4800	152.4
095	9.5	36	8	6	125	55	4800	152.4
096	9.6	36	8	6	125	55	4950	157.2
097	9.7	36	8	6	125	55	4950	157.2
098	9.8	36	8	6	125	55	4950	157.2
099	9.9	36	8	6	125	55	4950	157.2
100	10.0	38	10	6	135	60	4230	134.3
101	10.1	38	10	6	135	60	5760	182.9
102	10.2	38	10	6	135	60	5760	182.9
103	10.3	38	10	6	135	60	5760	182.9
104	10.4	38	10	6	135	60	5760	182.9
105	10.5	38	10	6	135	60	5760	182.9
106	10.6	38	10	6	135	60	5760	182.9
107	10.7	38	10	6	135	60	5760	182.9
108	10.8	38	10	6	135	60	5760	182.9
109	10.9	38	10	6	135	60	5760	182.9
110	11.0	41	10	6	145	60	5490	174.3
115	11.5	41	10	6	145	60	5490	174.3
120	12.0	44	10	6	150	60	5490	174.3
125	12.5	44	10	6	150	60	6960	221.0
130	13.0	44	10	6	150	60	6960	221.0
140	14.0	45	12	8	160	65	8160	259.1
150	15.0	45	12	8	160	65	8160	259.1
160	16.0	52	12	8	170	70	11520	365.8
180	18.0	52	12	8	170	70	16560	525.8
200	20.0	60	16	8	200	75	22560	716.2

> 55CR



SPIRAL FLUTE TAPS & SPIRAL POINT TAPS
/螺旋絲攻-先端絲攻

> Spiral Flute Taps 螺旋絲攻

- 抗拉強度600-900N/MM 的高碳鋼鎳基合金、合金工具、青銅、鑄鐵。
- 抗拉強度750N/MM 以下中低碳鋼、銅、鋁合金。
- 通/盲孔加工皆適用。

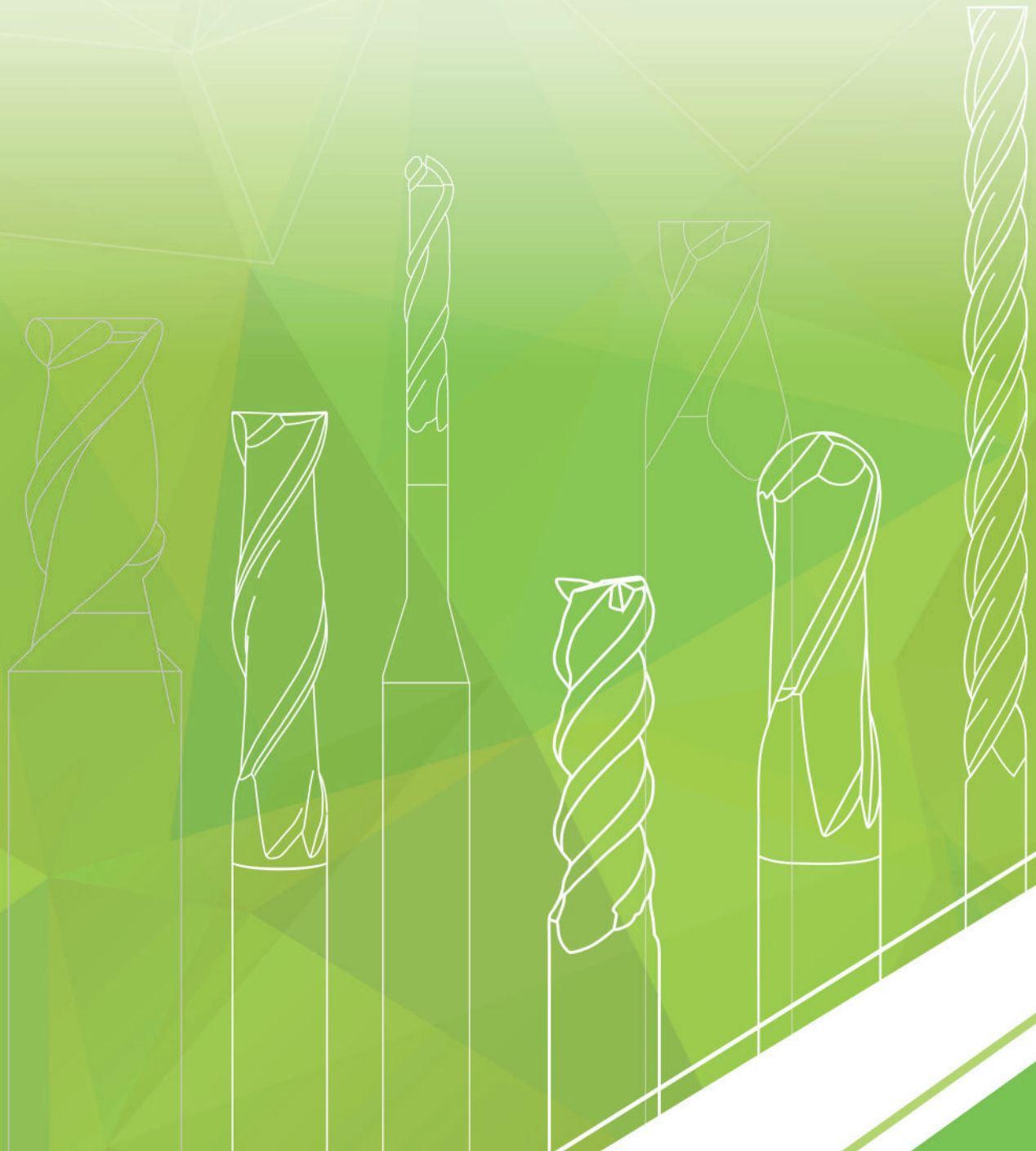
> Spiral Point Taps 先端絲攻

- 抗拉強度750N/MM 以下中低碳鋼、合金鋼、鎳基合金與不銹鋼、銅、長切屑的鋁。
- 通孔加工皆適用。

公制 (M)	英制 (W)	德制 (DIN)
M 2 X 0.4	W 1/8-40	DIN 3 X 0.5
M 2.5 X 0.45	W 5/32-32	DIN 4 X 0.7
M 2.6 X 0.45	W 3/16-24	DIN 5 X 0.8
M 3 X 0.5	W 1/4-20	DIN 6 X 1
M 4 X 0.7	W 5/16-18	DIN 8 X 1.0
M 5 X 0.8	W 3/8-16	DIN 8 X 1.25
M 6 X 1.0	W 1/2-12	DIN 10 X 1.0
M 8 X 1.25	W 5/8-11	DIN 10 X 1.5
M 10 X 1.5	W 3/4-10	DIN 12 X 1.0
M 12 X 1.75	W 7/8-9	DIN 12 X 1.25
M 14 X 2.0	W 1"-8	DIN 12 X 1.75
M 16 X 2.0		DIN 14 X 1.5
M 18 X 2.5		DIN 14 X 2
M 20 X 2.5		DIN 16 X 1.5
M 22 X 2.5		DIN 16 X 2
M 24 X 3.0		DIN 18 X 1.5
M 27 X 3.0		DIN 18 X 2.5
M 30 X 3.5		DIN 20 X 1.5
M 36 X 4.0		DIN 20 X 2.5
		DIN 22 X 1.5
		DIN 22 X 2.5
		DIN 24 X 1.5
		DIN 24 X 2.0
		DIN 24 X 3

材質：HSS-EV (M2-M6含鈷5%，M8以上含釩3%)
Material：HSS-EV (M2-M6 Cobalt 5%，M8 up Vanadium 3%)

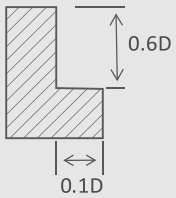
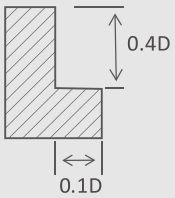
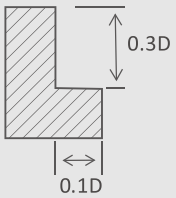
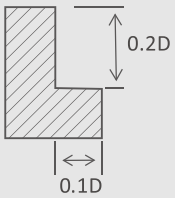
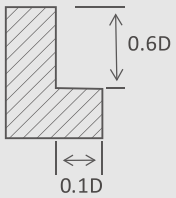
CUTTING CONDITION



MINIATURE SQUARE TYPE - 2 FLUTES
/ 2刃微小徑立銑刀

> 662L-C

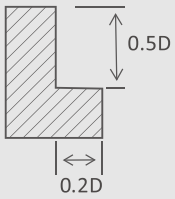
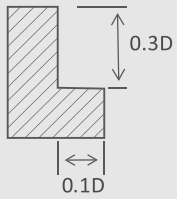
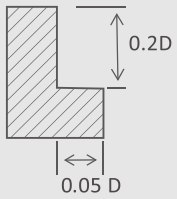
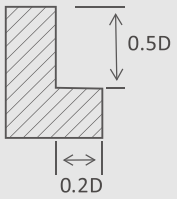
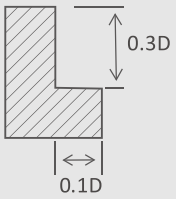
側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
0.2MM	16000	500	16000	500	16000	500	16000	500	16000	500
0.3MM	15000	600	15000	600	15000	600	15000	600	15000	600
0.4MM	14000	700	14000	700	14000	700	14000	700	14000	700
0.5MM	13500	750	13500	750	13500	750	13500	750	13500	750
0.6MM	13000	780	13000	780	13000	780	13000	780	13000	780
0.7MM	12800	800	12800	800	12800	800	12800	800	12800	800
0.8MM	12600	820	12600	820	12600	820	12600	820	12600	820
0.9MM	12500	830	12500	830	12500	830	12500	830	12500	830
1.1MM	12000	850	12000	850	12000	850	12000	850	12000	850
1.2MM	11500	880	11500	880	11500	880	11500	880	11500	880
1.3MM	11000	900	11000	900	11000	900	11000	900	11000	900
1.4MM	10800	920	10800	920	10800	920	10800	920	10800	920
1.6MM	10500	930	10500	930	10500	930	10500	930	10500	930
1.7MM	10000	950	10000	950	10000	950	10000	950	10000	950
1.8MM	9800	960	9800	960	9800	960	9800	960	9800	960
1.9MM	9600	980	9600	980	9600	980	9600	980	9600	980
2.1MM	9500	1000	9500	1000	9500	1000	9500	1000	9500	1000
2.2MM	9200	1010	9200	1010	9200	1010	9200	1010	9200	1010
2.3MM	9000	1020	9000	1020	9000	1020	9000	1020	9000	1020
2.4MM	8800	1050	8800	1050	8800	1050	8800	1050	8800	1050
2.6MM	8500	1080	8500	1080	8500	1080	8500	1080	8500	1080
2.7MM	8400	1100	8400	1100	8400	1100	8400	1100	8400	1100
2.8MM	8200	1150	8200	1150	8200	1150	8200	1150	8200	1150
2.9MM	8000	1200	8000	1200	8000	1200	8000	1200	8000	1200
切削基準量 Depth of Cutting (D = 直徑 Dia)										

切削條件表 cutting condition

> 662L-A

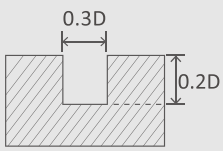
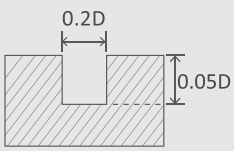
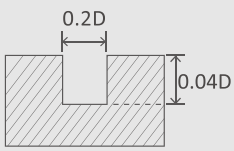
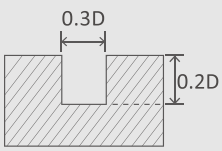
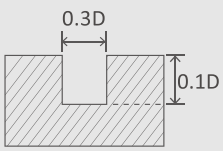
側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8000	400	8000	400	8000	400	8000	400	8000	400
1.5MM	7500	450	7500	450	7500	450	7500	450	7500	450
2MM	7000	500	7000	500	7000	500	7000	500	7000	500
2.5MM	6800	520	6800	520	6800	520	6800	520	6800	520
3MM	6500	530	6500	530	6500	530	6500	530	6500	530
3.5MM	6300	550	6300	550	6300	550	6300	550	6300	550
4MM	6000	560	6000	560	6000	560	6000	560	6000	560
4.5MM	5800	570	5800	570	5800	570	5800	570	5800	570
5MM	5500	580	5500	580	5500	580	5500	580	5500	580
5.5MM	5200	600	5200	600	5200	600	5200	600	5200	600
6MM	5000	600	5000	600	5000	600	5000	600	5000	600
6.5MM	4800	600	4800	600	4800	600	4800	600	4800	600
7MM	4500	580	4500	580	4500	580	4500	580	4500	580
7.5MM	4200	550	4200	550	4200	550	4200	550	4200	550
8MM	4000	520	4000	520	4000	520	4000	520	4000	520
8.5MM	3800	500	3800	500	3800	500	3800	500	3800	500
9MM	3700	480	3700	480	3700	480	3700	480	3700	480
9.5MM	3700	480	3700	480	3700	480	3700	480	3700	480
10MM	3600	450	3600	450	3600	450	3600	450	3600	450
10.5MM	3600	400	3600	400	3600	400	3600	400	3600	400
11MM	3500	400	3500	400	3500	400	3500	400	3500	400
11.5MM	3300	380	3300	380	3300	380	3300	380	3300	380
12MM	3200	370	3200	370	3200	370	3200	370	3200	370
14MM	3000	350	3000	350	3000	350	3000	350	3000	350
16MM	2800	300	2800	300	2800	300	2800	300	2800	300
18MM	2500	280	2500	280	2500	280	2500	280	2500	280
20MM	2300	250	2300	250	2300	250	2300	250	2300	250
25MM	2000	200	2000	200	2000	200	2000	200	2000	200
切削基準量 Depth of Cutting (D = 直徑 Dia)										

SQUARE TYPE - 2 FLUTES
/2刃立銑刀

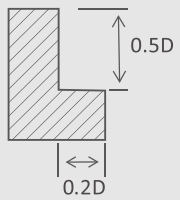
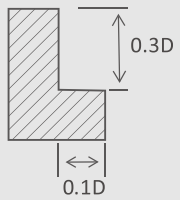
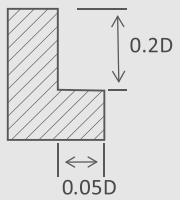
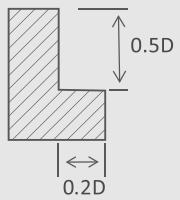
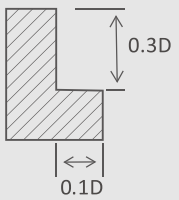
> 662L-A

開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8000	400	8000	400	8000	400	8000	400	8000	400
1.5MM	7500	450	7500	450	7500	450	7500	450	7500	450
2MM	7000	500	7000	500	7000	500	7000	500	7000	500
2.5MM	6800	520	6800	520	6800	520	6800	520	6800	520
3MM	6500	530	6500	530	6500	530	6500	530	6500	530
3.5MM	6300	550	6300	550	6300	550	6300	550	6300	550
4MM	6000	560	6000	560	6000	560	6000	560	6000	560
4.5MM	5800	570	5800	570	5800	570	5800	570	5800	570
5MM	5500	580	5500	580	5500	580	5500	580	5500	580
5.5MM	5200	600	5200	600	5200	600	5200	600	5200	600
6MM	5000	600	5000	600	5000	600	5000	600	5000	600
6.5MM	4500	600	4500	600	4500	600	4500	600	4500	600
7MM	4500	580	4500	580	4500	580	4500	580	4500	580
7.5MM	4200	550	4200	550	4200	550	4200	550	4200	550
8MM	4000	500	4000	500	4000	500	4000	500	4000	500
8.5MM	3800	480	3800	480	3800	480	3800	480	3800	480
9MM	3700	480	3700	480	3700	480	3700	480	3700	480
9.5MM	3600	450	3600	450	3600	450	3600	450	3700	450
10MM	3600	400	3600	400	3600	400	3600	400	3600	400
10.5MM	3600	400	3600	400	3600	400	3600	400	3600	400
11MM	3500	380	3500	380	3500	380	3500	380	3500	380
11.5MM	3200	370	3200	370	3300	370	3300	370	3300	370
12MM	3200	350	3200	350	3200	350	3200	350	3200	350
14MM	3000	300	3000	300	3000	300	3000	300	3000	300
16MM	2800	280	2800	280	2800	280	2800	280	2800	280
18MM	2500	250	2500	250	2500	250	2500	250	2500	250
20MM	2300	230	2300	230	2300	230	2300	230	2300	230
25MM	2000	200	2000	200	2000	200	2000	200	2000	200
切削基準量 Depth of Cutting (D = 直徑 Dia)										

> 664L-B

側加工 Side Milling

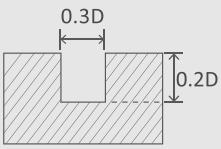
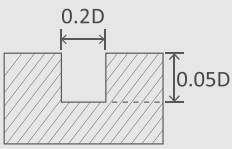
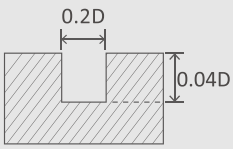
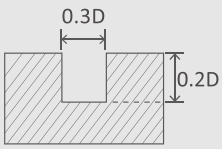
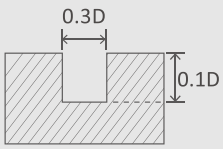
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8000	480	8000	480	8000	480	8000	480	8000	480
1.5MM	7500	500	7500	500	7500	500	7500	500	7500	500
2MM	7000	520	7000	520	7000	520	7000	520	7000	520
2.5MM	6800	560	6800	560	6800	560	6800	560	6800	560
3MM	6500	580	6500	580	6500	580	6500	580	6500	580
3.5MM	6300	600	6300	600	6300	600	6300	600	6300	600
4MM	6000	600	6000	600	6000	600	6000	600	6000	600
4.5MM	5800	600	5800	600	5800	600	5800	600	5800	600
5MM	5500	620	5500	620	5500	620	5500	620	5500	620
5.5MM	5200	630	5200	630	5200	630	5200	630	5200	630
6MM	5000	630	5000	630	5000	630	5000	630	5000	630
6.5MM	4800	630	4800	630	4800	630	4800	630	4800	630
7MM	4500	630	4500	630	4500	630	4500	630	4500	630
7.5MM	4200	600	4200	600	4200	630	4200	630	4200	630
8MM	4000	580	4000	580	4000	580	4000	580	4000	580
8.5MM	3800	550	3800	550	3800	550	3800	550	3800	550
9MM	3700	500	3700	500	3700	500	3700	500	3700	500
9.5MM	3700	500	3700	500	3700	500	3700	500	3700	500
10MM	3600	500	3600	500	3600	500	3600	500	3600	500
10.5MM	3600	480	3600	480	3600	480	3600	480	3600	480
11MM	3500	480	3500	480	3500	480	3500	480	3500	480
11.5MM	3300	460	3300	460	3300	460	3300	460	3300	460
12MM	3200	420	3200	420	3200	420	3200	420	3200	420
14MM	3000	400	3000	400	3000	400	3000	400	3000	400
16MM	2800	350	2800	350	2800	350	2800	350	2800	350
18MM	2500	320	2500	320	2500	320	2500	320	2500	320
20MM	2300	280	2300	280	2300	280	2300	280	2300	280
25MM	2000	250	2000	250	2000	250	2000	250	2000	250
切削基準量 Depth of Cutting (D = 直徑 Dia)										

切削條件表 cutting condition

SQUARE TYPE - 4 FLUTES
/ 4 刃立銑刀

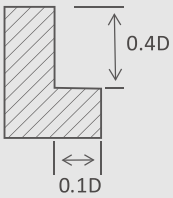
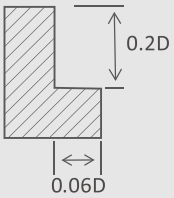
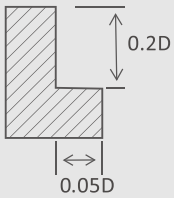
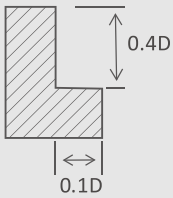
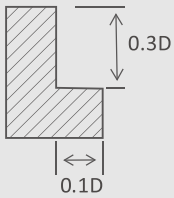
> 664L-B

開槽加工 Slotting

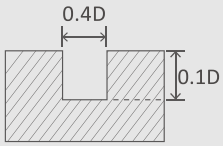
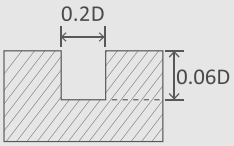
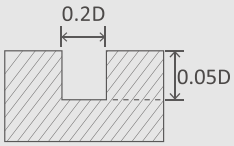
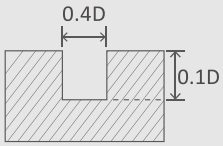
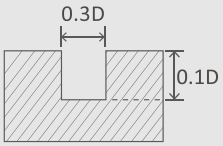
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8000	480	8000	480	8000	480	8000	480	8000	480
1.5MM	7500	500	7500	500	7500	500	7500	500	7500	500
2MM	7000	520	7000	520	7000	520	7000	520	7000	520
2.5MM	6800	560	6800	560	6800	560	6800	560	6800	560
3MM	6500	580	6500	580	6500	580	6500	580	6500	580
3.5MM	6300	600	6300	600	6300	600	6300	600	6300	600
4MM	6000	600	6000	600	6000	600	6000	600	6000	600
4.5MM	5800	600	5800	600	5800	600	5800	600	5800	600
5MM	5500	620	5500	620	5500	620	5500	620	5500	620
5.5MM	5200	630	5200	630	5200	630	5200	630	5200	630
6MM	5000	630	5000	630	5000	630	5000	630	5000	630
6.5MM	4800	630	4800	630	4800	630	4800	630	4800	630
7MM	4500	630	4500	630	4500	630	4500	630	4500	630
7.5MM	4200	600	4200	600	4200	600	4200	600	4200	600
8MM	4000	580	4000	580	4000	580	4000	580	4000	580
8.5MM	3800	500	3800	500	3800	500	3800	500	3800	500
9MM	3700	500	3700	500	3700	500	3700	500	3700	500
9.5MM	3700	500	3700	500	3700	500	3700	500	3700	500
10MM	3600	500	3600	500	3600	500	3600	500	3600	500
10.5MM	3600	480	3600	480	3600	480	3600	480	3600	480
11MM	3500	480	3500	480	3500	480	3500	480	3500	480
11.5MM	3300	460	3300	460	3300	460	3300	460	3300	460
12MM	3200	420	3200	420	3200	420	3200	420	3200	420
14MM	3000	400	3000	400	3000	400	3000	400	3000	400
16MM	2800	350	2800	350	2800	350	2800	350	2800	350
18MM	2500	320	2500	320	2500	320	2500	320	2500	320
20MM	2300	280	2300	280	2300	280	2300	280	2300	280
25MM	2000	250	2000	250	2000	250	2000	250	2000	250
切削基準量 Depth of Cutting (D = 直徑 Dia)										

> 662L-2AL

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	6500	700	6500	700	6500	700	6500	700	6500	700
4MM	6000	750	6000	750	6000	750	6000	750	6000	750
5MM	5500	800	5500	800	5500	800	5500	800	5500	800
6MM	5000	800	5000	800	5000	800	5000	800	5000	800
8MM	4500	800	4500	800	4500	800	4500	800	4500	800
10MM	4000	750	4000	750	4000	750	4000	750	4000	750
12MM	3500	700	3500	700	3500	700	3500	700	3500	700
16MM	3000	600	3000	600	3000	600	3000	600	3000	600
20MM	2500	500	2500	500	2500	500	2500	500	2500	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

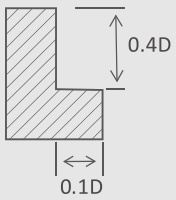
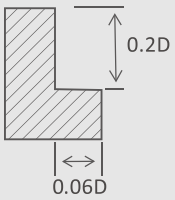
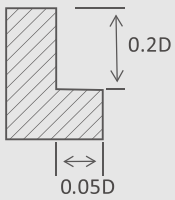
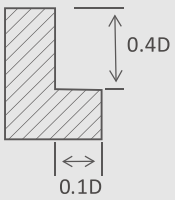
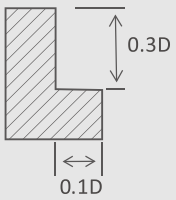
開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	6500	700	6500	700	6500	700	6500	700	6500	700
4MM	6000	750	6000	750	6000	750	6000	750	6000	750
5MM	5500	800	5500	800	5500	800	5500	800	5500	800
6MM	5000	800	5000	800	5000	800	5000	800	5000	800
8MM	4500	800	4500	800	4500	800	4500	800	4500	800
10MM	4000	750	4000	750	4000	750	4000	750	4000	750
12MM	3500	700	3500	700	3500	700	3500	700	3500	700
16MM	3000	600	3000	600	3000	600	3000	600	3000	600
20MM	2500	500	2500	500	2500	500	2500	500	2500	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

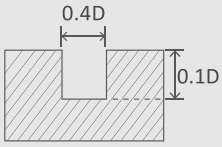
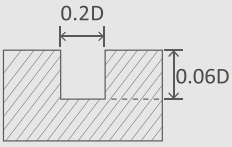
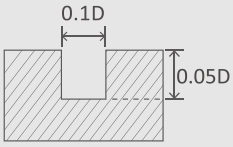
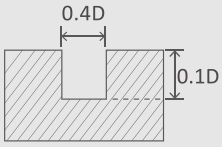
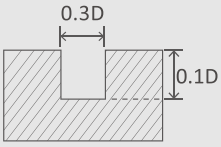
SQUARE TYPE LONG SHANK - 4 FLUTES
/ 4刃長柄立銑刀

> 664L-4BL

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	6500	800	6500	800	6500	800	6500	800	6500	800
4MM	6000	820	6000	820	6000	820	6000	820	6000	820
5MM	5500	900	5500	900	5500	900	5500	900	5500	900
6MM	5000	900	5000	900	5000	900	5000	900	5000	900
8MM	4500	900	4500	900	4500	900	4500	900	4500	900
10MM	4000	820	4000	820	4000	820	4000	820	4000	820
12MM	3500	750	3500	750	3500	750	3500	750	3500	750
16MM	3000	680	3000	680	3000	680	3000	680	3000	680
20MM	2500	600	2500	600	2500	600	2500	600	2500	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

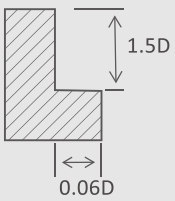
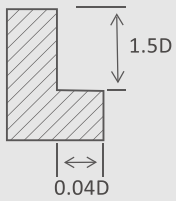
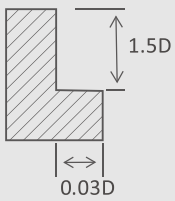
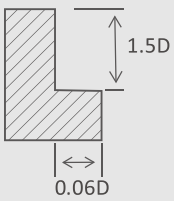
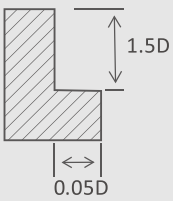
開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	6500	800	6500	800	6500	800	6500	800	6500	800
4MM	6000	820	6000	820	6000	820	6000	820	6000	820
5MM	5500	900	5500	900	5500	900	5500	900	5500	900
6MM	5000	900	5000	900	5000	900	5000	900	5000	900
8MM	4500	900	4500	900	4500	900	4500	900	4500	900
10MM	4000	820	4000	820	4000	820	4000	820	4000	820
12MM	3500	750	3500	750	3500	750	3500	750	3500	750
16MM	3000	680	3000	680	3000	680	3000	680	3000	680
20MM	2500	600	2500	600	2500	600	2500	600	2500	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

切削條件表 cutting condition

> 662LL-2A

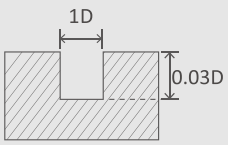
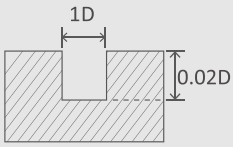
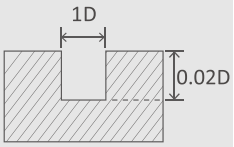
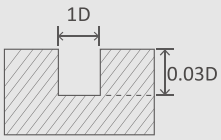
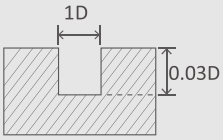
側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7500	230	7500	230	7500	230	7500	230	7500	230
1.5MM	7200	250	7200	250	7200	250	7200	250	7200	250
2MM	7000	280	7000	280	7000	280	7000	280	7000	280
2.5MM	6800	300	6800	300	6800	300	6800	300	6800	300
3MM	6500	320	6500	320	6500	320	6500	320	6500	320
3.5MM	6200	350	6200	350	6200	350	6200	350	6200	350
4MM	6000	370	6000	370	6000	370	6000	370	6000	370
4.5MM	5800	380	5800	380	5800	380	5800	380	5800	380
5MM	5500	400	5500	400	5500	400	5500	400	5500	400
5.5MM	5200	400	5200	400	5200	400	5200	400	5200	400
6MM	5000	400	5000	400	5000	400	5000	400	5000	400
7MM	4800	400	4800	400	4800	400	4800	400	4800	400
8MM	4500	400	4500	400	4500	400	4500	400	4500	400
9MM	4300	400	4300	400	4300	400	4300	400	4300	400
10MM	4200	400	4200	400	4200	400	4200	400	4200	400
11MM	4000	400	4000	400	4000	400	4000	400	4000	400
12MM	3500	380	3500	380	3500	380	3500	380	3500	380
14MM	3200	380	3200	380	3200	380	3200	380	3200	380
16MM	3000	380	3000	380	3000	380	3000	380	3000	380
20MM	2500	350	2500	350	2500	350	2500	350	2500	350
切削基準量 Depth of Cutting (D = 直徑 Dia)										

SQUARE TYPE LONG FLUTE - 2 FLUTES
/ 2刃長刃立銑刀

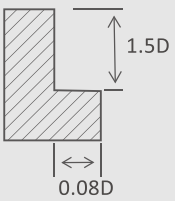
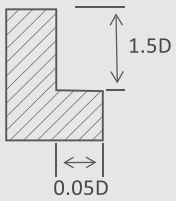
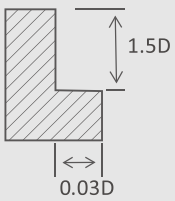
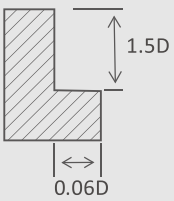
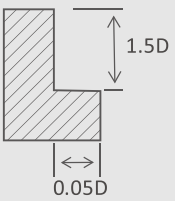
> 662LL-2A

開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7500	230	7500	230	7500	230	7500	230	7500	230
1.5MM	7200	250	7200	250	7200	250	7200	250	7200	250
2MM	7000	280	7000	280	7000	280	7000	280	7000	280
2.5MM	6800	300	6800	300	6800	300	6800	300	6800	300
3MM	6500	320	6500	320	6500	320	6500	320	6500	320
3.5MM	6200	350	6200	350	6200	350	6200	350	6200	350
4MM	6000	370	6000	370	6000	370	6000	370	6000	370
4.5MM	5800	380	5800	380	5800	380	5800	380	5800	380
5MM	5500	400	5500	400	5500	400	5500	400	5500	400
5.5MM	5200	400	5200	400	5200	400	5200	400	5200	400
6MM	5000	400	5000	400	5000	400	5000	400	5000	400
7MM	4800	400	4800	400	4800	400	4800	400	4800	400
8MM	4500	400	4500	400	4500	400	4500	400	4500	400
9MM	4300	400	4300	400	4300	400	4300	400	4300	400
10MM	4200	400	4200	400	4200	400	4200	400	4200	400
11MM	4000	400	4000	400	4000	400	4000	400	4000	400
12MM	3500	380	3500	380	3500	380	3500	380	3500	380
14MM	3200	380	3200	380	3200	380	3200	380	3200	380
16MM	3000	380	3000	380	3000	380	3000	380	3000	380
20MM	2500	350	2500	350	2500	350	2500	350	2500	350
切削基準量 Depth of Cutting (D = 直徑 Dia)										

> 664LL-4B

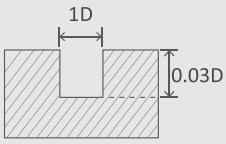
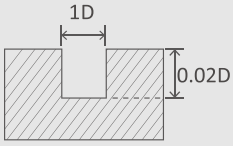
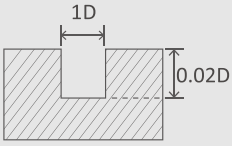
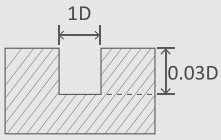
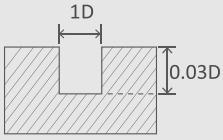
側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7500	300	7500	300	7500	300	7500	300	7500	300
1.5MM	7200	320	7200	320	7200	320	7200	320	7200	320
2MM	7000	350	7000	350	7000	350	7000	350	7000	350
2.5MM	6800	400	6800	400	6800	400	6800	400	6800	400
3MM	6500	410	6500	410	6500	410	6500	410	6500	410
3.5MM	6200	420	6200	420	6200	420	6200	420	6200	420
4MM	6000	450	6000	450	6000	450	6000	450	6000	450
4.5MM	5800	460	5800	460	5800	460	5800	460	5800	460
5MM	5500	500	5500	500	5500	500	5500	500	5500	500
5.5MM	5200	500	5200	500	5200	500	5200	500	5200	500
6MM	5000	500	5000	500	5000	500	5000	500	5000	500
7MM	4800	500	4800	500	4800	500	4800	500	4800	500
8MM	4500	480	4500	480	4500	480	4500	480	4500	480
9MM	4300	480	4300	480	4300	480	4300	480	4300	480
10MM	4200	480	4200	480	4200	480	4200	480	4200	480
11MM	4000	480	4000	480	4000	480	4000	480	4000	480
12MM	3500	420	3500	420	3500	420	3500	420	3500	420
14MM	3200	420	3200	420	3200	420	3200	420	3200	420
16MM	3000	420	3000	420	3000	420	3000	420	3000	420
20MM	2500	400	2500	400	2500	400	2500	400	2500	400
切削基準量 Depth of Cutting (D = 直徑 Dia)										

SQUARE TYPE LONG FLUTE - 4 FLUTES
/ 4 刃長刃立銑刀

> 664LL-4B

開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7500	300	7500	300	7500	300	7500	300	7500	300
1.5MM	7200	320	7200	320	7200	320	7200	320	7200	320
2MM	7000	350	7000	350	7000	350	7000	350	7000	350
2.5MM	6800	400	6800	400	6800	400	6800	400	6800	400
3MM	6500	410	6500	410	6500	410	6500	410	6500	410
3.5MM	6200	420	6200	420	6200	420	6200	420	6200	420
4MM	6000	450	6000	450	6000	450	6000	450	6000	450
4.5MM	5800	460	5800	460	5800	460	5800	460	5800	460
5MM	5500	500	5500	500	5500	500	5500	500	5500	500
5.5MM	5200	500	5200	500	5200	500	5200	500	5200	500
6MM	5000	500	5000	500	5000	500	5000	500	5000	500
7MM	4800	500	4800	500	4800	500	4800	500	4800	500
8MM	4500	480	4500	480	4500	480	4500	480	4500	480
9MM	4300	480	4300	480	4300	480	4300	480	4300	480
10MM	4200	480	4200	480	4200	480	4200	480	4200	480
11MM	4000	480	4000	480	4000	480	4000	480	4000	480
12MM	3500	420	3500	420	3500	420	3500	420	3500	420
14MM	3200	420	3200	420	3200	420	3200	420	3200	420
16MM	3000	420	3000	420	3000	420	3000	420	3000	420
20MM	2500	400	2500	400	2500	400	2500	400	2500	400
切削基準量 Depth of Cutting (D = 直徑 Dia)										

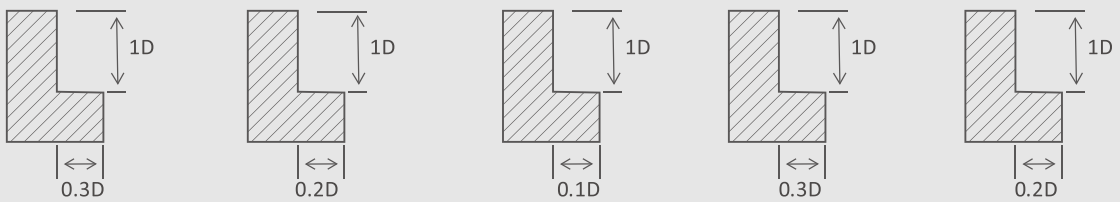
切削條件表 cutting condition

> 663L-A

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7500	650	7500	650	7500	650	7500	650	7500	650
1.5MM	7200	680	7200	680	7200	680	7200	680	7200	680
2MM	7000	700	7000	700	7000	700	7000	700	7000	700
2.5MM	6800	720	6800	720	6800	720	6800	720	6800	720
3MM	6500	750	6500	750	6500	750	6500	750	6500	750
3.5MM	6200	750	6200	750	6200	750	6200	750	6200	750
4MM	6000	760	6000	760	6000	760	6000	760	6000	760
4.5MM	5800	780	5800	780	5800	780	5800	780	5800	780
5MM	5500	780	5500	780	5500	780	5500	780	5500	780
5.5MM	5200	800	5200	800	5200	800	5200	800	5200	800
6MM	5000	800	5000	800	5000	800	5000	800	5000	800
6.5MM	5000	820	5000	820	5000	820	5000	820	5000	820
7MM	4800	820	4800	820	4800	820	4800	820	4800	820
7.5MM	4600	850	4600	850	4600	850	4600	850	4600	850
8MM	4500	850	4500	850	4500	850	4500	850	4500	850
8.5MM	4200	830	4200	830	4200	830	4200	830	4200	830
9MM	4100	820	4100	820	4100	820	4100	820	4100	820
9.5MM	4000	820	4000	820	4000	820	4000	820	4000	820
10MM	3800	800	3800	800	3800	800	3800	800	3800	800
10.5MM	3700	800	3700	800	3700	800	3700	800	3700	800
11MM	3600	780	3600	780	3600	780	3600	780	3600	780
11.5MM	3500	780	3500	780	3500	780	3500	780	3500	780
12MM	3200	760	3200	760	3200	760	3200	760	3200	760
14MM	3000	750	3000	750	3000	750	3000	750	3000	750
16MM	2800	720	2800	720	2800	720	2800	720	2800	720
18MM	2500	700	2500	700	2500	700	2500	700	2500	700
20MM	2300	680	2300	680	2300	680	2300	680	2300	680

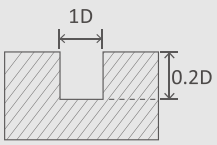
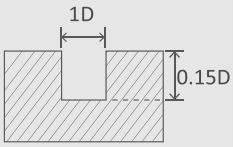
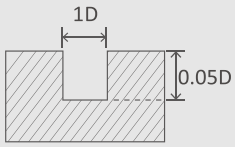
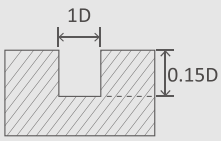
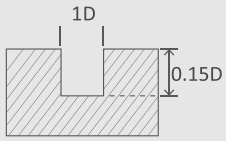
切削基準量
Depth of Cutting
(D = 直徑 Dia)



SQUARE TYPE - 3 FLUTES
/ 3刃立銑刀

> 663L-A

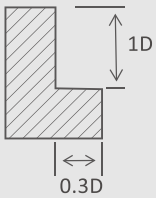
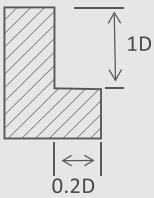
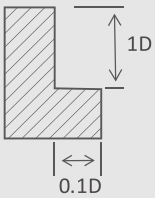
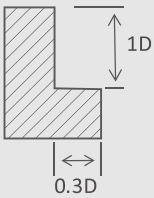
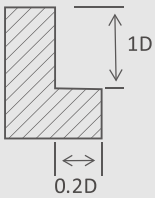
開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7500	650	7500	650	7500	650	7500	650	7500	650
1.5MM	7200	680	7200	680	7200	680	7200	680	7200	680
2MM	7000	700	7000	700	7000	700	7000	700	7000	700
2.5MM	6800	720	6800	720	6800	720	6800	720	6800	720
3MM	6500	750	6500	750	6500	750	6500	750	6500	750
3.5MM	6200	750	6200	750	6200	750	6200	750	6200	750
4MM	6000	760	6000	760	6000	760	6000	760	6000	760
4.5MM	5800	780	5800	780	5800	780	5800	780	5800	780
5MM	5500	780	5500	780	5500	780	5500	780	5500	780
5.5MM	5200	800	5200	800	5200	800	5200	800	5200	800
6MM	5000	800	5000	800	5000	800	5000	800	5000	800
6.5MM	5000	820	5000	820	5000	820	5000	820	5000	820
7MM	4800	820	4800	820	4800	820	4800	820	4800	820
7.5MM	4600	850	4600	850	4600	850	4600	850	4600	850
8MM	4500	850	4500	850	4500	850	4500	850	4500	850
8.5MM	4200	830	4200	830	4200	830	4200	830	4200	830
9MM	4100	820	4100	820	4100	820	4100	820	4100	820
9.5MM	4000	820	4000	820	4000	820	4000	820	4000	820
10MM	3800	800	3800	800	3800	800	3800	800	3800	800
10.5MM	3700	800	3700	800	3700	800	3700	800	3700	800
11MM	3600	800	3600	800	3600	800	3600	800	3600	800
11.5MM	3500	780	3500	780	3500	780	3500	780	3500	780
12MM	3200	760	3200	760	3200	760	3200	760	3200	760
14MM	3000	750	3000	750	3000	750	3000	750	3000	750
16MM	2800	720	2800	720	2800	720	2800	720	2800	720
18MM	2500	700	2500	700	2500	700	2500	700	2500	700
20MM	2300	680	2300	680	2300	680	2300	680	2300	680
切削基準量 Depth of Cutting (D = 直徑 Dia)										

切削條件表 cutting condition

> 664L-A

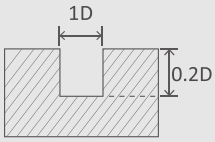
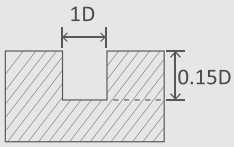
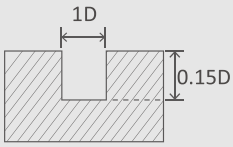
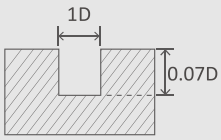
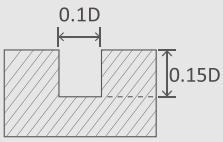
側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7500	680	7500	680	7500	680	7500	680	7500	680
1.5MM	7200	700	7200	700	7200	700	7200	700	7200	700
2MM	7000	730	7000	730	7000	730	7000	730	7000	730
2.5MM	6800	750	6800	750	6800	750	6800	750	6800	750
3MM	6500	780	6500	780	6500	780	6500	780	6500	780
3.5MM	6200	780	6200	780	6200	780	6200	780	6200	780
4MM	6000	800	6000	800	6000	800	6000	800	6000	800
4.5MM	5800	850	5800	850	5800	850	5800	850	5800	850
5MM	5500	880	5500	880	5500	880	5500	880	5500	880
5.5MM	5200	900	5200	900	5200	900	5200	900	5200	900
6MM	5000	900	5000	900	5000	900	5000	900	5000	900
6.5MM	5000	900	5000	900	5000	900	5000	900	5000	900
7MM	4800	900	4800	900	4800	900	4800	900	4800	900
7.5MM	4600	920	4600	920	4600	920	4600	920	4600	920
8MM	4500	920	4500	920	4500	920	4500	920	4500	920
8.5MM	4200	920	4200	920	4200	920	4200	920	4200	920
9MM	4100	920	4100	920	4100	920	4100	920	4100	920
9.5MM	4000	900	4000	900	4000	900	4000	900	4000	900
10MM	3800	900	3800	900	3800	900	3800	900	3800	900
10.5MM	3700	860	3700	860	3700	860	3700	860	3700	860
11MM	3600	860	3600	860	3600	860	3600	860	3600	860
11.5MM	3500	820	3500	820	3500	820	3500	820	3500	820
12MM	3200	800	3200	800	3200	800	3200	800	3200	800
14MM	3000	780	3000	780	3000	780	3000	780	3000	780
16MM	2800	760	2800	760	2800	760	2800	760	2800	760
18MM	2500	760	2500	760	2500	760	2500	760	2500	760
20MM	2300	730	2300	730	2300	730	2300	730	2300	730
切削基準量 Depth of Cutting (D = 直徑 Dia)										

SQUARE TYPE - 4 FLUTES
/ 4刃立銑刀

> 664L-A

開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7500	680	7500	680	7500	680	7500	680	7500	680
1.5MM	7200	700	7200	700	7200	700	7200	700	7200	700
2MM	7000	730	7000	730	7000	730	7000	730	7000	730
2.5MM	6800	750	6800	750	6800	750	6800	750	6800	750
3MM	6500	780	6500	780	6500	780	6500	780	6500	780
3.5MM	6200	780	6200	780	6200	780	6200	780	6200	780
4MM	6000	800	6000	800	6000	800	6000	800	6000	800
4.5MM	5800	850	5800	850	5800	850	5800	850	5800	850
5MM	5500	880	5500	880	5500	880	5500	880	5500	880
5.5MM	5200	900	5200	900	5200	900	5200	900	5200	900
6MM	5000	900	5000	900	5000	900	5000	900	5000	900
6.5MM	5000	900	5000	900	5000	900	5000	900	5000	900
7MM	4800	900	4800	900	4800	900	4800	900	4800	900
7.5MM	4600	920	4600	920	4600	920	4600	920	4600	920
8MM	4500	920	4500	920	4500	920	4500	920	4500	920
8.5MM	4200	920	4200	920	4200	920	4200	920	4200	920
9MM	4100	920	4100	920	4100	920	4100	920	4100	920
9.5MM	4000	920	4000	920	4000	920	4000	920	4000	920
10MM	3800	900	3800	900	3800	900	3800	900	3800	900
10.5MM	3700	900	3700	900	3700	900	3700	900	3700	900
11MM	3600	860	3600	860	3600	860	3600	860	3600	860
11.5MM	3500	860	3500	860	3500	860	3500	860	3500	860
12MM	3200	820	3200	820	3200	820	3200	820	3200	820
14MM	3000	800	3000	800	3000	800	3000	800	3000	800
16MM	2800	760	2800	760	2800	760	2800	760	2800	760
18MM	2500	760	2500	760	2500	760	2500	760	2500	760
20MM	2300	730	2300	730	2300	730	2300	730	2300	730
切削基準量 Depth of Cutting (D = 直徑 Dia)										

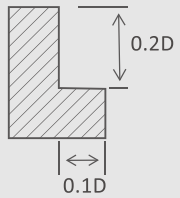
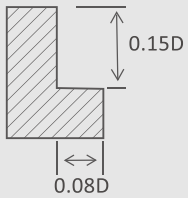
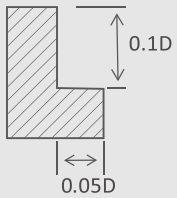
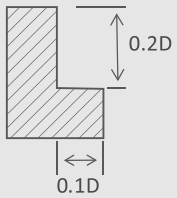
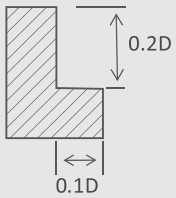
切削條件表 cutting condition

SQUARE TYPE LONG NECK- 2 FLUTES

/2刃深溝專用長頸立銑刀

> 662L-D

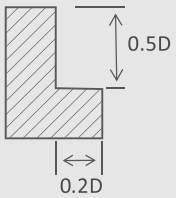
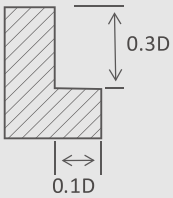
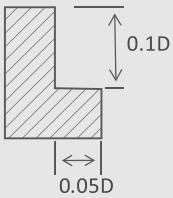
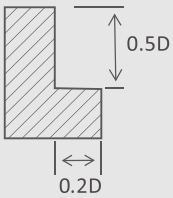
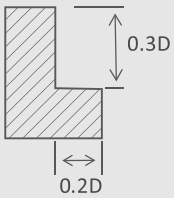
側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
0.5MM	11500	450	11500	450	11500	450	11500	450	11500	450
0.6MM	11000	480	11000	480	11000	480	11000	480	11000	480
0.7MM	10500	500	10500	500	10500	500	10500	500	10500	500
0.8MM	10200	550	10200	550	10200	550	10200	550	10200	550
0.9MM	10000	600	10000	600	10000	600	10000	600	10000	600
1MM	9500	680	9500	680	9500	680	9500	680	9500	680
1.2MM	9200	700	9200	700	9200	700	9200	700	9200	700
1.4MM	9000	700	9000	700	9000	700	9000	700	9000	700
1.5MM	8800	750	8800	750	8800	750	8800	750	8800	750
1.6MM	8500	760	8500	760	8500	760	8500	760	8500	760
1.8MM	8200	760	8200	760	8200	760	8200	760	8200	760
2MM	8000	780	8000	780	8000	780	8000	780	8000	780
2.5MM	7800	800	7800	800	7800	800	7800	800	7800	800
3MM	7500	850	7500	850	7500	850	7500	850	7500	850
3.5MM	7200	800	7200	800	7200	800	7200	800	7200	800
4MM	7000	800	7000	800	7000	800	7000	800	7000	800
切削基準量 Depth of Cutting (D = 直徑 Dia)										

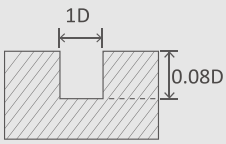
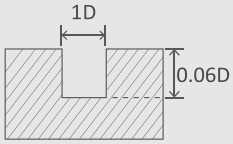
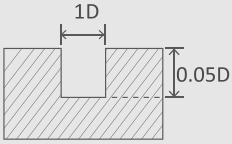
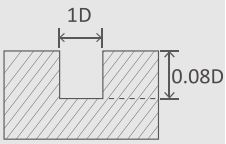
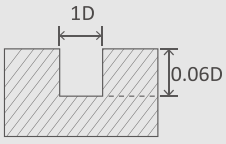
CORNER RADIUS - 2 FLUTES
/ 2 刃圓鼻立銑刀

> 668V-R

側加工 Side Milling

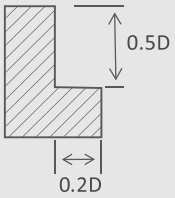
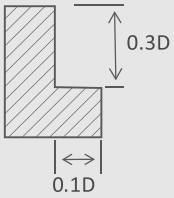
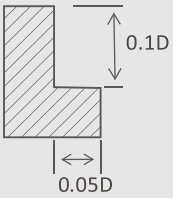
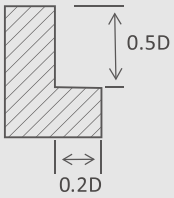
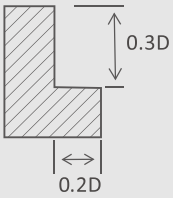
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8000	300	8000	300	8000	300	8000	300	8000	300
1.5MM	7500	350	7500	350	7500	350	7500	350	7500	350
2MM	7200	400	7200	400	7200	400	7200	400	7200	400
2.5MM	6000	420	6000	420	6000	420	6000	420	6000	420
3MM	5800	450	5800	450	5800	450	5800	450	5800	450
4MM	5500	480	5500	480	5500	480	5500	480	5500	480
5MM	5200	500	5200	500	5200	500	5200	500	5200	500
6MM	5000	500	5000	500	5000	500	5000	500	5000	500
8MM	4800	520	4800	520	4800	520	4800	520	4800	520
10MM	4500	520	4500	520	4500	520	4500	520	4500	520
12MM	4000	500	4000	500	4000	500	4000	500	4000	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

開槽加工 Slotting

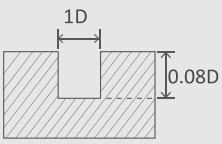
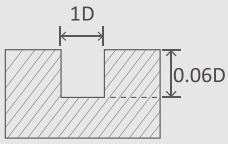
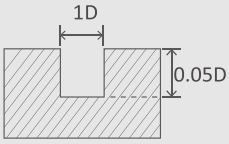
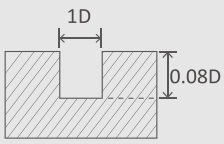
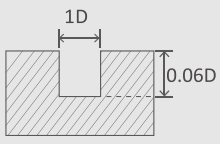
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8000	300	8000	300	8000	300	8000	300	8000	300
1.5MM	7500	350	7500	350	7500	350	7500	350	7500	350
2MM	7200	400	7200	400	7200	400	7200	400	7200	400
2.5MM	6000	420	6000	420	6000	420	6000	420	6000	420
3MM	5800	450	5800	450	5800	450	5800	450	5800	450
4MM	5500	480	5500	480	5500	480	5500	480	5500	480
5MM	5200	500	5200	500	5200	500	5200	500	5200	500
6MM	5000	500	5000	500	5000	500	5000	500	5000	500
8MM	4800	520	4800	520	4800	520	4800	520	4800	520
10MM	4500	520	4500	520	4500	520	4500	520	4500	520
12MM	4000	500	4000	500	4000	500	4000	500	4000	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

> 668V-RS

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8000	400	8000	400	8000	400	8000	400	8000	400
1.5MM	7500	450	7500	450	7500	450	7500	450	7500	450
2MM	7200	480	7200	480	7200	480	7200	480	7200	480
2.5MM	6000	500	6000	500	6000	500	6000	500	6000	500
3MM	5800	520	5800	520	5800	520	5800	520	5800	520
4MM	5500	550	5500	550	5500	550	5500	550	5500	550
5MM	5200	600	5200	600	5200	600	5200	600	5200	600
6MM	5000	600	5000	600	5000	600	5000	600	5000	600
8MM	4800	620	4800	620	4800	620	4800	620	4800	620
10MM	4500	620	4500	620	4500	620	4500	620	4500	620
12MM	4000	600	4000	600	4000	600	4000	600	4000	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

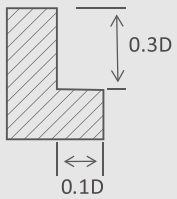
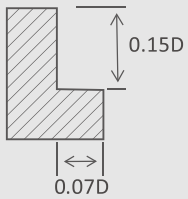
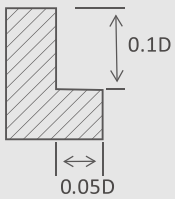
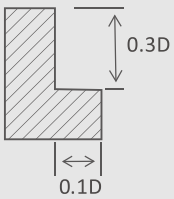
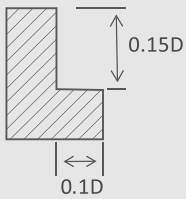
開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8000	400	8000	400	8000	400	8000	400	8000	400
1.5MM	7500	450	7500	450	7500	450	7500	450	7500	450
2MM	7200	480	7200	480	7200	480	7200	480	7200	480
2.5MM	6000	500	6000	500	6000	500	6000	500	6000	500
3MM	5800	520	5800	520	5800	520	5800	520	5800	520
4MM	5500	550	5500	550	5500	550	5500	550	5500	550
5MM	5200	600	5200	600	5200	600	5200	600	5200	600
6MM	5000	600	5000	600	5000	600	5000	600	5000	600
8MM	4800	620	4800	620	4800	620	4800	620	4800	620
10MM	4500	620	4500	620	4500	620	4500	620	4500	620
12MM	4000	600	4000	600	4000	600	4000	600	4000	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

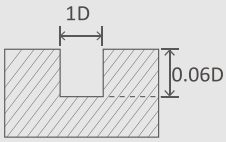
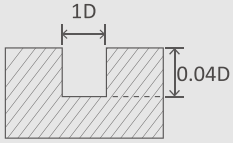
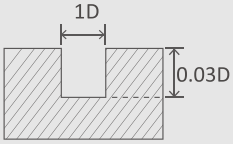
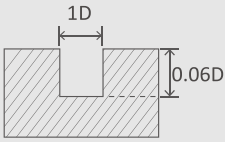
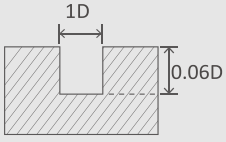
CORNER RADIUS LONG SHANK - 2 FLUTES
/ 2 刃長柄圓鼻立銑刀

> 668V-2RL

側加工 Side Milling

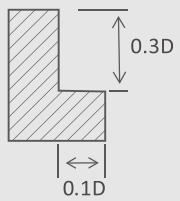
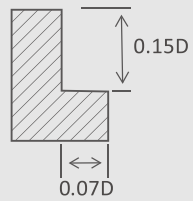
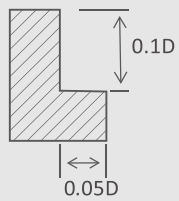
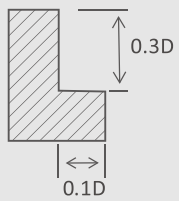
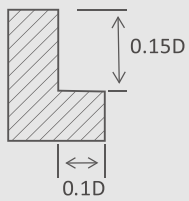
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	6000	450	6000	300	6000	300	6000	300	6000	300
4MM	5500	480	5500	480	5500	480	5500	480	5500	480
6MM	5000	500	5000	500	5000	500	5000	500	5000	500
8MM	4800	520	4800	520	4800	520	4800	520	4800	520
10MM	4500	520	4500	520	4500	520	4500	520	4500	520
12MM	4000	500	4000	500	4000	500	4000	500	4000	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

開槽加工 Slotting

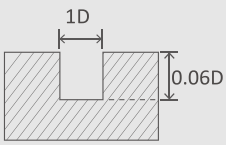
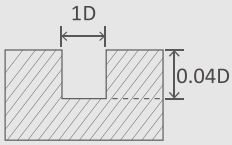
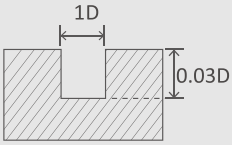
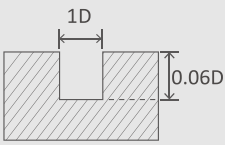
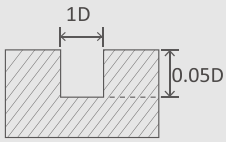
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	6000	400	6000	400	6000	400	6000	400	6000	400
4MM	5500	480	5500	480	5500	480	5500	480	5500	480
6MM	5000	500	5000	500	5000	500	5000	500	5000	500
8MM	4800	520	4800	520	4800	520	4800	520	4800	520
10MM	4500	520	4500	520	4500	520	4500	520	4500	520
12MM	4000	500	4000	500	4000	500	4000	500	4000	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

> 668V-4RL

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	6000	450	6000	450	6000	450	6000	450	6000	450
4MM	5500	480	5500	480	5500	480	5500	480	5500	480
6MM	5000	500	5000	500	5000	500	5000	500	5000	500
8MM	4800	520	4800	520	4800	520	4800	520	4800	520
10MM	4500	520	4500	520	4500	520	4500	520	4500	520
12MM	4000	500	4000	500	4000	500	4000	500	4000	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

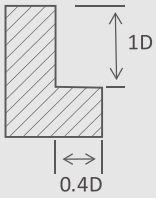
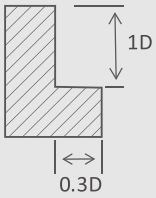
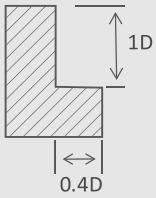
開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	6000	450	6000	450	6000	450	6000	450	6000	450
4MM	5500	480	5500	480	5500	480	5500	480	5500	480
6MM	5000	500	5000	500	5000	500	5000	500	5000	500
8MM	4800	520	4800	520	4800	520	4800	520	4800	520
10MM	4500	520	4500	520	4500	520	4500	520	4500	520
12MM	4000	500	4000	500	4000	500	4000	500	4000	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

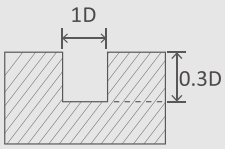
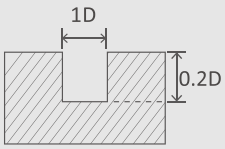
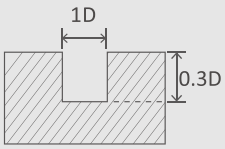
SQUARE TYPE FOR ALUMINUM - 3 FLUTES
/ 3刃鋁合金專用立銑刀

> 663L-AE

側加工 Side Milling

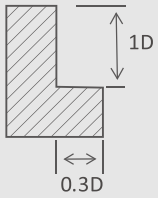
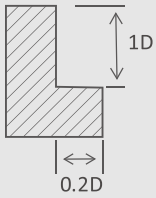
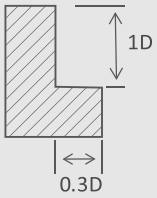
被切削材 (Material)	鋁合金 Aluminum Alloy		銅合金 Copper Alloy		塑鋼 (FRP)	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	8500	1300	8500	1300	8500	1300
4MM	8000	1500	8000	1500	8000	1500
5MM	7500	1400	7500	1400	7500	1400
6MM	7000	1500	7000	1500	7000	1500
8MM	6000	1300	6000	1300	6000	1300
10MM	5000	1200	5000	1200	5000	1200
12MM	4500	1200	4500	1200	4500	1200
16MM	4000	1200	4000	1200	4000	1200
20MM	3000	1200	3000	1200	3000	1200
切削基準量 Depth of Cutting (D = 直徑 Dia)						

開槽加工 Slotting

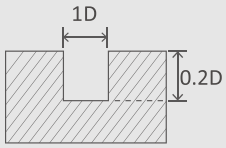
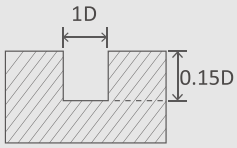
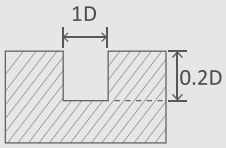
被切削材 (Material)	鋁合金 Aluminum Alloy		銅合金 Copper Alloy		塑鋼 (FRP)	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	8500	1300	8500	1300	8500	1300
4MM	8000	1500	8000	1500	8000	1500
5MM	7500	1400	7500	1400	7500	1400
6MM	7000	1500	7000	1500	7000	1500
8MM	6000	1300	6000	1300	6000	1300
10MM	5000	1200	5000	1200	5000	1200
12MM	4500	1200	4500	1200	4500	1200
16MM	4000	1200	4000	1200	4000	1200
20MM	3000	1200	3000	1200	3000	1200
切削基準量 Depth of Cutting (D = 直徑 Dia)						

> 663L-AEL

側加工 Side Milling

被切削材 (Material)	鋁合金 Aluminum Alloy		銅合金 Copper Alloy		塑鋼 (FRP)	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	8500	1000	8500	1000	8500	1000
4MM	8000	1100	8000	1100	8000	1100
5MM	7500	1100	7500	1100	7500	1100
6MM	7000	1200	7000	1200	7000	1200
8MM	6000	1100	6000	1100	6000	1100
10MM	5000	1000	5000	1000	5000	1000
12MM	4500	1000	4500	1000	4500	1000
16MM	4000	1000	4000	1000	4000	1000
20MM	3000	900	3000	900	3000	900
切削基準量 Depth of Cutting (D = 直徑 Dia)						

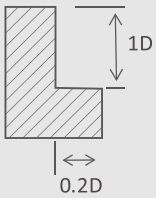
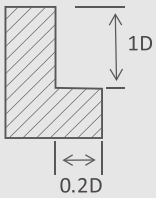
開槽加工 Slotting

被切削材 (Material)	鋁合金 Aluminum Alloy		銅合金 Copper Alloy		塑鋼 (FRP)	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	8500	1000	8500	1000	8500	1000
4MM	8000	1100	8000	1100	8000	1100
5MM	7500	1100	7500	1100	7500	1100
6MM	7000	1200	7000	1200	7000	1200
8MM	6000	1100	6000	1100	6000	1100
10MM	5000	1000	5000	1000	5000	1000
12MM	4500	1000	4500	1000	4500	1000
16MM	4000	1000	4000	1000	4000	1000
20MM	3000	900	3000	900	3000	900
切削基準量 Depth of Cutting (D = 直徑 Dia)						

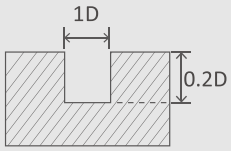
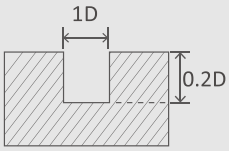
SQUARE TYPE FOR ALUMINUM / PLASTIC / WOOD - 1 FLUTE
/ 1刃鋁、塑膠、木工用立銑刀

> 662-1

側加工 Side Milling

被切削材 (Material)	塑料 (FRP)		木頭 Wood	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	12000	900	12000	900
1.5MM	11000	950	11000	950
2MM	10500	950	10500	950
2.5MM	10000	1000	10000	1000
3MM	9500	1000	9500	1000
3.17MM	9300	1100	9300	1100
4MM	9000	1200	9000	1200
4.765MM	8800	1200	8800	1200
5MM	8500	1300	8500	1300
6MM	8000	1500	8000	1500
6.35MM	7800	1400	7800	1400
8MM	7500	1300	7500	1300
10MM	7200	1200	7200	1200
12MM	7000	1200	7000	1200
切削基準量 Depth of Cutting (D = 直徑 Dia)				

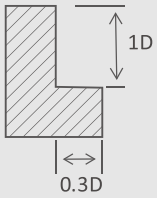
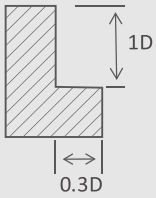
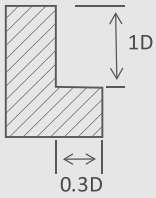
開槽加工 Slotting

被切削材 (Material)	塑料 (FRP)		木頭 Wood	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	12000	900	12000	900
1.5MM	11000	950	11000	950
2MM	10500	950	10500	950
2.5MM	10000	1000	10000	1000
3MM	9500	1000	9500	1000
3.17MM	9300	1100	9300	1100
4MM	9000	1200	9000	1200
4.765MM	8800	1200	8800	1200
5MM	8500	1300	8500	1300
6MM	8000	1500	8000	1500
6.35MM	7800	1400	7800	1400
8MM	7500	1300	7500	1300
10MM	7200	1200	7200	1200
12MM	7000	1200	7000	1200
切削基準量 Depth of Cutting (D = 直徑 Dia)				

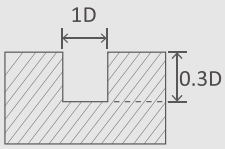
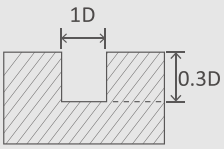
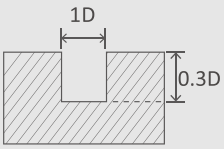
SQUARE TYPE FOR COPPER - 2 FLUTES
/ 2刃銅合金專用立銑刀

> 662L-2EE > 662L-2EEG

側加工 Side Milling

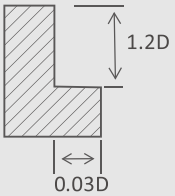
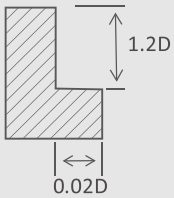
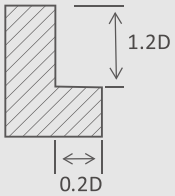
被切削材 (Material)	鋁合金 Aluminum Alloy		銅合金 Copper Alloy		塑鋼 (FRP)	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	10000	850	10000	850	10000	850
1.5MM	9500	880	9500	880	9500	880
2MM	9000	900	9000	900	9000	900
3MM	8800	920	8800	920	8800	920
4MM	7500	950	7500	950	7500	950
5MM	7300	1000	7300	1000	7300	1000
6MM	7000	1000	7000	1000	7000	1000
8MM	6500	1000	6500	1000	6500	1000
10MM	6000	950	6000	950	6000	950
12MM	5000	900	5000	900	5000	900
16MM	4000	850	4000	850	4000	850
20MM	3000	800	3000	800	3000	800
切削基準量 Depth of Cutting (D = 直徑 Dia)						

開槽加工 Slotting

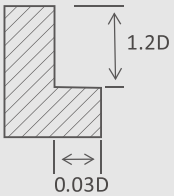
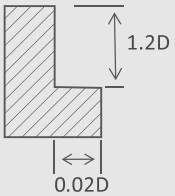
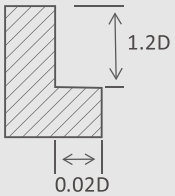
被切削材 (Material)	鋁合金 Aluminum Alloy		銅合金 Copper Alloy		塑鋼 (FRP)	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	10000	850	10000	850	10000	850
1.5MM	9500	880	9500	880	9500	880
2MM	9000	900	9000	900	9000	900
3MM	8800	920	8800	920	8800	920
4MM	7500	950	7500	950	7500	950
5MM	7300	1000	7300	1000	7300	1000
6MM	7000	1000	7000	1000	7000	1000
8MM	6500	1000	6500	1000	6500	1000
10MM	6000	950	6000	950	6000	950
12MM	5000	900	5000	900	5000	900
16MM	4000	850	4000	850	4000	850
20MM	3000	800	3000	800	3000	800
切削基準量 Depth of Cutting (D = 直徑 Dia)						

> 666H-D

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM	
硬度(Hardness)			20-30HRC		30-45 HRC	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
2MM	7000	1000	7000	1000	7000	1000
3MM	6500	1100	6500	1100	6500	1100
4MM	6000	1100	6000	1100	6000	1100
5MM	5500	1200	5500	1200	5500	1200
6MM	5000	1200	5000	1200	5000	1200
8MM	4500	1100	4500	1100	4500	1100
10MM	4000	1000	4000	1000	4000	1000
12MM	3500	950	3500	950	3500	950
16MM	3000	900	3000	900	3000	900
20MM	2500	800	2500	800	2500	800
25MM	2300	700	2300	700	2300	700
切削基準量 Depth of Cutting (D = 直徑 Dia)						

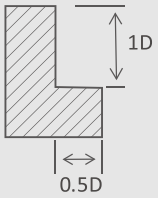
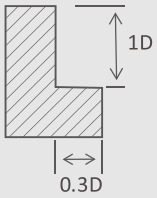
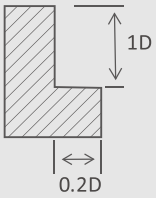
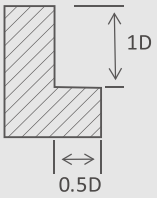
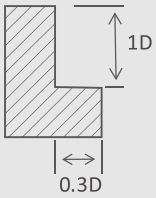
側加工 Side Milling

被切削材 (Material)	模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)		硬化鋼 (Mold Steel)	
Material Code	P1 / P3 / P5		SUS 303 / 304			
硬度(Hardness)	20-30HRC				~ 50HRC	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
2MM	7000	1000	7000	1000	7000	1000
3MM	6500	1100	6500	1100	6500	1100
4MM	6000	1100	6000	1100	6000	1100
5MM	5500	1200	5500	1200	5500	1200
6MM	5000	1200	5000	1200	5000	1200
8MM	4500	1100	4500	1100	4500	1100
10MM	4000	1000	4000	1000	4000	1000
12MM	3500	950	3500	950	3500	950
16MM	3000	900	3000	900	3000	900
20MM	2500	800	2500	800	2500	800
25MM	2300	700	2300	700	2300	700
切削基準量 Depth of Cutting (D = 直徑 Dia)						

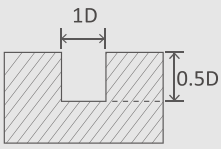
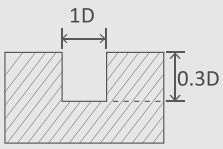
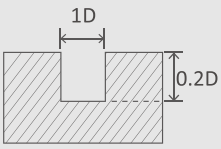
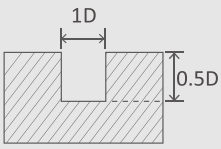
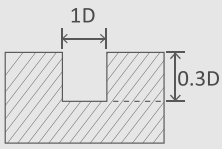
FINE PITCH ROUGHING END MILLS - 3 FLUTES
/3刃粗精銑刀

> 663L-GV

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
4MM	6000	700	6000	700	6000	700	6000	700	6000	700
5MM	5000	800	5000	800	5000	800	5000	800	5000	800
6MM	4500	800	4500	800	4500	800	4500	800	4500	800
7MM	4200	750	4200	750	4200	750	4200	750	4200	750
8MM	4000	750	4000	750	4000	750	4000	750	4000	750
9MM	3800	750	3800	750	3800	750	3800	750	3800	750
10MM	3500	750	3500	750	3500	750	3500	750	3500	750
11MM	3200	700	3200	700	3200	700	3200	700	3200	700
12MM	3000	700	3000	700	3000	700	3000	700	3000	700
16MM	2500	600	2500	600	2500	600	2500	600	2500	600
20MM	2300	500	2300	500	2300	500	2300	500	2300	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

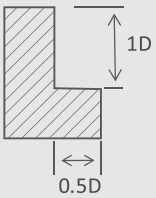
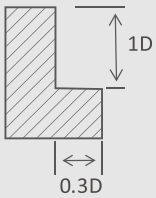
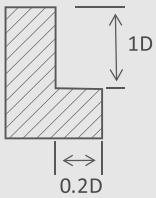
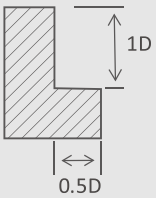
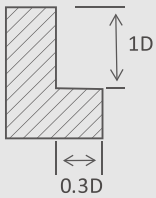
開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
4MM	6000	700	6000	700	6000	700	6000	700	6000	700
5MM	5000	800	5000	800	5000	800	5000	800	5000	800
6MM	4500	800	4500	800	4500	800	4500	800	4500	800
7MM	4200	750	4200	750	4200	750	4200	750	4200	750
8MM	4000	750	4000	750	4000	750	4000	750	4000	750
9MM	3800	750	3800	750	3800	750	3800	750	3800	750
10MM	3500	750	3500	750	3500	750	3500	750	3500	750
11MM	3200	700	3200	700	3200	700	3200	700	3200	700
12MM	3000	700	3000	700	3000	700	3000	700	3000	700
16MM	2500	600	2500	600	2500	600	2500	600	2500	600
20MM	2300	500	2300	500	2300	500	2300	500	2300	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

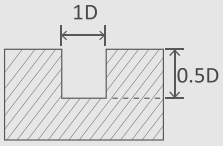
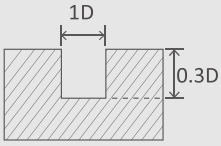
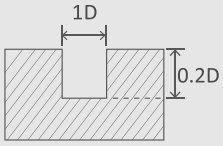
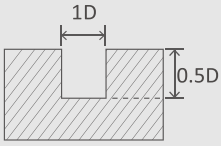
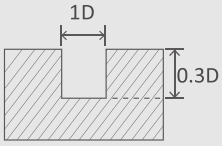
FINE PITCH ROUGHING END MILLS - 4 FLUTES
/4刃粗精銑刀

> 664L-GV

側加工 Side Milling

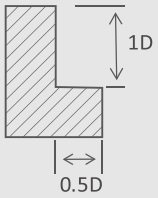
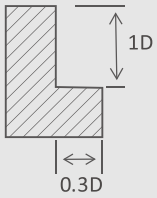
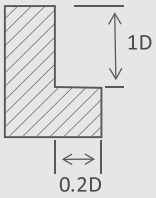
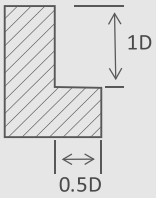
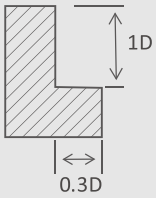
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
5MM	5000	800	5000	800	5000	800	5000	800	5000	800
6MM	4500	900	4500	900	4500	900	4500	900	4500	900
7MM	4200	850	4200	850	4200	850	4200	850	4200	850
8MM	4000	850	4000	850	4000	850	4000	850	4000	850
9MM	3800	850	3800	850	3800	850	3800	850	3800	850
10MM	3500	850	3500	850	3500	850	3500	850	3500	850
11MM	3200	800	3200	800	3200	800	3200	800	3200	800
12MM	3000	800	3000	800	3000	800	3000	800	3000	800
14MM	2800	750	2800	750	2800	750	2800	750	2800	750
15MM	2800	750	2800	750	2800	750	2800	750	2800	750
16MM	2500	700	2500	700	2500	700	2500	700	2500	700
20MM	2300	600	2300	600	2300	600	2300	600	2300	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

開槽加工 Slotting

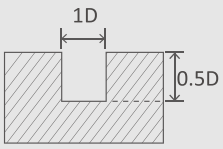
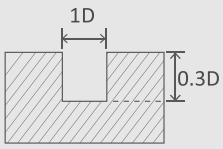
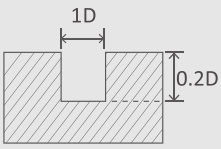
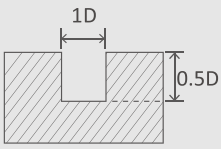
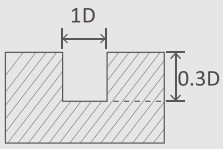
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
5MM	5000	800	5000	800	5000	800	5000	800	5000	800
6MM	4500	900	4500	900	4500	900	4500	900	4500	900
7MM	4200	850	4200	850	4200	850	4200	850	4200	850
8MM	4000	850	4000	850	4000	850	4000	850	4000	850
9MM	3800	850	3800	850	3800	850	3800	850	3800	850
10MM	3500	850	3500	850	3500	850	3500	850	3500	850
11MM	3200	800	3200	800	3200	800	3200	800	3200	800
12MM	3000	800	3000	800	3000	800	3000	800	3000	800
14MM	2800	750	2800	750	2800	750	2800	750	2800	750
15MM	2800	750	2800	750	2800	750	2800	750	2800	750
16MM	2500	700	2500	700	2500	700	2500	700	2500	700
20MM	2300	600	2300	600	2300	600	2300	600	2300	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

> 663L-G

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
4MM	6000	700	6000	700	6000	700	6000	700	6000	700
5MM	5000	800	5000	800	5000	800	5000	800	5000	800
6MM	4500	800	4500	800	4500	800	4500	800	4500	800
7MM	4200	750	4200	750	4200	750	4200	750	4200	750
8MM	4000	750	4000	750	4000	750	4000	750	4000	750
9MM	3800	750	3800	750	3800	750	3800	750	3800	750
10MM	3500	750	3500	750	3500	750	3500	750	3500	750
11MM	3200	700	3200	700	3200	700	3200	700	3200	700
12MM	3000	700	3000	700	3000	700	3000	700	3000	700
16MM	2500	600	2500	600	2500	600	2500	600	2500	600
20MM	2300	500	2300	500	2300	500	2300	500	2300	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

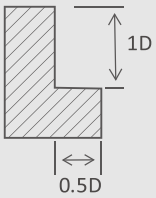
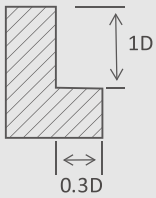
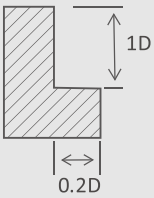
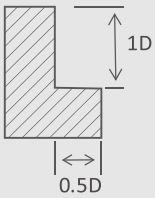
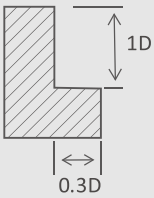
開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
4MM	6000	700	6000	700	6000	700	6000	700	6000	700
5MM	5000	800	5000	800	5000	800	5000	800	5000	800
6MM	4500	800	4500	800	4500	800	4500	800	4500	800
7MM	4200	750	4200	750	4200	750	4200	750	4200	750
8MM	4000	750	4000	750	4000	750	4000	750	4000	750
9MM	3800	750	3800	750	3800	750	3800	750	3800	750
10MM	3500	750	3500	750	3500	750	3500	750	3500	750
11MM	3200	700	3200	700	3200	700	3200	700	3200	700
12MM	3000	700	3000	700	3000	700	3000	700	3000	700
16MM	2500	600	2500	600	2500	600	2500	600	2500	600
20MM	2300	500	2300	500	2300	500	2300	500	2300	500
切削基準量 Depth of Cutting (D = 直徑 Dia)										

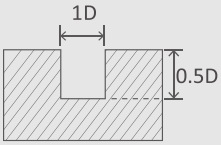
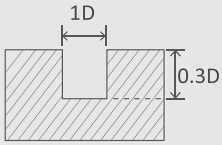
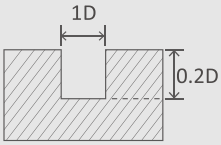
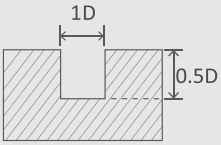
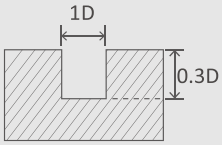
ROUGHING END MILLS - 4 FLUTES
/4刃粗銑刀

> 664L-G

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
5MM	5000	800	5000	800	5000	800	5000	800	5000	800
6MM	4500	900	4500	900	4500	900	4500	900	4500	900
7MM	4200	850	4200	850	4200	850	4200	850	4200	850
8MM	4000	850	4000	850	4000	850	4000	850	4000	850
9MM	3800	850	3800	850	3800	850	3800	850	3800	850
10MM	3500	850	3500	850	3500	850	3500	850	3500	850
11MM	3200	800	3200	800	3200	800	3200	800	3200	800
12MM	3000	800	3000	800	3000	800	3000	800	3000	800
16MM	2500	700	2500	700	2500	700	2500	700	2500	700
20MM	2300	600	2300	600	2300	600	2300	600	2300	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

開槽加工 Slotting

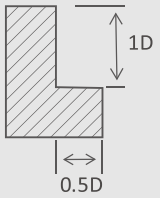
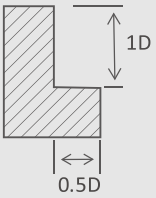
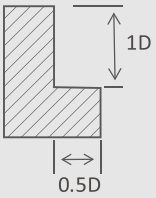
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
5MM	5000	800	5000	800	5000	800	5000	800	5000	800
6MM	4500	900	4500	900	4500	900	4500	900	4500	900
7MM	4200	850	4200	850	4200	850	4200	850	4200	850
8MM	4000	850	4000	850	4000	850	4000	850	4000	850
9MM	3800	850	3800	850	3800	850	3800	850	3800	850
10MM	3500	850	3500	850	3500	850	3500	850	3500	850
11MM	3200	800	3200	800	3200	800	3200	800	3200	800
12MM	3000	800	3000	800	3000	800	3000	800	3000	800
16MM	2500	700	2500	700	2500	700	2500	700	2500	700
20MM	2300	600	2300	600	2300	600	2300	600	2300	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

ROUGHING END MILLS FOR ALUMINUM - 3 FLUTES

/3刃鋁用粗銑刀

> 663L-X

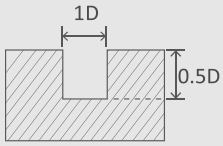
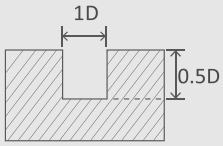
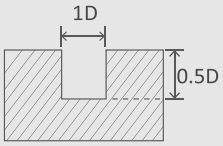
側加工 Side Milling

被切削材 (Material)	鋁合金 Aluminum Alloy		銅合金 Copper Alloy		塑鋼 (FRP)	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
4MM	7000	1800	7000	1800	7000	1800
5MM	6500	2000	6500	2000	6500	2000
6MM	6000	2000	6000	2000	6000	2000
6.5MM	5800	2000	5800	2000	5800	2000
7MM	5500	1900	5500	1900	5500	1900
7.5MM	5300	1900	5300	1900	5300	1900
8MM	5200	1900	5200	1900	5200	1900
8.5MM	5000	1900	5000	1900	5000	1900
9MM	4800	1800	4800	1800	4800	1800
9.5MM	4800	1800	4800	1800	4800	1800
10MM	4500	1800	4500	1800	4500	1800
11MM	4200	1700	4200	1700	4200	1700
12MM	4000	1650	4000	1650	4000	1650
13MM	3800	1600	3800	1600	3800	1600
14MM	3500	1500	3500	1500	3500	1500
15MM	3500	1500	3500	1500	3500	1500
16MM	3200	1200	3200	1200	3200	1200
17MM	3000	1200	3000	1200	3000	1200
18MM	2800	1100	2800	1100	2800	1100
20MM	2500	1000	2500	1000	2500	1000
25MM	2300	900	2300	900	2300	900
切削基準量 Depth of Cutting (D = 直徑 Dia)						

切削條件表 cutting condition

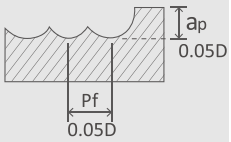
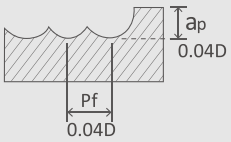
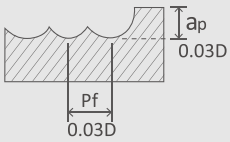
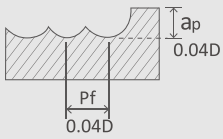
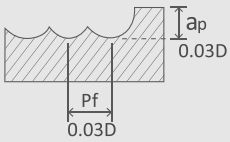
> 663L-X

開槽加工 Slotting

被切削材 (Material)	鋁合金 Aluminum Alloy		銅合金 Copper Alloy		塑鋼 (FRP)	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
4MM	7000	1800	7000	1800	7000	1800
5MM	6500	2000	6500	2000	6500	2000
6MM	6000	2000	6000	2000	6000	2000
6.5MM	5800	2000	5800	2000	5800	2000
7MM	5500	1900	5500	1900	5500	1900
7.5MM	5300	1900	5300	1900	5300	1900
8MM	5200	1900	5200	1900	5200	1900
8.5MM	5000	1800	5000	1800	5000	1800
9MM	4800	1800	4800	1800	4800	1800
9.5MM	4800	1800	4800	1800	4800	1800
10MM	4500	1800	4500	1800	4500	1800
11MM	4200	1700	4200	1700	4200	1700
12MM	4000	1650	4000	1650	4000	1650
13MM	3800	1600	3800	1600	3800	1600
14MM	3500	1500	3500	1500	3500	1500
15MM	3500	1500	3500	1500	3500	1500
16MM	3200	1200	3200	1200	3200	1200
17MM	3000	1200	3000	1200	3000	1200
18MM	2800	1100	2800	1100	2800	1100
20MM	2500	1000	2500	1000	2500	1000
25MM	2300	900	2300	900	2300	900
切削基準量 Depth of Cutting (D = 直徑 Dia)						

> 668V-B

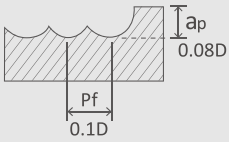
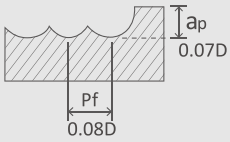
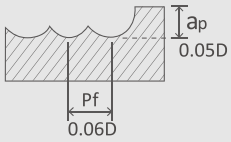
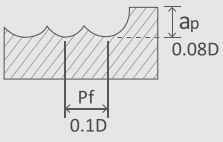
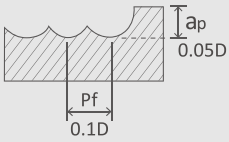
曲面加工 Profiling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
0.3MM	18000	500	18000	500	18000	500	18000	500	18000	500
0.4MM	17500	480	17500	480	17500	480	17500	480	17500	480
0.5MM	17000	480	17000	480	17000	480	17000	480	17000	480
0.6MM	16800	480	16800	480	16800	480	16800	480	16800	480
0.7MM	16500	500	16500	500	16500	500	16500	500	16500	500
0.8MM	16200	520	16200	520	16200	520	16200	520	16200	520
0.9MM	16000	520	16000	520	16000	520	16000	520	16000	520
1.1MM	15500	520	15500	520	15500	520	15500	520	15500	520
1.2MM	15000	530	15000	530	15000	530	15000	530	15000	530
1.3MM	14800	530	14800	530	14800	530	14800	530	14800	530
1.4MM	14500	530	14500	530	14500	530	14500	530	14500	530
1.6MM	14000	550	14000	550	14000	550	14000	550	14000	550
1.7MM	13500	550	13500	550	13500	550	13500	550	13500	550
1.8MM	13000	580	13000	580	13000	580	13000	580	13000	580
1.9MM	12500	600	12500	600	12500	600	12500	600	12500	600
2.1MM	12000	600	12000	600	12000	600	12000	600	12000	600
2.2MM	11000	600	11000	600	11000	600	11000	600	11000	600
2.3MM	10500	620	10500	620	10500	620	10500	620	10500	620
2.4MM	10200	620	10200	620	10200	620	10200	620	10200	620
2.6MM	10500	650	10500	650	10500	650	10500	650	10500	650
2.7MM	10000	650	10000	650	10000	650	10000	650	10000	650
2.8MM	9500	680	9500	680	9500	680	9500	680	9500	680
2.9MM	9000	700	9000	700	9000	700	9000	700	9000	700
切削基準量 Depth of Cutting (D = 直徑 Dia)										

BALL NOSE - 2 FLUTES
/2刃球型立銑刀

> 668V-A

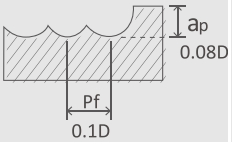
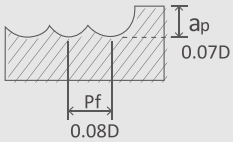
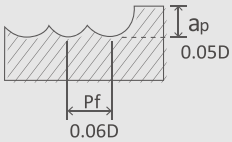
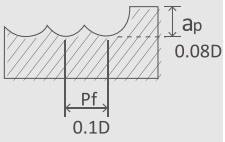
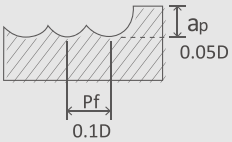
曲面加工 Profiling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C / S50C / S55C		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Strength)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
1MM	9500	700	9500	700	9500	700	9500	700	9500	700
1.5MM	9000	720	9000	720	9000	720	9000	720	9000	720
2MM	8500	750	8500	750	8500	750	8500	750	8500	750
2.5MM	8000	800	8000	800	8000	800	8000	800	8000	800
3MM	7800	800	7800	800	7800	800	7800	800	7800	800
3.5MM	7500	820	7500	820	7500	820	7500	820	7500	820
4MM	7000	820	7000	820	7000	820	7000	820	7000	820
4.5MM	6800	800	6800	800	6800	800	6800	800	6800	800
5MM	6500	800	6500	800	6500	800	6500	800	6500	800
5.5MM	6200	800	6200	800	6200	800	6200	800	6200	800
6MM	6000	800	6000	800	6000	800	6000	800	6000	800
7MM	5800	800	5800	800	5800	800	5800	800	5800	800
8MM	5500	780	5500	780	5500	780	5500	780	5500	780
9MM	5300	780	5300	780	5300	780	5300	780	5300	780
10MM	5000	750	5000	750	5000	750	5000	750	5000	750
11MM	4800	720	4800	720	4800	720	4800	720	4800	720
12MM	4500	720	4500	720	4500	720	4500	720	4500	720
14MM	4200	700	4200	700	4200	700	4200	700	4200	700
16MM	4000	700	4000	700	4000	700	4000	700	4000	700
18MM	3800	680	3800	680	3800	680	3800	680	3800	680
20MM	3500	650	3500	650	3500	650	3500	650	3500	650
切削基準量 Depth of Cutting (D = 直徑 Dia)										

切削條件表 cutting condition

> 668V-AA

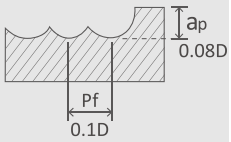
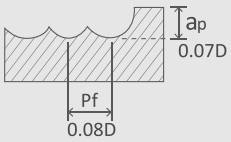
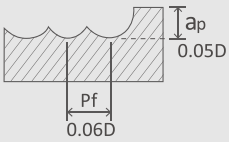
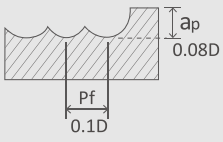
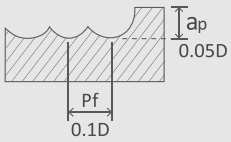
曲面加工 Profiling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	9500	800	9500	800	9500	800	9500	800	9500	800
1.5MM	9000	820	9000	820	9000	820	9000	820	9000	820
2MM	8500	850	8500	850	8500	850	8500	850	8500	850
2.5MM	8000	900	8000	900	8000	900	8000	900	8000	900
3MM	7800	900	7800	900	7800	900	7800	900	7800	900
3.5MM	7500	920	7500	920	7500	920	7500	920	7500	920
4MM	7000	920	7000	920	7000	920	7000	920	7000	920
4.5MM	6800	900	6800	900	6800	900	6800	900	6800	900
5MM	6500	900	6500	900	6500	900	6500	900	6500	900
5.5MM	6200	900	6200	900	6200	900	6200	900	6200	900
6MM	6000	900	6000	900	6000	900	6000	900	6000	900
7MM	5800	900	5800	900	5800	900	5800	900	5800	900
8MM	5500	880	5500	880	5500	880	5500	880	5500	880
9MM	5300	880	5300	880	5300	880	5300	880	5300	880
10MM	5000	850	5000	850	5000	850	5000	850	5000	850
11MM	4800	820	4800	820	4800	820	4800	820	4800	820
12MM	4500	820	4500	820	4500	820	4500	820	4500	820
14MM	4200	820	4200	820	4200	820	4200	820	4200	820
16MM	4000	800	4000	800	4000	800	4000	800	4000	800
18MM	3800	780	3800	780	3800	780	3800	780	3800	780
20MM	3500	750	3500	750	3500	750	3500	750	3500	750
切削基準量 Depth of Cutting (D = 直徑 Dia)										

BALL NOSE LONG SHANK - 2 FLUTES
/2刃長柄球型立銑刀

> 668V-2AL

曲面加工 Profiling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	9500	650	9500	650	9500	650	9500	650	9500	650
1.5MM	9000	630	9000	630	9000	630	9000	630	9000	630
2MM	8500	600	8500	600	8500	600	8500	600	8500	600
2.5MM	8000	700	8000	700	8000	700	8000	700	8000	700
3MM	7800	700	7800	700	7800	700	7800	700	7800	700
3.5MM	7500	720	7500	720	7500	720	7500	720	7500	720
4MM	7000	720	7000	720	7000	720	7000	720	7000	720
5MM	6500	700	6500	700	6500	700	6500	700	6500	700
6MM	6000	700	6000	700	6000	700	6000	700	6000	700
8MM	5500	680	5500	680	5500	680	5500	680	5500	680
10MM	5000	650	5000	650	5000	650	5000	650	5000	650
12MM	4500	620	4500	620	4500	620	4500	620	4500	620
16MM	4000	600	4000	600	4000	600	4000	600	4000	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

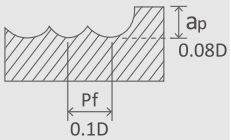
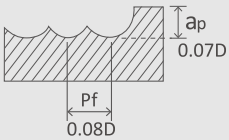
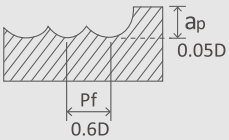
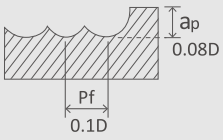
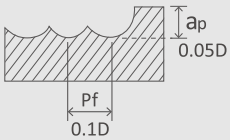
切削條件表 cutting condition

BALL NOSE -TAPER NECK - 2 FLUTES

/深溝斜度頸球型立銑刀

> 668L-S

曲面加工 Profiling

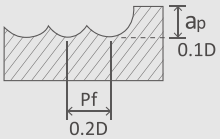
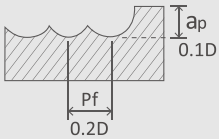
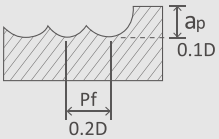
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	9500	680	9500	680	9500	680	9500	680	9500	680
1.5MM	9000	630	9000	630	9000	630	9000	630	9000	630
2MM	8500	600	8500	600	8500	600	8500	600	8500	600
3MM	7800	700	7800	700	7800	700	7800	700	7800	700
4MM	7000	720	7000	720	7000	720	7000	720	7000	720
6MM	6000	700	6000	700	6000	700	6000	700	6000	700
8MM	5500	680	5500	680	5500	680	5500	680	5500	680
切削基準量 Depth of Cutting (D = 直徑 Dia)										

切削條件表 cutting condition

BALL NOSE - FOR COPPER / ALUMINUM - 2 FLUTES
/ 2 刃銅鋁合金專用球型立銑刀

> 668V-2EX **> 668V-2EXD**

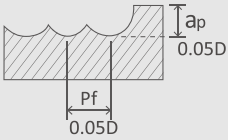
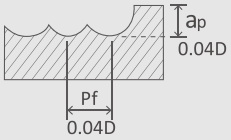
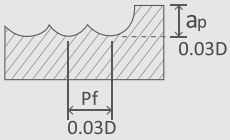
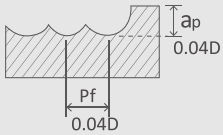
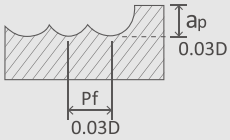
曲面加工 Profiling

被切削材 (Material)	鋁合金 Aluminum Alloy		銅合金 Copper Alloy		塑鋼 (FRP)	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	12000	850	12000	850	12000	850
1.5MM	11500	850	11500	850	11500	850
2MM	11000	900	11000	900	11000	900
2.5MM	10500	900	10500	900	10500	900
3MM	10000	950	10000	950	10000	950
3.5MM	9500	950	9500	950	9500	950
4MM	9000	1000	9000	1000	9000	1000
4.5MM	8500	1100	8500	1100	8500	1100
5MM	8000	1150	8000	1150	8000	1150
5.5MM	7500	1200	7500	1200	7500	1200
6MM	7000	1200	7000	1200	7000	1200
8MM	6000	1200	6000	1200	6000	1200
10MM	5000	1100	5000	1100	5000	1100
12MM	4000	1000	4000	1000	4000	1000
切削基準量 Depth of Cutting (D = 直徑 Dia)						

切削條件表 cutting condition

> 668V-D

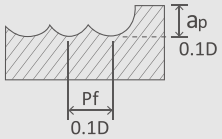
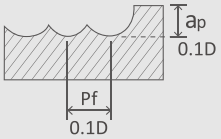
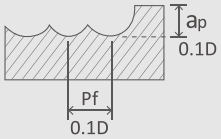
曲面加工 Profiling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
0.5MM	12000	450	12000	450	12000	450	12000	450	12000	450
0.6MM	11800	450	11800	450	11800	450	11800	450	11800	450
0.8MM	11500	450	11500	450	11500	450	11500	450	11500	450
1MM	11000	480	11000	480	11000	480	11000	480	11000	480
1.2MM	10500	500	10500	500	10500	500	10500	500	10500	500
1.4MM	10000	520	10000	520	10000	520	10000	520	10000	520
1.5MM	9800	520	9800	520	9800	520	9800	520	9800	520
1.6MM	9500	550	9500	550	9500	550	9500	550	9500	550
1.8MM	9200	550	9200	550	9200	550	9200	550	9200	550
2MM	9000	600	9000	600	9000	600	9000	600	9000	600
2.5MM	8000	650	8000	650	8000	650	8000	650	8000	650
3MM	7500	700	7500	700	7500	700	7500	700	7500	700
4MM	7000	750	7000	750	7000	750	7000	750	7000	750
切削基準量 Depth of Cutting (D = 直徑 Dia)										

BALL NOSE - FOR COPPER / ALUMINUM - 2 FLUTES
/2刃銅鋁用高速球型立銑刀

> 668V-I

曲面加工 Profiling

被切削材 (Material)	鋁合金 Aluminum Alloy		銅合金 Copper Alloy		塑鋼 (FRP)	
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
2MM	9500	1000	9500	1000	9500	1000
2.5MM	9000	1100	9000	1100	9000	1100
3MM	8500	1100	8500	1100	8500	1100
4MM	8000	1200	8000	1200	8000	1200
5MM	7500	1300	7500	1300	7500	1300
6MM	7000	1300	7000	1300	7000	1300
8MM	6000	1300	6000	1300	6000	1300
10MM	5000	1100	5000	1100	5000	1100
12MM	4000	1050	4000	1050	4000	1050
16MM	3000	900	3000	900	3000	900
20MM	2500	800	2500	800	2500	800
切削基準量 Depth of Cutting (D = 直徑 Dia)						

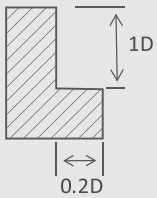
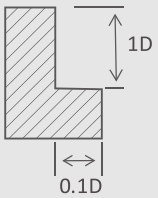
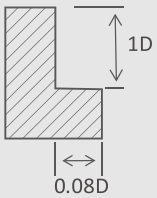
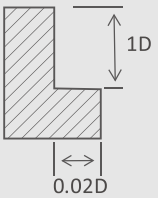
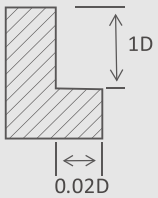
切削條件表 cutting condition

TAPERED SQUARE TYPE LONG FLUTE- 2 FLUTES

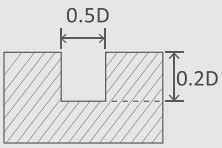
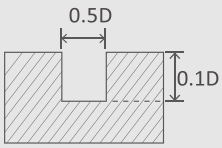
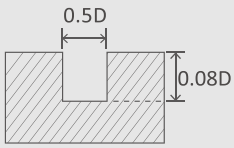
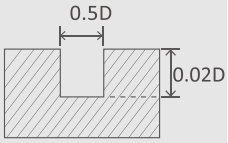
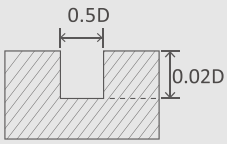
/2刃長刃斜度立銑刀

> 662L-SL

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7000	450	7000	450	7000	450	7000	450	7000	450
1.5MM	6500	500	6500	500	6500	500	6500	500	6500	500
2MM	6200	520	6200	520	6200	520	6200	520	6200	520
2.5MM	6000	550	6000	550	6000	550	6000	550	6000	550
3MM	5800	580	5800	580	5800	580	5800	580	5800	580
4MM	5500	600	5500	600	5500	600	5500	600	5500	600
5MM	5200	600	5200	600	5200	600	5200	600	5200	600
6MM	5000	600	5000	600	5000	600	5000	600	5000	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

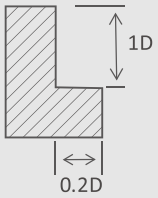
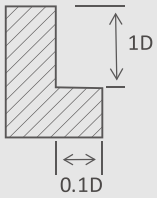
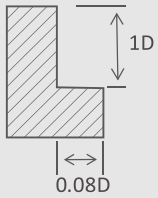
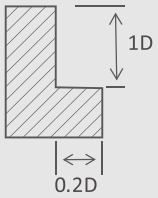
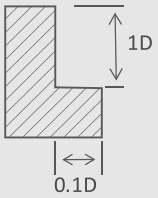
開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7000	450	7000	450	7000	450	7000	450	7000	450
1.5MM	6500	520	6500	520	6500	520	6500	520	6500	520
2MM	6200	520	6200	520	6200	520	6200	520	6200	520
2.5MM	6000	550	6000	550	6000	550	6000	550	6000	550
3MM	5800	580	5800	580	5800	580	5800	580	5800	580
4MM	5500	600	5500	600	5500	600	5500	600	5500	600
5MM	5200	600	5200	600	5200	600	5200	600	5200	600
6MM	5000	600	5000	600	5000	600	5000	600	5000	600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

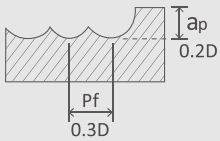
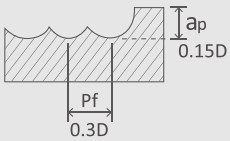
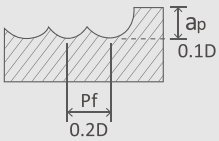
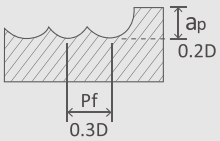
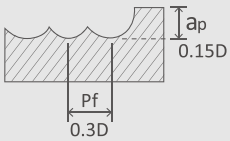
TAPERED BALL NOSE - 2 FLUTES
/2刃球型斜度立銑刀

> 668V-SX

側加工 Side Milling

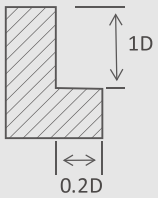
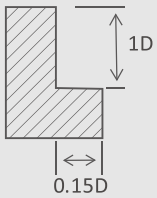
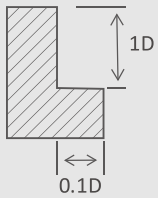
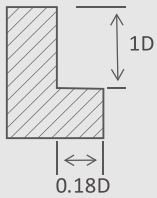
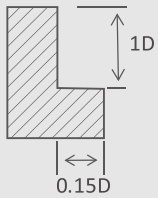
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7000	700	7000	700	7000	700	7000	700	7000	700
1.5MM	6800	700	6800	700	6800	700	6800	700	6800	700
2MM	6500	720	6500	720	6500	720	6500	720	6500	720
2.5MM	6200	700	6200	700	6200	700	6200	700	6200	700
3MM	6000	700	6000	700	6000	700	6000	700	6000	700
切削基準量 Depth of Cutting (D = 直徑 Dia)										

曲面加工 Profiling

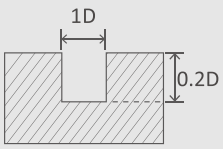
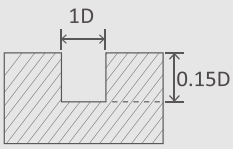
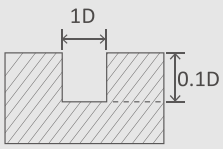
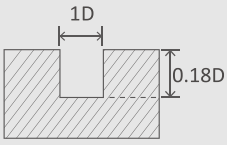
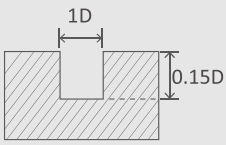
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	9000	800	9000	800	9000	800	9000	800	9000	800
1.5MM	8000	800	8000	800	8000	800	8000	800	8000	800
2MM	7500	820	7500	820	7500	820	7500	820	7500	820
2.5MM	7200	800	7200	800	7200	800	7200	800	7200	800
3MM	7000	800	7000	800	7000	800	7000	800	7000	800
切削基準量 Depth of Cutting (D = 直徑 Dia)										

> 662L-2X

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	6000	720	6000	720	6000	720	6000	720	6000	720
4MM	5500	720	5500	720	5500	720	5500	720	5500	720
5MM	5200	700	5200	700	5200	700	5200	700	5200	700
6MM	5000	700	5000	700	5000	700	5000	700	5000	700
8MM	4500	700	4500	700	4500	700	4500	700	4500	700
10MM	4000	650	4000	650	4000	650	4000	650	4000	650
12MM	3500	600	3500	600	3500	600	3500	600	3500	600
14MM	3000	550	3000	550	3000	550	3000	550	3000	550
16MM	2800	500	2800	500	2800	500	2800	500	2800	500
20MM	2500	400	2500	400	2500	400	2500	400	2500	400
切削基準量 Depth of Cutting (D = 直徑 Dia)										

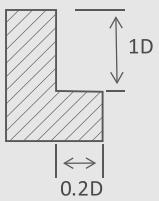
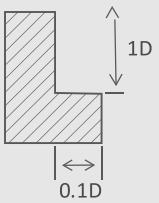
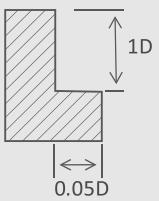
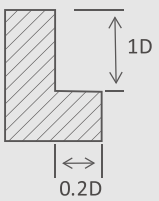
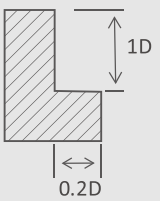
開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度(Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
3MM	6000	720	6000	720	6000	720	6000	720	6000	720
4MM	5500	720	5500	720	5500	720	5500	720	5500	720
5MM	5200	700	5200	700	5200	700	5200	700	5200	700
6MM	5000	700	5000	700	5000	700	5000	700	5000	700
8MM	4500	700	4500	700	4500	700	4500	700	4500	700
10MM	4000	650	4000	650	4000	650	4000	650	4000	650
12MM	3500	600	3500	600	3500	600	3500	600	3500	600
14MM	3000	550	3000	550	3000	550	3000	550	3000	550
16MM	2800	550	2800	550	2800	550	2800	550	2800	550
20MM	2500	400	2500	400	2500	400	2500	400	2500	400
切削基準量 Depth of Cutting (D = 直徑 Dia)										

SQUARE TYPE - 2 FLUTES
/ 2刃立銑刀

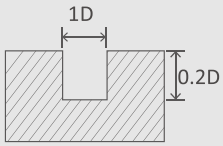
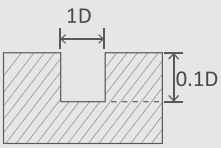
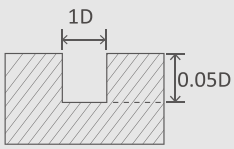
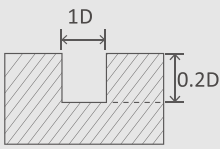
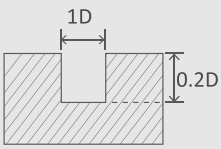
> 772L-A

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8500	700	8500	700	8500	700	8500	700	8500	700
1.5MM	8200	800	8200	750	8200	750	8200	800	8200	750
2MM	8000	820	8000	780	8000	780	8000	820	8000	780
2.5MM	7800	850	7800	800	7800	800	7800	850	7800	800
3MM	7500	900	7500	830	7500	830	7500	900	7500	830
3.5MM	7200	920	7200	850	7200	850	7200	920	7200	850
4MM	7000	950	7000	900	7000	900	7000	950	7000	900
4.5MM	6800	1000	6500	930	6500	930	6800	1000	6500	930
5MM	6500	1050	6000	950	6000	950	6500	1050	6000	950
5.5MM	6200	1100	5800	1000	5800	1000	6200	1100	5800	1000
6MM	6000	1100	5500	1000	5500	1000	6000	1100	5500	1000
6.5MM	5800	1100	5200	1000	5200	1000	5800	1100	5200	1000
7MM	5500	1000	5000	950	5000	950	5500	1000	5000	950
7.5MM	5200	1000	4800	900	4800	900	5200	1000	4800	900
8MM	5000	1000	4500	850	4500	850	5000	1000	4500	850
8.5MM	4800	950	4200	800	4200	800	4800	950	4200	800
9MM	4500	900	4000	750	4000	750	4500	900	4000	750
9.5MM	4300	850	3800	700	3800	700	4300	850	3800	700
10MM	4000	820	3500	680	3500	680	4000	820	3500	680
10.5MM	3800	800	3300	650	3300	650	3800	800	3300	650
11MM	3600	750	3200	620	3200	620	3600	750	3200	620
11.5MM	3500	720	3100	600	3100	600	3500	720	3100	600
12MM	3200	700	3000	550	3000	550	3200	700	3000	550
14MM	3000	600	2800	500	2800	500	3000	600	2800	500
16MM	2500	500	2500	450	2500	450	2500	500	2500	450
18MM	2300	450	2300	400	2300	400	2300	450	2300	400
20MM	2100	400	2100	380	2100	380	2100	400	2100	380
25MM	1800	350	1800	350	1800	350	1800	350	1800	350
切削基準量 Depth of Cutting (D = 直徑 Dia)										

> 772L-A

開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8500	700	8500	700	8500	700	8500	700	8500	700
1.5MM	8200	800	8200	750	8200	750	8200	800	8200	750
2MM	8000	820	8000	780	8000	780	8000	820	8000	780
2.5MM	7800	850	7800	800	7800	800	7800	850	7800	800
3MM	7500	900	7500	830	7500	830	7500	900	7500	830
3.5MM	7200	920	7200	850	7200	850	7200	920	7200	850
4MM	7000	950	7000	900	7000	900	7000	950	7000	900
4.5MM	6800	1000	6500	930	6500	930	6800	1000	6500	930
5MM	6500	1050	6000	950	6000	950	6500	1050	6000	950
5.5MM	6200	1100	5800	1000	5800	1000	6200	1100	5800	1000
6MM	6000	1100	5500	1000	5500	1000	6000	1100	5500	1000
6.5MM	5800	1100	5200	1000	5200	1000	5800	1000	5200	1000
7MM	5500	1000	5000	950	5000	950	5500	1000	5000	950
7.5MM	5200	1000	4800	900	4800	900	5200	1000	4800	900
8MM	5000	1000	4500	850	4500	850	5000	1000	4500	850
8.5MM	4800	950	4200	800	4200	800	4800	950	4200	800
9MM	4500	900	4000	750	4000	750	4500	900	4000	750
9.5MM	4300	850	3800	700	3800	700	4300	850	3800	700
10MM	4000	820	3500	680	3500	680	4000	820	3500	680
10.5MM	3800	800	3300	650	3300	650	3800	800	3300	650
11MM	3600	750	3200	620	3200	620	3600	750	3200	620
11.5MM	3500	720	3100	600	3100	600	3500	720	3100	600
12MM	3200	700	3000	550	3000	550	3200	700	3000	550
14MM	3000	600	2800	500	2800	500	3000	600	2800	500
16MM	2500	500	2500	450	2500	450	2500	500	2500	450
18MM	2300	450	2300	400	2300	400	2300	450	2300	400
20MM	2100	400	2100	380	2100	380	2100	400	2100	380
25MM	1800	350	1800	350	1800	350	1800	350	1800	350
切削基準量 Depth of Cutting (D = 直徑 Dia)										

切削條件表 cutting condition

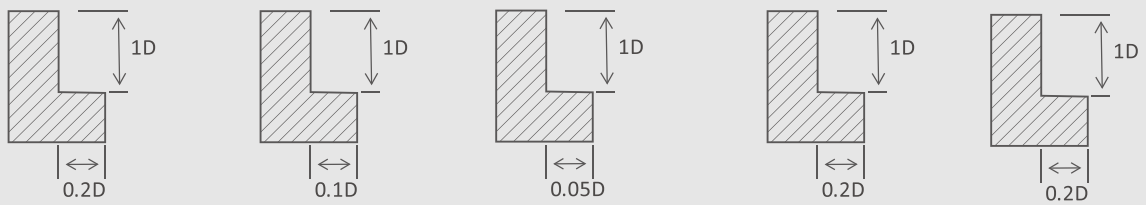
SQUARE TYPE - 4 FLUTES
/ 4刃立銑刀

> 774L-B

側加工 Side Milling

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8500	900	8500	900	8500	900	8500	900	8500	900
1.5MM	8200	900	8200	900	8200	900	8200	900	8200	900
2MM	8000	950	8000	950	8000	950	8000	950	8000	950
2.5MM	7800	950	7800	950	7800	950	7800	950	7800	950
3MM	7500	1000	7500	1000	7500	1000	7500	1000	7500	1000
3.5MM	7200	1000	7200	1000	7200	1000	7200	1000	7200	1000
4MM	7000	1050	7000	1050	7000	1050	7000	1050	7000	1050
4.5MM	6800	1100	6500	1100	6500	1100	6500	1100	6500	1100
5MM	6500	1200	6000	1200	6000	1200	6000	1200	6000	1200
5.5MM	6200	1300	5800	1300	5800	1300	5800	1300	5800	1300
6MM	6000	1300	5500	1300	5500	1300	5500	1300	5500	1300
6.5MM	5800	1300	5200	1300	5200	1300	5200	1300	5200	1300
7MM	5500	1300	5000	1300	5000	1300	5000	1300	5000	1300
7.5MM	5200	1300	4800	1300	4800	1300	4800	1300	4800	1300
8MM	5000	1200	4500	1200	4500	1200	4500	1200	4500	1200
8.5MM	4800	1100	4200	1100	4200	1100	4200	1100	4200	1100
9MM	4500	1050	4000	1050	4000	1050	4000	1050	4000	1050
9.5MM	4300	1000	3800	1000	3800	1000	3800	1000	3800	1000
10MM	4000	1000	3500	1000	3500	1000	3500	1000	3500	1000
10.5MM	3800	950	3300	950	3300	950	3300	950	3300	950
11MM	3600	900	3200	900	3200	900	3200	900	3200	900
11.5MM	3500	850	3100	850	3100	850	3100	850	3100	850
12MM	3200	800	3000	800	3000	800	3000	800	3000	800
14MM	3000	700	2800	700	2800	700	2800	700	2800	700
16MM	2500	600	2500	600	2500	600	2500	600	2500	600
18MM	2300	550	2300	550	2300	550	2300	550	2300	550
20MM	2100	500	2100	500	2100	500	2100	500	2100	500
25MM	1800	400	1800	400	1800	400	1800	400	1800	400

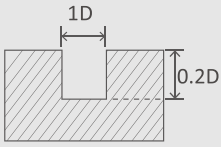
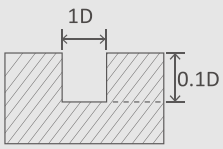
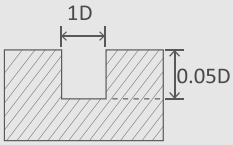
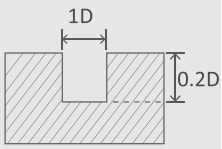
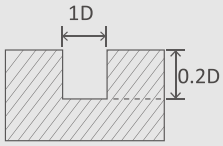
切削基準量
Depth of Cutting
(D = 直徑 Dia)



切削條件表
cutting condition

> 774L-B

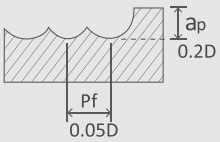
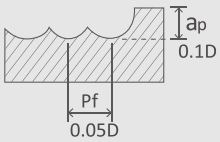
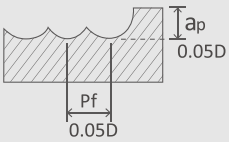
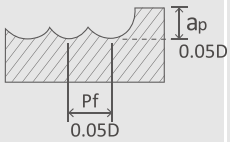
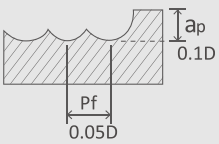
開槽加工 Slotting

被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8500	900	8500	900	8500	900	8500	900	8500	900
1.5MM	8200	900	8200	900	8200	900	8200	900	8200	900
2MM	8000	950	8000	950	8000	950	8000	950	8000	950
2.5MM	7800	950	7800	950	7800	950	7800	950	7800	950
3MM	7500	1000	7500	1000	7500	1000	7500	1000	7500	1000
3.5MM	7200	1000	7200	1000	7200	1000	7200	1000	7200	1000
4MM	7000	1050	7000	1050	7000	1050	7000	1050	7000	1050
4.5MM	6800	1100	6500	1100	6500	1100	6500	1100	6500	1100
5MM	6500	1200	6000	1200	6000	1200	6000	1200	6000	1200
5.5MM	6200	1300	5800	1300	5800	1300	5800	1300	5800	1300
6MM	6000	1300	5500	1300	5500	1300	5500	1300	5500	1300
6.5MM	5800	1300	5200	1300	5200	1300	5200	1300	5200	1300
7MM	5500	1300	5000	1300	5000	1300	5000	1300	5000	1300
7.5MM	5200	1300	4800	1300	4800	1300	4800	1300	4800	1300
8MM	5000	1200	4500	1200	4500	1200	4500	1200	4500	1200
8.5MM	4800	1100	4200	1100	4200	1100	4200	1100	4200	1100
9MM	4500	1050	4000	1050	4000	1050	4000	1050	4000	1050
9.5MM	4300	1000	3800	1000	3800	1000	3800	1000	3800	1000
10MM	4000	1000	3500	1000	3500	1000	3500	1000	3500	1000
10.5MM	3800	950	3300	950	3300	950	3300	950	3300	950
11MM	3600	900	3200	900	3200	900	3200	900	3200	900
11.5MM	3500	850	3100	850	3100	850	3100	850	3100	850
12MM	3200	800	3000	800	3000	800	3000	800	3000	800
14MM	3000	700	2800	700	2800	700	2800	700	2800	700
16MM	2500	600	2500	600	2500	600	2500	600	2500	600
18MM	2300	550	2300	550	2300	550	2300	550	2300	550
20MM	2100	500	2100	500	2100	500	2100	500	2100	500
25MM	1800	400	1800	400	1800	400	1800	400	1800	400
切削基準量 Depth of Cutting (D = 直徑 Dia)										

BAll NOSE - 2 FLUTES
/2刃球型立銑刀

> 778V-A

曲面加工 Profiling

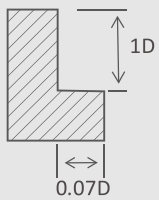
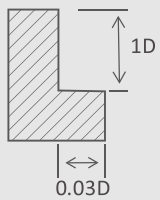
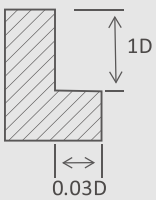
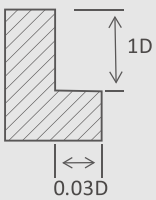
被切削材 (Material)	碳鋼(鑄鐵) (Carbon Steels/Cast Iron)		合金鋼 (HRC 20-30 Alloy Steels)		工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		不銹鋼 (Stainless Steel)	
Material Code	S45C (F25C)		SKD / SKS / SNCM		SKD11 / SKD61 / SCM		P1 / P3 / P5		SUS 303 / 304	
硬度 (Hardness)			20-30HRC		30-45 HRC		20-30HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	12500	2100	12000	2300	12000	2300	12000	2300	12000	2300
1.5MM	12000	2300	11500	2300	11500	2300	11500	2300	11500	2300
2MM	11500	2500	11000	2500	11000	2500	11000	2500	11000	2500
2.5MM	11000	2600	10500	2600	10500	2600	10500	2600	10500	2600
3MM	10500	2800	10000	2800	10000	2800	10000	2800	10000	2800
3.5MM	9500	3000	9500	3000	9500	3000	9500	3000	9500	3000
4MM	9000	3500	9000	3200	9000	3200	9000	3200	9000	3200
4.5MM	8800	3200	8800	3200	8800	3200	8800	3200	8800	3200
5MM	8500	3000	8500	3200	8500	3200	8500	3200	8500	3200
5.5MM	8200	3000	8200	3200	8200	3200	8200	3200	8200	3200
6MM	8000	3000	8000	3200	8000	3200	8000	3200	8000	3200
7MM	7800	2800	7800	3000	7800	3000	7800	3000	7800	3000
8MM	7500	2600	7500	2800	7500	2800	7500	2800	7500	2800
9MM	7200	2500	7200	2600	7200	2600	7200	2600	7200	2600
10MM	7000	2300	7000	2500	7000	2500	7000	2500	7000	2500
11MM	6500	2100	6800	2300	6800	2300	6800	2300	6800	2300
12MM	6200	2000	6500	2300	6500	2300	6500	2300	6500	2300
14MM	6000	1800	6200	2100	6200	2100	6200	2100	6200	2100
16MM	5000	1600	6000	2000	6000	2000	6000	2000	6000	2000
18MM	4500	1500	5000	1800	5000	1800	5000	1800	5000	1800
20MM	3800	1200	4000	1600	4000	1600	4000	1600	4000	1600
切削基準量 Depth of Cutting (D = 直徑 Dia)										

切削條件表 cutting condition

MINIATURE SQUARE TYPE - 2 FLUTES
/ 2刃微小徑立銑刀

> 992L-C > 992L-CNB

側加工 Side Milling

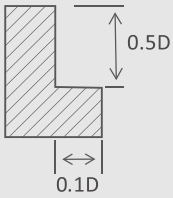
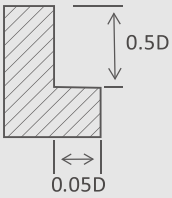
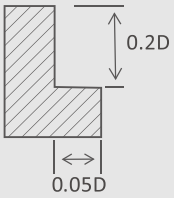
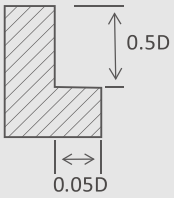
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
0.2MM	20000	260	20000	260	20000	260	20000	260
0.3MM	19000	270	19000	270	19000	270	19000	270
0.4MM	18000	280	18000	280	18000	280	18000	280
0.5MM	15000	290	15000	290	15000	290	15000	290
0.6MM	13000	300	13000	300	13000	300	13000	300
0.7MM	12500	310	12500	310	12500	310	12500	310
0.8MM	12000	320	12000	320	12000	320	12000	320
0.9MM	11800	330	11800	330	11800	330	11800	330
1.1MM	11500	350	11500	350	11500	350	11500	350
1.2MM	11200	360	11200	360	11200	360	11200	360
1.3MM	11000	380	11000	380	11000	380	11000	380
1.4MM	10900	400	10900	400	10900	400	10900	400
1.6MM	10800	400	10800	400	10800	400	10800	400
1.7MM	10600	420	10600	420	10600	420	10600	420
1.8MM	10500	420	10500	420	10500	420	10500	420
1.9MM	10200	420	10200	420	10200	420	10200	420
2.1MM	10000	450	10000	450	10000	450	10000	450
2.2MM	9900	450	9900	450	9900	450	9900	450
2.3MM	9800	450	9800	450	9800	450	9800	450
2.4MM	9500	480	9500	480	9500	480	9500	480
2.6MM	9300	480	9300	500	9300	500	9300	500
2.7MM	9200	500	9200	500	9200	500	9200	500
2.8MM	9000	500	9000	500	9000	500	9000	500
2.9MM	9000	500	9000	500	9000	500	9000	500
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

SQUARE TYPE - 2 FLUTES
/ 2刃立銑刀

> 992L-A **> 992L-ANB**

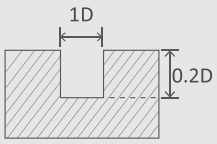
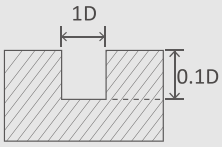
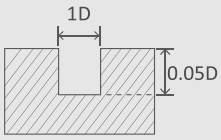
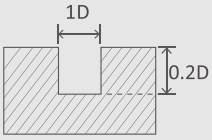
側加工 Side Milling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7000	800	7000	800	7000	800	7000	800
1.5MM	6500	820	6500	820	6500	820	6500	820
2MM	6000	850	6000	850	6000	850	6000	850
2.5MM	6300	880	6300	880	6300	880	6300	880
3MM	6000	900	6000	900	6000	900	6000	900
3.5MM	5500	920	5500	920	5500	920	5500	920
4MM	5200	950	5200	950	5200	950	5200	950
4.5MM	5300	1000	5500	1000	5500	1000	5500	1000
5MM	5200	1000	5200	1000	5200	1000	5200	1000
5.5MM	5000	1200	5000	1200	5000	1200	5000	1200
6MM	5000	1200	5000	1200	5000	1200	5000	1200
6.5MM	5000	1300	5000	1300	5000	1300	5000	1300
7MM	4800	1200	4800	1200	4800	1200	4800	1200
7.5MM	4600	1100	4600	1100	4600	1100	4600	1100
8MM	4500	1100	4500	1100	4500	1100	4500	1100
8.5MM	4300	1000	4300	1000	4300	1100	4300	1100
9MM	4200	950	4200	950	4200	950	4200	950
9.5MM	4000	900	4000	900	4000	900	4000	900
10MM	3800	880	3800	880	3800	880	3800	880
10.5MM	3700	860	3700	860	3700	860	3700	860
11MM	3600	860	3600	860	3600	860	3600	860
11.5MM	3600	860	3600	860	3600	860	3600	860
12MM	3600	880	3600	880	3600	880	3600	880
14MM	3200	850	3200	850	3200	850	3200	850
15MM	3000	800	3000	800	3000	800	3000	800
16MM	2800	780	2800	780	2800	780	2800	780
20MM	2500	700	2500	700	2500	700	2500	700
25MM	2200	600	2200	600	2200	600	2200	600
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

> 992L-A > 992L-ANB

開槽加工 Slotting

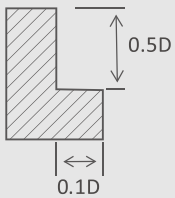
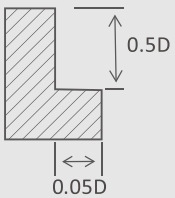
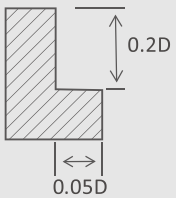
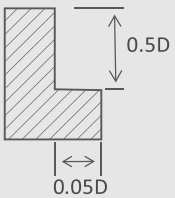
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7000	800	7000	800	7000	800	7000	800
1.5MM	6500	820	6500	820	6500	820	6500	820
2MM	6000	850	6000	850	6000	850	6000	850
2.5MM	6300	880	6300	880	6300	880	6300	880
3MM	6000	900	6000	900	6000	900	6000	900
3.5MM	5500	920	5500	920	5500	920	5500	920
4MM	5200	950	5200	950	5200	950	5200	950
4.5MM	5300	1000	5500	1000	5500	1000	5500	1000
5MM	5200	1000	5200	1000	5200	1000	5200	1000
5.5MM	5000	1200	5000	1200	5000	1200	5000	1200
6MM	5000	1200	5000	1200	5000	1200	5000	1200
6.5MM	5000	1300	5000	1300	5000	1300	5000	1300
7MM	4800	1200	4800	1200	4800	1200	4800	1200
7.5MM	4600	1100	4600	1100	4600	1100	4600	1100
8MM	4500	1100	4500	1100	4500	1100	4500	1100
8.5MM	4300	1000	4300	1000	4300	1100	4300	1100
9MM	4200	950	4200	950	4200	950	4200	950
9.5MM	4000	900	4000	900	4000	900	4000	900
10MM	3800	880	3800	880	3800	880	3800	880
10.5MM	3700	860	3700	860	3700	860	3700	860
11MM	3600	860	3600	860	3600	860	3600	860
11.5MM	3600	860	3600	860	3600	860	3600	860
12MM	3600	880	3600	880	3600	880	3600	880
14MM	3200	850	3200	850	3200	850	3200	850
15MM	3000	800	3000	800	3000	800	3000	800
16MM	2800	780	2800	780	2800	780	2800	780
20MM	2500	700	2500	700	2500	700	2500	700
25MM	2200	600	2200	600	2200	600	2200	600
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

SQUARE TYPE - 4 FLUTES
/ 4 刃立銑刀

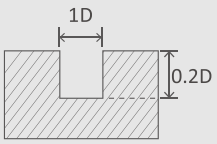
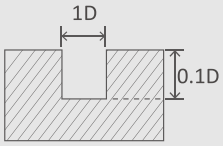
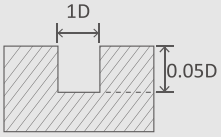
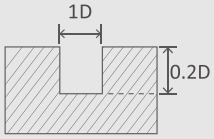
> 994L-B **> 994L-BNB**

側加工 Side Milling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7000	1000	7000	1000	7000	1000	7000	1000
1.5MM	6500	1050	6500	1050	6500	1050	6500	1050
2MM	6000	1100	6000	1100	6000	1100	6000	1100
2.5MM	6300	1150	6300	1150	6300	1150	6300	1150
3MM	6000	1200	6000	1200	6000	1200	6000	1200
3.5MM	5500	1250	5500	1250	5500	1250	5500	1250
4MM	5200	1200	5200	1200	5200	1200	5200	1200
4.5MM	5300	1250	5300	1250	5300	1250	5300	1250
5MM	5200	1300	5200	1300	5200	1300	5200	1300
5.5MM	5000	1300	5000	1300	5000	1300	5000	1300
6MM	5000	1300	5000	1300	5000	1300	5000	1300
6.5MM	5000	1350	5000	1350	5000	1350	5000	1350
7MM	4800	1300	4800	1300	4800	1300	4800	1300
7.5MM	4600	1250	4600	1250	4600	1250	4600	1250
8MM	4500	1200	4500	1200	4500	1200	4500	1200
8.5MM	4300	1200	4300	1200	4300	1200	4300	1200
9MM	4200	1200	4200	1200	4200	1200	4200	1200
9.5MM	4000	1150	4000	1150	4000	1150	4000	1150
10MM	3800	1100	3800	1100	3800	1100	3800	1100
10.5MM	3700	1050	3700	1050	3700	1050	3700	1050
11MM	3600	1000	3600	1000	3600	1000	3600	1000
11.5MM	3600	950	3600	950	3600	950	3600	950
12MM	3600	950	3600	950	3600	950	3600	950
14MM	3200	900	3200	900	3200	900	3200	900
15MM	3000	900	3000	900	3000	900	3000	900
16MM	2800	880	2800	880	2800	880	2800	880
20MM	2500	850	2500	850	2500	850	2500	850
25MM	2200	800	2200	800	2200	800	2200	800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

> 994L-B > 994L-BNB

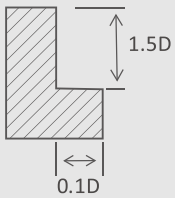
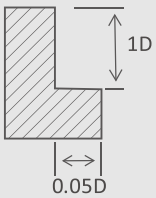
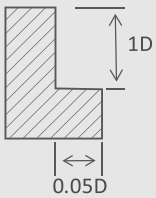
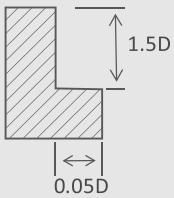
開槽加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7000	1000	7000	1000	7000	1000	7000	1000
1.5MM	6500	1050	6500	1050	6500	1050	6500	1050
2MM	6000	1100	6000	1100	6000	1100	6000	1100
2.5MM	6300	1150	6300	1150	6300	1150	6300	1150
3MM	6000	1200	6000	1200	6000	1200	6000	1200
3.5MM	5500	1250	5500	1250	5500	1250	5500	1250
4MM	5200	1200	5200	1200	5200	1200	5200	1200
4.5MM	5300	1250	5300	1250	5300	1250	5300	1250
5MM	5200	1300	5200	1300	5200	1300	5200	1300
5.5MM	5000	1300	5000	1300	5000	1300	5000	1300
6MM	5000	1300	5000	1300	5000	1300	5000	1300
6.5MM	5000	1350	5000	1350	5000	1350	5000	1350
7MM	4800	1300	4800	1300	4800	1300	4800	1300
7.5MM	4600	1250	4600	1250	4600	1250	4600	1250
8MM	4500	1200	4500	1200	4500	1200	4500	1200
8.5MM	4300	1200	4300	1200	4300	1200	4300	1200
9MM	4300	1200	4300	1200	4300	1200	4300	1200
9.5MM	4200	1200	4200	1200	4200	1200	4200	1200
10MM	3800	1150	3800	1150	3800	1150	3800	1150
10.5MM	3700	1100	3700	1100	3700	1100	3700	1100
11MM	3600	1050	3600	1050	3600	1050	3600	1050
11.5MM	3600	1000	3600	1000	3600	1000	3600	1000
12MM	3600	950	3600	950	3600	950	3600	950
14MM	3200	900	3200	900	3200	900	3200	900
15MM	3000	900	3000	900	3000	900	3000	900
16MM	2800	880	2800	880	2800	880	2800	880
20MM	2500	850	2500	850	2500	850	2500	850
25MM	2200	800	2200	800	2200	800	2200	800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

SQUARE TYPE LONG FLUTE - 2 FLUTES
/ 2刃長刃立銑刀

> 992LL-2A **> 992LL-2ANB**

側加工 Side Milling

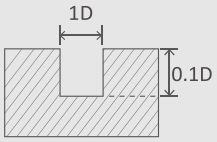
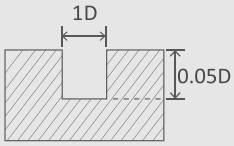
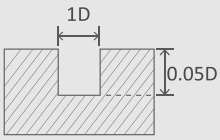
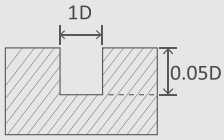
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7200	700	7200	700	7200	700	7200	700
1.5MM	7000	670	7000	670	7000	670	7000	670
2MM	6800	650	6800	650	6800	650	6800	650
3MM	6500	620	6500	620	6500	620	6500	620
4MM	6300	600	6300	600	6300	600	6300	600
4.5MM	6000	580	6000	580	6000	580	6000	580
5MM	5500	550	5500	550	5500	550	5500	550
5.5MM	5000	600	5000	600	5000	600	5000	600
6MM	5000	600	5000	600	5000	600	5000	600
6.5MM	5000	600	5000	600	5000	600	5000	600
7MM	4800	550	4800	550	4800	550	4800	550
7.5MM	4500	530	4500	530	4500	530	4500	530
8MM	4200	500	4200	500	4200	500	4200	500
8.5MM	4000	480	4000	480	4000	480	4000	480
9MM	3800	450	3800	450	3800	450	3800	450
9.5MM	3600	420	3600	420	3600	420	3600	420
10MM	3500	400	3500	400	3500	400	3500	400
10.5MM	3300	380	3300	380	3300	380	3300	380
11MM	3200	380	3200	380	3200	380	3200	380
11.5MM	3100	380	3100	380	3100	380	3100	380
12MM	3000	380	3000	380	3000	380	3000	380
14MM	2800	350	2800	350	2800	350	2800	350
15MM	2500	300	2500	300	2500	300	2500	300
16MM	2300	280	2300	280	2300	280	2300	280
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

SQUARE TYPE LONG FLUTE - 2 FLUTES
/ 2刃長刃立銑刀

> 992LL-2A **> 992LL-2ANB**

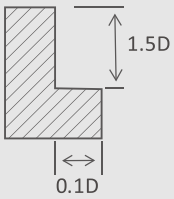
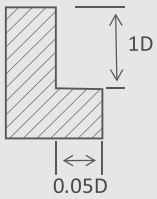
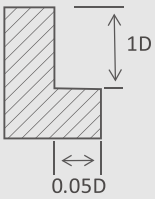
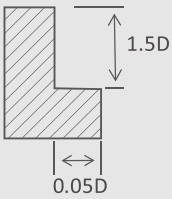
開槽加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7200	700	7200	700	7200	700	7200	700
1.5MM	7000	670	7000	670	7000	670	7000	670
2MM	6800	650	6800	650	6800	650	6800	650
3MM	6500	620	6500	620	6500	620	6500	620
4MM	6300	600	6300	600	6300	600	6300	600
4.5MM	6000	580	6000	580	6000	580	6000	580
5MM	5500	550	5500	550	5500	550	5500	550
5.5MM	5000	600	5000	600	5000	600	5000	600
6MM	5000	600	5000	600	5000	600	5000	600
6.5MM	5000	600	5000	600	5000	600	5000	600
7MM	4800	600	4800	600	4800	600	4800	600
7.5MM	4500	550	4500	550	4500	550	4500	550
8MM	4200	530	4200	530	4200	530	4200	530
8.5MM	4000	500	4000	500	4000	500	4000	500
9MM	3800	480	3800	480	3800	480	3800	480
9.5MM	3600	450	3600	450	3600	450	3600	450
10MM	3500	420	3500	420	3500	420	3500	420
10.5MM	3300	400	3300	400	3300	400	3300	400
11MM	3200	380	3200	380	3200	380	3200	380
11.5MM	3100	380	3100	380	3100	380	3100	380
12MM	3000	380	3000	380	3000	380	3000	380
14MM	2800	350	2800	350	2800	350	2800	350
15MM	2500	300	2500	300	2500	300	2500	300
16MM	2300	280	2300	280	2300	280	2300	280
切削基準量 Depth of Cutting (D = 直徑 Dia)								

SQUARE TYPE LONG FLUTE - 4 FLUTES
/ 4刃長刃立銑刀

> 994LL-4B **> 994LL-4BNB**

側加工 Side Milling

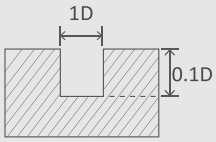
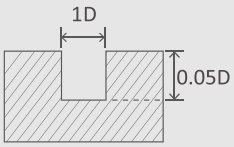
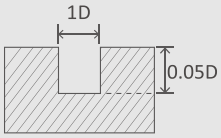
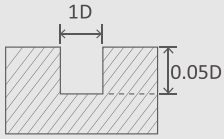
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7200	900	7200	900	7200	900	7200	900
1.5MM	7000	880	7000	880	7000	880	7000	880
2MM	6800	820	6800	820	6800	820	6800	820
3MM	6500	800	6500	800	6500	800	6500	800
4MM	6300	750	6300	750	6300	750	6300	750
5MM	5500	800	5500	800	5500	800	5500	800
6MM	5000	800	5000	800	5000	800	5000	800
7MM	4800	800	4800	800	4800	800	4800	800
8MM	4200	800	4200	800	4200	800	4200	800
10MM	3500	750	3500	750	3500	750	3500	750
12MM	3000	700	3000	700	3000	700	3000	700
14MM	2800	600	2800	600	2800	600	2800	600
16MM	2300	500	2300	500	2300	500	2300	500
20MM	2000	400	2000	400	2000	400	2000	400
25MM	1800	380	1800	380	1800	380	1800	380
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

SQUARE TYPE LONG FLUTE - 4 FLUTES
/ 4刃長刃立銑刀

> 994LL-4B > 994LL-4BNB

開槽加工 Slotting

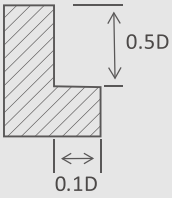
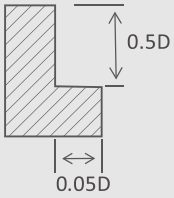
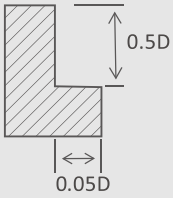
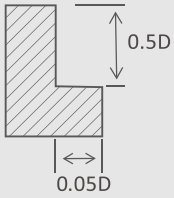
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	7200	900	7200	900	7200	900	7200	900
1.5MM	7000	880	7000	880	7000	880	7000	880
2MM	6800	820	6800	820	6800	820	6800	820
3MM	6500	800	6500	800	6500	800	6500	800
4MM	6300	750	6300	750	6300	750	6300	750
5MM	5500	800	5500	800	5500	800	5500	800
6MM	5000	800	5000	800	5000	800	5000	800
7MM	4800	800	4800	800	4800	800	4800	800
8MM	4200	800	4200	800	4200	800	4200	800
10MM	3500	750	3500	750	3500	750	3500	750
12MM	3000	700	3000	700	3000	700	3000	700
14MM	2800	600	2800	600	2800	600	2800	600
16MM	2300	500	2300	500	2300	500	2300	500
20MM	2000	500	2000	400	2000	400	2000	400
25MM	1800	380	1800	380	1800	380	1800	380
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

SQUARE TYPE LONG NECK- 2 FLUTES
/2刃深溝專用長頸立銑刀

> 992L-D **> 992L-DNB**

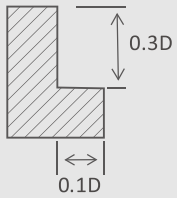
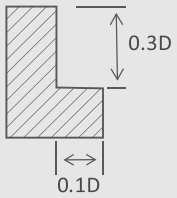
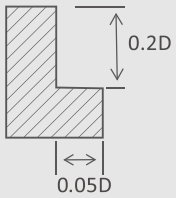
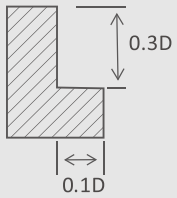
側加工 Side Milling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
0.5MM	11000	500	11000	500	11000	500	11000	500
0.6MM	10000	500	10000	500	10000	500	10000	500
0.7MM	9500	550	9500	550	9500	550	9500	550
0.8MM	9000	600	9000	600	9000	600	9000	600
1MM	8000	700	8000	700	8000	700	8000	700
1.5MM	7500	700	7500	700	7500	700	7500	700
2MM	7000	700	7000	700	7000	700	7000	700
2.5MM	6800	720	6800	720	6800	720	6800	720
3MM	6500	750	6500	750	6500	750	6500	750
4MM	7000	800	7000	800	7000	800	7000	800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

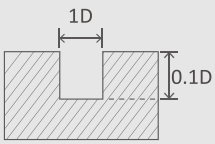
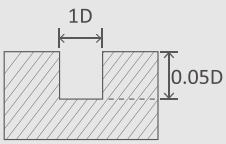
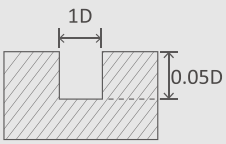
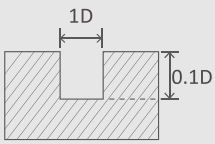
切削條件表 cutting condition

> 998V-RS > 998V-RSNB

側加工 Side Milling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	8800	1100	8800	1100	8800	1100	8800	1100
1.5MM	8500	1100	8500	1100	8500	1100	8500	1100
2MM	8300	1100	8300	1100	8300	1100	8300	1100
2.5MM	8000	1200	8000	1200	8000	1200	8000	1200
3MM	7800	1200	7800	1200	7800	1200	7800	1200
4MM	7500	1200	7500	1200	7500	1200	7500	1200
5MM	7000	1200	7000	1200	7000	1200	7000	1200
6MM	6000	1200	6000	1200	6000	1200	6000	1200
8MM	5500	1000	5500	1000	5500	1000	5500	1000
10MM	5000	900	5000	900	5000	900	5000	900
12MM	4000	800	4000	800	4000	800	4000	800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

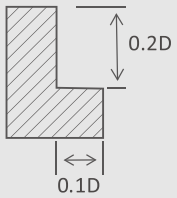
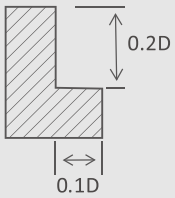
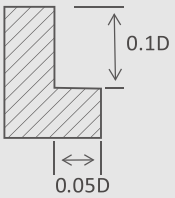
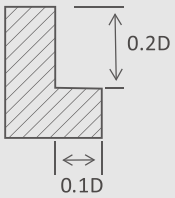
開槽加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Strength)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)	回轉速度 (Speed)	進給速度 (Feed)
1MM	8000	1100	8000	1100	8000	1100	8000	1100
1.5MM	7800	1100	7800	1100	7800	1100	7800	1100
2MM	7500	1200	7500	1200	7500	1200	7500	1200
2.5MM	7300	1200	7300	1200	7300	1200	7300	1200
3MM	7000	1200	7000	1200	7000	1200	7000	1200
4MM	6800	1300	6800	1300	6800	1300	6800	1300
5MM	6500	1300	6500	1300	6500	1300	6500	1300
6MM	6000	1300	6000	1300	6000	1300	6000	1300
8MM	5500	1200	5500	1200	5500	1200	5500	1200
10MM	5000	1000	5000	1000	5000	1000	5000	1000
12MM	4000	900	4000	900	4000	900	4000	900
切削基準量 Depth of Cutting (D = 直徑 Dia)								

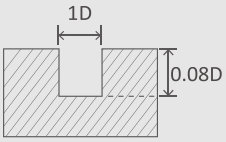
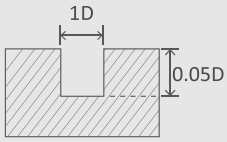
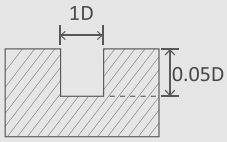
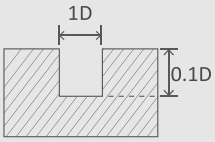
CORNER RADIUS LONG NECK - 2 FLUTES
/ 2刃長頸圓鼻立銑刀

> 998V-RD **> 998V-RDNB**

側加工 Side Milling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
6MM	6000	800	6000	800	6000	800	6000	800
8MM	5500	750	5500	750	5500	750	5500	750
10MM	5000	700	5000	700	5000	700	5000	700
12MM	4000	600	4000	600	4000	600	4000	600
切削基準量 Depth of Cutting (D = 直徑 Dia)								

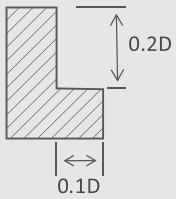
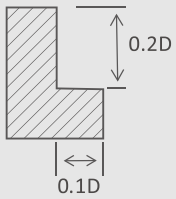
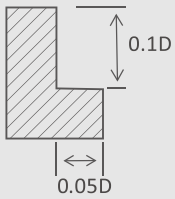
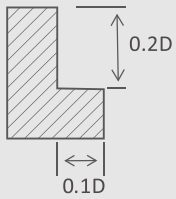
開槽加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
6MM	6000	800	6000	800	6000	800	6000	800
8MM	5500	750	5500	750	5500	750	5500	750
10MM	5000	700	5000	700	5000	700	5000	700
12MM	4000	600	4000	600	4000	600	4000	600
切削基準量 Depth of Cutting (D = 直徑 Dia)								

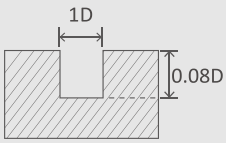
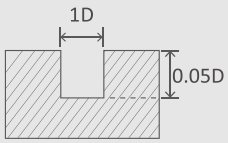
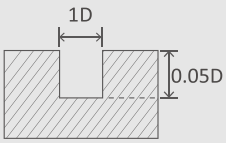
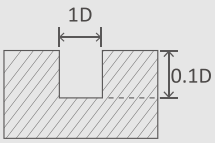
CORNER RADIUS LONG NECK - 4 FLUTES
/ 4刃長頸圓鼻立銑刀

> 998V-RSD **> 998V-RSDNB**

側加工 Side Milling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
6MM	6000	1200	6000	1200	6000	1200	6000	1200
8MM	5500	1000	5500	1000	5500	1000	5500	1000
10MM	5000	900	5000	900	5000	900	5000	900
12MM	4000	800	4000	800	4000	800	4000	800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

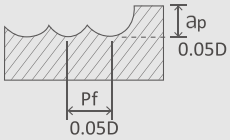
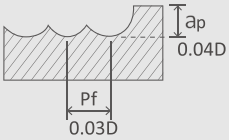
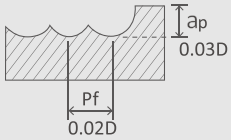
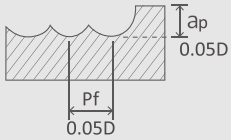
開槽加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
6MM	6000	1300	6000	1300	6000	1300	6000	1300
8MM	5500	1200	5500	1200	5500	1200	5500	1200
10MM	5000	1000	5000	1000	5000	1000	5000	1000
12MM	4000	900	4000	900	4000	900	4000	900
切削基準量 Depth of Cutting (D = 直徑 Dia)								

MINIATURE BALL NOSE - 2 FLUTES
/ 2刃微小徑球型立銑刀

> 998V-B **> 998V-BNB**

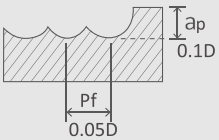
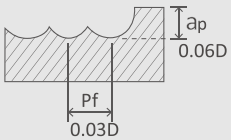
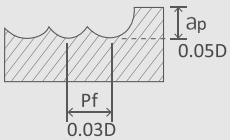
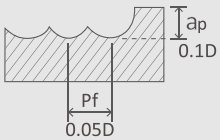
曲面加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
0.3MM	13500	700	13500	700	13500	700	13500	700
0.4MM	13000	750	13000	750	13000	750	13000	750
0.5MM	12300	800	12300	800	12300	800	12300	800
0.6MM	12000	800	12000	800	12000	800	12000	800
0.7MM	11500	850	11500	850	11500	850	11500	850
0.8MM	11200	850	11200	850	11200	850	11200	850
1.0MM	11000	880	11000	880	11000	880	11000	880
1.2MM	10800	880	10800	880	10800	880	10800	880
1.4MM	10500	900	10500	900	10500	900	10500	900
1.5MM	10200	900	10200	900	10200	900	10200	900
1.6MM	10000	900	10000	900	10000	900	10000	900
1.8MM	9800	950	9800	950	9800	950	9800	950
2.0MM	9500	950	9500	950	9500	950	9500	950
2.2MM	9000	1000	9000	1000	9000	1000	9000	1000
2.4MM	8800	1000	8800	1000	8800	1000	8800	1000
2.5MM	8500	1100	8500	1100	8500	1100	8500	1100
3.0MM	8000	1200	8000	1200	8000	1200	8000	1200
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

> 998V-A > 998V-ANB

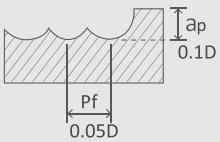
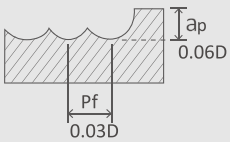
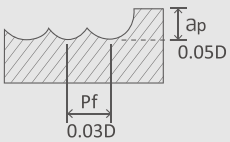
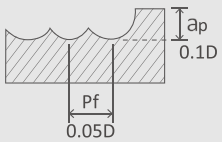
曲面加工 Profiling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	12000	2300	10500	1100	10500	1100	10500	1100
1.5MM	11000	2300	10000	1300	10000	1300	10000	1200
2MM	10500	2400	9500	1400	9500	1400	9500	1400
2.5MM	10000	2500	9000	1500	9000	1500	9000	1500
3MM	9500	2600	8500	1600	8500	1600	8500	1600
4MM	9000	2700	8000	1800	8000	1800	8000	1800
5MM	8500	2800	7000	2000	7000	1800	7500	2000
6MM	8000	3000	6000	2000	6000	2000	7000	2000
7MM	7500	3000	5800	1900	5800	1900	6500	2200
8MM	7000	3000	5500	1800	5500	1800	6000	2200
9MM	6500	2500	5200	1600	5200	1600	5800	2000
10MM	6000	2500	5000	1500	5000	1500	5500	1800
12MM	5500	2000	4800	1500	4800	1500	5200	1700
14MM	5000	1800	4500	1300	4500	1500	5000	1600
16MM	4000	1600	4000	1200	4000	1300	4500	1500
20MM	3800	1200	3500	1100	3500	1100	4000	1200
25MM	3500	1000	3000	1000	3000	1000	3500	1100
切削基準量 Depth of Cutting (D = 直徑 Dia)								

BALL NOSE - 4 FLUTES
/ 4刃球型立銑刀

> 998V-AA **> 998V-AANB**

曲面加工 Profiling

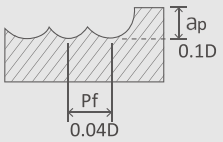
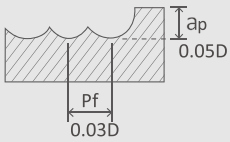
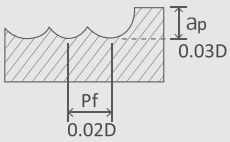
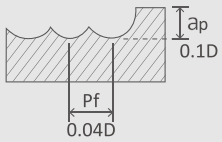
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	12000	2800	12000	2800	12000	2800	12000	2800
1.5MM	11000	2800	11000	2800	11000	2800	11000	2800
2MM	10500	3000	10500	3000	10500	3000	10500	3000
2.5MM	10000	3000	10000	3000	10000	3000	10000	3000
3MM	9500	3500	9500	3500	9500	3500	9500	3500
4MM	9000	3500	9000	3500	9000	3500	9000	3500
5MM	8500	3500	8500	3500	8500	3500	8500	3500
6MM	8000	3200	8000	3200	8000	3200	8000	3200
8MM	7000	3000	7000	3000	7000	3000	7000	3000
10MM	6000	2800	6000	2800	6000	2800	6000	2800
12MM	5500	2600	5500	2600	5500	2600	5500	2600
14MM	5000	2500	5000	2500	5000	2500	5000	2500
16MM	4000	2200	4000	2200	4000	2200	4000	2200
20MM	3800	2000	3800	2000	3800	2000	3800	2000
25MM	3500	1800	3500	1800	3500	1800	3500	1800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

BALL NOSE LONG SHANK - 2 FLUTES
/ 2刃長柄球型立銑刀

> 998V-2AL **> 998V-2ALNB**

曲面加工 Profiling

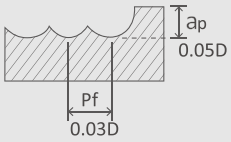
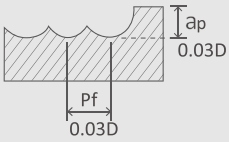
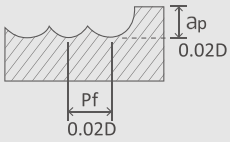
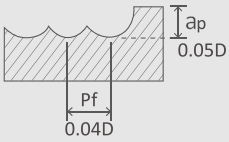
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	11000	1800	11000	1800	11000	1800	11000	1800
2MM	10500	1900	10500	1900	10500	1900	10500	1900
3MM	10000	1800	10000	1800	10000	1800	10000	1800
4MM	9500	1800	9500	1800	9500	1800	9500	1800
5MM	9000	1800	9000	1800	9000	1800	9000	1800
6MM	8500	1800	8500	1800	8500	1800	8500	1800
7MM	8000	1600	8000	1600	8000	1600	8000	1600
8MM	7500	1500	7500	1500	7500	1500	7500	1500
9MM	7000	1300	7000	1300	7000	1300	7000	1300
10MM	6500	1200	6500	1200	6500	1200	6500	1200
12MM	6000	1100	6000	1100	6000	1100	6000	1100
14MM	5500	1000	5500	1000	5500	1000	5500	1000
16MM	5000	950	5000	950	5000	950	5000	950
20MM	4000	900	4000	900	4000	900	4000	900
25MM	3500	800	3500	800	3500	800	3500	800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

BALL NOSE LONG NECK - 2 FLUTES
/ 2刃深溝專用長頸球型立銑刀

> 998V-D　> 998V-DNB

曲面加工 Profiling

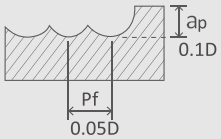
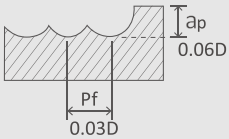
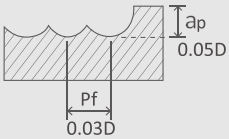
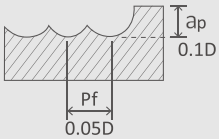
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
0.5MM	12000	1500	12000	1500	12000	1500	12000	1500
0.6MM	11000	1500	11000	1500	11000	1500	11000	1500
0.8MM	10200	1500	10200	1500	10200	1500	10200	1500
1.0MM	10500	1300	10500	1300	10500	1300	10500	1300
1.5MM	10000	1300	10000	1300	10000	1300	10000	1300
2.0MM	9500	1300	9500	1300	9500	1300	9500	1300
2.5MM	9000	1200	9000	1200	9000	1200	9000	1200
3.0MM	8500	1100	8500	1100	8500	1100	8500	1100
4.0MM	8000	1000	8000	1000	8000	1000	8000	1000
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

BALL NOSE - 2 FLUTES
/ 2刃短刃強力球型立銑刀

> 998V-AS **> 998V-ASNB**

曲面加工 Profiling

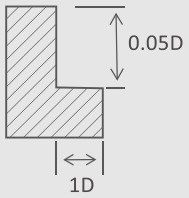
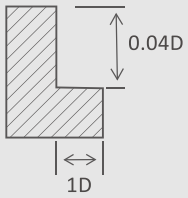
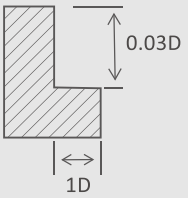
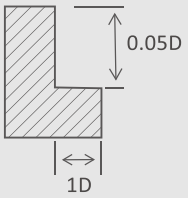
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	12000	2400	12000	2400	12000	2400	12000	2400
1.5MM	11000	2400	11000	2400	11000	2400	11000	2400
2MM	10500	2500	10500	2500	10500	2500	10500	2500
2.5MM	10000	2500	10000	2500	10000	2500	10000	2500
3MM	9500	2700	9500	2700	9500	2700	9500	2700
3.5MM	9300	2800	9300	2800	9300	2800	9300	2800
4MM	9000	2800	9000	2800	9000	2800	9000	2800
4.5MM	8800	2800	8800	2800	8800	2800	8800	2800
5MM	8500	3000	8500	3000	8500	3000	8500	3000
5.5MM	8000	3000	8000	3000	8000	3000	8000	3000
6MM	7500	3000	7500	3000	7500	3000	7500	3000
7MM	7200	3000	7200	3000	7200	3000	7200	3000
8MM	7000	2800	7000	2800	7000	2800	7000	2800
9MM	6500	2600	6500	2600	6500	2600	6500	2600
10MM	6000	2600	6000	2600	6000	2600	6000	2600
12MM	5500	2500	5500	2500	5500	2500	5500	2500
14MM	4000	2000	4000	2000	4000	2000	4000	2000
16MM	3800	1800	3800	1800	3800	1800	3800	1800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

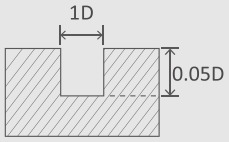
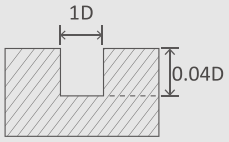
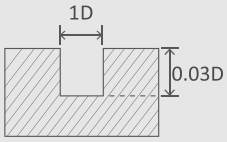
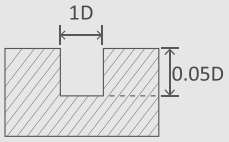
CORNER RADIUS PENCIL NECK - 2 FLUTES
/ 2刃短刃圓鼻斜頸立銑刀

> 998V-RHP **> 998V-RHPNB**

側加工 Side Milling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
2MM	8000	2000	8000	2000	8000	2000	8000	2000
3MM	7500	2200	7500	2200	7500	2200	7500	2200
4MM	7000	2200	7000	2200	7000	2200	7000	2200
5MM	6500	2500	6500	2500	6500	2500	6500	2500
6MM	6000	2500	6000	2500	6000	2500	6000	2500
8MM	5500	2300	5500	2300	5500	2300	5500	2300
10MM	5000	2000	5000	2000	5000	2000	5000	2000
12MM	4000	1800	4000	1800	4000	1800	4000	1800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

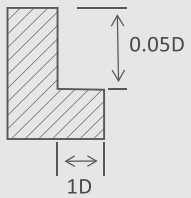
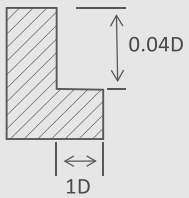
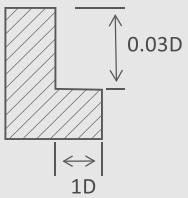
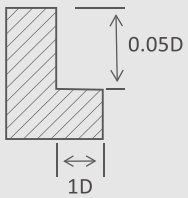
開槽加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
2MM	8000	2000	8000	2000	8000	2000	8000	2000
3MM	7500	2200	7500	2200	7500	2200	7500	2200
4MM	7000	2200	7000	2200	7000	2200	7000	2200
5MM	6500	2500	6500	2500	6500	2500	6500	2500
6MM	6000	2500	6000	2500	6000	2500	6000	2500
8MM	5500	2300	5500	2300	5500	2300	5500	2300
10MM	5000	2000	5000	2000	5000	2000	5000	2000
12MM	4000	1800	4000	1800	4000	1800	4000	1800
切削基準量 Depth of Cutting (D = 直徑 Dia)								

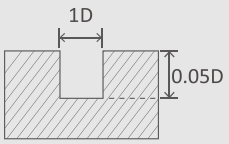
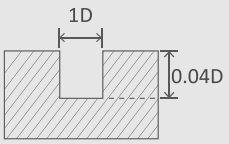
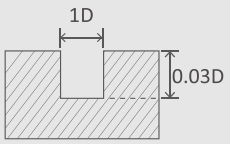
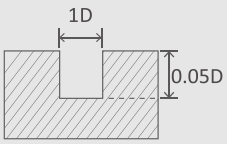
CORNER RADIUS PENCIL NECK - 4 FLUTES
/ 4刃短刃圓鼻斜頸立銑刀

> 998V-RSHP > 998V-RSHPNB

曲面加工 Profiling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
2MM	8000	2500	8000	2500	8000	2500	8000	2500
3MM	7500	2500	7500	2500	7500	2500	7500	2500
4MM	7000	2500	7000	2500	7000	2500	7000	2500
5MM	6500	2800	6500	2800	6500	2800	6500	2800
6MM	6000	2800	6000	2800	6000	2800	6000	2800
8MM	5500	2500	5500	2500	5500	2500	5500	2500
10MM	5000	2300	5000	2300	5000	2300	5000	2300
12MM	4000	2100	4000	2100	4000	2100	4000	2100
切削基準量 Depth of Cutting (D = 直徑 Dia)								

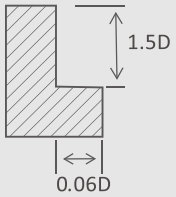
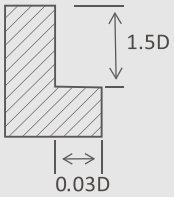
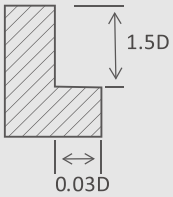
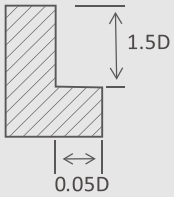
開槽加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
2MM	8000	2500	8000	2500	8000	2500	8000	2500
3MM	7500	2500	7500	2500	7500	2500	7500	2500
4MM	7000	2500	7000	2500	7000	2500	7000	2500
5MM	6500	2800	6500	2800	6500	2800	6500	2800
6MM	6000	2800	6000	2800	6000	2800	6000	2800
8MM	5500	2500	5500	2500	5500	2500	5500	2500
10MM	5000	2300	5000	2300	5000	2300	5000	2300
12MM	4000	2100	4000	2100	4000	2100	4000	2100
切削基準量 Depth of Cutting (D = 直徑 Dia)								

SQUARE TYPE - MULTIPLE FLUTES
/多刃高硬度用立銑刀

> 999H-D **> 999H-DNB**

側加工 Side Milling

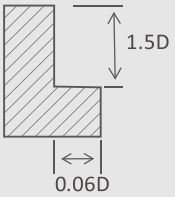
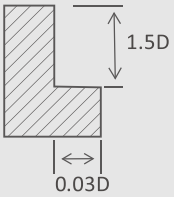
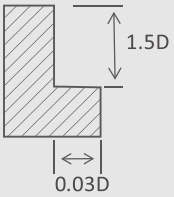
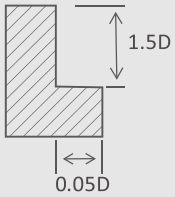
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
6MM	7000	3000	7000	3000	7000	3000	7000	3000
8MM	6500	3000	6500	3000	6500	3000	6500	3000
10MM	6000	3000	6000	3000	6000	3000	6000	3000
12MM	5000	2800	5000	2800	5000	2800	5000	2800
16MM	4000	2500	4000	2500	4000	2500	4000	2500
20MM	3500	2000	3500	2000	3500	2000	3500	2000
25MM	2800	1500	2800	1500	2800	1500	2800	1500
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表
cutting condition

SQUARE TYPE LONG FLUTE - MULTIPLE FLUTES
/多刃長刃強力立銑刀

> 999HL-D > 999HL-DNB

側加工 Side Milling

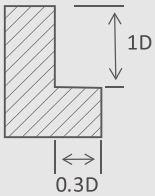
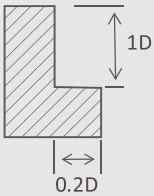
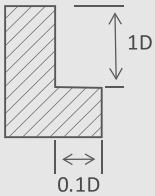
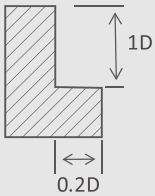
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
6MM	7000	3000	7000	3000	7000	3000	7000	3000
8MM	6500	3000	6500	3000	6500	3000	6500	3000
10MM	6000	3000	6000	3000	6000	3000	6000	3000
12MM	5000	2800	5000	2800	5000	2800	5000	2800
16MM	4000	2500	4000	2500	4000	2500	4000	2500
20MM	3500	2000	3500	2000	3500	2000	3500	2000
25MM	2800	1500	2800	1500	2800	1500	2800	1500
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

SQUARE TYPE - 2 FLUTES
/ 魔神99 Plus 2刃立銑刀

> 992L-A+

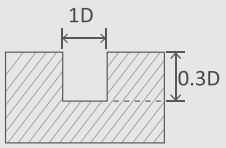
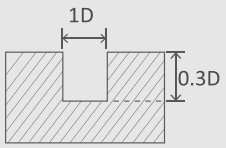
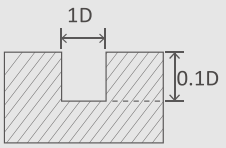
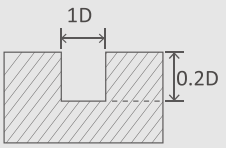
側加工 Side Milling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	11000	1000	11000	1000	10000	1000	9500	800
1.5MM	10500	1200	10000	1200	9500	1200	9000	900
2MM	10000	1500	9500	1500	9000	1300	8500	1000
2.5MM	9500	1700	9000	1600	8500	1500	8000	1100
3MM	9000	1800	8500	1700	8000	1600	7500	1200
3.5MM	8500	2000	8000	1800	7500	1800	7000	1300
4MM	8000	2000	7500	2000	6500	2000	6500	1500
4.5MM	7800	2500	7000	2100	6000	2100	6000	1600
5MM	7500	2800	6500	2300	5500	2200	5500	1800
5.5MM	7000	2900	6000	2500	5000	2500	5000	2000
6MM	7000	3000	6000	2600	5000	2600	5000	2000
6.5MM	7000	3100	6000	2700	5000	2700	5000	2000
7MM	6000	2800	5000	2500	4500	2200	4800	1800
7.5MM	5800	2500	5000	2500	4000	2100	4800	1800
8MM	5500	2200	4800	2300	3800	2000	4500	1600
8.5MM	5000	2000	4500	2200	3500	1800	4500	1600
9MM	4500	1800	4000	2000	3200	1700	4200	1500
9.5MM	4200	1700	3800	1800	3000	1600	4000	1400
10MM	4000	1500	3800	1800	2800	1500	3800	1300
10.5MM	4000	1500	3500	1600	2600	1200	3500	1200
11MM	3800	1300	3200	1500	2500	1000	3200	1100
11.5MM	3800	1300	3000	1300	2500	1000	3000	1000
12MM	3500	1200	2800	1000	2200	800	2800	800
14MM	3000	1000	2600	800	2000	700	2700	750
15MM	2800	900	2500	750	1800	650	2600	700
16MM	2500	800	2300	700	1500	600	2500	600
20MM	2200	700	2100	600	1300	500	2000	500
25MM	2000	600	2000	500	1200	350	1800	350
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

> 992L-A+

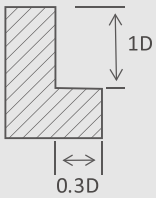
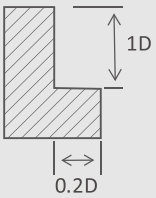
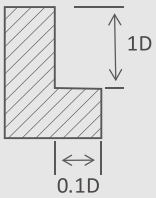
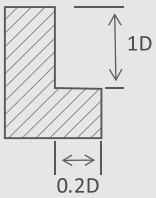
開槽加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	11000	700	10000	620	10000	600	10000	700
1.5MM	10500	750	9500	650	9500	650	9500	680
2MM	10000	800	9000	700	9000	700	9000	650
2.5MM	9500	850	8500	750	8500	720	8500	700
3MM	9000	900	8000	780	8000	750	8000	750
3.5MM	8500	1000	7500	800	7500	800	7500	800
4MM	8000	1100	7000	850	7000	800	7000	800
4.5MM	7500	1200	6500	900	6500	1000	6500	1000
5MM	7000	1300	6000	1000	6000	1100	6000	1000
5.5MM	6500	1500	5500	1050	5500	1200	5500	1100
6MM	6000	1500	5000	1100	5000	1200	5000	1200
6.5MM	6000	1500	5000	1100	5000	1200	5000	1200
7MM	5800	1400	4800	1000	4800	1100	4800	1000
7.5MM	5500	1300	4500	950	4500	1000	4500	1000
8MM	5200	1200	4200	900	4200	950	4200	950
8.5MM	5000	1100	4000	850	4000	900	4000	900
9MM	4800	1050	3800	800	3800	850	3800	850
9.5MM	4600	1000	3600	700	3600	800	3600	800
10MM	4500	1000	3500	650	3500	800	3500	750
10.5MM	4200	900	3300	600	3300	750	3300	720
11MM	4000	850	3200	550	3200	700	3200	700
11.5MM	3800	820	3100	520	3200	700	3200	700
12MM	3500	800	3000	500	3000	650	3000	680
14MM	3000	700	2800	450	2800	600	2800	650
15MM	2800	650	2600	400	2600	500	2600	600
16MM	2500	600	2500	350	2500	400	2500	550
20MM	2300	500	2100	300	2000	350	2000	500
25MM	2000	400	2000	300	1800	300	1800	400
切削基準量 Depth of Cutting (D = 直徑 Dia)								

SQUARE TYPE - 4 FLUTES
/魔神99 Plus 4刃立銑刀

> 994L-B+

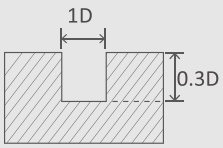
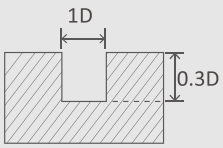
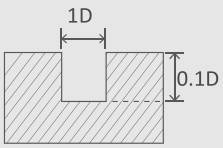
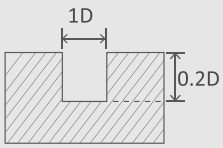
側加工 Side Milling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	11000	2000	11000	1500	10000	1500	9500	1500
1.5MM	10500	2200	10000	1600	9500	1600	9000	1600
2MM	10000	2500	9500	1600	9000	1600	8500	1600
2.5MM	9500	2800	9000	1800	8500	1800	8000	1800
3MM	9000	3000	8500	2000	8000	2000	7500	2000
3.5MM	8500	3000	8000	2200	7500	2200	7000	2100
4MM	8000	3200	7500	2300	6500	2300	6500	2100
4.5MM	7800	3500	7000	2500	6000	2500	6000	2300
5MM	7500	3800	6500	2800	5500	2800	5500	2600
5.5MM	7000	4000	6000	3000	5000	3000	5000	2800
6MM	7000	4000	6000	3000	5000	3000	5000	2800
6.5MM	7000	4000	6000	3000	5000	3000	5000	2800
7MM	6000	3500	5500	2700	4800	2700	4800	2600
7.5MM	5800	3200	5000	2600	4500	2600	4800	2600
8MM	5500	3200	4800	2500	4200	2500	4500	2500
8.5MM	5000	3000	4500	2300	4000	2300	4500	2500
9MM	4500	2800	4200	2200	3800	2200	4200	2300
9.5MM	4200	2800	4000	2000	3600	2000	4000	2200
10MM	4000	2600	3800	1800	3500	1800	3800	2000
10.5MM	4000	2600	3600	1800	3300	1800	3500	1800
11MM	3800	2300	3500	1600	3200	1600	3200	1600
11.5MM	3800	2300	3200	1500	3000	1500	3000	1500
12MM	3500	2000	3000	1300	2800	1300	2800	1300
14MM	3000	1800	2800	1000	2600	1000	2700	1000
15MM	2800	1700	2600	800	2500	800	2600	800
16MM	2500	1600	2500	750	2300	750	2500	750
20MM	2200	1500	2300	700	2000	700	2000	700
25MM	2000	1000	2000	600	1800	600	1800	600
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

> 994L-B+

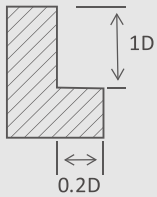
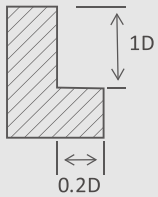
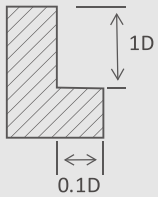
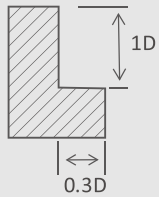
開槽加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	11000	1000	10000	750	10000	1000	10000	750
1.5MM	10500	1100	9500	800	9500	1100	9500	800
2MM	10000	1200	9000	900	9000	1200	9000	850
2.5MM	9500	1300	8500	1000	8500	1300	8500	900
3MM	9000	1400	8000	1100	8000	1400	8000	1000
3.5MM	8500	1500	7500	1200	7500	1500	7500	1100
4MM	8000	1600	7000	1300	7000	1600	7000	1200
4.5MM	7500	1800	6500	1400	6500	1800	6500	1300
5MM	7000	1900	6000	1500	6000	1800	6000	1500
5.5MM	6500	2000	5500	1600	5500	2000	5000	1600
6MM	6000	2000	5000	1500	5000	2000	5000	1600
6.5MM	6000	2000	5000	1500	5000	2000	5000	1600
7MM	5800	2000	4800	1400	4800	1900	4800	1500
7.5MM	5500	1800	4500	1300	4500	1800	4500	1400
8MM	5200	1700	4200	1200	4200	1700	4200	1350
8.5MM	5000	1600	4000	1100	4000	1600	4000	1300
9MM	4800	1500	3800	1000	3800	1500	3800	1200
9.5MM	4600	1500	3600	900	3600	1400	3600	1100
10MM	4500	1400	3500	850	3500	1300	3500	1000
10.5MM	4200	1300	3200	800	3300	1200	3300	950
11MM	4000	1200	3100	750	3200	1100	3200	900
11.5MM	3800	1100	3000	700	3200	1000	3200	850
12MM	3500	1000	3000	650	3000	950	3000	800
14MM	3000	950	2800	600	2800	900	2800	750
15MM	2800	900	2600	550	2600	850	2600	700
16MM	2500	800	2500	500	2500	800	2500	650
20MM	2300	700	2100	400	2000	700	2000	600
25MM	2000	600	2000	350	1800	500	1800	500
切削基準量 Depth of Cutting (D = 直徑 Dia)								

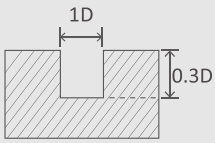
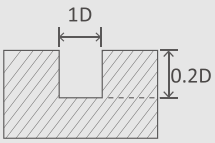
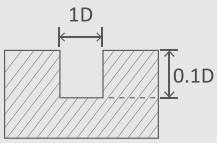
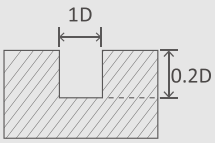
CORNER RADIUS - 4 FLUTES
/魔神99 Plus 4刃圓鼻立銑刀

> 998V-RS+

側加工 Side Milling

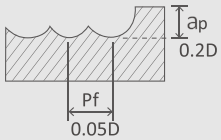
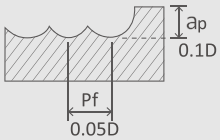
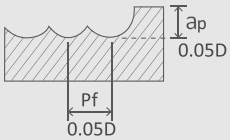
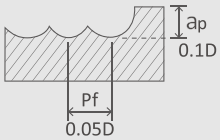
被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	9000	2600	7500	1800	9000	2600	7500	1800
1.5MM	8800	2600	7000	1800	8800	2600	7000	1800
2MM	8500	2600	6800	1800	8500	2600	6800	1800
2.5MM	8200	2800	6500	1900	8200	2800	6500	1900
3MM	8000	2800	6200	1900	8000	2800	6200	1900
4MM	7500	3000	6000	2000	7500	3000	6000	2000
5MM	7200	3000	5500	2000	7300	3000	5500	2000
6MM	7000	3000	5000	2000	7000	3000	5000	2200
8MM	6000	3000	4000	1500	6000	3000	4000	1800
10MM	5500	2500	3500	1000	5500	2500	3500	1200
12MM	5000	2000	3000	900	5000	2000	3000	1000
切削基準量 Depth of Cutting (D = 直徑 Dia)								

開槽加工 Slotting

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	9000	2200	7500	1800	9000	2600	7500	1800
1.5MM	8500	2200	7000	1800	8800	2600	7000	1800
2MM	8200	2200	6800	1800	8500	2600	6800	1800
2.5MM	8000	2300	6500	1900	8200	2800	6500	1900
3MM	7800	2300	6200	1900	8000	2800	6200	1900
4MM	7500	2300	6000	2000	7500	3000	6000	2000
5MM	7200	2500	5500	2000	7300	3000	5500	2000
6MM	7000	2500	5000	2000	7000	3500	5000	2500
8MM	6000	2500	4000	1500	6000	3200	4000	2000
10MM	5000	2000	3500	1000	5500	2800	3500	1800
12MM	4000	1800	3000	900	5000	2200	3000	1200
切削基準量 Depth of Cutting (D = 直徑 Dia)								

> 998V-A+

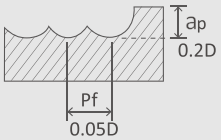
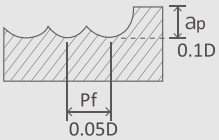
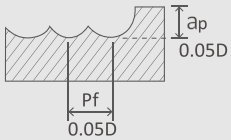
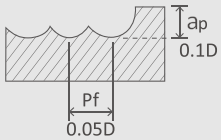
曲面加工 Profiling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度(Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	12000	2300	10500	1100	10500	1100	10500	1100
1.5MM	11000	2300	10000	1300	10000	1300	10000	1200
2MM	10500	2400	9500	1400	9500	1400	9500	1400
2.5MM	10000	2500	9000	1500	9000	1500	9000	1500
3MM	9500	2600	8500	1600	8500	1600	8500	1600
4MM	9000	2700	8000	1800	8000	1800	8000	1800
5MM	8500	2800	7000	2000	7000	2000	7500	2000
6MM	8000	3000	6000	2000	6000	2000	7000	2000
7MM	7500	3000	5800	1900	5800	1900	6500	2200
8MM	7000	3000	5500	1800	5500	1800	6000	2200
9MM	6500	2500	5200	1600	5200	1600	5800	2000
10MM	6000	2500	5000	1500	5000	1500	5500	1800
12MM	5500	2000	4800	1500	4800	1500	5200	1700
14MM	5000	1800	4500	1300	4500	1300	5000	1600
16MM	4000	1600	4000	1200	4000	1200	4500	1500
20MM	3800	1200	3500	1100	3500	1100	4000	1200
25MM	3500	1000	3000	1000	3000	1000	3500	1100
切削基準量 Depth of Cutting (D = 直徑 Dia)								

BALL NOSE - 4 FLUTES
/ 魔神99 Plus 4刃球型立銑刀

> 998V-AA+

曲面加工 Profiling

被切削材 (Material)	工具鋼 (HRC 30-45 Tool Steels)		模具鋼 (Mold Steel)		硬化鋼 (Hardened Steel)		不銹鋼 (Stainless Steel)	
Material Code	SKD11 / SKD61 / SCM		P20 / NAK		STAVAX / SKD		SUS 303 / 4xx	
硬度 (Hardness)	30-45 HRC		30-45HRC		~60HRC			
直徑 (Diameter)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)	回轉速度 (RPM)	進給速度 (Feed)
1MM	12000	2300	11000	1600	10500	1600	12000	1500
1.5MM	11000	2300	10500	1700	10000	1700	11000	1600
2MM	10500	2400	10000	1800	9500	1800	10500	1800
2.5MM	10000	2500	9500	2000	9000	2000	10000	2000
3MM	9500	2800	8500	2200	8500	2200	9500	2100
4MM	9000	3000	8000	2300	8000	2300	9000	2300
5MM	8500	3500	7000	2500	7000	2500	8500	2500
6MM	8000	3800	6000	2500	6000	2500	8000	2800
8MM	7000	3500	5500	2300	5800	2300	7000	2700
10MM	6000	3000	5000	2200	5500	2200	6000	2500
12MM	5500	2500	4800	2000	5000	2000	5500	2300
14MM	5000	2200	4500	1800	4500	1800	5000	2100
16MM	4000	2000	4000	1600	4000	1600	4000	2000
20MM	3800	1800	3500	1500	3500	1500	3800	1800
25MM	3500	1500	3000	1200	3000	1200	3500	1600
切削基準量 Depth of Cutting (D = 直徑 Dia)								

切削條件表 cutting condition

NOTE

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NOTE

元 駿 國 際 有 限 公 司

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