

# Products Selection Guide

## 產品選擇指南

Indexable Milling Tools

捨棄式銑刀

Solid Carbide Endmills

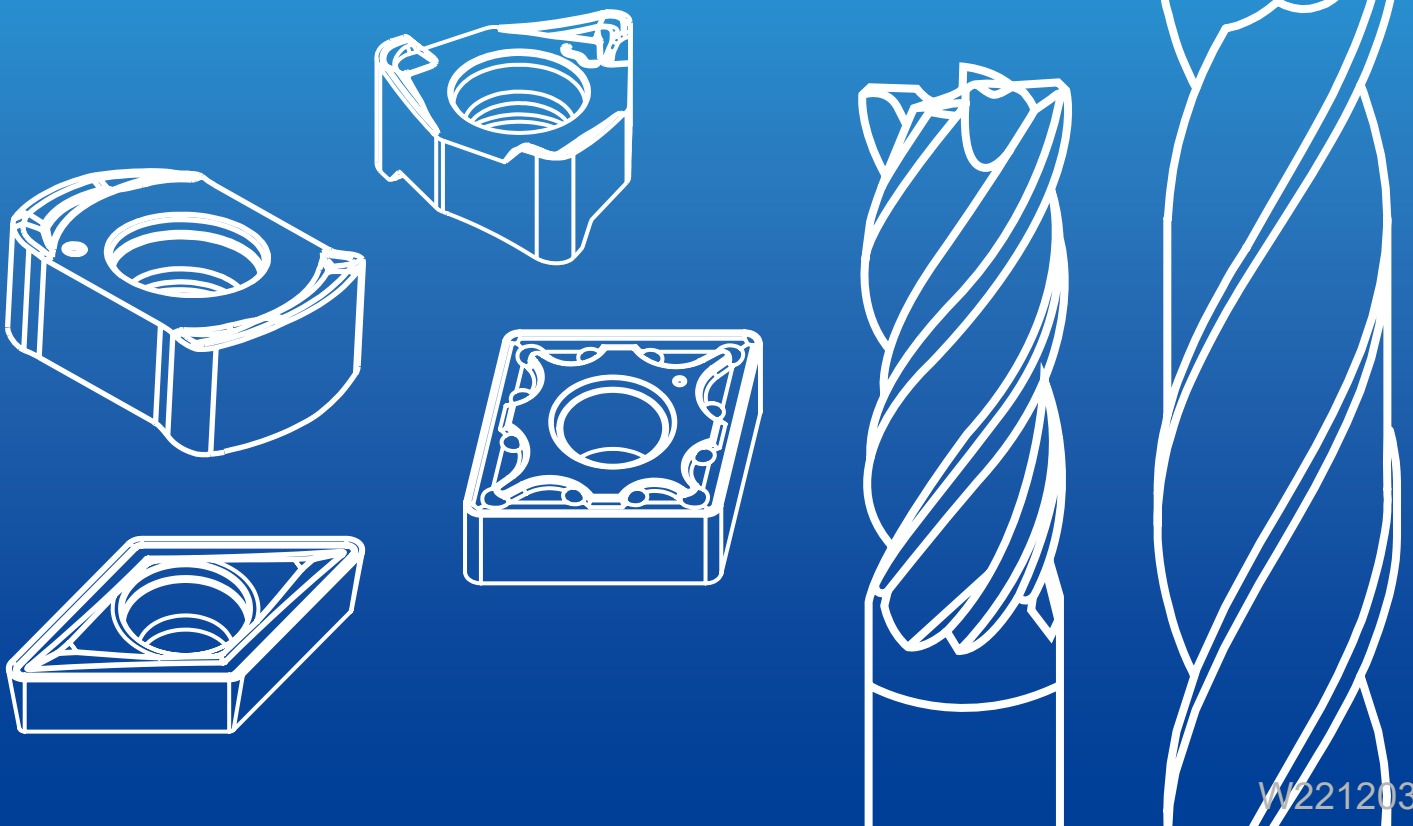
全鎢鋼銑刀

Holemaking Tools

鑽削刀具









Turning Tools

車削刀具

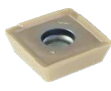









**Indexable Milling Tools 捨棄式銑刀 選擇指南**

**P Steel 鋼**









Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CAPK · APKT-MG · CX33TX 	CXXN · XNMX-MG · CX33TX 
High Feed Milling 高進給銑削	CXBN · BNMX-MG · CX33TX 	CXWN · WNMX-MG · CX33TX 
Face Milling 面銑削	CXSN · SNMX-MG · CX33TX 	CASX · SEMT-MG · CX33TX 
Copy Milling 仿形銑削	CF21 · WP32-MM · CX23AX 	CF21 · WP32-MM · CX22HX 

**M Stainless Steel 不鏽鋼**




Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CR49 · W490-SG · CX43TX 	CAPK · APKT-SG · CX43TX 
High Feed Milling 高進給銑削	CXBN · BNMX-SG · CX43TX 	CXLO · LOGX-SG · CX43TX 
Face Milling 面銑削	CXHN · HNMX-SG · CX43TX 	CASX · SEMT-MG · CX43TX 
Copy Milling 仿形銑削	CF21 · WP32-SM · CX23AX 	CF21 · WP32-MM · CX22HX 

**Indexable Milling Tools 捨棄式銑刀 選擇指南**

**K Cast Iron 鑄鐵**









Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CAPK · APKT-RG · CX37TA 	CXXN · XNMX-RG · CX37TA 
High Feed Milling 高進給銑削	CXBN · BNMX-RG · CX37TA 	CXWN · WNMX-RG · CX37TA 
Face Milling 面銑削	CXSN · SNMX-RG · CX37TA 	CASX · SEMT-RG · CX37TA 
Copy Milling 仿形銑削	CF21 · WP32-MM · CX23AX 	CF21 · WP32-MM · CX22HX 

**N Aluminum alloy & Brass 鋁合金與銅**









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

**Indexable Milling Tools 捨棄式銑刀 選擇指南**

**S High Temperature Alloy 高溫合金**









Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CAXO · XOMT-SG · CX43TX 	CR39 · W390-SG · CX47TA 
High Feed Milling 高進給銑削	CXBN · BNMX-SG · CX43TX 	CXLO · LOGX-SG · CX43TX 
Face Milling 面銑削	CXHN · HNMX-SG · CX43TX 	CAOF · OFMT-SG · CX43TX 
Copy Milling 仿形銑削	CF21 · WP32-SM · CX23AX 	CF21 · WP32-MM · CX23AX 

**H Hardened Steel 高硬度鋼**

Application 應用	1st Recommendation 第一推薦 (Series · Insert · Grade)	2nd Recommendation 第二推薦 (Series · Insert · Grade)
Shoulder Milling 方肩銑削	CAPK · APKT-RG · CX33TX 	CART · WRT-RG · CX33TX 
High Feed Milling 高進給銑削	CXBN · BNMX-RG · CX33TX 	CASR · SDNW-RG · CX33TX 
Face Milling 面銑削	CASE · SEKW · CX33TX 	CXSN · SNMX-RG · CX33TX 
Copy Milling 仿形銑削	CF21 · WP32-MM · CX23AX 	CF21 · WP32-SM · CX23AX 

Solid Carbide Endmills 全鎢鋼銑刀 選擇指南

**P Steel 鋼**









Application 應用	1st Recommendation 第一推薦 (Series · Type · Coating)	2nd Recommendation 第二推薦 (Series · Type · Coating)
Slotting 溝銑削	V470 · EPSSVC4 · ACRO 	G550 · EPSSC2 · UNICO 
Side Roughing 粗側銑削	V470 · EPSSVC4 · ACRO 	G550 · EPSSC4 · UNICO 
Side Finishing 精側銑削	V470 · EPSSVD4 · ANAX 	G550 · EPSSH4 · UNAX 
Profiling 輪廓銑削	G550 · EPBSC2 · UNICO 	G450 · EPBSA2 · ARCO 

**M Stainless Steel 不鏽鋼**









Application 應用	1st Recommendation 第一推薦 (Series · Type · Coating)	2nd Recommendation 第二推薦 (Series · Type · Coating)
Slotting 溝銑削	V470 · EPSSVC4 · ANAX 	V530 · ESSVC4 · SNAX 
Side Roughing 粗側銑削	V470 · EPSSVC4 · ANAX 	V530 · ESSVC4 · SNAX 
Side Finishing 精側銑削	V470 · EPSSVC5 · ANAX 	V530 · ESSVD4 · SNAX 
Profiling 輪廓銑削	M500 · ESBHS4 · ANAX 	M500 · EBSA2 · ANAX 

Solid Carbide Endmills 全鎢鋼銑刀 選擇指南

**K Cast Iron** 鑄鐵


Application 應用	1st Recommendation 第一推薦 (Series · Type · Coating)	2nd Recommendation 第二推薦 (Series · Type · Coating)
Slotting 溝銑削	V470 · EPSSVC4 · ACRO 	G550 · EPSSC2 · UNICO 
Side Roughing 粗側銑削	V470 · EPSSVC4 · ACRO 	G550 · EPSSC4 · UNICO 
Side Finishing 精側銑削	V470 · EPSSVD4 · ANAX 	G550 · EPSSH4 · UNAX 
Profiling 輪廓銑削	G550 · EPBSC2 · UNICO 	G450 · EPBSA2 · ARCO 

**N Aluminum alloy & Brass** 鋁合金與銅

Application 應用	1st Recommendation 第一推薦 (Series · Type · Coating)	2nd Recommendation 第二推薦 (Series · Type · Coating)
Slotting 溝銑削	A100 · ENSSV3 · Uncoated 	A100 · ENSSS3 · Uncoated 
Side Roughing 粗側銑削	A100 · ENSSV3 · Uncoated 	A100 · ENSSP3 · Uncoated 
Side Finishing 精側銑削	A100 · ENSSF3 · Uncoated 	A100 · ENSSP3 · Uncoated 
Profiling 輪廓銑削	A100 · ENBSA2 · Uncoated 	G450 · EPBSA2 · Uncoated 

Solid Carbide Endmills 全鎢鋼銑刀 選擇指南

**S High Temperature Alloy** 高溫合金

Application 應用	1st Recommendation 第一推薦 (Series · Type · Coating)	2nd Recommendation 第二推薦 (Series · Type · Coating)
Slotting 溝銑削	V530 · ESSVC4 · SNAX 	V470 · EPSSVC4 · ANAX 
Side Roughing 粗側銑削	V530 · ESSVC4 · SNAX 	V470 · EPSSVC5 · ANAX 
Side Finishing 精側銑削	V470 · EPSSVD5 · ANAX 	V530 · ESSVD4 · SNAX 
Profiling 輪廓銑削	M500 · ESBHS4 · ANAX 	H650 · EHBHS4 · ANAX 

**H Hardened Steel** 高硬度鋼

Application 應用	1st Recommendation 第一推薦 (Series · Type · Coating)	2nd Recommendation 第二推薦 (Series · Type · Coating)
Slotting 溝銑削	H650 · EHCUH4 · ANAX 	H680 · EHCSF4 · SNAX 
Side Roughing 粗側銑削	H650 · EHSSH4 · ANAX 	V470 · EPSSVD5 · ANAX 
Side Finishing 精側銑削	H700 · EHSSS6 · SNAX 	V470 · EPSSVD5 · ANAX 
Profiling 輪廓銑削	H650 · EHBHS4 · ANAX 	H650 · EHBHS2 · ANAX 

Holemaking Tools 鑽削刀具 選擇指南

**P Steel** 鋼

Application 應用	1st Recommendation 第一推薦	2nd Recommendation 第二推薦
Rough Hole Drilling (Indexable) (Hole Tolerance : -0.1~+0.4) 粗孔 (中至大孔, 捨棄式鑽頭)	DSP · SPMG-MG · CX33TX 	DWC · WCMT-MM · CX33TX 
Precise Hole Drilling (Solid) (Hole Tolerance : 0~+0.1) 細孔 (小至中孔, 全鎢鋼鑽頭)	DPC / DPN · UNAX 	DMC / DMN · UNAX 

**M Stainless Steel** 不鏽鋼

Application 應用	1st Recommendation 第一推薦	2nd Recommendation 第二推薦
Rough Hole Drilling (Indexable) (Hole Tolerance : -0.1~+0.4) 粗孔 (中至大孔, 捨棄式鑽頭)	DWC · WCMT-SG · CX43TX 	DSP · SPMG-MG · CX43TX 
Precise Hole Drilling (Solid) (Hole Tolerance : 0~+0.1) 細孔 (小至中孔, 全鎢鋼鑽頭)	DMC / DMN · UNAX 	DPC / DPN · UNAX 



**K Cast Iron** 鑄鐵

Application 應用	1st Recommendation 第一推薦	2nd Recommendation 第二推薦
Rough Hole Drilling (Indexable) (Hole Tolerance : -0.1~+0.4) 粗孔 (中至大孔, 捨棄式鑽頭)	DSP · SPMG-MG · CX33TX 	DWC · WCMT-MM · CX33TX 
Precise Hole Drilling (Solid) (Hole Tolerance : 0~+0.1) 細孔 (小至中孔, 全鎢鋼鑽頭)	DPC / DPN · UNAX 	DMC / DMN · UNAX 



Holemaking Tools 鑽削刀具 選擇指南

**N Aluminum alloy & Brass** 鋁合金與銅

Application 應用	1st Recommendation 第一推薦	2nd Recommendation 第二推薦
Rough Hole Drilling (Indexable) (Hole Tolerance : -0.1~+0.4) 粗孔 (中至大孔, 捨棄式鑽頭)	-	-
Precise Hole Drilling (Solid) (Hole Tolerance : 0~+0.1) 細孔 (小至中孔, 全鎢鋼鑽頭)	DMC · Uncoated 	DMN · Uncoated 

**S High Temperature Alloy** 高溫合金

Application 應用	1st Recommendation 第一推薦	2nd Recommendation 第二推薦
Rough Hole Drilling (Indexable) (Hole Tolerance : -0.1~+0.4) 粗孔 (中至大孔, 捨棄式鑽頭)	DWC · WCMT-SG · CX43TX 	DSP · SPMG-MG · CX43TX 
Precise Hole Drilling (Solid) (Hole Tolerance : 0~+0.1) 細孔 (小至中孔, 全鎢鋼鑽頭)	DMC / DMN · UNAX 	DPC / DPN · UNAX 

**H Hardened Steel** 高硬度鋼

Application 應用	1st Recommendation 第一推薦	2nd Recommendation 第二推薦
Rough Hole Drilling (Indexable) (Hole Tolerance : -0.1~+0.4) 粗孔 (中至大孔, 捨棄式鑽頭)	DSP · SPMG-MG · CX33TX 	DWC · WCMT-MM · CX33TX 
Precise Hole Drilling (Solid) (Hole Tolerance : 0~+0.1) 細孔 (小至中孔, 全鎢鋼鑽頭)	DPC · SNAX 	DPN · SNAX 

## Turning Tools 車削刀具 選擇指南

## P Steel 鋼

Work Material 加工材質	Cutting Process 加工方式	Chipbreaker 斷屑槽	Grade 材質	ap (mm)	fr (mm/rev)	Vc (m/min)
Soft Steel / Low Carbon Steel 軟鋼 / 低碳鋼 (SS400, C15)	Continuous (Finishing) 連續加工 (精)	FP, SP	CC7015	0.5-1.0-1.5	0.1-0.2-0.3	390-330-260
	General (Medium) 泛用加工 (中)	MP	CC7025	1.0-2.0-3.0	0.2-0.3-0.4	300-250-200
	Interrupted (Roughing) 斷續加工 (粗)	RK	CC7035	1.5-3.0-4.5	0.3-0.4-0.5	210-180-140
Carbon Steel / Alloy Steel 碳鋼 / 合金鋼 (S45C, SCM435)	Continuous (Finishing) 連續加工 (精)	FP, SP	CC7015	0.5-1.0-1.5	0.1-0.2-0.3	320-270-210
	General (Medium) 泛用加工 (中)	MP	CC7025	1.0-2.0-3.0	0.2-0.3-0.4	230-190-150
	Interrupted (Roughing) 斷續加工 (粗)	RK	CC7035	1.5-3.0-4.5	0.3-0.4-0.5	170-140-110
Hard Steel / Alloy Steel 硬化鋼 / 合金鋼 (SCM440H)	Continuous (Finishing) 連續加工 (精)	FP, SP	CC7015	0.5-1.0-1.5	0.1-0.2-0.3	260-220-170
	General (Medium) 泛用加工 (中)	MP	CC7025	1.0-2.0-3.0	0.2-0.3-0.4	200-170-130
	Interrupted (Roughing) 斷續加工 (粗)	RK	CC7035	1.5-3.0-4.5	0.3-0.4-0.5	140-120-90

## M Stainless Steel 不鏽鋼

Work Material 加工材質	Cutting Process 加工方式	Chipbreaker 斷屑槽	Grade 材質	ap (mm)	fr (mm/rev)	Vc (m/min)
Ferritic 鐵素體不鏽鋼 (SUS430)	Continuous (Finishing) 連續加工 (精)	FP, FB, SM, SP	CP6025	0.5-1.0-1.5	0.05-0.10-0.15	260-220-170
	General (Medium) 泛用加工 (中)	MP	CC7035	1.0-2.0-3.0	0.10-0.20-0.30	210-180-140
	Interrupted (Roughing) 斷續加工 (粗)	RK	CC7035	1.5-3.0-4.5	0.20-0.30-0.40	210-180-140
Martensitic / Austenitic 馬氏體 / 奧氏體不鏽鋼 (SUS410 / SUS304)	Continuous (Finishing) 連續加工 (精)	FP, FB, SM, SP	CP6025	0.5-1.0-1.5	0.05-0.10-0.15	180-150-120
	General (Medium) 泛用加工 (中)	MP	CC7035	1.0-2.0-3.0	0.10-0.20-0.30	150-130-100
	Interrupted (Roughing) 斷續加工 (粗)	RK	CC7035	1.5-3.0-4.5	0.20-0.30-0.40	120-100-80
Duplex 雙相不鏽鋼 (SUS329)	Continuous (Finishing) 連續加工 (精)	FP, FB, SM, SP	CP6025	0.5-1.0-1.5	0.05-0.10-0.15	150-130-100
	General (Medium) 泛用加工 (中)	MP	CC7035	1.0-2.0-3.0	0.10-0.20-0.30	120-100-80
	Interrupted (Roughing) 斷續加工 (粗)	RK	CC7035	1.5-3.0-4.5	0.20-0.30-0.40	110-90-70
Precipitation Hardening 析出硬化不鏽鋼 (SUS630)	Continuous (Finishing) 連續加工 (精)	FP, FB, SM, SP	CP6025	0.5-1.0-1.5	0.05-0.10-0.15	140-120-90
	General (Medium) 泛用加工 (中)	MP	CC7025	1.0-2.0-3.0	0.10-0.20-0.30	110-90-70
	Interrupted (Roughing) 斷續加工 (粗)	RK	CC7035	1.5-3.0-4.5	0.20-0.30-0.40	80-70-50

※ ap & fr value : Min. - Suggestion - Max.      Vc : Max. - Suggestion - Min.  
 下限 - 推薦 - 上限      上限 - 推薦 - 下限

Turning Tools 車削刀具 選擇指南

**K Cast Iron** 鑄鐵

Work Material 加工材質	Cutting Process 加工方式	Chipbreaker 斷屑槽	Grade 材質	ap (mm)	fr (mm/rev)	Vc (m/min)
Gray Cast Iron 灰鑄鐵 (GG-25)	Continuous (Finishing) 連續加工 (精)	SP	CC7015	0.5-2.0-2.0	0.10-0.20-0.30	400-300-200
	General (Medium) 泛用加工 (中)	Flat, MP	CC7015	0.5-2.0-4.0	0.10-0.25-0.40	360-270-180
	Interrupted (Roughing) 斷續加工 (粗)	Flat, RK	CC7025	0.5-2.0-6.0	0.10-0.30-0.50	300-230-150
Ductile Cast Iron 球墨鑄鐵 (GGG-40.3)	Continuous (Finishing) 連續加工 (精)	SP	CC7015	0.5-2.0-2.0	0.10-0.20-0.30	360-270-180
	General (Medium) 泛用加工 (中)	Flat, MP	CC7015	0.5-2.0-4.0	0.10-0.25-0.40	320-240-160
	Interrupted (Roughing) 斷續加工 (粗)	Flat, RK	CC7025	0.5-2.0-6.0	0.10-0.30-0.50	240-180-120
High-strength Ductile Cast Iron 高強度球墨鑄鐵 (GGG-70, etc)	Continuous (Finishing) 連續加工 (精)	SP	CC7015	0.5-2.0-2.0	0.10-0.20-0.30	320-240-160
	General (Medium) 泛用加工 (中)	Flat, MP	CC7015	0.5-2.0-4.0	0.10-0.25-0.40	280-210-140
	Interrupted (Roughing) 斷續加工 (粗)	Flat, RK	CC7025	0.5-2.0-6.0	0.10-0.30-0.50	160-120-80

**N Aluminum alloy & Brass** 鋁合金與銅

Work Material 加工材質	Cutting Process 加工方式	Chipbreaker 斷屑槽	Grade 材質	ap (mm)	fr (mm/rev)	Vc (m/min)
Aluminum alloys 鋁合金 (Si < 12%)	Continuous (Finishing) 連續加工 (精)	DS	DA3200	0.05-0.53-1.0	0.03-0.14-0.25	2700-1700-700
	General (Medium) 泛用加工 (中)	FA	CU1000	0.50-2.00-3.5	0.10-0.25-0.40	1000-650-300
Aluminum alloys 鋁合金 (Si > 12%)	Continuous (Finishing) 連續加工 (精)	DS	DA3200	0.05-0.53-1.0	0.03-0.11-0.18	800-540-270
	General (Medium) 泛用加工 (中)	FA	CU1000	0.50-2.00-3.5	0.10-0.25-0.40	500-340-180
Brass 黃銅	Continuous (Finishing) 連續加工 (精)	DS	DA3200	0.05-0.53-1.0	0.05-0.21-0.36	1300-950-600
	General (Medium) 泛用加工 (中)	FA	CU1000	0.50-2.00-3.5	0.10-0.25-0.40	1000-650-300

※ ap & fr value : Min. - Suggestion - Max. Vc : Max. - Suggestion - Min.  
 下限 - 推薦 - 上限    上限 - 推薦 - 下限

Turning Tools 車削刀具 選擇指南

**S High Temperature Alloy** 高溫合金

Work Material 加工材質	Cutting Process 加工方式	Chipbreaker 斷屑槽	Grade 材質	ap (mm)	fr (mm/rev)	Vc (m/min)
Nickel Alloy / PH Stainless Steel 鎳合金 / 析出硬化不鏽鋼	Continuous (Finishing) 連續加工 (精)	FP, FB	CP6015	0.2-0.50-0.8	0.10-0.15-0.20	100-75-50
	Continuous (Semi-finishing) 連續加工 (半精)	SM, SP	CP6025	0.2-0.85-1.5	0.10-0.15-0.20	90-65-40
	General (Medium) 泛用加工 (中)	MP	CP6025	0.5-1.75-3.0	0.15-0.20-0.25	80-55-30
Titanium Alloy 鈦合金	Continuous (Finishing) 連續加工 (精)	FP, FB	CP6015	0.2-0.50-0.8	0.10-0.15-0.20	80-60-40
	Continuous (Semi-finishing) 連續加工 (半精)	SM, SP	CP6025	0.2-0.85-1.5	0.10-0.15-0.20	70-50-30
	General (Medium) 泛用加工 (中)	MP	CP6025	0.5-1.75-3.0	0.15-0.20-0.25	70-50-30

**H Hardened Steel** 高硬度鋼

Work Material 加工材質	Cutting Process 加工方式	Chipbreaker 斷屑槽	Grade 材質	ap (mm)	fr (mm/rev)	Vc (m/min)
Hardened Steel 高硬度鋼 (SKT, SKD)	Continuous (Semi-finishing) 連續加工 (半精)	DR	BN4200	0.05-0.13-0.20	0.05-0.18-0.30	180-130-80

※ ap & fr value : Min. - Suggestion - Max.      Vc : Max. - Suggestion - Min.  
 下限 - 推薦 - 上限                                      上限 - 推薦 - 下限