

## SPECIFICATIONS

We reserve the rights to change the specs below without any prior notification.

MODEL		金鑽 12B III	金鑽 12CSB III	金鑽 16B III	金鑽 16CSB III	金鑽 20B III	金鑽 20CSB III	金鑽 25B III	金鑽 25CSB III	
		DIAMOND 12B III	DIAMOND 12CSB III	DIAMOND 16B III	DIAMOND 16CSB III	DIAMOND 20B III	DIAMOND 20CSB III	DIAMOND 25B III	DIAMOND 25CSB III	
Working Range 加工範圍	最大加工外徑	Max. machining Dia.	ø12.7 mm	ø12.7 mm	ø16.5 mm	ø16.5 mm	ø20 mm	ø20 mm	ø26 mm	ø26 mm
	最大加工長度	Max. machining length per chucking	200 mm							
	最大鑽孔直徑 (主軸)	Max. drilling dia. (main spindle)	ø7 mm	ø7 mm	ø10 mm	ø10 mm	ø10 mm	ø10 mm	ø10 mm	ø10 mm
	最大鑽孔直徑 (背軸)	Max. drilling dia. (sub spindle)	ø7 mm	ø7 mm	ø7 mm	ø7 mm	ø7 mm	ø7 mm	ø7 mm	ø7 mm
	最大攻牙外徑 (主軸)	Max. tapping dia. (main spindle)	M6	M6	M8	M8	M8	M8	M8	M8
最大攻牙外徑 (背軸)	Max. tapping dia. (sub spindle)	M6	M6	M6	M6	M6	M6	M6	M6	
O.D. Tooling 外徑刀	刀具數	Number of tools	6							
	刀具尺寸	Dimension	□12 x 12 x 120							
I.D. Tooling 內徑刀	刀具數	Number of tools	4							
	刀具尺寸	Dimension	10 mm (ER16)							
Cross Working Driven Tooling 側面鑽銑刀	刀具數	Number of tools	6		6		6		6	
	刀具尺寸	Dimension	10 mm (ER16)		10 mm (ER16)		10 mm (ER16)		10 mm (ER16)	
	刀具轉速	Speed	200~6,000 rpm		200~6,000 rpm		200~6,000 rpm		200~6,000 rpm	
Front Working Driven Tooling 正面鑽銑刀	刀具數	Number of tools	3		3		3		3	
	刀具尺寸	Dimension	10 mm (ER16)		10 mm (ER16)		10 mm (ER16)		10 mm (ER16)	
	刀具轉速	Speed	200~6,000 rpm		200~6,000 rpm		200~6,000 rpm		200~6,000 rpm	
Back I.D. Tooling 背面內徑刀	刀具數	Number of tools	4 + 4							
	刀具尺寸	Dimension	10 mm (ER16)							
Back Working Driven Tooling 背面鑽銑刀	刀具數	Number of tools	3		3		3		3	
	刀具尺寸	Dimension	7 mm (ER11)		7 mm (ER11)		7 mm (ER11)		7 mm (ER11)	
	刀具數	Number of tools	4		4		4		4	
	刀具尺寸	Dimension	10 mm (ER16)		10 mm (ER16)		10 mm (ER16)		10 mm (ER16)	
	刀具轉速	Speed	200~6,000 rpm		200~6,000 rpm		200~6,000 rpm		200~6,000 rpm	
Spindle 主軸	主軸內徑	Spindle hole dia.	ø13 mm	ø13 mm	ø17 mm	ø17 mm	ø22 mm	ø22 mm	ø27 mm	ø27 mm
	主軸轉速	Spindle speed	200~8,000 rpm							
	主軸定位角度	Main spindle indexing angle	C axis							
Back Spindle 背主軸	背主軸內徑	Spindle hole dia.	ø13 mm	ø13 mm	ø17 mm	ø17 mm	ø22 mm	ø22 mm	ø27 mm	ø27 mm
	背主軸轉速	Spindle speed	200~5,000 rpm (200~8,000 rpm 選配內藏馬達 Option built-in motor)							
	前面出料最大長度	Max. length for front ejection	50 mm							
	背主軸定位角度	Sub spindle indexing angle	C axis							
Rapid Traverse	快速位移	X1, Y1, Z1, X2, Z2	30 m / min							
Motors 馬達	主軸馬達	Spindle motor	2.2 kW				3.7 kW			
	背主軸馬達	Back spindle motor	2.2 kW (2.2 kW 選配內藏馬達 Option built-in motor)				2.2 kW (3.7 kW 選配內藏馬達 Option built-in motor)			
	X1, Y1, Z1, X2, Z2軸馬達	X1, Y1, Z1, X2, Z2 axes motor	1 kW							
	Y2軸馬達(選配)	Y2 axis motor(option)	1 kW							
	切削馬達	Coolant pump motor	1 HP							
	潤滑油馬達	Lubrication motor	4 W							
	固定手背動力刀座	Driven tools motor-fixed arm	2.2kW		2.2kW		2.2kW		2.2kW	
背軸可替換式動力刀座	Driven tools motor-back replaced toolholder set	1.5kW		1.5kW		1.5kW		1.5kW		
(選配Y2 軸)	(option Y2 axis)	2.2kW		2.2kW		2.2kW		2.2kW		
Machine Dimensions 機械尺寸	主軸中心高	Center height	890 mm							
	重量 (選配Y2 軸)	Weight (option Y2 axis)	1,890 kg	1,920 kg	2,040 kg	2,070 kg	2,090 kg	2,120 kg	2,140 kg	2,170 kg
	機械尺寸	Machine dimension	2,400 x 1,430 x 1,650 mm(2,690x1,495x1,890選配Y2軸option Y2 axis)							
Air Pressure 氣壓	空氣壓力	Air pressure	5 kg / cm							
	空氣量	Air supply	10 L / min							

## SPECIFICATIONS

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MODEL		金鑽 20B II	金鑽 20CSB II	金鑽 32B II	金鑽 32CSB II	金鑽 42B II	金鑽 42CSB II		
		DIAMOND 20B II	DIAMOND 20CSB II	DIAMOND 32B II	DIAMOND 32CSB II	DIAMOND 42B II	DIAMOND 42CSB II		
Working Range 加工範圍	最大加工外徑	Max. machining Dia.	ø20 mm	ø20 mm	ø32 mm	ø32 mm	ø42 mm		
	最大加工長度	Max. machining length per chucking	240 mm						
	最大鑽孔直徑 (主 / 背軸)	Max. drilling dia. (main / sub spindle)	ø12 mm	ø12 mm	ø15 mm	ø15 mm	ø15 mm		
	最大攻牙外徑 (主 / 背軸)	Max. tapping dia. (main / sub spindle)	M10	M10	M12	M12	M12		
O.D. Tooling 外徑刀	刀具數	Number of tools	6				5		
	刀具尺寸	Dimension	□12 x 12 x 120	□12 x 12 x 120	□16 x 16 x 120	□16 x 16 x 120	□16 x 16 x 120		
I.D. Tooling 內徑刀	刀具數	Number of tools	4						
	刀具尺寸	Dimension	10 mm (ER16)	10 mm (ER16)	13 mm (ER20)	13 mm (ER20)	13 mm (ER20)		
Cross Working Driven Tooling 側面鑽銑刀	刀具數	Number of tools	6		6		6		
	刀具尺寸	Dimension	10 mm (ER16)		13 mm (ER20)		13 mm (ER20)		
	刀具轉速	Speed	200~6,000 rpm		200~6,000 rpm		200~6,000 rpm		
Front Working Driven Tooling 正面鑽銑刀	刀具數	Number of tools	3		3		3		
	刀具尺寸	Dimension	10 mm (ER16)		13 mm (ER20)		13 mm (ER20)		
	刀具轉速	Speed	200~6,000 rpm		200~6,000 rpm		200~6,000 rpm		
Back I.D. Tooling 背面內徑刀	刀具數	Number of tools	4 + 4						
	刀具尺寸	Dimension	10 mm (ER16)	10 mm (ER16)	13 mm (ER20)	13 mm (ER20)	13 mm (ER20)		
Back Working Driven Tooling 背面鑽銑刀	刀具數	Number of tools	3		3		3		
	刀具尺寸	Dimension	7 mm (ER11)		10 mm (ER16)		10 mm (ER16)		
	刀具數	Number of tools	4		4		4		
	刀具尺寸	Dimension	10 mm (ER16)		13 mm (ER20)		13 mm (ER20)		
	刀具轉速	Speed	3,000 rpm		3,000 rpm		3,000 rpm		
Spindle 主軸	主軸內徑	Spindle hole dia.	ø22 mm	ø22 mm	ø35 mm	ø35 mm	ø45 mm		
	主軸轉速	Spindle speed	200~8,000 rpm	200~8,000 rpm	200~7,000 rpm	200~7,000 rpm	200~5,000 rpm		
	主軸定位角度	Main spindle indexing angle	C axis						
Back Spindle 背主軸	背主軸內徑	Spindle hole dia.	ø22 mm	ø22 mm	ø35 mm	ø35 mm	ø45 mm		
	背主軸轉速	Spindle speed	200~8,000 rpm	200~8,000 rpm	200~7,000 rpm	200~7,000 rpm	200~5,000 rpm		
	前面出料最大長度	Max. length for front ejection	60 mm				80 mm		
	背主軸定位角度	Sub spindle indexing angle	C axis						
Rapid Traverse	快速位移	X1, Y1, Z1, X2, Z2	30 m / min						
Motors 馬達	主軸馬達	Spindle motor	3.7 kW	3.7 kW	5.5 kW	5.5 kW	7.5 kW		
	背主軸馬達	Back spindle motor	3.7 kW	3.7 kW	5.5 kW	5.5 kW	5.5 kW		
	X1,Y1, Z1, X2,Z2 軸馬達	X1,Y1, Z1, X2,Z2 axes motor	1 kW						
	Y2 軸馬達 (選配)	Y2 axis motor (option)	1 kW						
	切削馬達	Coolant pump motor	1 HP x 2						
	潤滑油馬達	Lubrication motor	4 W x 2						
	固定手背動力刀座	Driven tools motor-fixed arm	2.2kW		2.2kW		2.2kW		
背軸可替換式動力刀座	Driven tools motor-back replaced toolholder set	1.5kW		1.5kW		1.5kW			
(選配Y2 軸)	(option Y2 axis)	2.2kW		2.2kW		2.2kW			
Machine Dimensions 機械尺寸	主軸中心高	Center height	1,050 mm						
	重量 (選配Y2 軸)	Weight (option Y2 axis)	3,140 kg	3,170 kg	3,390 kg	3,420 kg	3,710 kg	3,740 kg	
	機械尺寸	Machine dimension	2,500 x 1,280 x 1,780 mm						
Air Pressure 氣壓	空氣壓力	Air pressure	5 kg/cm						
	空氣量	Air supply	10 L/min						

# PO LY GIM

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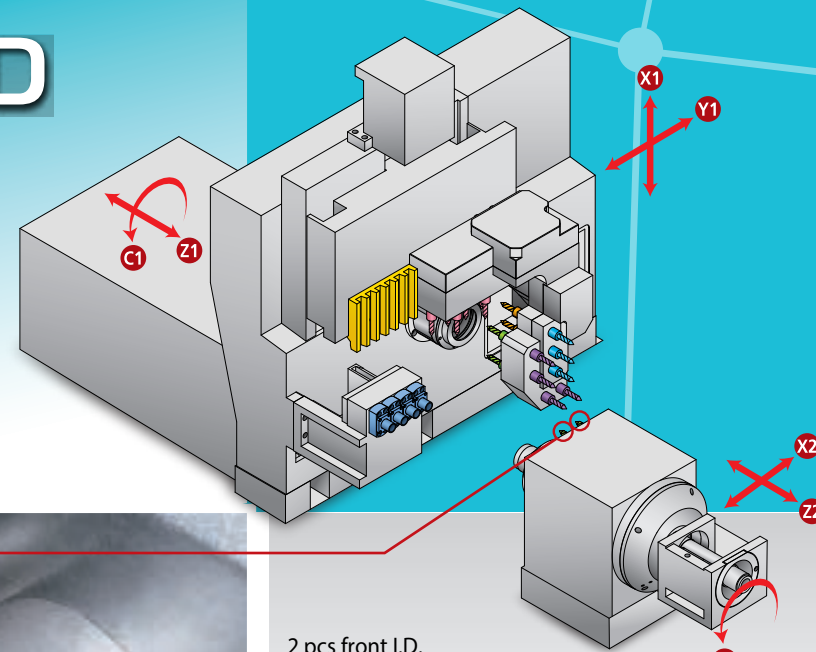
Save a world of time and labor with our latest generation of lathes.  
Performance machines and unsurpassed service from PO LY GIM.

DIAMOND B II / III  
CSB II / III Series

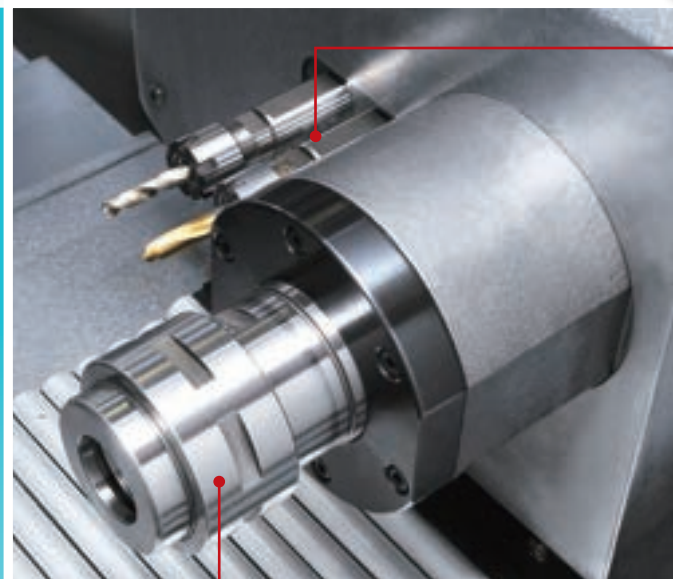
PO LY GIM

# DIAMOND

12CSB III  
16CSB III  
20CSB III  
25CSB III



2 pcs front I.D. stationary tool holder  
(Only available for B III / CSB III with belt type motor)  
2支固定正面內徑刀具刀座  
(適用於 B III / CSB III 配皮帶式背軸)



Sub spindle only with simple C axis for B III / CSB III  
(If the sub-spindle option with built-in motor, it can option CS axis for CSB III)

背主軸標準是配 C 軸 --- B III / CSB III  
如果換配內藏式馬達可選配 CS 軸 --- CSB III



Appearance for machine with Y2 axis./ Y2軸機器外觀

# SWISS TYPE CNC AUTO LATHE 走心式 CNC 自動車床

Multifunction High Productivity 7 Axis Machining at a Low Cost.  
走心、走刀二用機，有 7 個軸向，多重選擇

# DIAMOND

20CSB II / 32CSB II / 42CSB II



## FEATURES 機械特點

### ■ Cross Travel Sub-spindle

Cross travel sub spindle design. The main and sub spindles can work either one at a time or simultaneously for reduced machining duration. This design brings multi-function front and rear machining.

### ■ Short Remnant Material

With the optional Rough Material Bushing, the remnant material can be 50mm (depending on the parts length).

### ■ Raw Material Machining

0.1mm material tolerance can be achieved by using the Rough Material Bushing.

### ■ Replaceable Fixed / Driven Toolholder Set

The 4 pc back stationary / driven tool holder is replaced by the newly designed replaceable fixed tool holder or driven tool holder. This enables increased tooling flexibility.

### ■ 十字型走向背主軸

十字型走向背主軸設計，主軸和背軸可以同時或單獨加工，節省加工時間，提供高度及多樣的前後混合加工。

### ■ 餘料短

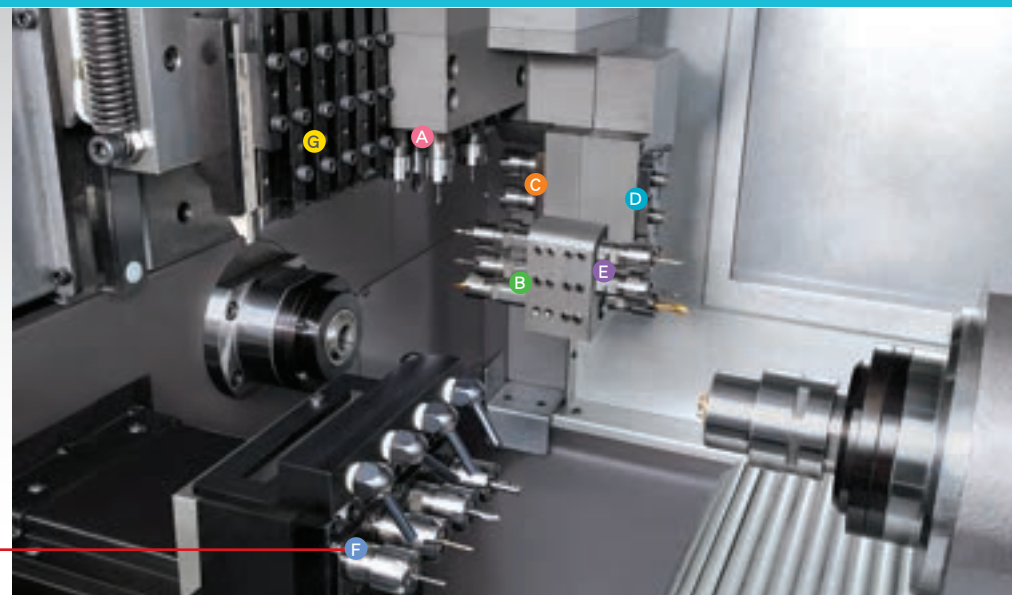
選擇粗料套筒即可走心機當走刀機用，殘料長度約 50mm，可有效達到精簡材料成本。

### ■ 粗料加工

選擇粗料套筒，非研磨棒材也能在走心機加工，材料公差容忍 0.1mm。

### ■ 可替換式固定 / 動力刀座組

4支背面固定 / 動力鑽銑刀具刀座是新研發可拆卸安裝固定或動力刀具組之刀座，使您在刀具使用上有更靈活的運用。



- A 6 pcs cross working driven tool holder  
6支側面鑽銑刀具刀座
- B 4 pcs I.D. stationary tool holder  
4支正面內徑刀具刀座
- C 3 pcs front working driven tool holder  
3支正面鑽銑刀具刀座
- D 3 pcs back working driven tool holder  
3支背面鑽銑刀具刀座
- E 4 pcs back I.D. stationary tool holder  
4支背面固定 / 動力鑽銑刀具刀座
- F 4 pcs back I.D. stationary / working driven tool holder  
4支背面固定 / 動力鑽銑刀具刀座
- G 6 pcs O.D. turning tool holder  
6支外徑刀具刀座  
(42Type with 5 pcs O.D. turning tool  
42型配5支外徑刀)

## STANDARD ACCESSORIES 標準配件

- Controller : Mitsubishi
- Main spindle
- Back spindle
- Work light
- Coolant system
- Part off detective sensor
- Fixed bushing (Except 32B II / 32CSB II / 42B II / 42CSB II / 25B III / 25CSB III )
- Live bushing
- Part catcher
- 6 pcs O.D. turning tool holder (42 Type with 5 pcs O.D. turning tool)
- 4 pcs I.D. stationary tool holder
- 6 pcs cross working driven tool holder
- 3 pcs front working driven tool holder
- 4 pcs back I.D. stationary tool holder
- 3 pcs back working driven tool holder
- 4 pcs back I.D. stationary / working driven tool holder
- 控制系統：三菱
- 主軸
- 背面主軸
- 工作燈
- 冷卻系統
- 工件切斷檢測
- 固定式套筒 (除32BII/32CSBII/42BII/42CSBII/25BIII/25CSBIII)
- 同期迴轉套筒
- 工件收集器
- 6支外徑刀具刀座 (42型配5支外徑刀)
- 4支正面內徑刀具刀座
- 6支側面鑽銑刀具刀座
- 3支正面鑽銑刀具刀座
- 4支背面內徑刀具刀座
- 3支背面鑽銑刀具刀座
- 4支背面固定 / 動力鑽銑刀具刀座

## OPTION ACCESSORIES 選擇配件

- Controller : Fanuc
- CS axis
- Rough material bushing (without guide bush)
- Chip conveyor + bucket
- 2 pcs front I.D. stationary tool holder (available for B III / CSB III with belt type)
- Y2 Axis
- 控制系統：發那科
- CS軸
- 粗料套筒 (最大加工長度 = 材料外徑 x 3)
- 排屑機 + 鐵屑車
- 2支固定正面內徑刀具刀座 (適用於 B III / CSB III 配皮帶式背軸)
- Y2 軸

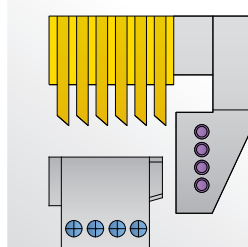


選配：背面Y2軸  
Option: Sub-spindle has Y2 axis

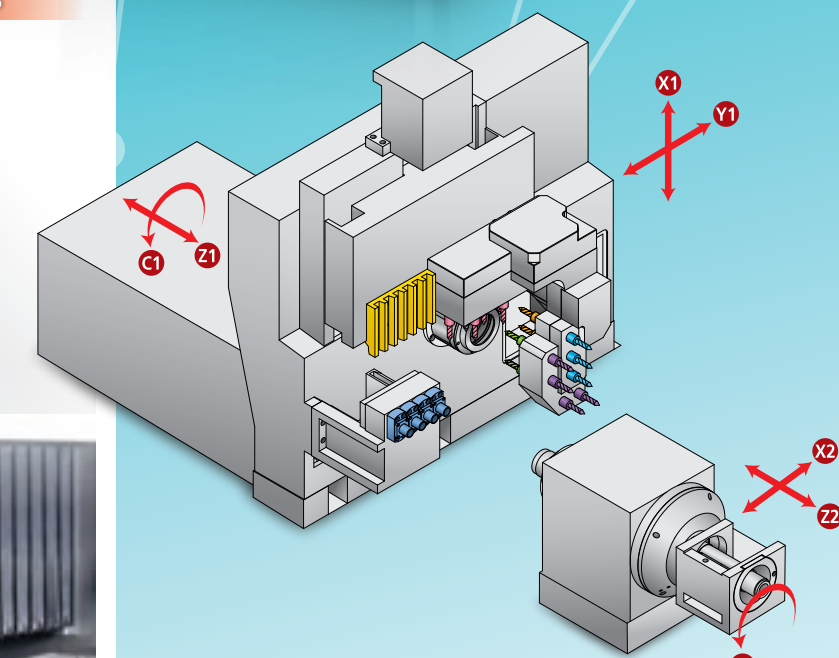
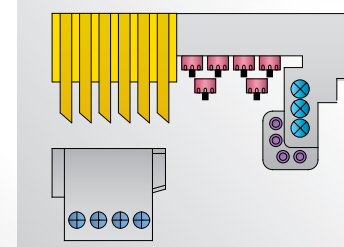


選配：背面選配Y2軸時可加選配立式鑽銑刀具刀座  
Option: Optional Radial drilling tool holder when Y2 axis is selected on the sub-spindle

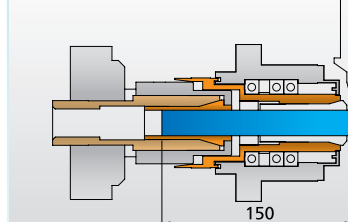
## DIAMOND B II / III series



## DIAMOND CSB II / III series

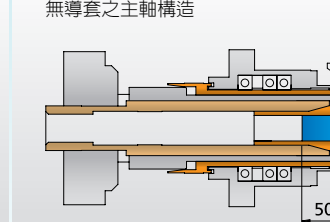


Using Live Bushing with Guide Bush  
有導套之主軸構造



Remnant Material 150 mm  
剩餘材料 150 mm

Using Rough Material Bushing without Guide Bush  
無導套之主軸構造



Remnant Material 50 mm  
剩餘材料 50 mm

Evermore removable tool holder can choose 5 pcs cross driven tool holder or 6 pcs cross driven tool holder. (For CSBII selection only)  
Evermore 抽換式刀座可選擇5支側鑽或6支側鑽 (僅供CSBII選擇)