This product implements safety standards: "GB15760-2004 General Technical Conditions for Safety Protection of Metal Cutting Machine Tools" and "GB5226.1-2008 Mechanical and Electrical Safety Mechanical and Electrical Equipment Part 1: General Technical Conditions"; its quality accuracy implementation standard "GB/T19362 .1-2003 Gantry Milling Machine Inspection Conditions Accuracy Inspection Part 1 Stationary Gantry Milling Machine》. The design, production, manufacturing and delivery process of this product implements the standard "GB/T 24001-2016 Environmental Management System Requirements and Usage Guidelines".

Main Technical Parameters

Item		unit	PG3220		
Travels	Travels on x aixs	mm	**3200**		
	Travels on y aixs	mm	**2000**		
	Travels on Z aixs	mm	**1000**		
	Distance from spindle end to table	mm	295～1295（BT40 ）		
	Distance from table to gantry beam	mm	1300		
	Distance between two columns	mm	2000		
Worktable	Table size	mm	1800×3000		
	T slot width/distance	mm	9-22/190		
	Max. table load	T	6		
Spindle	Max. Speed	rpm	**12000**		
	Main motor power	Kw	11/18.5		
	Output torque	N.m	52.5/118		
	Drive type		Direct drive spindle		
Feed rate	Axis		X	Y	Z
	Max. Fast move	m/min	15	15	15
	Cutting feeding	m/min	10	10	10
	Positioning accuracy	mm	0.03	0.02	0.012
	Repeatability accuracy	mm	0.028	0.018	0.01
Ball Screw	Three axes screw (diameter / lead)		X	Y	Z
		mm	8016	5010	5010
Feed motor	Torque		X	Y	Z
		N.m	36-90	36-90	36-90(with braking)
Tools magazine	Tool magazine type		Disc type		
	Tool holder		**BT40**		

	Capacity	No.	**30**
	Max tools diameter/length/weight	mm, kg	Φ75mm/300mm/8kg
	Max tool diameters with adjacent potion free	mm	Φ120
	Tools change	sec	3
power	Air supply	Mpa	0.6～0.7
Weight	Weight	T	**Approx 23**
Machine Size	Height (Z Axis)	mm	Approx.4200
	Width (Y Axis)		Approx.5300（including stairs and Chain Type）
	Overall Length		Approx.8400
	power	KVA	45
Cnc controller		Fanuc	FANUC 0i-MF Plus(3B)※

Machine Configuration

1. Standard Configuration

No.	Name	Note
1	Cnc controller	Fanuc
2	Spindle	PONC
3	X/Y/Z axis high-performance servo motor	Fanuc
4	automatic lubrication device	BAOTN/HERU
5	The entire body and main moving parts are made of castings	
6	Working area protection	
7	cutting cooling system	
8	MPG(pendant)	
9	Chain Type chip conveyor	
10	warning light	
11	work area lighting	
12	air conditioned Electric cabinet	
13	Oil cooler for spindle	
14	BT40 -30T tool magazine	

2.Options

No.	item	Note
1	FANUC 0i-MF Plus(3B)	※
2	CE marking（Not Separation of strong and weak electricity）	※

3	Safety door locks	※
4	Safety relays	※
5	Sheet metal raised to 200mm (now 1800mm)	※
6	Through-Spindle Coolant 20bar	※
7	Renishaw OMP40	※
8	BT40 -30T tool magazine	※

Delivery List

No	Name	Quantity	Note
1	Full set of anchor bolts and foundation pads,	Full set	
2	Toolbox	One set	Common tools
3	USB flash drive	One piece	8G

Documents

NO	Name	Quantity	Note
1	machine manual	1	Eectronic version
2	Electrical Instruction Manual	1	Eectronic version
3	Certificate	1	
4	Shipping documents	1	
5	Electrical schematic	1	Eectronic version
6	CNC system operation manual	1	Eectronic version
7	Spindle cooler manual	1	Eectronic version

Suppliers of Key Components

No	Part name		Supplier	quantity	note
1	Operation System		Fanuc	1	
2	Principal axis Servo motors		Fanuc	1	
3	Actuating shaft Servo motors		Fanuc	1	
4	Ballscrew	X：80*16	PMI /HIWIN	1	
		Y：50*10			
		Z：50*10			
5	Guide rail		PMI /HIWIN	1	
6	Spindle		PONC	1	
7	Coupler		Roundss	1	
8	cylinder		Haocheng/ROYLI	1	

9	Lubrication system	BAOTN/HERU	1	
10	Beraings X/Y/Z aixs	NSK/NACHI	1	
11	Sheild on X/Y/Z aixs	Hong wang /Hai dong	1	

Note: When there is insufficient supply, other brands of the components will be used instead, but there will be no difference in quality and grade.

Recommended coolant, oil and grease

Lubrication part		Oil type	Volume	Lubricating oil viscosity	Note
Constant temperature system	Spindle	Spindle oil	17L	ISO VG2	According to the usage of the machine , it is recommended to be changed every six months
Machine tool lubrication system	axis lubricate	Rail Lubricant	4L	ISO VG68	The supply is based on the oil level alarm signal set on the machine
Workpiece cooling	Coolant		400L	Cutting fluid chosen by customer	

Installtion and commssioning preparation

No	Projects	Request
Basic machine requirements		
1	Machine foundation conditions	For details of foundation loads, see Foundation Diagrams.
		No source of vibration around the foundation
2	Incoming power supply preparation	3-phase 380V ±10 per cent; 50Hz ±2 per cent, 90kVA (standard) User-supplied power cord from power supply to machine tool
3	Compressed air access preparation	Compressed air: ≥0.6MPa, ≥500L/min, the user to provide from the air source to the machine tool air pipe
4	Cleaning oils and utensils	8L of washing oil (petrol or paraffin), some cotton rags
5	Machine tools need to be lubricated	See PG3220 Recommended Oils and Greases for more information.
Confirmation required before delivery of the machine		
6	Confirmation of transport road conditions	Confirmation of the mode of transport according to the plant and the surrounding road conditions
7	Factory door size	Meet the net transport dimensions of the largest parts of the machine
8	Factory height	Confirm the lifting method according to the actual Factory height.
9	Preparation of machine tool mounting	See list of specialised spreaders for details of contents