

Model			BV55-75	BV55-85	BV55-100	BV55-120	
Specification							
Travel	X axis	mm	762	862	1050	1200	
	Y axis	mm	550				
	Z axis	mm	650				
Work table size(W*L)		mm	610×900	610×1000	610×1300	610×1500	
Max. loading capacity		kg	600		700		
Spindle nose to table		mm	162~812（40#hilt），127~777（50#hilt）				
Spindle center to column		mm	725				
Rapid Travel		mm/min	24000				
Feeding speed		mm/min	3~20000				
Spindle	Rotate speed	rpm	60~7000（可选 10000），60~6000（50#刀柄）				
	Taper		7:24 No.40				
	Diameter	mm	Φ70				
Tool Magazine	Type		ATC				
	Capacity		24				
	Time		2 sec.				
Positioning Accuracy	Calculate by JB/T 8771.4 or ISO230-2						
	Positioning	mm	X/Y/Z:0.016/0.010		X:0.020 /0.012 Y/Z:0.016/0.010		
	Repeatability	mm	X/Y/Z:0.012/0.006		X:0.015/0.008 Y/Z:0.012/0.006		
Motor powe	Spindle motor		9/11 KW, 114.6Nm (FANUC) or 12/15KW,114.6Nm (Siemens)				
	X axis motor		3KW, 12Nm(FANUC) or 5.8KW, 27Nm *				
	Y axis motor		4KW,22Nm(FANUC) or 5.8KW, 27Nm (Siemens) *				
	Z axis motor		4KW, 22Nm (FANUC) or 5.8KW, 27Nm (Siemens) *				
Electric Power			380（1±10%）V 50HZ				
Compress air Pressure		mpa	0.6				
Single air consumption		m³/min	0.1				
Full load current			100				
Overall Size (L*W*H)			mm	3250×3120 ×3139	3250×3120 ×3139	3450×3120 ×3139	3750×3120 ×3139
Occupation Dimension			mm	4938×3521	4938×3521	4938×3521	5013×3521
Net weight			kg	8500	8500	9000	9500
Working Environment			Temperature 5℃~40℃ Humidity <75%				

Features and Application

Features

- ◆ Bed Type structure with fixed column
- ◆ X and Y Axis go through cross moving table
- ◆ Each linear motion axis use imported rectilinear rolling guide, ball screw and servo motor.
- ◆ Enlarge the span of guideway on Y axis furthest, eliminate the gravity tips during

- X axis moving, so that ensure the stability and rigidity of machine;
- ◆ The column is herringbone to enlarge the section size, and ensures the construction and combination rigidity.
- ◆ ATC system is fixed on the column, realizing automatic tool change.
- ◆ High quality specialized bearings are used to main spindle, and all components of spindle are no rotation vibration after strict motion balance. Tool storage uses steel ball collet and disk spring to get tools tied and untied. Pulling force is from disk spring. Unclamping force is from cylinder.
- ◆ The synchronous dentiform belt is transferred between spindle and motor, the transmission ratio is 1:1;
- ◆ Various combination of shanks and rivets can be used to spindle
- ◆ The guide way and ball screw are lubricated automatically by thin oil;
- ◆ Two automatic chips conveyor, interior and exterior and are applied. Interior screw chip conveyor, which makes machine body structure reasonable and ensures construction rigid. Exterior chip conveyor is raddle type placed in the rear part of machine.
- ◆ The machine surface is equipped with closed protective cover with cocoon and dual-door. Stainless steel shield are used on all guideways.
- ◆ Two electric cabinets are combined with main body of machine as one, unnecessary to disassemble during transportation or installation.
- ◆ Modularization structure design guarantees flexible configuration with kinds of special options.
- ◆ Various sensor, closed loop control laser scale and rotary table can be installed optionally;

Application

BV55 serious vertical machining centers use CNC system provided by professional suppliers. Each linear motion axis, spindle as well as additional rotation axes are driven by servo motors, 3-axis ganged, milling, boring, drilling and rigid threading, which is suitable for light and general processing. Digital precision positioning can be achieved. With motion axes plugging and ganged, processing large screw and curved surface can be realized. Various working procedure of rough and précised machining can be achieved with one-time clamp on the same machine tool. Meanwhile, multiple typical cycle program is installed in the NC system as options during processing. Pre-set program controls cutting, coolant supply, and tool change, etc. In the process of tool change, air will be blown from spindle center automatically to keep shank and taper-bore clean. Chips produced by cutting can be cleaned to the chip collecting cart through interior and exterior chip conveyor.