

BARON-MAX[®] 5-Axis Vertical Machining Centers

The SR/A series machines with a swivel head and rotary table design, Rotary table is removable and machine could work as 4 axes machine, which offer the latest and most precise 5-axis machining. Simplify setup and production of complex and multi-sided parts with high accuracy and saving time.

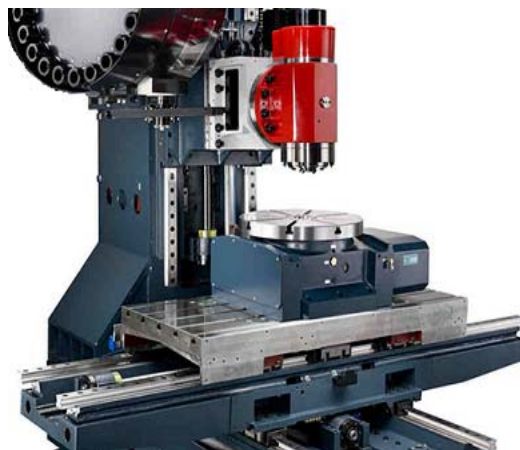
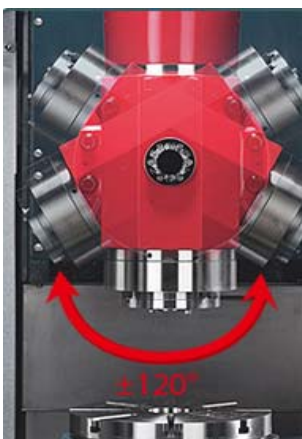


The 5 Axis or 5 Face gives you...

- Increased flexibility
- Reduced cycle times
- Improved surface finish
- Machining strategies improved
- Enhanced controlled precision
- Reduced work in progress

Industrial sectors:

- Mould and die machining
- Aerospace
- Automotive
- Power generation
- Telecommunications
- Medical



Hi-Speed, Hi-Power, Hi-Torque, Built-in Spindle 15000 rpm, swivels 120°



B-AXIS Swivel Milling Head

- Built-in 15,000rpm Spindle with $\pm 120^\circ$ swing
- B axis-swivel head designed by dual pitch worm gear set that are teeth backlash elimination and transmission perfectly.

Features of Integrated C axis with T-Slot Table:

- Rotary table surface and standard T-slot table are on the same plane, it accommodates larger and heavier work pieces.
- Direct drive C axis.
- 0.001 minimum position accuracy supported by high rigidity bearing and hydraulic braking system.

Continuous 5 Axis machining

The SR-500AX is high speed, high accuracy with FAGOR 8065 Power 5-axis simultaneously controlled machine center. Equips 15000rpm built-in spindle, B-axis swivel head 120° , and C-axis rotary table to optimize machining space and allows complex workpiece to be finished in just one setup and reduce cycle time.



CNC 8065 CNC System has unique features necessary for high speed machining while maintaining the best surface finish and providing maximum accuracy



The machines with FAGOR last generation 8065 -M-ICU CNC for developing their latest 5-axis machine, the calculation algorithms of the 8065 Power CNC make it possible to optimize high speed machining. This achieves higher cutting speeds, smoother contours, better surface finish and higher accuracy, the 8065 CNC controls RTCP machining on 5-axis machines. The main axes and another 2 rotary axes that may be at the spindle or on the work table. In 5-axis machining, it is common to work with inclined planes. The 8065 offers very simple formats for Defining inclined planes both for machines with automatic rotary axes and for manual ones.

SINUMERIK 840D sl MDynamics provides technology packages that consists of CNC hardware, intelligent CNC functions and CAD/CAM solutions for three and five-axis milling machines

- 10.4" Color TFT Display, Full QUERTY keyboard
- Advanced Surface
- Save user data on compact Flash (CF) card
- Spline interpolation
- Transmit and peripheral surface transformation
- Automatic measuring cycles
- Simultaneous recording of 3D simulation, HSC and HPC – machining, specific algorithms, interpolation concepts and, if applicable, smoothing functions are features that are regarded as crucially important
- ShopMill/ShopTurn Machining step programming
- Residual material detection
- 5 axes machining package
- 3D tool radius correction
- Kinematic measuring



MODEL / DESCRIPTION		SR-320/5A	SR-500/5A	SR-630/5A
Table	Table Size	1100 x 600mm	1400 x 650mm	1700 x 650mm
	Travel Ranges (X)	1000 mm	1300 mm	1500 mm
	Travel Ranges (Y)	600 mm	730 mm	730 mm
	Travel Ranges (Z)	800 mm	800 mm	800 mm

	Max. Table Load	600 kg	800 kg	800 kg
	Spindle Nose To Table Surface (Vertical)	100 – 900 mm	100~900 mm	
	T-Slot (W x D x H)	18 x 125 x 5mm		
Built-in Spindle	Spindle Taper	BT40		
	Spindle Center To Column	640 mm	750 mm	750 mm
	Spindle Speed	15,000 rpm		
	Main Motor (Con / 30min)	15 / 18 kW		15 / 19.5 kW
	Motor Type	48 /120 Nm		72 / 135 Nm
Swing Head	Driver Type	WORM GEAR		
	Reduction Ratio	1:72		1:120
	Tilting Range(Deg)	±120°		
	Max. Speed	25 rpm		
	Min. Unit	0.001°		
Rotary Table	Drive Type	WORM GEAR		
	Table Diameter	Ø320 mm	Ø500 mm	Ø630 mm
	Center Bore Diameter	70 mm	60 mm	75 mm
	Rotation Speed	22.2 rpm	11.1 rpm	11.1 rpm
	Min. Index	0.001°		
	Max. Table Load	350 kgs	500 kgs	800 kgs
Axis Servo Motors	Rapid Feed Rate (X/Y/Z)	30 / 30 / 24 M/min.		
	Feed Rate (X/Y/Z)	10000 mm/min.		
	Rated Torque (X/Y/Z)	16 / 16 / 16 Nm (Siemens), 16.5 / 16.5 / 23 Nm(Fagor)		
	B-Axis Rated Torque	12 Nm		
	C-Axis Rated Torque	12 Nm		
Tool Magazine	ATC Type	DISK / CHAIN (Opt.)		
	Cam Type	DAUL ARM		
	Tool Selection (Bi-Direction)	RANDOM		
	Tool Storage Capacity	24 tools (Std.) / 32, 40 tools(Opt.)		
	Max. Tool Diameter	76 mm		
	Max. Tool Length	250 mm		
	Max. Tool Weight	7 kg		
Accuracy	Positioning XYZ Linear Axis	0.005 mm		
	BC Rotary	10 sec.		

	Repeatability XYZ Linear Axis	0.003 mm		
	BC Rotary	6 sec.		
Miscellaneous	Air Requirement	7 kg/cm ²		
	Power Requirement	40 KVA		
	Coolant Tank Capacity	300 L	350 L	400 L
	Swarf removal	Chip auger (Std.), Chain type Chip Conveyor (Opt.)		
	Machine Weight	6500 kgs	7500 kgs	8500 kgs
	Machine Height	3100mm (122.05")		
	Floor Space (L x W)	290 x 230 cm	340 x 230 cm	385 x 230 mm
	Packing Size (L x W x H)	310*230*255 cm	340*230*255 cm	385*230*255cm

Specifications are subject to change without notice

Standard Accessories:

- Fagor 8065 / Siemens 840D controllers available
- 15,000 rpm Inline Direct-Drive spindle
- Powerful 11/15 Kw high torque spindle motor
- 24-station automatic dual arm tool changer
- Telescopic way covers for X, Y and Z axis
- Fully enclosed splash guard with interlock
- Auger conveyor
- Rigid tapping
- Coolant system
- Spindle Air Blast
- Coolant gun
- Air gun
- Halogen work light
- Automatic lubrication system
- Portable MPG
- Leveling pads & bolts for installation
- Tool box & kits
- Lamp of cycle finish & alarm
- Heat exchanger for the electrical cabinet
- CE Norms

Optional Accessories

- Chip Conveyor System
- Coolant Through Spindle (CTS)
- Linear Scale
- Oil Skimmer / Separator
- Tool offset Probe
- Belt Type / Scrapper Type
- 25 bar or 60 bar
- FAGOR
- Available



BARON-MAX[®] MACHINE TOOLS Since 1976

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