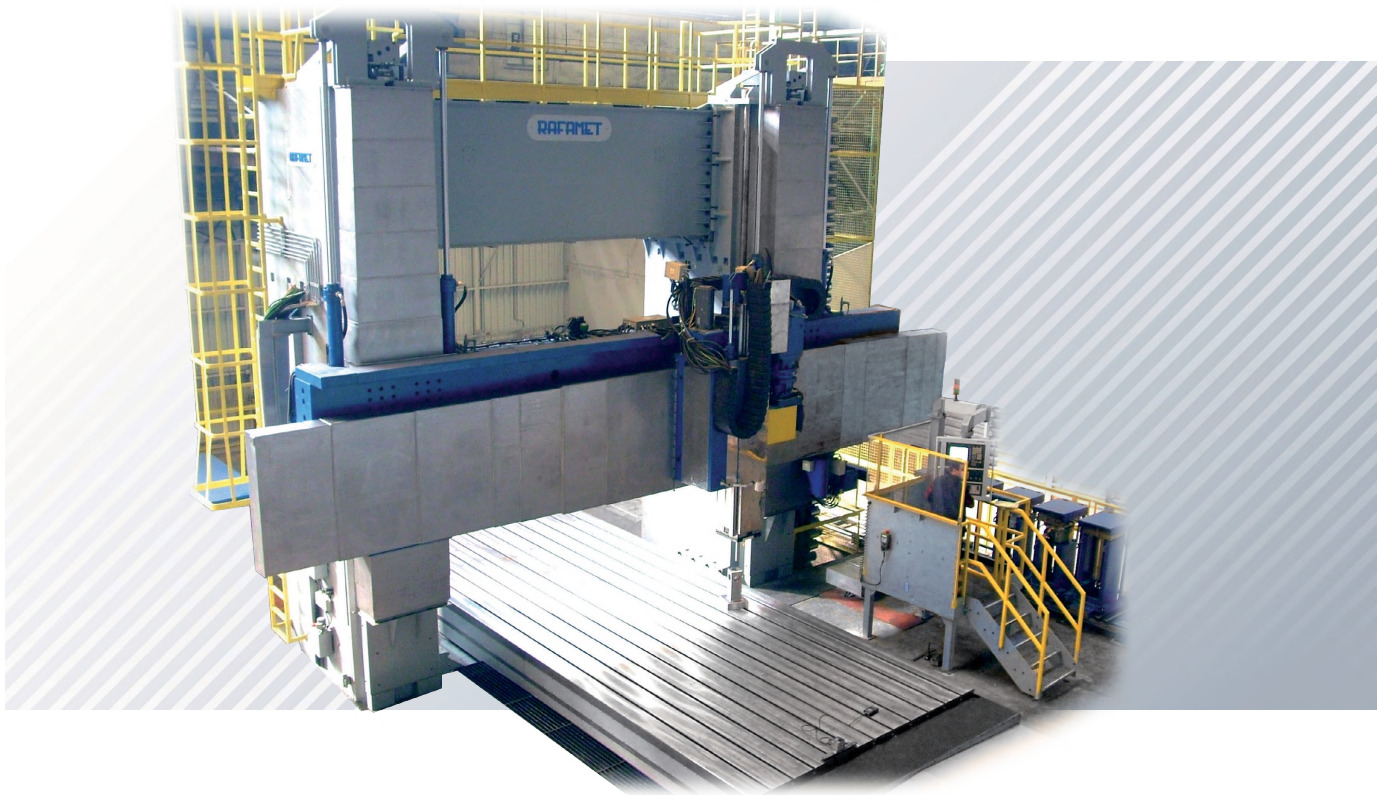


FBA Series

The FBA Series CNC Milling Machines are designed for machining of the complex workpieces. The FBA Series machines are capable of 3D milling, drilling, reaming, boring, threading or envelope threading in all machining planes. The application of the CNC system provides automatic and productive machining controlled by technological program. The ram spindle and tool head are provided with ISO-50 taper which enables automatic tool clamping and unclamping, as well as cooperating with tool magazine (optional).



Movable table / Movable Cross-rail



- Fixed frame of machine tool with movable or fixed cross-rail
- Movable table
- Vertical milling railhead consisting of cast iron body and forged steel ram
- All movable assembly units travel along precise rolling or hydrostatic guideways

STANDARD EQUIPMENT

- Siemens SINUMERIK ONE system
- Threading without compensation holder
- Handwheel
- Spindle with gear
- Tool air and liquid cooling system
- Data transmission USB + Fast Ethernet
- Integrated chip conveyors system

OPTIONAL EQUIPMENT

- Internal spindle cooling
- Tool magazine from up to 60 positions
- Heidenhain measuring scales
- Head magazine
- Tool measuring probe
- Workpiece measuring probe

TECHNICAL SPECIFICATIONS		FBA 200 CNC	FBA 350 CNC
Table			
Surface of table for workpiece clamping (width × length) ⁽¹⁾	mm	2000 × 4000	3500 × 8000
Table travel ⁽¹⁾	mm	5000	8500
Range of continuously variable feed rates of table (X axis)	mm/min	0.2 to 3000	
Maximum rate of table rapid travel	mm/min	7500	
Max. weight of workpiece	×10 kN	10	50
Max. load of table	×10 kN/m ²	5	7
Frame			
Clearance between columns (Y axis) ⁽¹⁾	mm	2500	4500
Max. distance between spindle face and table (Z axis) ⁽¹⁾	mm	1050	3500
Milling railhead			
Ram stroke ⁽¹⁾	mm	1000	1600
Ram cross-section ⁽¹⁾	mm	350 × 350	425 × 425
Range of continuously variable feed rates of railhead (Y axis) and ram (Z axis)	mm/min	0.3 to 4000	
Machine tool overall dimensions and weight			
Machine tool overall dimensions:			
• Length	mm	10150	18150
• Width	mm	6120	9120
• Height	mm	6270	8770
Approximate weight of machine tool	×10 kN	60	170
Machine tool accuracies			
X – axis positioning accuracy M_{ar} (L=1000 mm)	mm	0.020	
Y – and Z – axis positioning accuracy M_{ar} (L=1000 mm)	mm	0.012	
X – axis positioning repeatability $RP_{Max.}$ (L=1000 mm)	mm	0.012	
Y – and Z – axis positioning repeatability $RP_{Max.}$ (L=1000 mm)	mm	0.008	
⁽¹⁾ – For standard execution of machine tool. Other parameters to be agreed upon.			

Some of the above data can be altered to meet the Customer requirements.
Above data are subject to change due to product development, without prior notice.