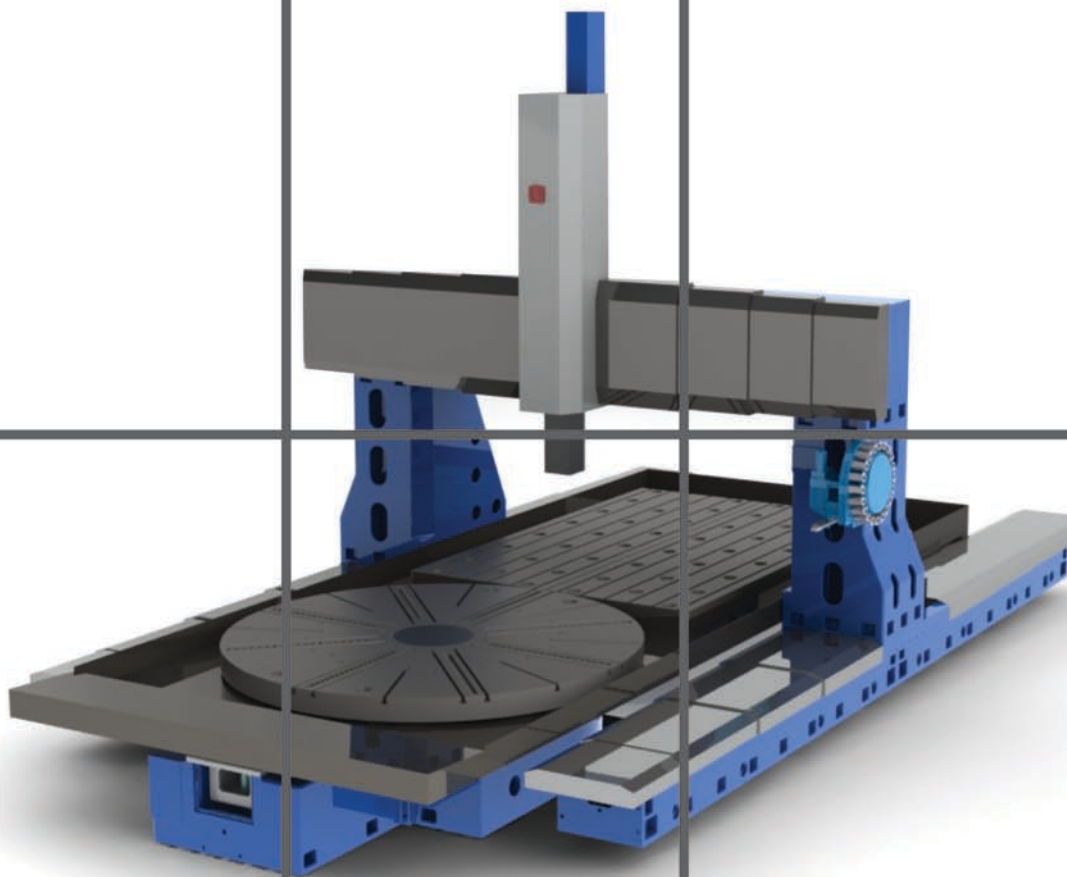


# GANTRY TYPE VERTICAL TURNING & MACHINING CENTRE 1200 / 5000



**STRENGTH  
PRECISION  
RELIABILITY**

## GANTRY TYPE VERTICAL TURNING AND MACHINING CENTRE - GTMC 1200

This machine is designed as a Double Column Vertical Turn Mill Centre with Columns moving across in Gantry formation as Y axis, thus combining a Vertical Machining Centre with a Turning Centre.

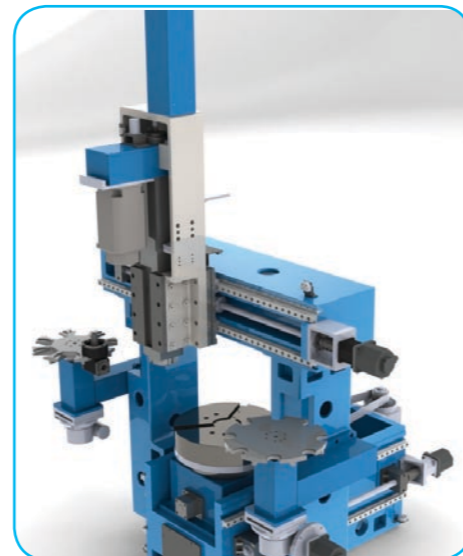
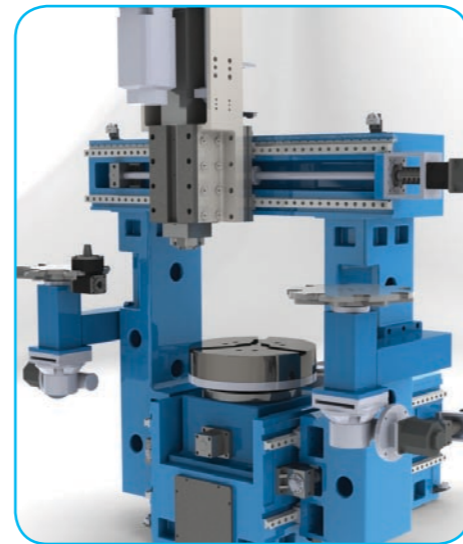
The base is fitted with a rotating chuck, driven through a gear box for holding the component.

The chuck can be manually operated or hydraulically operated as required.

The gantry movement, the Cross and Vertical movement of the RAM are all controlled by CNC to cover the entire area of the swing available, using the chuck as the table. This unique design allows machining of the component in turning mode and in milling mode to completely machine the component in one setup. The usage of the machine is further enhanced by using angular milling heads for machining all the 5 faces of the component. The machine is offered with two ATC's of 8 tool magazine on either side one for turning tools angular milling head and the other for exclusively rotating tools. The table can be indexed and locked in position for machining centre operation.

### SPECIFICATION

Distance between Columns	1400 mm
Dia of table / chuck	1000 mm
Working area available	1200 X 1200
Distance from RAM face to table	700 mm
RAM size	200 X 200 mm
RAM travel Z axis	550 mm
Cross slide travel X axis	1200 mm
Gantry travel Y axis	1200 mm
Spindle nose in RAM	BT 50
Spindle power cont / 30 mts	12 / 16 KW
Spindle speed	50 – 1500 RPM
Table speed	50 – 360 RPM
Power of table motor	22 KW
Feed rate of X,Y & Z axis	1 -5000 mm / min
Rapid traverse of X , Y axes	10,000 mm / min
Rapid traverse of Z axis	7500 mm / min
Speed ratio of angular milling head	1 : 1
Maximum RPM	1500
CNC System	Fanuc Oi TD
Resolution of 'C' Axis	5° X 72 Positions
Positioning accuracy	±0.002 mm / mtr
Repeatability	± 0.01 mm
Total weight of the Machine	15 Tons



## GANTRY TYPE VERTICAL TURNING AND MACHINING CENTRE - GTMC 5000

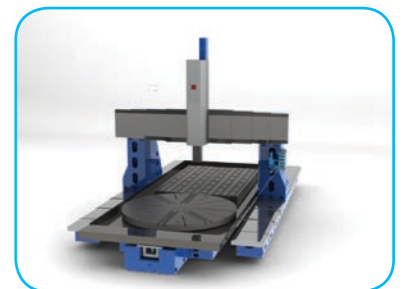
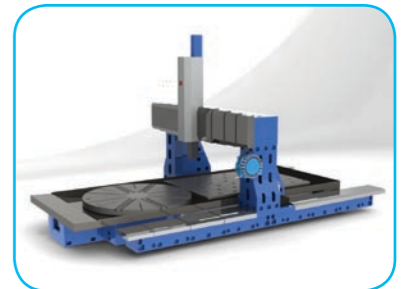
This machine is designed for performing Turning, Milling, Drilling, Contour Machining, Tapping, Thread cutting and coordinating drilling operations on large components weighing up to 60 tons.

The basic machine concept is a Vertical Turning Machine with a rotary table of 4500 mm diameter with Moving Column on Two separate beds for a length of 10,500 mm. This covers 4500 mm on the Rotary table and 6000 mm on floor plates. The Gantry has a Fixed Cross Rail equipped with Vertical Ram Slide and a Heavy Duty RAM of 340 mm square section. The RAM has an in built Spindle of 32 KW Power for Drilling, Milling and other operations. The RAM also accepts turning tools for turning with Rotary table. The Column moving design permits higher swing diameter than the Rotary table for machining ring type components up to 10,000 mm dia. The RAM head also is fitted with an Angular Milling Head, which can be indexed to 4 X 90 ° position for performing machining of 5 faces of a component.

The machine is fitted with two Auto Tool Changer magazines - one for 6 Nos Turning tools and the other for 20 Nos Drilling and Milling tools with a measuring probe and Software.

### SPECIFICATION

Distance between Columns	5000 mm
Area of Floor Plates	4500 X 5600 mm
Maximum height under cross rail from table	2050 mm
Travel of Gantry X , X1 Axis	10500 mm
Travel of RAM head Y Axis	5600 mm
Travel of RAM Z Axis	1600 mm
Diameter of Rotary Table	4500 mm
Speed of Rotary Table	1 - 48 RPM
Power of Rotary Table cont / 30 min	55 KW / 81 W
Power of milling spindle	32 KW
Spindle nose	BT 50
Spindle speed	50 – 2000 RPM
Tool clamping force	2500 Kg
No of Tools in turning ATC	6 Nos
No of Tools in milling ATC	20,30
Torque of Axis motors	48 NM
CNC System	Siemens 840 D
Direct encoder on Rotary table – C- Axis	36000 PPR
Resolution of C Axis	0.001
Positioning of accuracy	± 0.02 mm / mtr
Repeatability	± 0.01 mm
Total power required	130 KVA
Total weight of the machine including the floor plates	150 Tons





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