

# GMC Series

## GANTRY MILLING MACHINES



### **i** BASIC TECHNICAL SPECIFICATIONS

Max. working space of frame:	7,000 × 7,000 mm
Max. power of main drive:	110 kW
Max. ram cross-section	600 × 600 mm
Max. ram travel	4,000 mm
CNC axes:	Up to five (5)

 **PURPOSE**

The **GMC Series CNC Gantry** Milling Machines are designed for machining of the complex workpieces.

The GMC Series machines are capable of the following:

- 3D milling
- Drilling
- Reaming
- Boring
- Threading, envelope threading (helical motion) in all machining planes, i.e. XY, YZ, XZ
- Turning - option with rotary table

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 releasing, as well as cooperating with tool magazine (optional).

 **MAIN FEATURES**

- Gantry-type with fixed or movable cross-rail (CNC "W" axis)
- Two parallel runways with fixed table plate provided with 2-plane geometry adjustment system
- Gantry consisting of cast iron cross-rail and two columns
- Vertical milling railhead consisting of cast iron body and steel ram
- All movable assembly units travel along precise rolling or hydrostatic guideways


**TECHNICAL SPECIFICATIONS**

MODEL: Code:		GMC 320 CNC G-1	GMC 400 CNC G-2
<b>Table</b>			
Surface of table for workpiece clamping (width × length) <sup>(1)</sup>	mm	2,500 × 8,000	3,200 × 8,000
Length of runway guideways <sup>(1)</sup>	mm		11,400
Maximum load of table	× 10 kN/m <sup>2</sup>		8
<b>Gantry (movable)</b>			
Gantry travel (X axis) <sup>(1)</sup>	mm		9,000
Clearance between columns (Y axis) <sup>(1)</sup>	mm	3,200	4,000
Maximum distance between spindle face and table (Z axis) <sup>(1)</sup>	mm		2,500
Range of continuously variable feed rates of Gantry (X axis)	mm/min		1 - 1,500
Gantry rapid travel (X axis)	mm/min		8,000
<b>Milling railhead</b>			
Ram travel <sup>(1)</sup>	mm		1,500
Ram cross-section <sup>(1)</sup>	mm		450 × 450
<b>Machine tool overall dimensions and weight <sup>(1)</sup></b>			
Length	mm		19,000
Width	mm	10,500	11,450
Height	mm		6,750
Weight	× 10 kN	115	130
<b>Machine tool accuracies</b>			
X - axis positioning accuracy $M_{ar}$ (L = 1,000 mm)	mm		0.020
Y - and Z-axes positioning accuracy $M_{ar}$ (L = 1,000 mm)	mm		0.012
X - axis positioning repeatability $RP_{max}$ (L = 1,000 mm)	mm		0.012
Y - and Z-axes positioning repeatability $RP_{max}$ (L = 1,000 mm)	mm		0.008
<small>(1) For standard execution of machine tool. Other parameters to be agreed upon.</small>			

Some of the above data can be altered to meet the customer requirements.  
Above data is subject to changes due to product development, without prior notice.