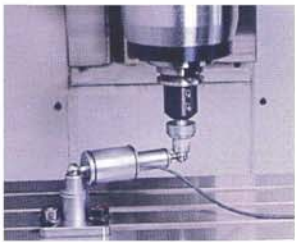


**PHOENIX**

**LG SERIES (Linear Guide Ways)**

# **VERTICAL MACHINING CENTER**

*LG Series Linear Guideways machines are designed especially for job shops and tool rooms. The wide range of product lineup is capable of handling your sudden job requirements.*



**FMC-510LG**

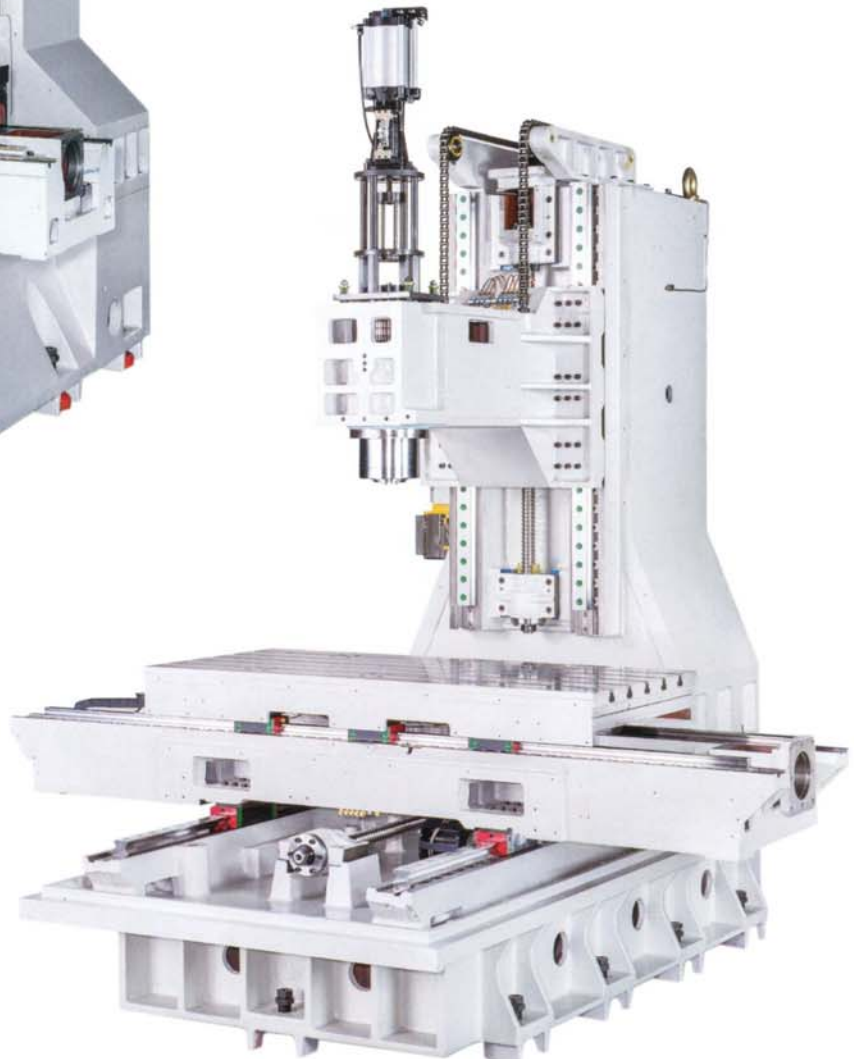
## *Roller type linear guide ways*

*The Linear Motion Guideways feature low friction and free from stick-and-slip problems. Such the characteristics are especially suitable for high speed 3D cutting and finishing. The quality of workpiece surface is increased ; the need of manual polishing of workpiece surface is reduced.*



### **FMC-610LG**

Machine frame construction



### **FMC-1200LG**

Machine frame construction

## SPECIFICATIONS

MODEL	FMC-510LG	FMC-610LG	FMC-850LG	FMC-1000LG
<b>TABLE</b>				
Working surface	600 x 320mm (23-5/8"x12-9/16")	800 x 450mm (31-1/2"x17-11/16")	1000 x 500mm (39-3/8"x19-11/16")	1200 x 500mm (47-3/16"x19-11/16")
T-slots (size x number x pitch)	14mmx3x100mm (0.551" x 3 x 3.937")	18mmx3x100mm (0.708" x 3 x 3.937")	18mmx5x100mm (0.708" x 5 x 3.937")	
Max. table load	300 kgs (661 lbs)	400 kgs (882 lbs)	500 kgs (1102 lbs)	
<b>TRAVEL</b>				
Longitudinal travel (X axis)	510mm (20")	610mm (24")	850mm (33-7/16")	1020mm (40-1/8")
Cross travel (Y axis)	410mm(16-1/8")	460mm(18-1/8")	510mm(20")	
Vertical travel (Z axis)	460mm(18-1/8")	510mm(20")	560mm(22")	
Distance from spindle end to table	130~590mm (5-1/8"~23-3/16")	120~630mm (4-3/4"~24-13/16")	150~710mm (5-7/8"~27-15/16")	
Distance from spindle center to column	430mm (16-7/8")	553mm (21-3/4")	608mm (23-15/16")	
<b>SPINDLE</b>				
Spindle nose taper	BT40 (or CAT40 / DIN40, opt.)			
Spindle speeds	8000 r.p.m. (or 10000 ~ 24000 r.p.m.,opt.)		8000 r.p.m. (or 10000 ~ 15000 r.p.m.,opt.)	
Transmission	belt		belt	
<b>FEED</b>				
Cutting feed rate (X, Y, Z axes)	1~10000 mm/min. (max.)			
Rapid traverse (X, Y axes)	36 m/min. (max.)			
Rapid traverse (Z axis)	36 m/min. (max.)			
<b>ATC</b>				
Tool storage capacity	12 pcs (carrousel) (or 20pcs (carrousel / arm), opt.)	16 pcs(carrousel) (or 20pcs(carrousel) / 24 pcs(arm),opt.)		
Max. tool weight	6 kgs (13.22 lbs)			
Max. tool size (dia. x length)	100mmx300mm (3-15/16"x11-13/16")			
Tool selection	Random			
Tool shank	BT-40			
Pull stud bolt	MAS-P40T-1			
<b>MOTOR</b>				
Spindle motor (AC servo)	3.7 / 5.5KW	5.5 / 7.5KW		
X, Y, Z axes motor (AC servo)	1.5KW	2 KW		
Coolant pump motor	3/4HP			
<b>DIMENSION</b>				
Machine size	2000x2305x2460mm (78 <sup>3</sup> / <sub>4</sub> "x90 <sup>3</sup> / <sub>4</sub> "x96 <sup>3</sup> / <sub>8</sub> ")	2160x2435x2550mm (85"x95-7/8"x100 <sup>3</sup> / <sub>8</sub> ")	2900x2420x2850mm (114 <sup>3</sup> / <sub>16</sub> "x95 <sup>1</sup> / <sub>4</sub> "x112 <sup>3</sup> / <sub>16</sub> "")	2900x2420x2850mm (114 <sup>3</sup> / <sub>16</sub> "x95 <sup>1</sup> / <sub>4</sub> "x112 <sup>3</sup> / <sub>16</sub> "")
Machine weight	2800 kgs (6173 lbs)	3800 kgs (8377 lbs)	5000 kgs (11023 lbs)	5200 kgs (11463 lbs)

- The manufacturer reserves the right to modify the design, specifications, mechanisms...etc. to improve the performance of the machine without prior notice. All the specifications shown above are just for reference.

## OPTIONAL ACCESSORIES /EQUIPMENTS

- Spindle cooling device
- 10000~24000 r.p.m. spindle speed w/ spindle cooling device
- Bigger horse power spindle motor
- Carrousel type 20 tools ATC
- Arm type 24 tools ATC
- Auger style chip conveyer
- Steel belt chip conveyer
- High pressure water scour for chip removal
- Coolant through spindle
- Air conditioner for electrical cabinet
- CNC Rotary table (the 4th axis control)
- CNC Tilting rotary table (the 4th / 5th axis control)

**\*The machines could be supplied without controller and servo motor/drives as OEM FRAME.**

## SPECIFICATIONS

MODEL	FMC-1200LG	FMC-1300LG	FMC-1600LG
<b>TABLE</b>			
Working surface	1300 x 600mm (51-3/16"x23-5/8")	1450 x 700mm (57" x 27-9/16")	1750 x 700mm (68-7/8" x 27-9/16")
T-slots (size x number x pitch)	18mm x 5 x 100mm (0.708" x 5 x 3.937")	18mm x 5 x 125mm (0.708" x 5 x 4.921")	
Max. table load	1000kgs (2205 lbs)	1200kgs (2646 lbs)	
<b>TRAVEL</b>			
Longitudinal travel (X axis)	1200mm (47-1/4")	1300mm (51-3/16")	1600mm (63")
Cross travel (Y axis)	610mm (24")	700mm (27-9/16")	
Vertical travel (Z axis)	610mm (24")	700mm (27-9/16")	
Distance from spindle end to table	150~760mm(5-7/8"~29-7/8")	BT40 : 130~830mm(5-1/8"~32-11/16") BT50 : 100~800mm(3-15/16"~31-1/2") (opt.)	
Distance from spindle center to column	717mm (28-3/16")	770mm (30-5/16")	
<b>SPINDLE</b>			
Spindle nose taper	BT40 (or CAT40 / DIN40, opt.)	BT40 (or CAT40 / DIN40 ; BT50 / CAT50 / DIN50, opt.)	
Spindle speeds	8000 r.p.m. (or 10000~15000 r.p.m., opt.)	8000 r.p.m. (for BT40) (or 6000 r.p.m. , for BT50, opt.)	
Transmission	belt	belt	
<b>FEED</b>			
Cutting feed rate (X, Y, Z axes)	1~10000 mm/min. (max.)		
Rapid traverse (X, Y axes)	36 m/min. (max.)	30 m/min. (max.)	
Rapid traverse (Z axis)	36 m/min. (max.)	24 m/min. (max.)	
<b>ATC</b>			
Tool storage capacity	20 pcs (carrousel) (or 24pcs (arm), opt.)		
Max. tool weight	6 kgs (13.23 lbs)	6 kgs (13.23 lbs) , for BT40 (or 15 kgs (33.07 lbs) , for BT50, opt.)	
Max. tool size (dia. x length)	100mm x 300mm (3-15/16" x 11-13/16")	100mmx300mm (3-15/16" x11-13/16"), for BT40 (or 125mmx300mm(4-15/16"x11-13/16"), for BT50, opt.)	
Tool selection	Random		
Tool shank	BT-40	BT-40 (or BT50, opt.)	
Pull stud bolt	MAS-P40T-1	MAS-P40T-1 (or MAS-P50T-1, for BT50 , opt.)	
<b>MOTOR</b>			
Spindle motor (AC servo)	7.5 / 11 KW		
X, Y, Z axes motor (AC servo)	3 KW	3.5 KW	
Coolant pump motor	3/4HP		
<b>DIMENSION</b>			
Machine size	3450x2805x2950 mm (135 <sup>13</sup> / <sub>16</sub> " x 110 <sup>7</sup> / <sub>16</sub> " x 116 <sup>1</sup> / <sub>16</sub> "	3650x2915x3050 mm (126" x 114 <sup>3</sup> / <sub>4</sub> " x 120 <sup>1</sup> / <sub>16</sub> "	4370x2915x3050 mm (172" x 114 <sup>3</sup> / <sub>4</sub> " x 120 <sup>1</sup> / <sub>16</sub> "
Machine weight	6800kgs (13767 lbs)	8350kgs (18408 lbs)	10000kgs (22046 lbs)

• The manufacturer reserves the right to modify the design, specifications, mechanisms...etc. to improve the performance of the machine without prior notice. All the specifications shown above are just for reference.

## STANDARD ACCESSORIES / EQUIPMENTS

- Tool box w/tools
- Leveling screws w/ blocks
- Coolant spraying device
- Centralized auto lubrication device
- Automatic tool changer equipment
- Heat exchanger for electrical box
- Full enclosure guard
- Work lamp
- Telescopic sheet metal way covers on 3 axes
- Heavy duty type linear guide ways on X, Y and Z axes
- C3 Double nut precision ball screws
- Net work interface
- Auto power off circuit
- End of program light

**\*The machines could be supplied without controller and servo motor/drives as OEM FRAME.**



**TOP PHOENIX**  
**INTERNATIONAL CORP.**  
Machinery Exporter & Importer

No. 48-3, Wayao Rd., Dali Dist.,  
Taichung City 412, Taiwan  
E-Mail: sales@topphoenix.com.tw ; topphoenix24@gmail.com;  
top.phoenix@msa.hinet.net  
http://www.topphoenix.com.tw  
Tel:886-4-2406-5028(Rep.) Fax:886-4-2406-5019