

CNC Router Systems



CNC Router System
(Gantry table only)



Turnkey CNC Router System
(Machine stand included; optional spindle shown above)

CATALOG NUMBER

HX□3□BM201□□□□05

- 3 CNC Router
4 Turnkey CNC Router

Motor Drive

- V Servo Motor
S Stepper Motor

*Gantry Clearance

- 2 200 mm (175 mm Z travel)
3 300 mm (275 mm Z travel)
5 500 mm (475 mm Z travel)

Model	Table Size mm (in)	Travel (X – Y) mm (in)
015	600 x 500 (23.6 x 19.6)	350 x 290 (13.7 x 11.4)
027	850 x 750 (33.4 x 29.5)	500 x 540 (19.6 x 21.2)
040	1100 x 750 (43.3 x 29.5)	750 x 540 (29.5 x 21.2)
054	1350 x 750 (53.1 x 29.5)	1000 x 540 (39.3 x 21.2)
067	1350 x 1000 (53.1 x 39.3)	850 x 790 (33.4 x 31.1)
130	1750 x 1250 (68.8 x 49.2)	1250 x 1040 (49.2 x 40.9)

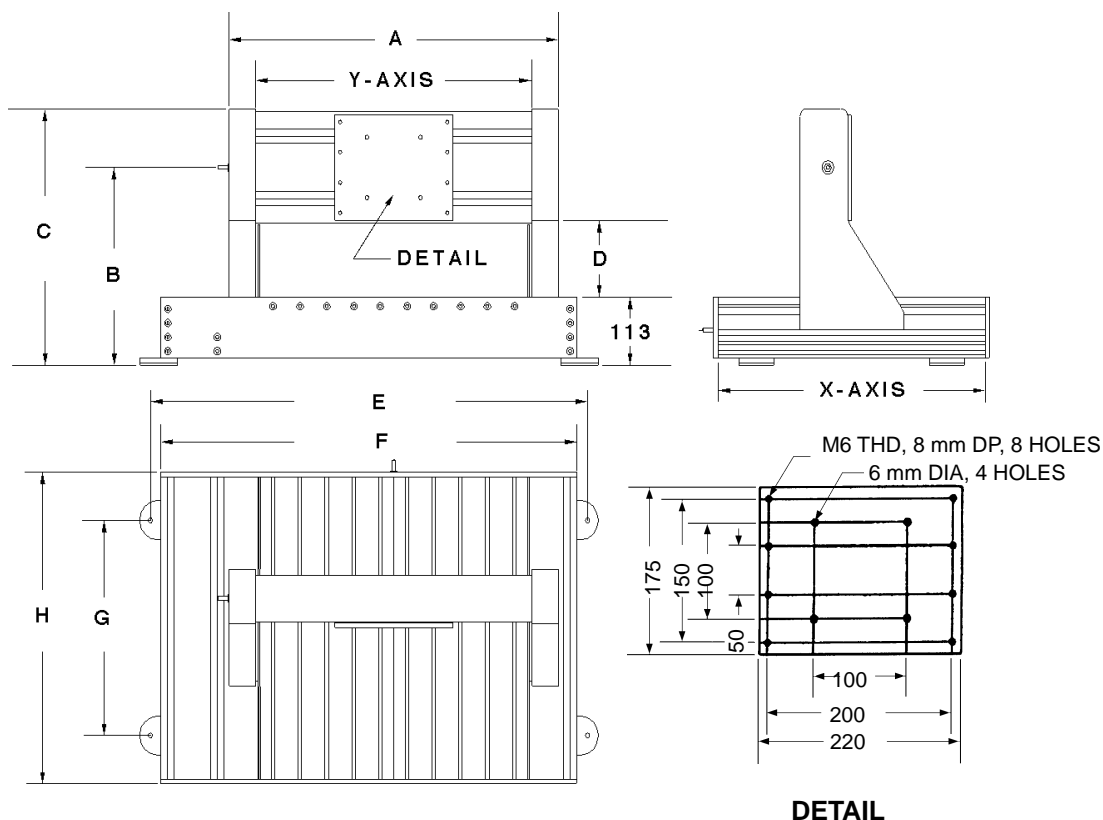
* Gantry clearance on Model **015** is 122.5 mm (80 mm Z travel).

Machines with vacuum table, deduct 36 mm from Gantry clearance (see page 110).

FEATURES

- Moving gantry provides large stationary work surface
- All axes provided with home reference switch and far end limit switch with ± 0.01 mm repeatability
- Y & Z axes are provided with aluminum dust cover and Teflon lip seals to provide protection against contaminants
- X axis bearings and drive screw are mounted beneath the work surface to protect them from dust and debris
- 2 patented double linear rails and 4 patented double-bearing blocks on each axis
- Models 015, 027, 040, 054 & 067 feature 125 oz-in stepper motors on X & Y axes
- Model 130 features 150 oz-in stepper motor on X axis, and 125 oz-in stepper motor on Y axis
- All models feature 150 oz-in stepper motor on Z axis (model 015 features 125 oz-in motor)
- All models with servo motor option feature 1000-line, line driver optical rotary encoder on all axes
- Standard anti-backlash ball screw and nut, 16 mm diameter with 5 mm pitch
- Heavy cast-aluminum side plates support the Y axis and provide increased stiffness for cutting and positioning applications
- Standard clearance under the gantry is 200 mm (optional gantry clearance heights of 300 mm and 500 mm available)
- Work surface constructed of flat milled 30 x 250 mm aluminum table plates
- Z axis features magnetic brake to maintain position when power to motor is interrupted.
- T-slots provided for work-holding tools
- System includes all the necessary electronics and cables to interface to an IBM compatible PC
- Turnkey CNC router systems include steel machine base, cable-carrier system, Touch & Go kit with joystick and tool-calibration pad and work-holding bars and clamps





Model	Travel mm		A mm	B mm	C mm	D* mm	E mm	F mm	G mm	H mm
	X	Y								
015	350	290	620	328	425	125	869	824	456	610
027	500	540	870	393	490	190	1119	1074	685	850
040	750	540	870	393	490	190	1119	1074	935	1100
054	1000	540	870	393	490	190	1119	1074	1185	1350
067	850	790	1120	393	490	190	1224	1184	1185	1350
130	1250	1040	1370	393	490	190	1474	1434	1585	1750

* With vacuum table, deduct 36 mm from clearance.

SPECIFICATIONS

Repeatability	± .01 mm (± .0004 in)	
Positioning Accuracy	± .1 mm/300 mm (± .004 in/12 in)/axis	
Max. Z-Axis Load	22.7 kg (50 lb)	
Motor Drives	Stepper	Servo
No Load Speed	127 mm/sec (5 in/sec)	152 mm/sec (6 in/sec)
Thrust Force at Low Speed	91 kg (200 lb)	113 kg (250 lb)
Resolution	.0125 mm (.0005 in)	.0013 mm (.00005 in)

For the machine stand dimensions, please see page 117.