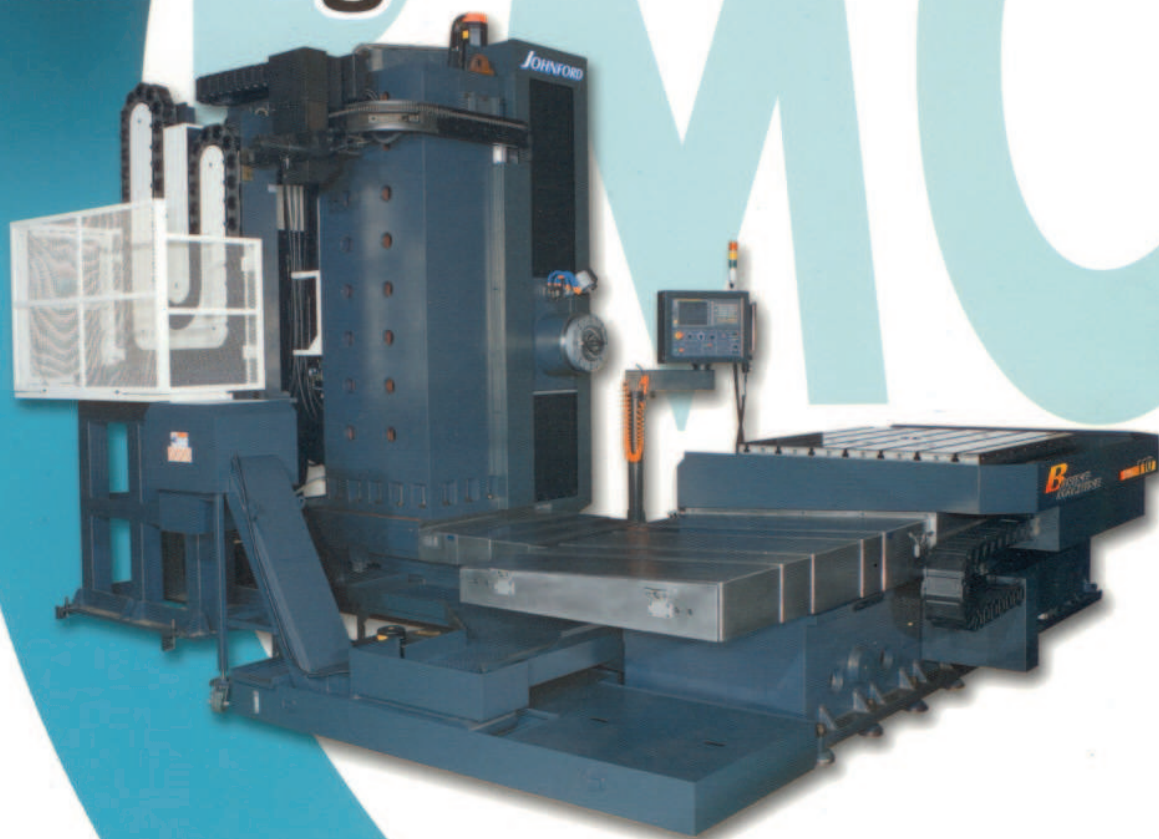




JOHN FORD

Horizontal Boring and Milling Centers

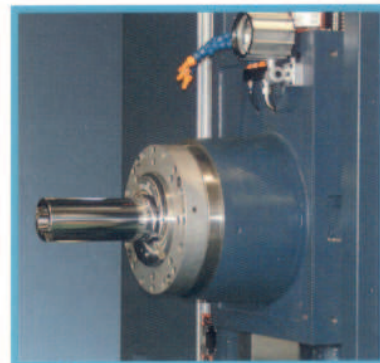


BMC-110 / 130

Horizontal Boring and Milling C

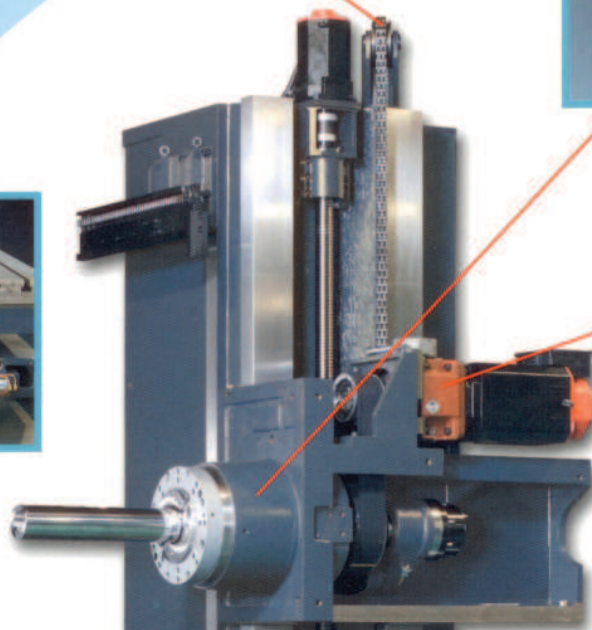
Hydraulic counterbalance

The BMC-110's hydraulic counterbalance ensures smooth Y-axis movement.



Powerful transmission

A 2-speed ZF transmission delivers outstanding torque and cutting performance.



Large table handles big, heavy parts

The BMC-110's large table provides a generous 55" x 63" working surface. Maximum workload on the table is an impressive 15,400 lb.



Linear scales ensure accurate positioning

Standard Heidenhain linear scales on all linear axes deliver high accuracy and form a closed-loop feedback control system. Large-diameter, pre-tensioned ballscrews and powerful servomotors further ensure positioning accuracy.



← Precision spindle ideal for heavy cutting

The BMC-110 features a 110 mm (4.33") quill made from wear-resistant chrome-moly steel alloy. Both spindle and sleeve are nitride hardened and then ground and lapped for high-precision performance. The spindle boasts the highest class of precision bearings for optimum accuracy and heavy-duty cutting performance. Maximum spindle speed is 3,000 RPM, and the spindle and headstock are liquid cooled to mitigate thermal growth.

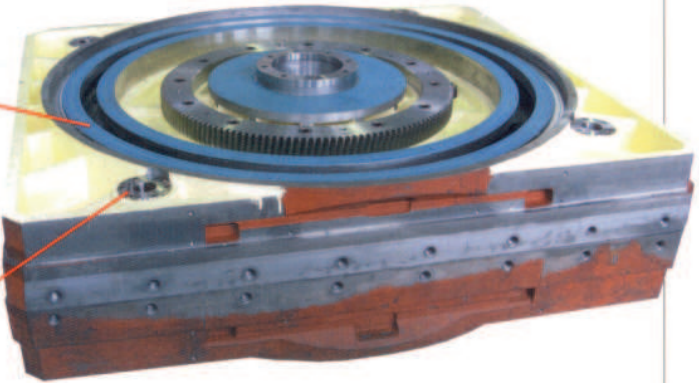
→ Fanuc Control

The Fanuc 21/M-B control is standard and is ideal for general machining applications. For high-speed mold/die, an optional Fanuc 18/M-B control is available.



Turcite-B is applied to all contact surfaces for easy table rotation and high load-carrying capacity.

Precision locating holes every 90° for heavy cutting.

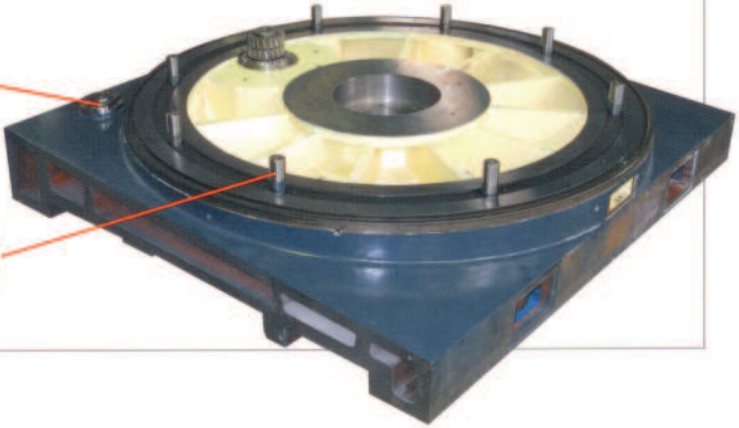


→ Flexible Indexing Table

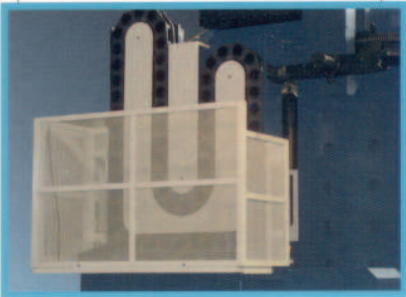
The BMC-110 features a B-axis rotary table for both heavy cutting and precision indexing with powerful clamping.

Precision locating pin

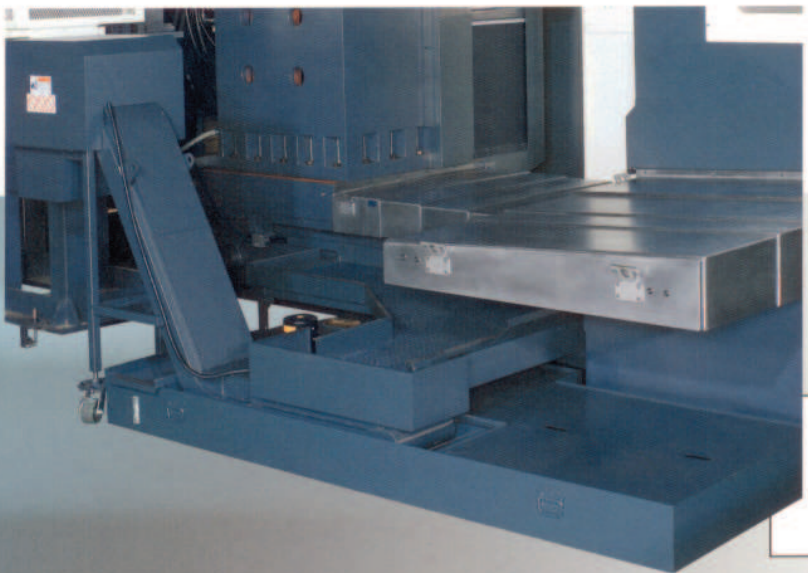
Eight hydraulically powered clamping pads for superior table rigidity at any position.



→ Tool Magazine / ATC



The BMC-110 has a heavy-duty arm-type ATC that is separated from the machine for easy maintenance. The ATC holds 60 tools as standard. Larger tool changers are also available.

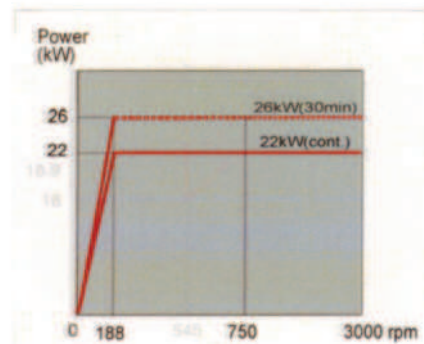
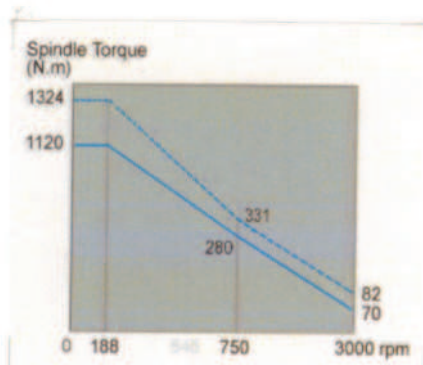


→ Standard Chip Removal System

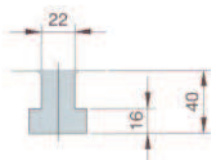
A screw-type conveyor between the table and column discharges into a caterpillar-type conveyor.

Technical Data

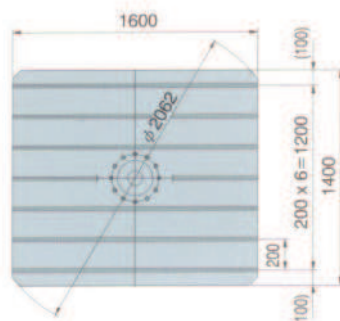
Spindle Power & Torque Chart



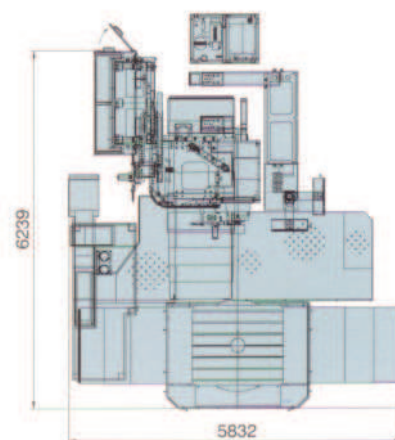
Dimensions



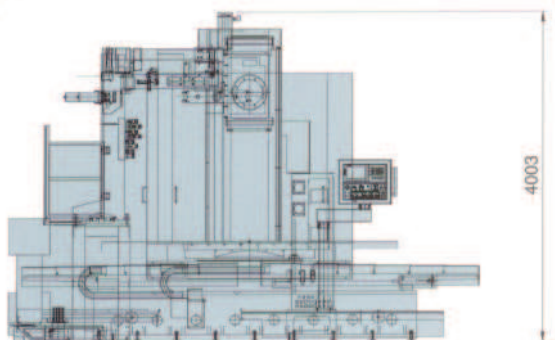
T-slot



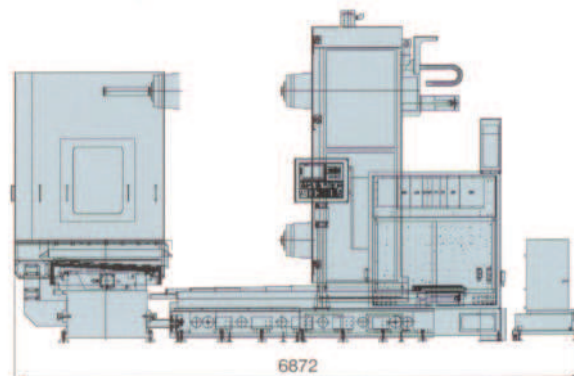
Table



Top View (floor space required)



Front View



Side View

Powerful — Rigid — Great Value

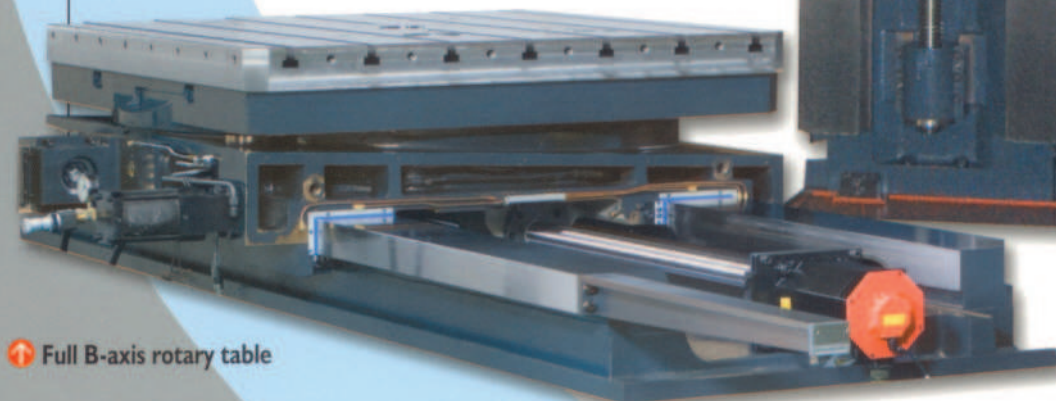
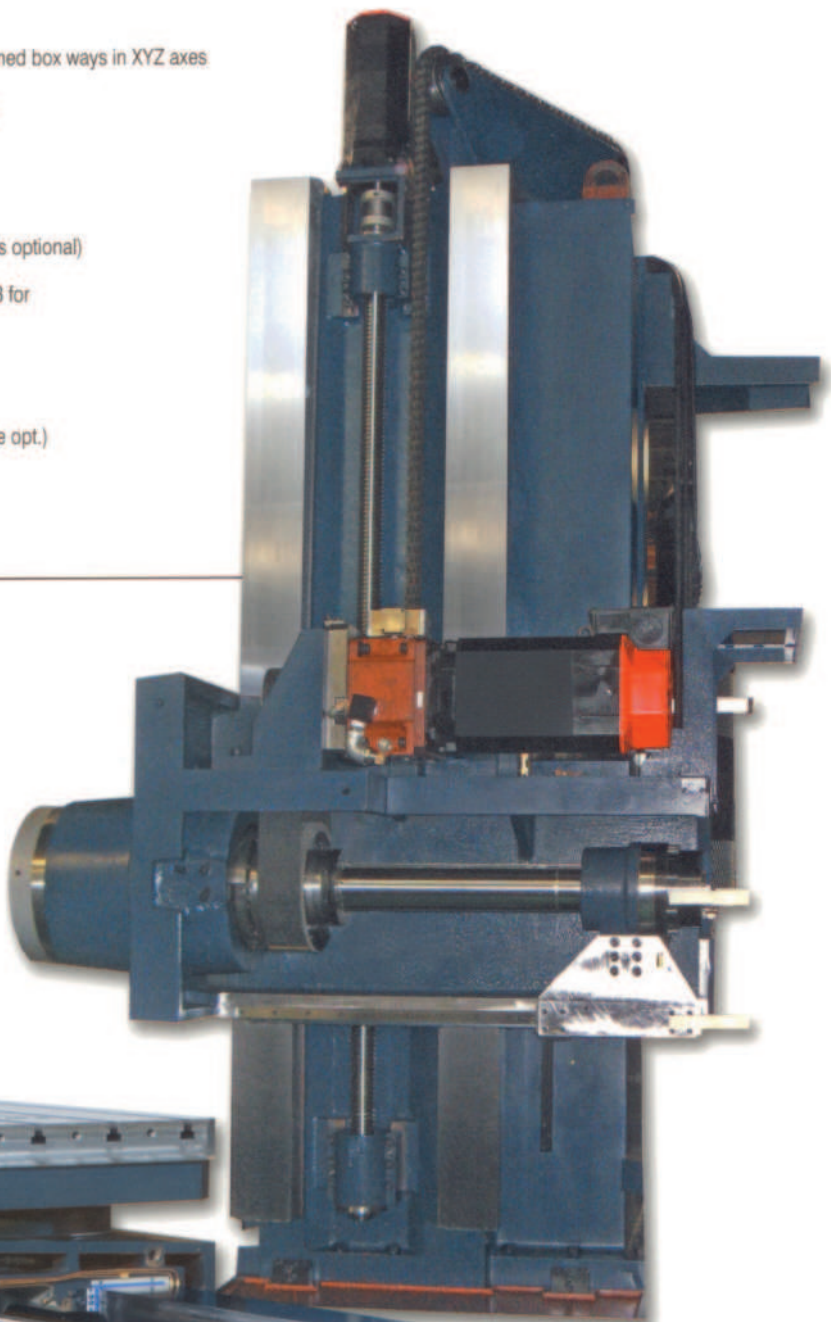
Johnford delivers the **NEW BMC-110**, the heaviest horizontal boring mill in its class. This 35 HP workhorse weighs in at a hefty 55,000 lb. of Meehanite cast iron. The BMC-110 delivers **outstanding rigidity and accuracy at a great price.**

You'll get excellent value with the BMC-110 horizontal boring mill, plus a load of **standard features** other builders charge as options:

- Precision ground and induction hardened box ways in XYZ axes
- Heidenhain linear scales on XYZ axes
- Full B-axis rotary table
- 300 PSI coolant-through spindle
- 60 tool arm-type ATC (80 and 120 tools optional)
- Fanuc 21/M-B control (optional 18/M-B for high-speed machining)
- Chip removal system
- Standard table guarding (full enclosure opt.)

➔ Moving column / rotary table design

Get more versatility from your horizontal boring mill! The BMC-110 features a moving column for the Z-axis and a moving table for the X-axis only. This design delivers superior rigidity, accuracy, and full support of the table over the complete X-axis travel.



➔ Full B-axis rotary table

➔ Moving column delivers Z-axis movement



Whatever You Need for Milling and Turning We Offer The Best.

Item	Model	BMC-110	BMC-130
Table Size (mm)		1400 x 1600 (55" x 63")	1800 x 1600 (70.9" x 63")
X Axis Travel (mm)		2000 (78.7")	3000 (118")
Y Axis Travel (mm)		1800 (70.8")	2300 (90.5")
Z Axis Travel (mm)		1600 (63")	
W Axis Travel (mm)		550 (21.7")	700 (27.5")
Spindle Nose to Table Center (mm)		550 ~ 2150 (21.7" ~ 84.7")	700 ~ 2300 (27.5" ~ 90.5")
Spindle Center to Table Top (mm)		0 ~ 1800 (0 ~ 70.9")	0 ~ 2300 (0 ~ 90.5")
Boring Spindle Diameter (mm)		φ 110 (4.3")	φ 130 (5.1")
Spindle Taper		No. 50	
Spindle Speed (rpm)		5 ~ 3000	0 ~ 2500
Spindle Speed Change Range		2	
X-Y-Z Cutting Feed (m/min)		6	
X-Y-Z Rapid traverse (m/min)		12	10
Table revolution (B Axis) (rpm)		4	1.4
ATC	Tool Magazine Capacity	60	
	Max. Tool Diameter	φ 125	
	Max. Tool Length (mm)	400 (15.7")	
	Max. Tool Weight (kg)	25 (55 lb)	
	Tool Selection	Bi-direction Random Type Shortest Path	
Dimensions	Spindle Motor (S6/S1) (kW)	22 / 26	30 / 37
	Length (mm)	6880 (207.9")	6950 (273.6")
	Width (mm)	5600 (220.5")	6900 (271.6")
Machine Weight (kg)	Height (mm)	4020 (158.3")	5050 (198.8")
		27000 (59400 lb)	33000 (72600 lb)

Standard Accessories:

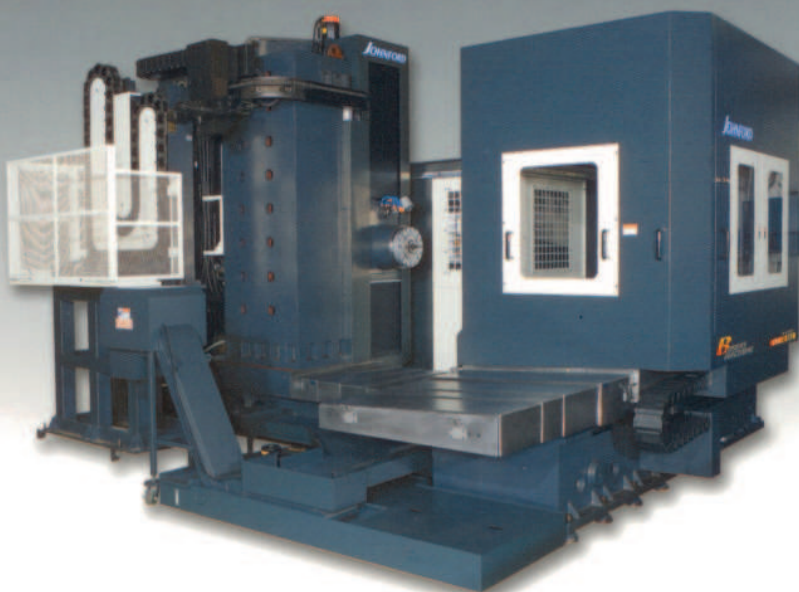
1. Coolant unit
2. Spindle air blast
3. Spindle and gear box cooler
4. 0.001 degree B-axis rotary table (Precision locating holes at every 90°)
5. Operation box
6. Heat exchanger
7. Chip conveyor & chip bucket
8. Lubrication with alarm
9. Cycle finish light (M30) / Working lamp
10. Rigid tapping
11. Hydraulic unit
12. Leveling bolts and pads
13. Fanuc (21/MB) controller

Optional Accessories:

1. Contact tool setting system
2. Workpiece measuring system
3. High-pressure coolant-through spindle (1000 PSI)
4. 90 / 120 / 180 tools ATC
5. Angle plates
6. Spindle extension sleeve
7. Angle milling head
8. Universal milling head
9. Facing head with telescopic tool holder
10. Linear scale
11. Coolant-through spindle (300PSI)

■ Specifications Subject To Change Without Prior Notice.

➔ Full Enclosure
(Opt.)



ROUNDTOP MACHINERY INDUSTRIES CO., LTD.

No. 1056, Zhongshan Rd., Shengang Shiang, Taichung County 429, Taiwan (R.O.C.)

Tel : 886-4-2562-4721

Fax: 886-4-2561-3886

http: //www.johnford.com.tw

E-mail: johnford@johnford.com.tw