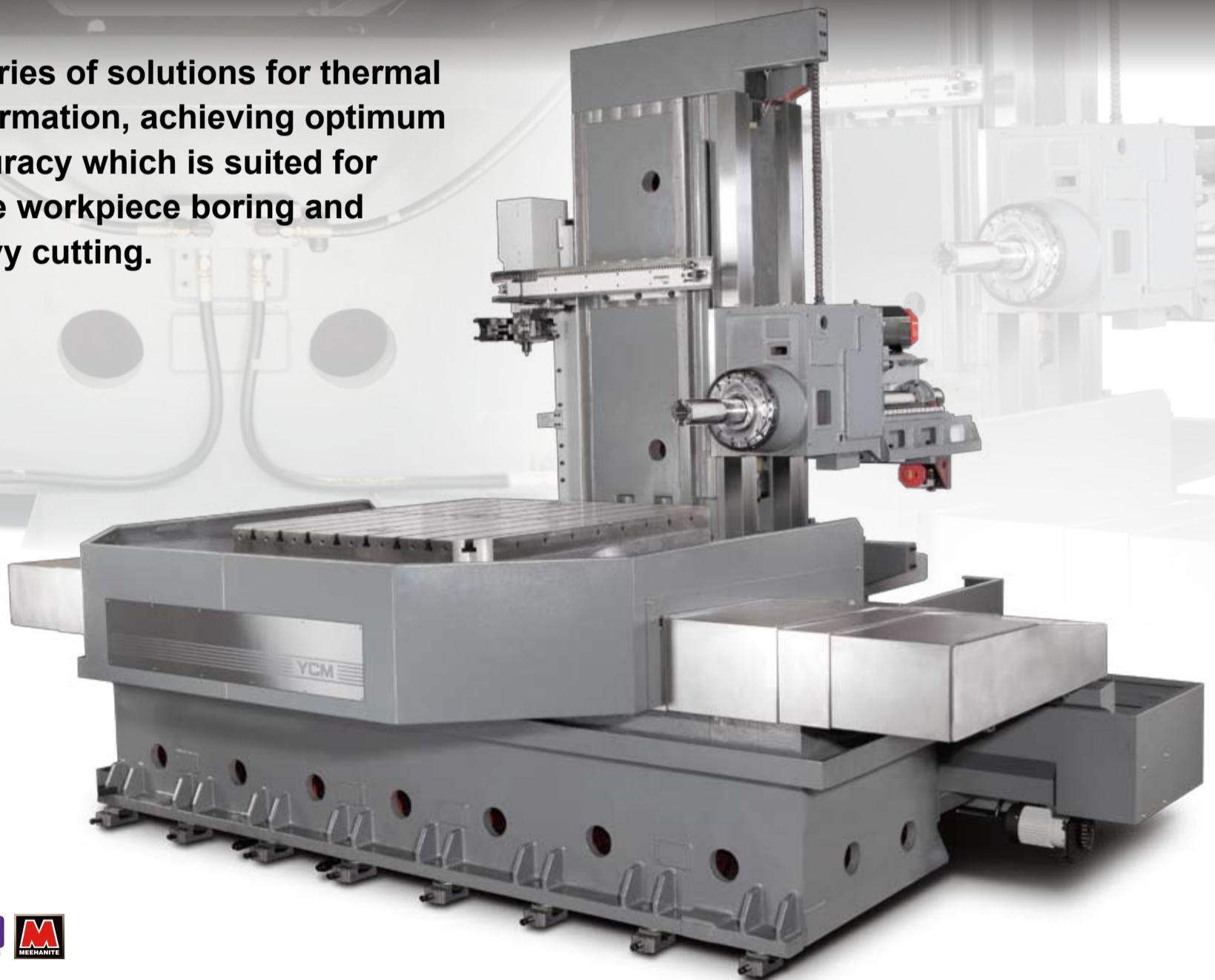


High Accuracy Heavy Duty Boring Machine

BMP1416B

A series of solutions for thermal deformation, achieving optimum accuracy which is suited for large workpiece boring and heavy cutting.



Max. Spindle Power	22kW 30HP
Spindle Speed	2,500rpm
X/Y/Z-axis Travel	2,000mm/1,500mm/1,500mm 78.7" x 59.1" x 59.1"
W-axis Travel	500mm 19.7"
Distance Between Table Center to Spindle Nose (W-axis = 500)	600~2,100mm (100~1,600mm) 23.6"~82.7" (3.9"~63")
Distance Between Spindle Center to Table Top	0~1,500mm 0~59"
The Height from Table Top to Floor	1,400mm 55.1"
Table Size	1,400 x 1,600mm 55" x 63"

Max. Load on Table	7,000kg 15,432 lb
No. T-slots x Size x Pitch	9 x 22mm x 160mm 9 x 0.86" x 6.3"
Table Index	45° (0.001°)
Spindle Taper	BBT50
Tool Magazine Capacity	60T
Max. Tool Weight	35kg 77 lb
Max. Tool Dimensions	ø125 x 500mm 4.9" x 19.7"
Max. Workpiece Diameter	ø2,400mm ø94.5"
The Height from Table Top to Floor	1,400mm 55.1"
Machine Weight	30,000kg 66,138 lb

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

■ High Rigidity Headstock

- YCM in-house 3-speed gearbox spindle provides max. 256kgf-m 1,852 lb-ft torque, 22kW 30HP power.
- The 130mm 5.12" spindle diameter with 500mm 19.7" W-axis travel is suitable for deep hole machining.
- NN roller type bearing, angular contact bearings and oil-air lubrication system efficiently reduce heat.
- Air-packing design avoids the slant problem generated from heavy loading condition.
- Made of alloy steel reinforced through nitrogen treatment.

■ High Accuracy High Rigidity Axial Designs

- Box guideway design on X/Y-axis enhances rigidity. Air-packing design strongly supports the table and reduce the motor loading.
- SKC3 pad achieves excellent damping capacity.
- Z-axis adopts low waving linear guideway with long block to provide low friction.
- Direct drive motor design on X/Y/Z-axis achieves 12m/min. 473ipm rapid feedrate.

■ Patent Air Pocket Rotary Table Design

- Made by sophisticated hand-made scraper work skill.
- The rotary table allows 360° positioning. Every 45° has a pin to ensure the best accuracy. The positioning can be reached to ± 1.5 sec.
- Even the table is under 7,000kg 15,432lb, the max. load, the axial motor loading can be greatly reduced.

■ A Complete Solution for Thermal Deformation

- Effective heat isolation by chip guard.
- Casting cooling circuit control ensures the machining accuracy and reliability even in an unstable environment.
- Circular cooling system on motor seats, bearings, and ball screw nuts.
- A heat pipe in the ball screw makes the cooling process more effective.
- The patent air pocket design on X-axis & the rotary table, hydraulic counter weight design on Y-axis and linear guideway design on Z-axis greatly reduce the motor loading.
- YCM self-developed ITC (Intelligent Thermal Compensation) system achieves automatic thermal deformation controlled ability.

