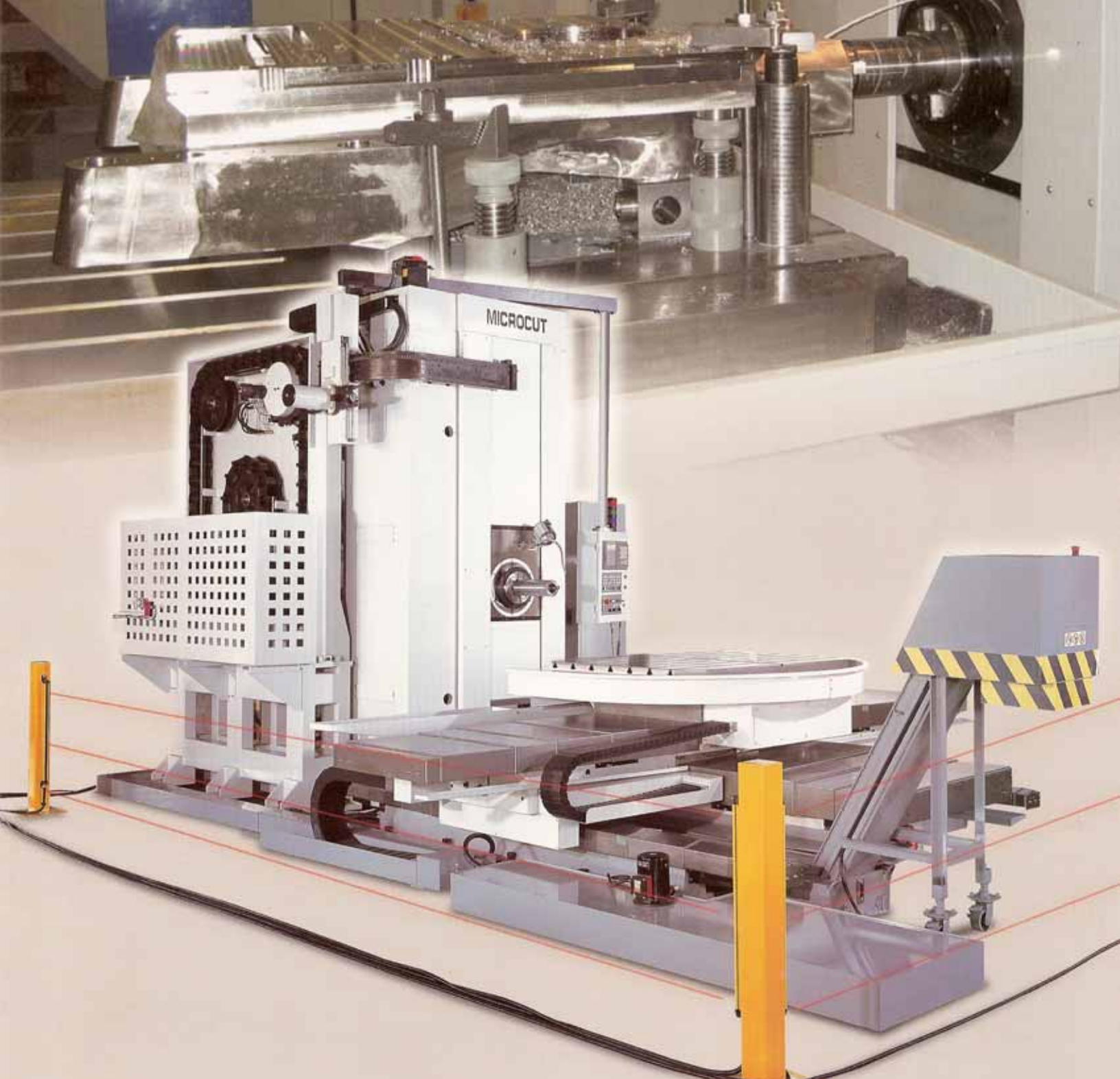




MODERN

Microcut

CNC Horizontal Boring Mill HBM-4

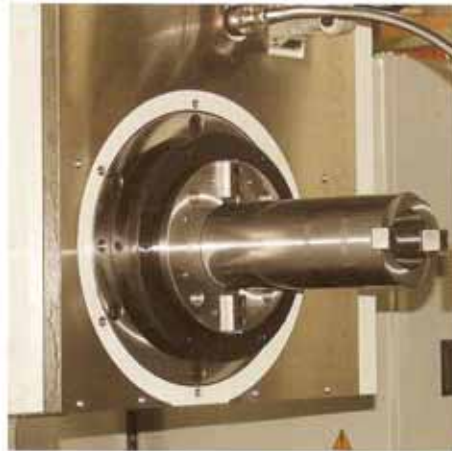


CNC Horizontal



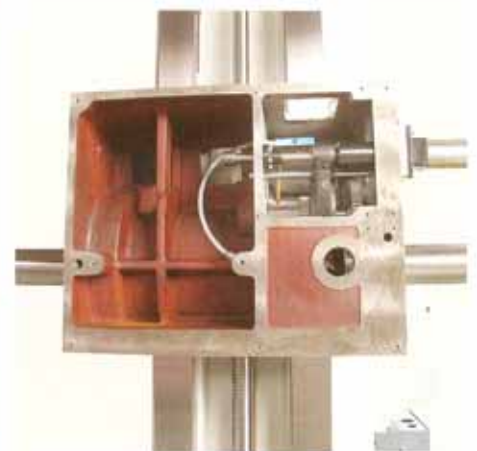
ROTARY TABLE

- Large table capacity handles heavy work loads
- Precision ground gear and 3 piece clutch for index positioning provides high accuracy & long durability
- Hydraulic clamping system and 3 pieces clutch ensures superior rigidity for heavy cutting
- Multi-pitch worm gear transmission increases accuracy with minimal gearlash compensation
- Complete rotary table integration provides reliable easy operator and CNC interface



SPINDLE (ISO50)

- Spindle & sleeve are hardened & ground chrome plate steel which provides precise accuracy and cutting rigidity
- Precision fit duplex cylindrical roller bearings offer high accuracies and heavy cutting capacity
- 3000rpm ISO50 spindle
- Spindle quill diameter 110mm
- W axis travel 550mm



GEAR BOX

- Auto two step gearbox provides high torque throughout speed range
- Hardened and precision ground gears offers reliable operation with smooth transmission of torque
- CNC controlled automatic shift assembly for speed ranges
- Oil chiller maintains constant head temperature for added reliability and accuracy

Features of rotary table:

- 1500 x 1200mm working table
- T slot 22mm
- Index accuracy +-5 sec
- Mini index angle 1 degree (standard)
- Clamping torque 4500kg-m
- Hydraulic clamping system 35kg/cm²
- Loading weight 5000kgs
- Cutting torque 4000kg-m
- Total gear ratio 1/180
- Rotary plate: 11.1

- 18000 increments continuous Rotary Table available on request



Boring Mill HBM-4



ATC 60 TOOLS(OPT.)

- 60 pocket belt system
- 300mm tool length capacity
- Traveling arm type
- Rear access tool loading

BED

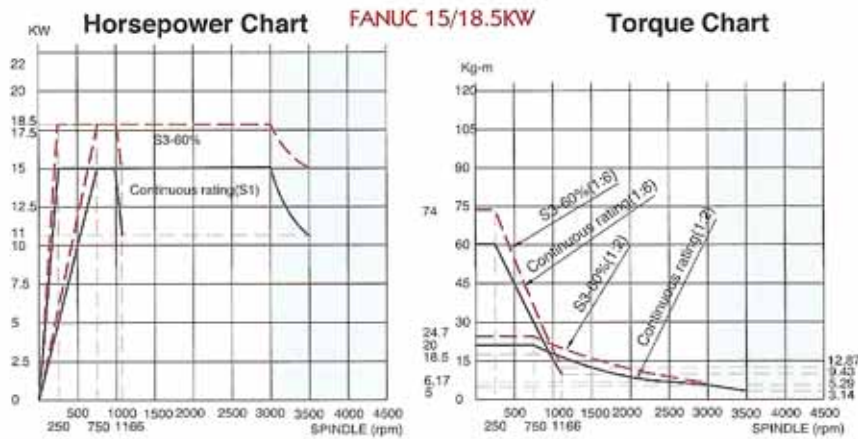
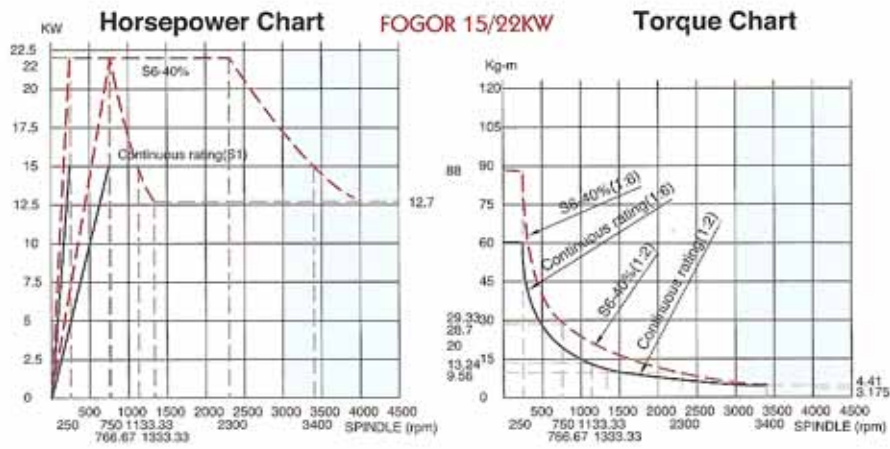
- Heavy duty box way construction
- All castings are stress relieved
- Way surfaces induction hardened and precision ground
- Z axis is comprised of 2 box ways plus 2 additional supporting ways
- Convenient chip control utilizes an auger mounted to the rear of the table and empties into a conveyor system for single point chip removal
- Operator station location allows easy access to spindle area for easy part set up

FEATURE:

- Hardened and ground box way construction for XYZ axis
- Precision ground C3 double nut ball screws
- Two way backlash compensation system with Hydraulic clamping of rotary table offers maximum accuracy and cutting performance
- Automatic pressurized lubrication system

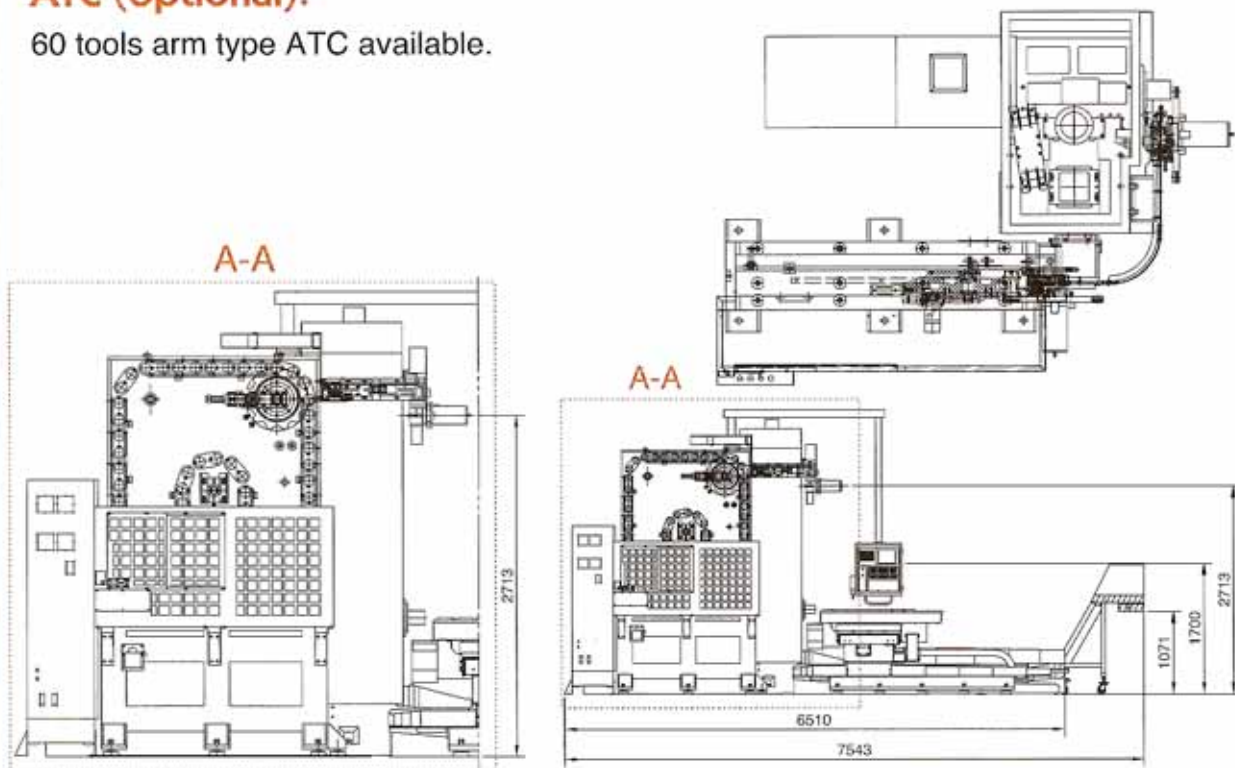


Power / Torque Chart



ATC (optional):

60 tools arm type ATC available.

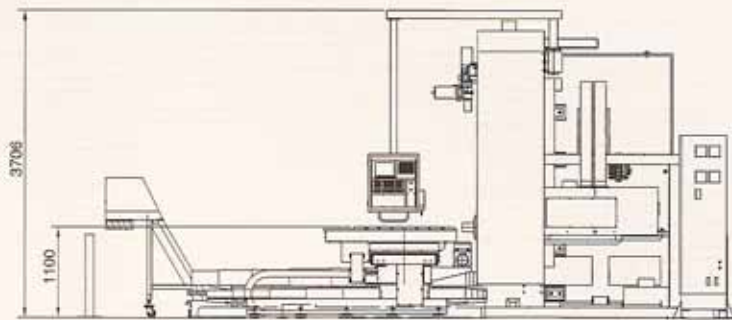
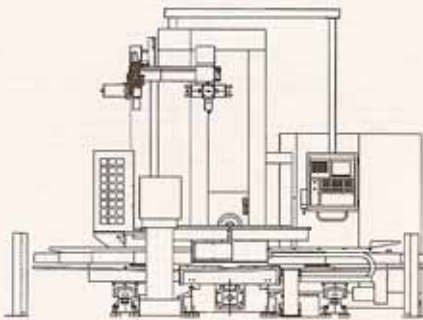
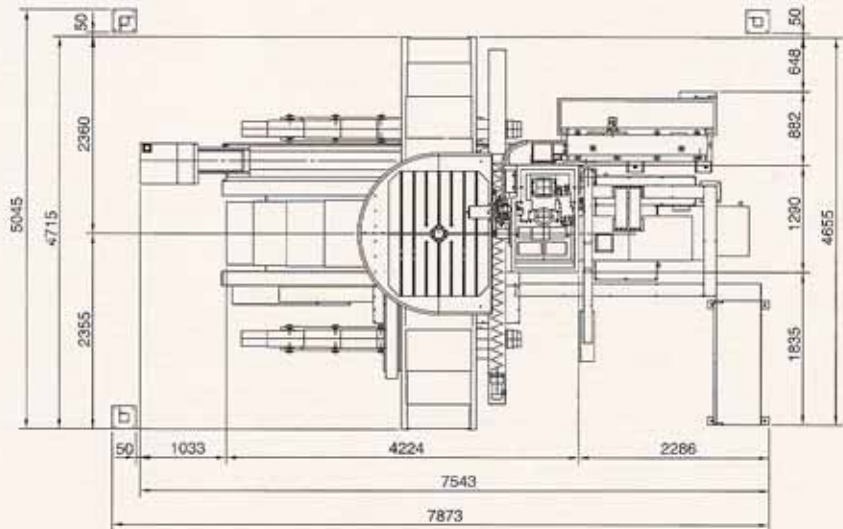


Specifications

Item	Unit	HBM-4
TRAVEL		
X axis travel	mm	2200
Y axis travel	mm	1600
Z axis travel	mm	1600
W axis travel	mm	550
Distance between spindle center to table center	mm	0~1650
Distance between spindle nose to table center	mm	620~2220
TABLE		
Working area of table	mm	1200 x 1500
T slot		7 x 22 x 150
Table max loading weight	Kg	5000
Table index(standard)		1°
SPINDLE		
Spindle taper		ISO No.50
Spindle speed	RPM	35~3000
Spindle step		2 steps(auto.)
Quill diameter (W axis)	mm	ø110
Spindle bearing I/D	mm	ø150
FEED		
X axis rapid feed	mm/min	12000
Y axis rapid feed	mm/min	12000
Z axis rapid feed	mm/min	12000
3 axes cutting feed	mm/min	1~5000
B axis cutting speed	RPM	11
XYZ ballscrew	mm	ø55 x P12/C3 double nut
W axis ballscrew	mm	ø40 x P5/C3 double nut
ATC		
Pocket	PC	60
Max. tool diameter	mm	125/250
Max. tool length	mm	300
Max. tool weight	Kg	25
Time of tool change (T-T)	sec.	9
MOTOR		
Spindle motor (30 munite/continuous)	Kw	18.5/15
Axes motors (X/Y/Z/B/W)	Kw	3.8/3.8/3.8/3.8/1
Hydraulic motor	Kw	3.75
Coolant pump motor	Kw	1.7
Slideway lubrication motor	W	12
Floor occupation	mm	4715 x 7543 x 3706
Total weight	Kg	22500

*Specification subjects to change without notice

Machine Dimensions:



Standard Accessories:

- spindle oil chiller
- auto power off
- chip auger for table & chip conveyer
- coolant system
- hydraulic system
- auto lubrication system
- program end & alarm lamp
- RS232 interface
- work lamp
- MPG box
- Machining leveling plate
- operation manual

Optional Accessories:

- angle milling head
- Universal milling head
- Angular block
- Facing head with telescopic tool holder
- Spindle extension sleeve
- 18000 increment continuous Rotary Table



MODERN TOOL LTD.

- ☐ Calgary, Alberta, 11488 - 70 Street S.E. T2C 4Y3, Telephone (403) 236-1150, Fax (403) 236-4277
- ☐ Edmonton, Alberta, 4820 Eleniak Road T6B 2S1, Telephone (780) 465-9471, Fax (780) 465-6951
- ☐ Port Coquitlam, British Columbia, 1385 Kingsway Ave. V3C 1S2, Telephone 604-472-1444, Fax 604-472-1455