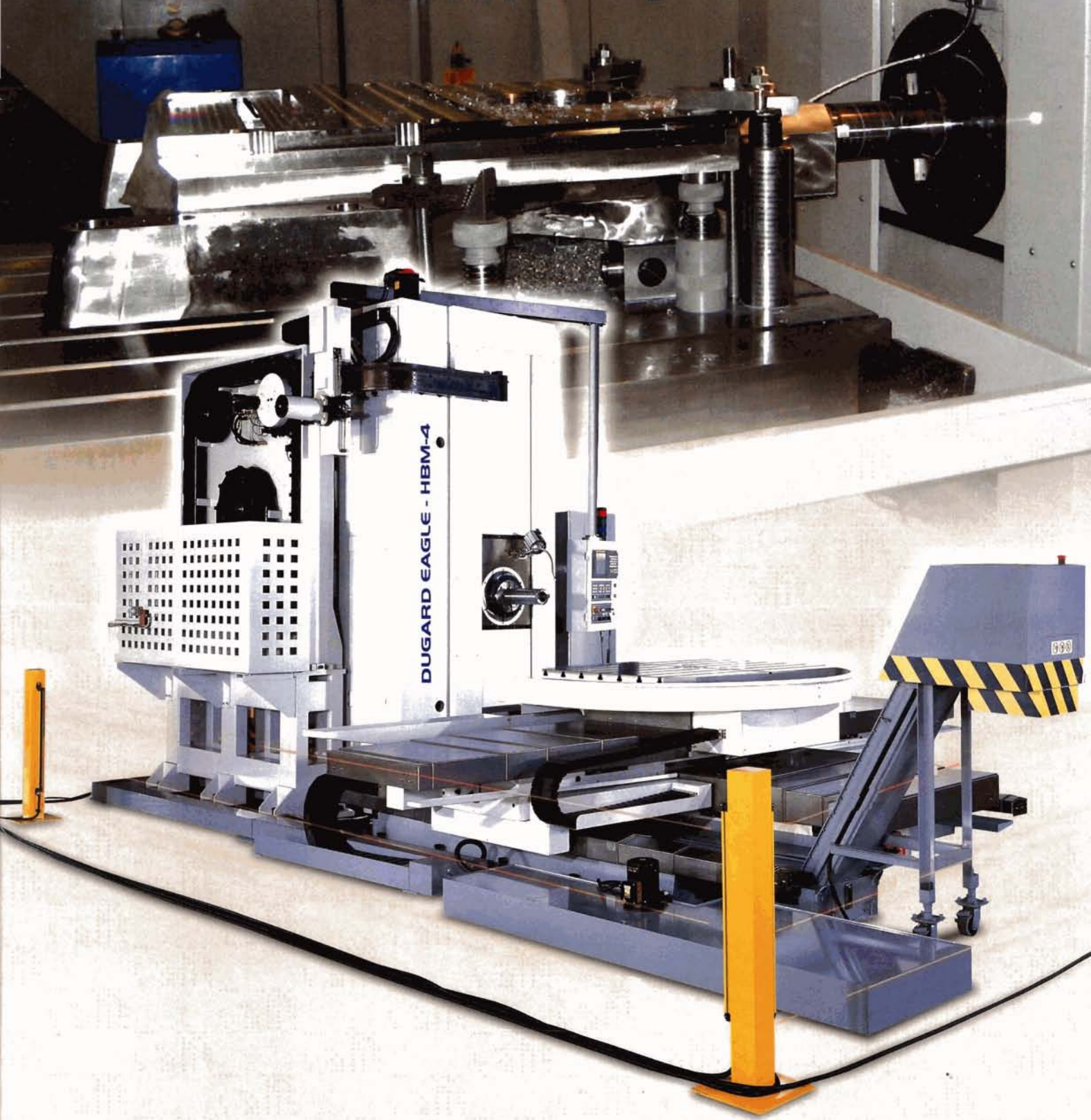




DUGARD EAGLE HBM - 4



CNC Horizontal Borer

CNC Horizontal

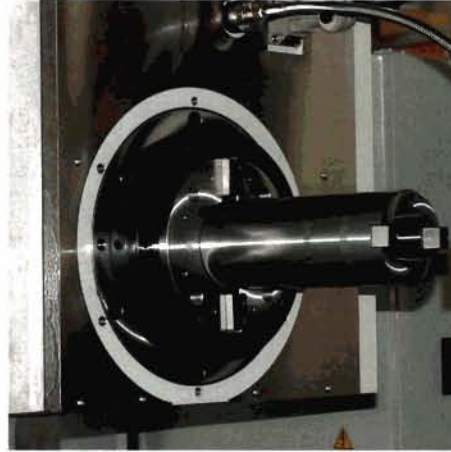


ROTARY TABLE

- * Heavy loading capacity
- * Auger chip remover
- * High accuracy:
3 pieces flat type clutch for position index provides high accuracy & long durability
- * Heavy cutting:
Hydraulic clamping system provides high rigidity for heavy cutting
- * Durability:
Multi-pitch worm gear for transmission system offers excellent accuracy with low power consumption
- * Easy operation:
All signals are connected directly to CNC controller and commanded by the control

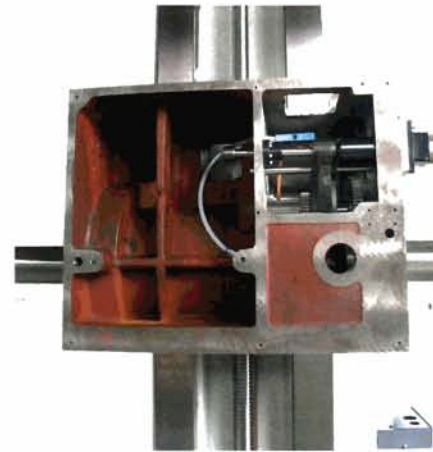
Features of rotary table:

- * 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



SPINDLE (ISO50)

- * Spindle & sleeve are made of chrome steel, hardened & ground for high rigidity and accuracy
- * Cylindrical roller bearings (double rollers) fitted to the spindle for high precision and heavy cutting capacity
- * 3000rpm spindle, ISO50
- * Spindle quill diameter 110mm
- * W axis travel 550mm



GEAR BOX

- * 2 speed provides high torque output
- * Hardened and ground gear transmission auto speed change provided & oil chiller



Borer HBM-4



ATC 60 TOOLS(OPT.)

- * Travel ARM type
- * 60 pockets available
- * Tool length 300mm
- * Tool loaded from rear of machine

BED

- * All the main components of the box way machines are stress relieved, Induction hardened and ground
- * The Z axis has 2 box ways plus 2 outer supporting ways
- * All chip will be sprayed to the back of machine where the auger beside the table & the chip conveyor remove all chips
- * Operator station positioned at eye level

FEATURE:

- * XYZ axes ways are hardened & ground box ways
- * C3 high precision Ball screws with double nuts
- * Rotary table works efficiently with hydraulic clamp system for positioning, & a two-ways backlash compensation system provided for accurate indexing
- * Auto lubrication system with pressure gauge



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 \dot{u}
SPINDLE		
Spindle taper		ISO No.50
Spindle speed	RPM	35~3000
Spindle step		2 steps(auto.)
Quill diameter (W axis)	mm	110
Spindle bearing I/D	mm	150
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	55 x P12/C3 double nut
W axis ballscrew	mm	40 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	20/30
Axes motors (X/Y/Z/B/W)	Kw	7.2/8.6/7.2/5.7/1.85
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

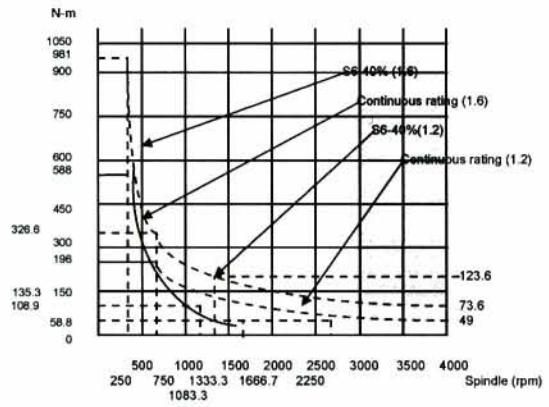
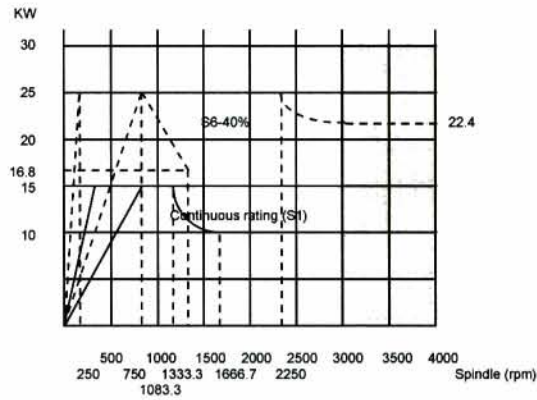
*Specification subjects to change without notice

Power / Torque Chart

Horsepower Chart

Heidenhain 15/25KW

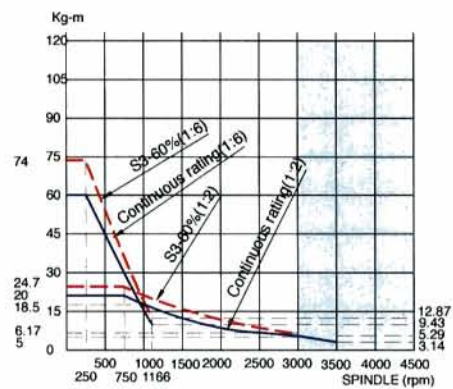
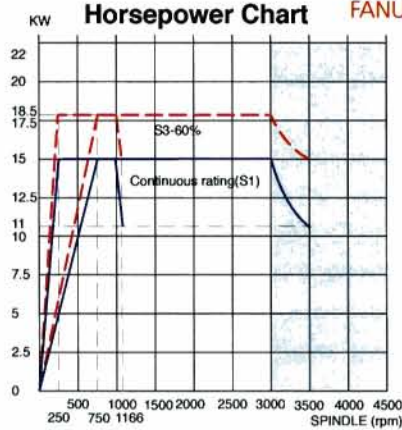
Torque Chart



Horsepower Chart

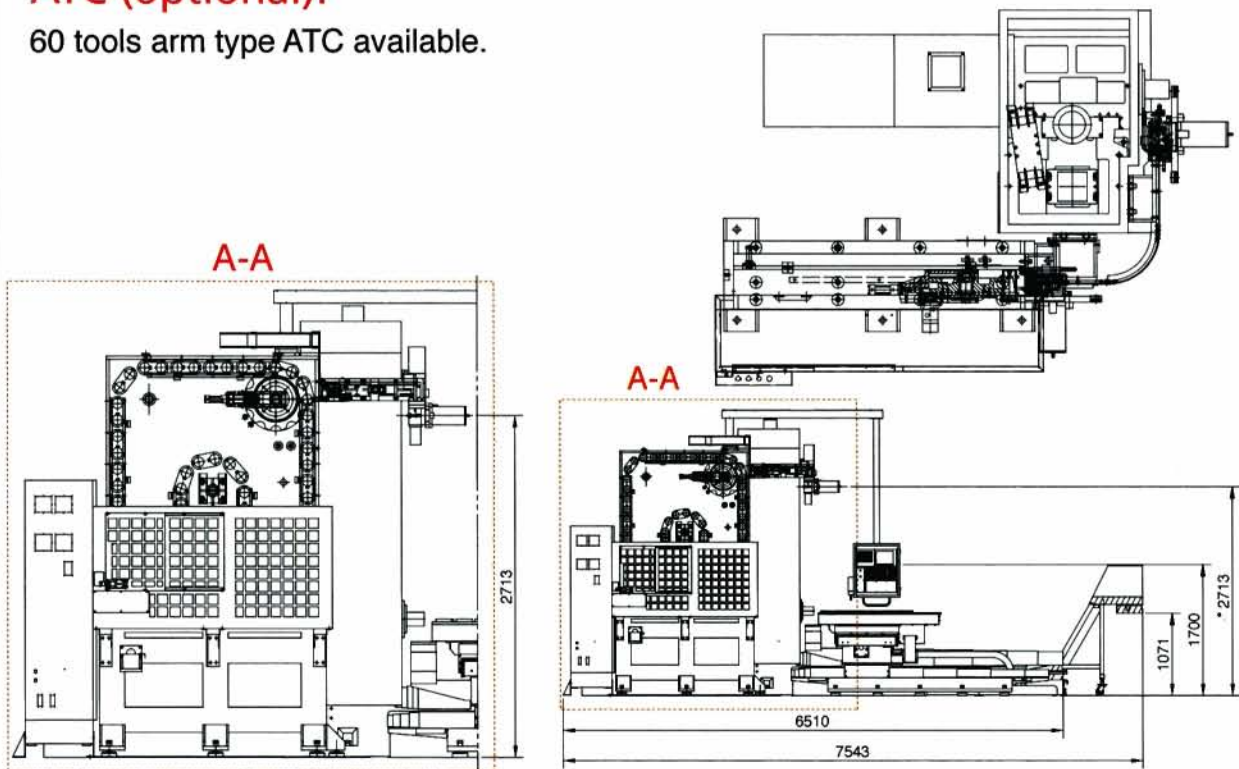
FANUC 15/18.5KW

Torque Chart

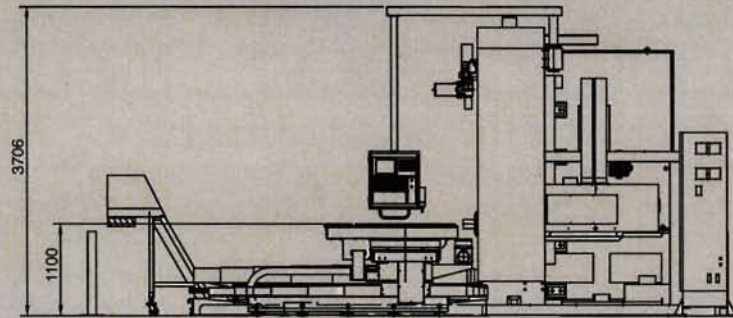
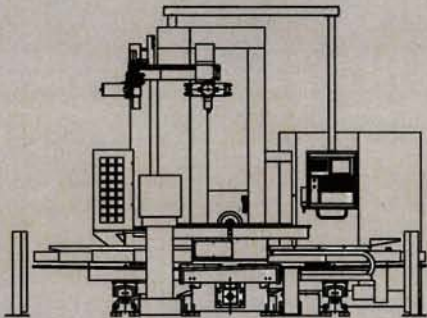
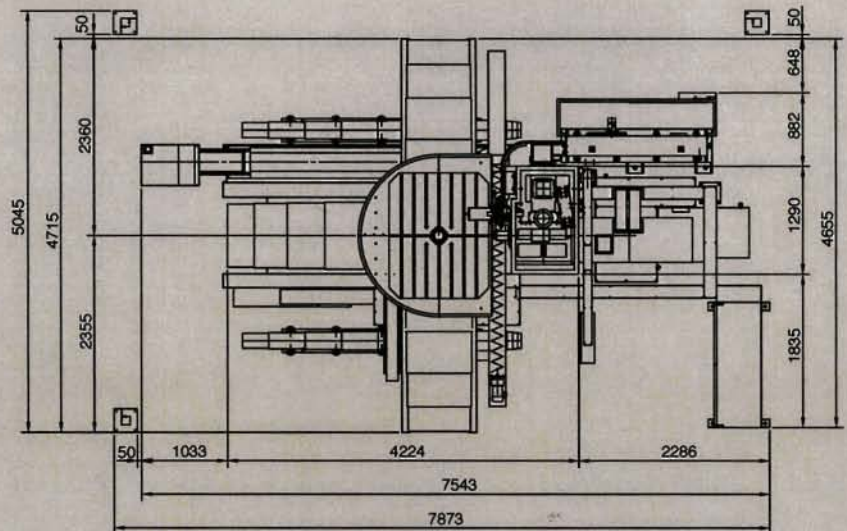


ATC (optional):

60 tools arm type ATC available.



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



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