



CNC Horizontal Boring & Milling Machine
(FIXED COLUMN)
UBM-RS series



CNC Horizontal Boring & Milling Machine
(MOVABLE COLUMN)
UBM-R series



CNC Double Column
Machining Center
UDM series



Conventional Horizontal Boring
& Milling Machine
UBM series



UHM-630 UHM-800 CNC HORIZONTAL MACHINING CENTER



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UHM-630

CNC HORIZONTAL MACHINING CENTER

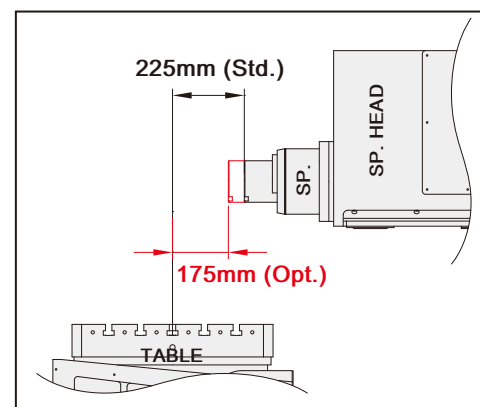
- X, Y, Z-axis travel: 1500x1200x1000mm (Standard)
1600x1200x1100mm (Optional)
- Rapid traverse rates on X, Y, Z-axis: 15/12/15 m/min
- Three linear guide ways on base
- 5° indexing rotary table (Standard)
1° indexing rotary table (Optional)
- BT50 spindle taper
- Linear scales on three axes



U'chine UHM-630 VS Competitor's 630 series

Comparison Table Of Machine Structure And Features

Manufacturer	UHM-630	Taiwanese Competitor's 630 Series
X, Y, Z-axis travel	1500/1200/1000mm	1200/950/800mm
X, Y, Z-axis rapid traverse	15/12/15m/min	12/10/12m/min
Width of Y-axis box ways	95mm	80mm
Span between Y-axis box ways	430mm	400mm
Distance from spindle nose to table center	225~1225mm	250~1050mm
Spindle motor	11/15kW	7.5/11kW
Gearbox	German ZF- 2K-250	German ZF-2K-120
X, Z-axis linear guide ways	Japanese THK HSR55 or German Schneebberger MRD55	German Schneebberger MRD55
X, Y, Z-axis ball screws	Hiwin Ø50	Hiwin Ø45
Overall span among three linear guide ways	1450mm	1300mm
Overall length of X-axis saddle	2850mm	2300mm



Shorter Distance From Spindle Nose To Table Center

- Exclusively designed distance from spindle nose to table center is shortened to 225mm, resulting in higher stability of machining.
- Upon request, extra short distance of 175mm from spindle nose to table center is available. This exhibits outstanding stability especially when performing deep hole boring operation.

Extra Large Travels on Three Axes A Pioneer in the Industry

High Quality Cast Iron Deformation Free

- All structural parts are manufactured from high quality cast iron (FC 30), tempered and stress relieved.

Extra Large X, Y, Z-axis Travel

- X, Y, Z-axis travel 1500x1200x1000mm which are larger than on our competitors models.

Guide Ways

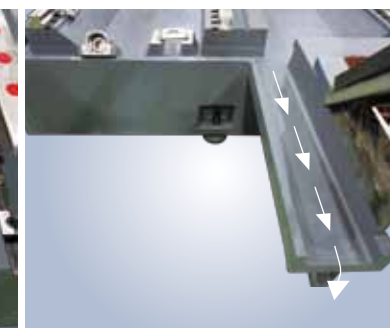
- Linear guide ways on X, Z-axis.
- Three linear guide ways on Z-axis with an overall span of up to 1450mm.
- Box ways on Y-axis with width increased by 18%.

Massive Base Width Increased By 12%



Secure Screw Support Without Loosening

- The ball screw supports on X, Y, Z-axis are all tightened by 8 screws to eliminate loosening problem while ensuring the transmission rigidity.



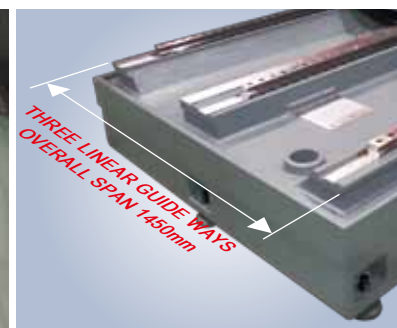
Waste Oil Reclaim Channel

- An additional waste oil reclaim channel is designed at the back side of the base, that effectively prevents waste oil from splashing on the floor causing pollution or slipping problems. Another benefit is to prevent the waste oil mixing with the cutting fluid.



Additional Chip Auger

- An additional chip auger is mounted between the table and the column for removing chips out of the machine.



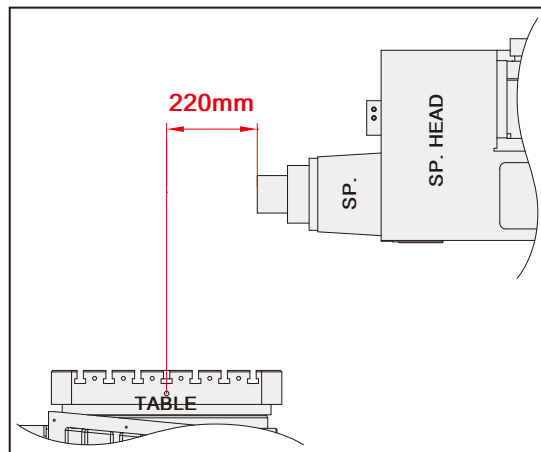
Three Linear Guide Ways on Base

- The overall span among the three linear guide ways reach 1450mm, which is the largest among its class. It assists in upgrading machining stability.
- Extra long saddle length features higher stability than our competitors models.
- X, Z-axis linear guide ways provide a choice of Japanese THK HSR 55 type or German Schneebberger MRD 55 type.

UHM-800

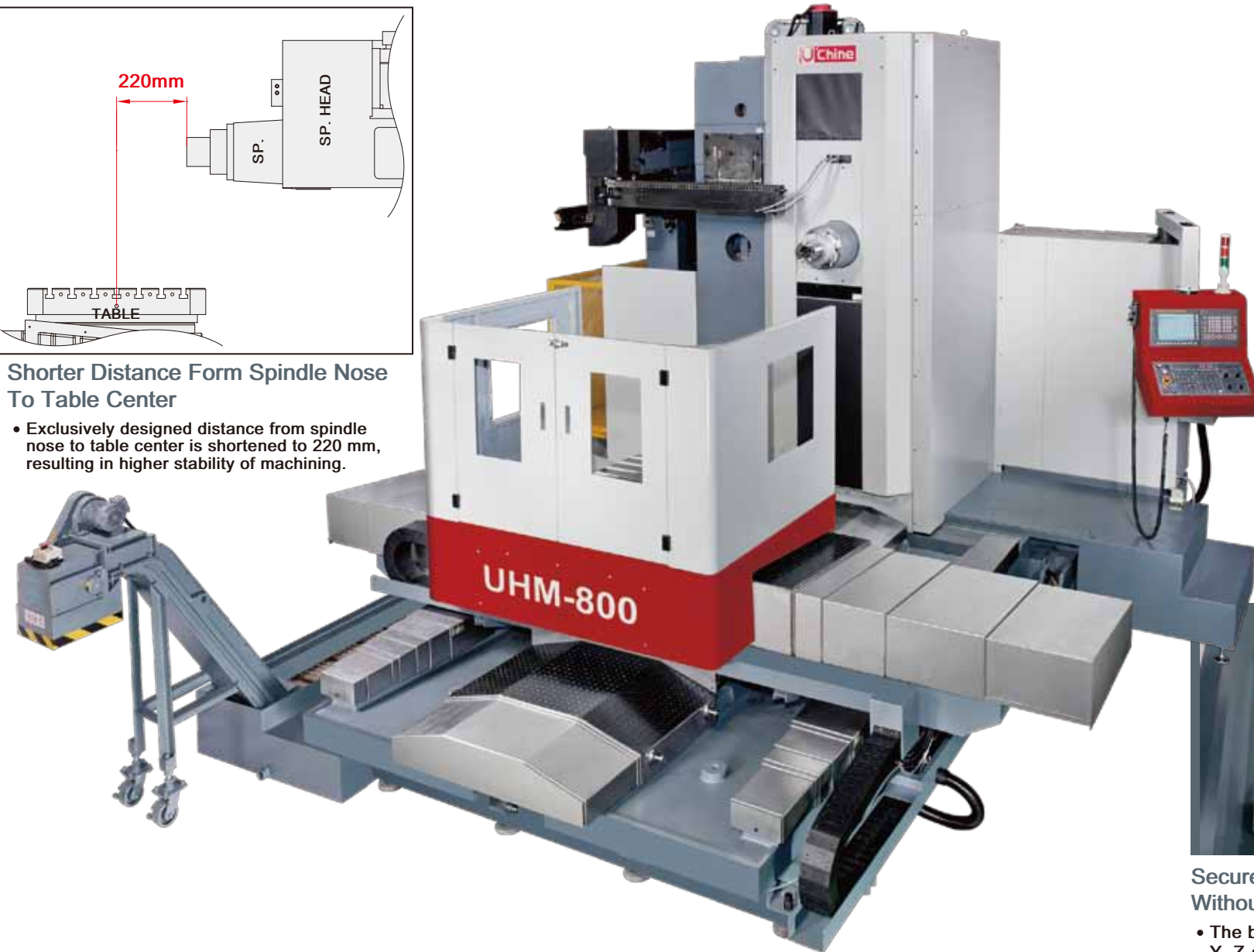
CNC HORIZONTAL MACHINING CENTER

- X, Y, Z-axis travel: 2000x1400x1400mm (Standard)
2000x1700x1600mm (Optional)
- Rapid traverse rates on X, Y, Z-axis: 15/12/15 m/min
- Four linear guide ways on base
- 1° indexing rotary table
- BT50 spindle taper
- Linear scales on three axes



Shorter Distance From Spindle Nose To Table Center

- Exclusively designed distance from spindle nose to table center is shortened to 220 mm, resulting in higher stability of machining.



Four Linear Guide Ways on Base A Perfect Combination of Efficiency And Stability

High Quality Cast Iron Deformation Free

- All structural parts are manufactured from high quality cast iron (FC 30), tempered and stress relieved.

Extra Large X, Y, Z-axis Travel

- X, Y, Z-axis travel 2000x1400x1400mm which are larger than on our competitors models.
As a result, greater machining range can be achieved.

Guide Ways

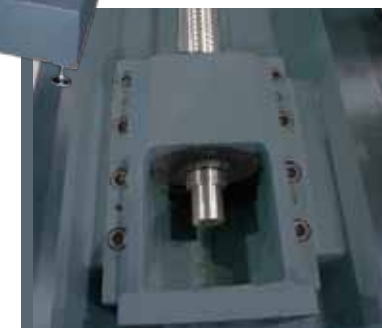
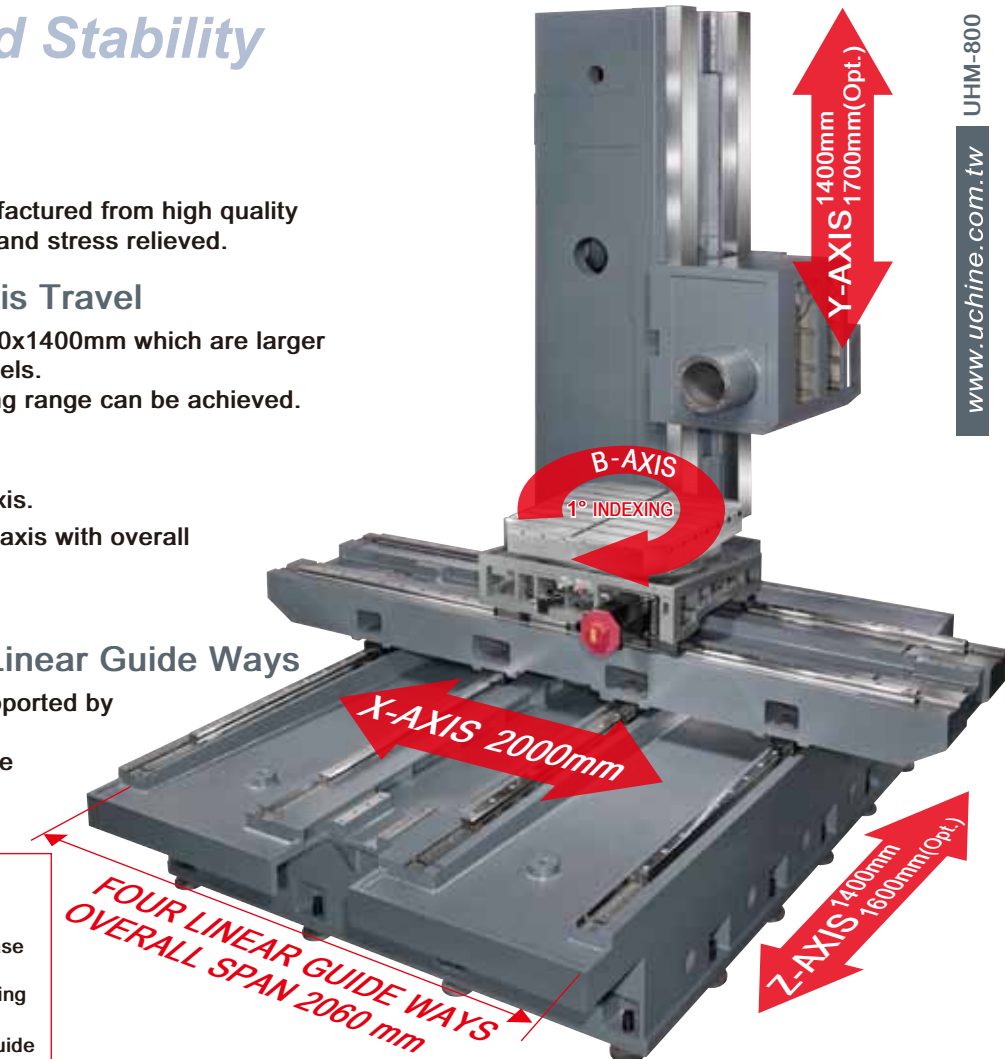
- Linear guide ways on X, Z-axis.
- Four linear guide ways on Z-axis with overall span of up to 2060mm.
- Box ways on Y-axis.

Rib Supported under Linear Guide Ways

- All linear guide ways are supported by additional ribs to ensure deformation-free performance for a heavy load.

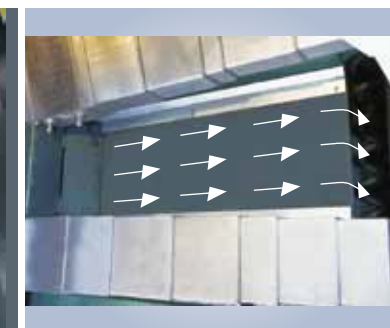
Oversized Base With Four Linear Guide Ways

- The specially designed oversized base is a one-piece construction with the largest sizes among its class, featuring exceptional rigidity.
- Z-axis is deployed with four linear guide ways for resisting heavy load as well as firm support of workpiece.
- X, Z-axis linear guide ways provide a choice of Japanese THK HSR 55 type or German Schneberger MRD55 type.



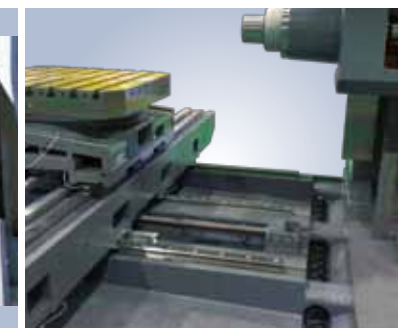
Secure Screw Support Without Loosening

- The ball screw supports on X, Y, Z-axis are all tightened by 8 screws to eliminate loosening problem while ensuring the transmission rigidity.



Additional Chip Removing Plate

- An additional chip plate is fitted to back side of the saddle, that may remove chips on the base to the chip auger and save manual removing of chips.



Additional Chip Auger

- An additional chip auger is mounted between the table and the column for removing chips out of the machine.



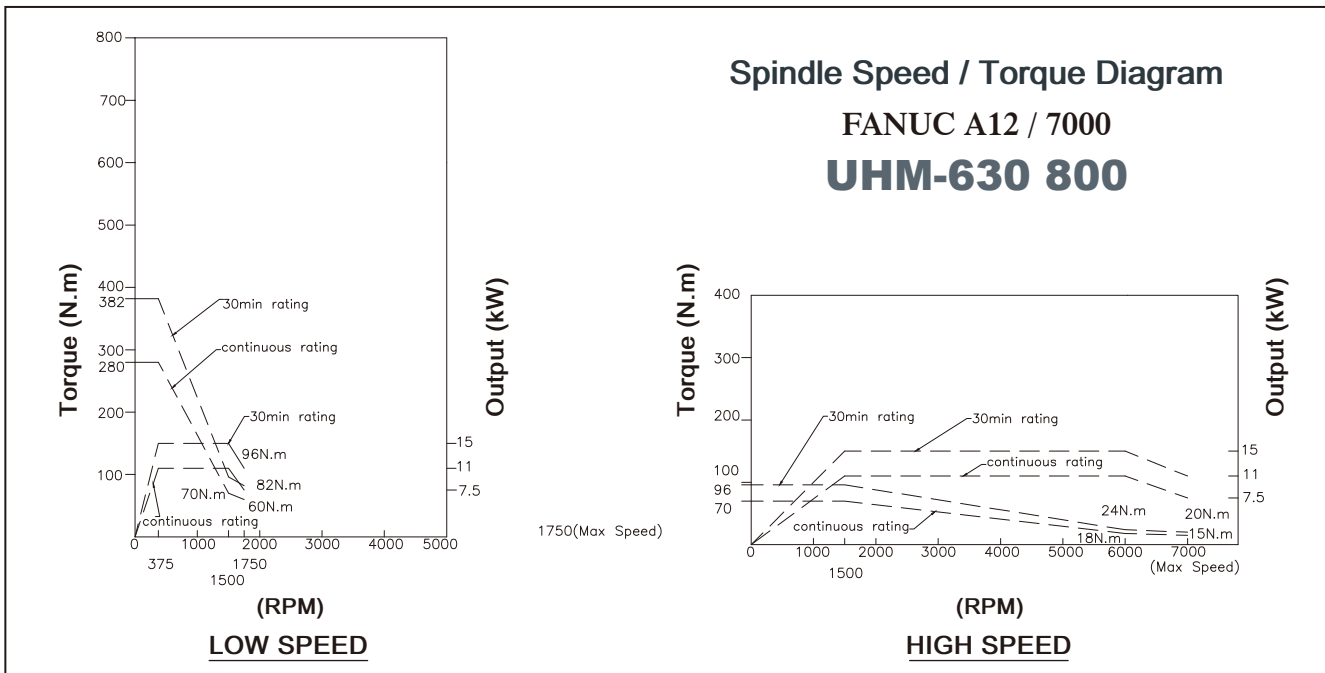
Optimized Rib Reinforcement in Column

- The column interior is reinforced by "X" shaped ribs with an "O" shaped rib at the center of ribs. Such ribs deployment may effectively avoid column deformation during heavy cutting.
- Specially designed double-wall column construction provides a dramatic increase in structural rigidity.



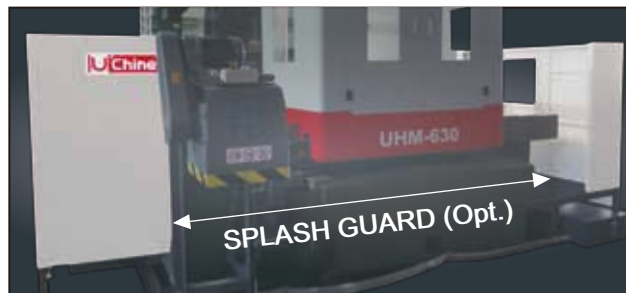
Rigid, Powerful Spindle Head

- The spindle motor provides greater power output than our competitors models. As a result, extra powerful cutting force can be obtained.
- The spindle is driven through a German ZF-gearbox.

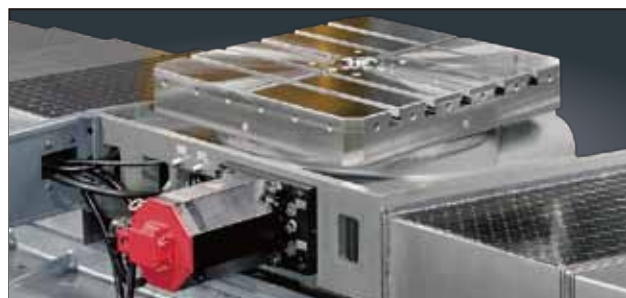


Side-mount Chain Type Magazine

- 40-tool magazine is standard.
- 60-tool magazine is optional.



Splash Guard (optional)



Rotary Table

- 700x700 or 700x900 (For UHM-630)
- 800x1000 or 1000x1000 (For UHM-800)



Air conditioner for Electrical Cabinet

UHM SERIES
MACHINE SPECIFICATIONS

[]: As Optional

	MODEL	UNIT	UHM-630	UHM-800
TABLE	Table Size	mm	630 x 630	800 x 800
	T-slots Size	mm	20 x 5	22 x 7
	Maximum Load	kg	1500	2500
	Indexing Degree		5°/72 (1°/360)	1°/360
TRAVEL	X-Axis	mm	1500 (1600)	2000
	Y-Axis	mm	1200	1500 (1800)
	Z-Axis	mm	1000 (1100)	1400 (1600)
SPINDLE	Spindle Speed	rpm	4000 (6000)	
	Spindle Taper		7/24 taper ISO.50, BT-50	
DISTANCES	Spindle Center to Table	mm	0~1200	0~1500 (1800)
	Spindle Nose to Table Center	mm	(175~1175) 225~1225	220~1620 (1820)
	Hight From Ground to Table Surface	mm	1110	1325
FEED RATE	Rapid Feed Rate X/Y/Z	m/min	15 / 12 / 15	
	Minimum Setting	mm	0.001	
	Cutting Feed Rate	mm/min	1~5000	
MOTOR	Spindle Motor - cont. / 30min.	kW	11/15 (15/18.5)	
	X/Y/Z/B-Axis	kW	3 / 3 / 4 / 3	4 / 4 / 4 / 3
	Lubricator Motor	kW	0.15	
	Hydraulic Pump	kW	2.25	
	Coolant Pump	kW	1.17	
	Chip Conveyor	kW	0.2	
	Oil Cooler Pump	kW	0.75	
	No. of Tools	pieces	40 (60)	
	Tool Selection		Absolute	
	Tool Change Time (approx.) (T to T)	sec	15	
ATC	Max. Tool (dia. / leng.)	mm	Dia. Ø125/Ø250 (Without Adjacent Tool) / Length 400	
	Max. Tool Weight	kg	18	
	Power Required	kVA	30	45
MISCELLANEOUS	Compressed Air	kg/cm ²	6	
	Machine Weight (approx.)	kg	15000	21000

■ Specifications are subject to change without prior notice.

STANDARD ACCESSORIES :

1. Linear scale on X, Y, Z-axis
2. Spindle oil cooler
3. Automatic power off
4. Hydraulic system
5. Coolant system
6. Lubricator system
7. Alarm lamp
8. Work lamp
9. M. P. G.
10. RS-232 interface
11. Heat exchanger
12. Chip conveyor and cart
13. Leveling bolts and pads
14. Controller manuals and circuit diagram
15. Operation manuals
16. Machine inspection lists
17. Splash guards (around the table)
18. Toolbox with spanners & wrenches
19. Fanuc OiMD
20. ATC: 40 Tools

OPTIONAL ACCESSORIES :

1. ATC: 60 Tools
2. Oil mist device
3. Variety of controllers (FANUC / MELDAS / SIEMENS / HEIDENHAIN)
4. Various auxiliary work tables are available
5. Air conditioner at cabinet
6. Coolant through spindle
7. Various work tables are available 700x700, 700x900 mm (for UHM-630) 800x1000, 1000x1000 mm (for UHM-800)
8. 0.001° indexing on B-axis
9. Oil-feed holder