



CNC HORIZONTAL BORING
& MILLING MACHINE



Conventional Horizontal Boring
& Milling Machine
UBM series

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

CNC Double Column
Machining Center
UDM series

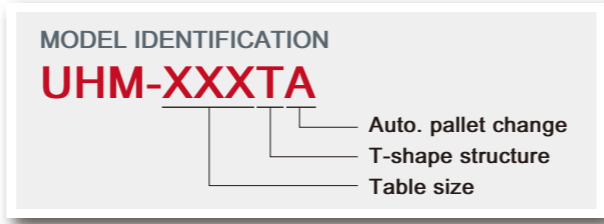
CNC Horizontal Heavy Duty
Milling Machine
UMM series

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



UHM
series

CNC Horizontal Machining Center



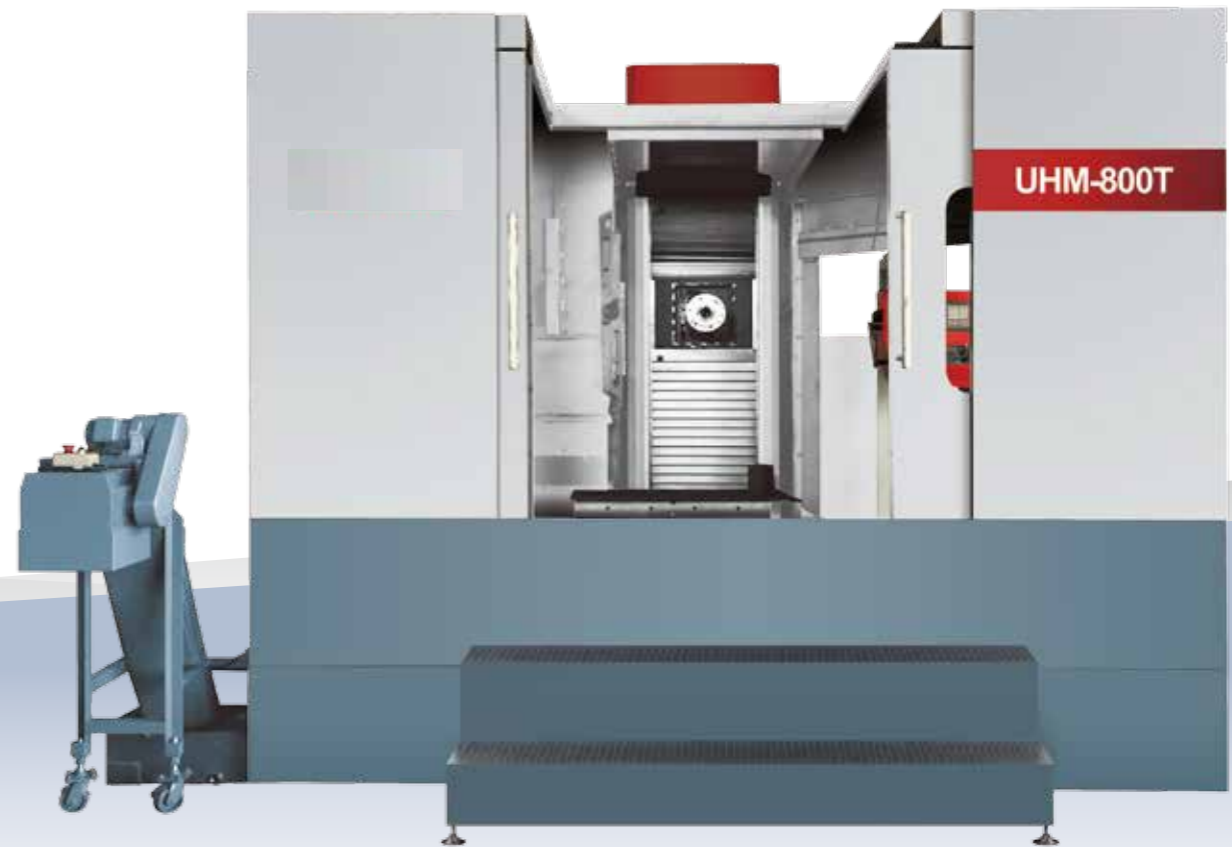
UHM-630TA, 800TAS
UHM-800TA, 1000TA, 1250TA
(TWO-STATION PALLET CHANGE)

CNC HORIZONTAL MACHINING CENTER
 (CENTER-MOUNT SPINDLE HEAD)



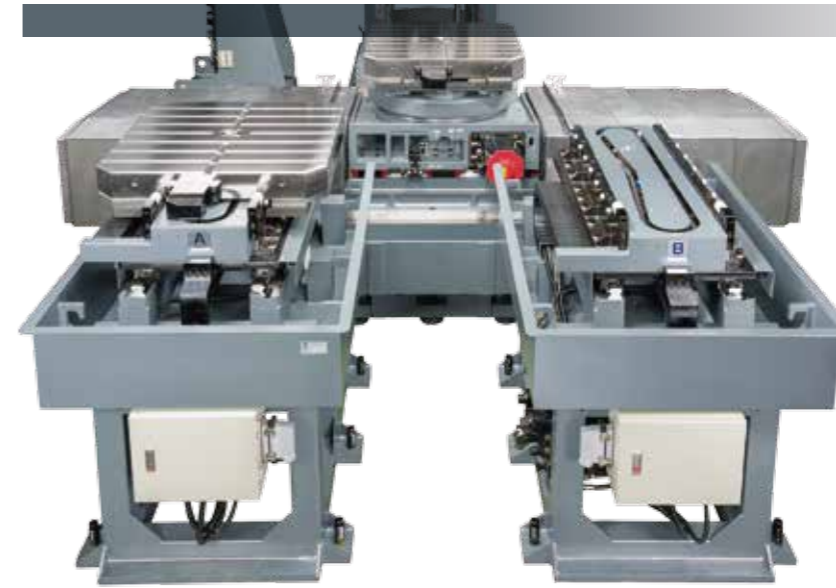
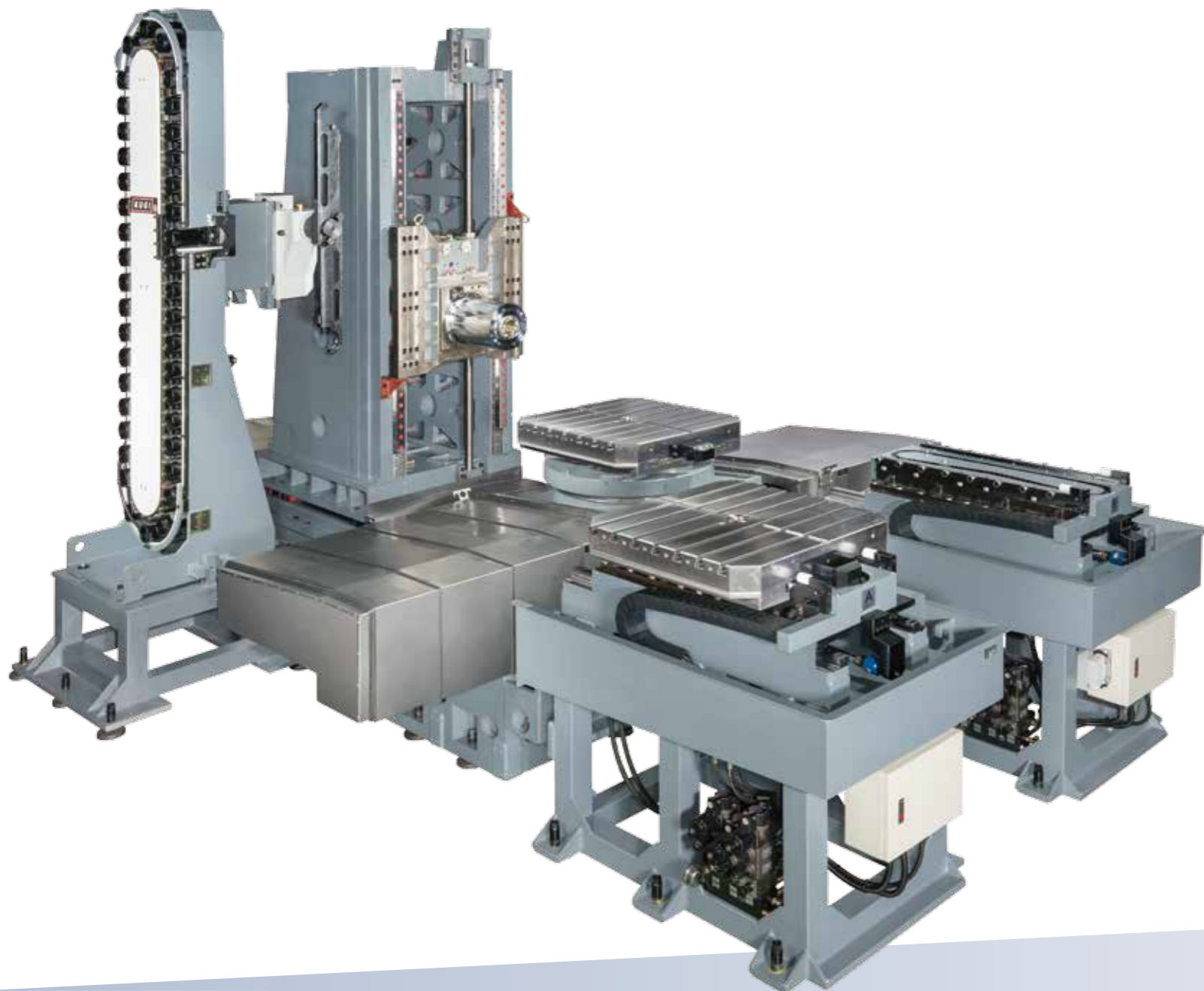
UHM-630T, 800TS
UHM-800T, 1000T, 1250T, 1400T
(SINGLE TABLE)

CNC HORIZONTAL MACHINING CENTER
 (CENTER-MOUNT SPINDLE HEAD)



OPTIMAL RIGIDITY THROUGH T-SHAPED STRUCTURE

With heavy duty roller type linear guideways on X, Y, Z-axis along with the use of high precision linear scales, high machining accuracy can be achieved. The spindle is gear-driven with two-speed ranges, which provides full power output at 320 rpm and high speed can reach 6000 rpm (8000 rpm optional). The spindle head moves on linear ways on the column in combination with each 3 blocks on the right and left linear ways, thus dramatically upgrading rigidity and stability in heavy cutting.



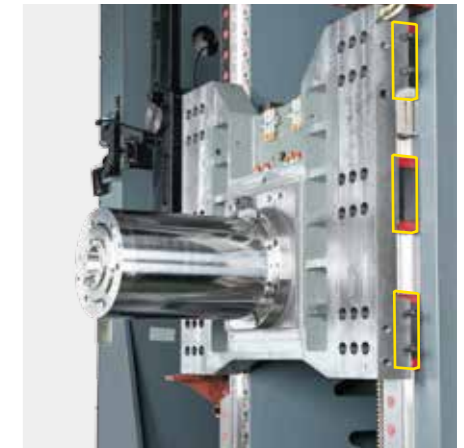
Automatic Pallet Changer (A. P. C.)

The A. P. C. is a parallel change design without restriction of weight difference, that features extremely smooth motions and allows for greater working range.



6 Blocks on Y-Axis Linear Ways

Each linear way on Y-axis is equipped with 3 blocks to increase the contact area between the spindle head and the linear ways, resulting in higher rigidity when performing heavy cutting.



One-Piece Fabricated Base

The base is a one-piece configuration so as to increase the rigidity of the entire machine. The base structure may effectively prevent cutting fluid from leaking and facilitate chip exhaust.

The use of 65 mm type linear ways on Z-axis makes the machine ideal for heavy machining on large workpieces.



UHM series

Traveling Column With Center-Mount Spindle Head

MACHINE SPECIFICATIONS

[]: As Optional

	MODLE	UNIT	UHM-630T	UHM-630TA	UHM-800TS	UHM-800TAS	UHM-800T	UHM-800TA	UHM-1000T	UHM-1000TA	UHM-1250T	UHM-1250TA	UHM-1400T	
TABLE	Table Size	mm	630 x 630	630 x 630 (APC)	800 x 800	800 x 800 (APC)	800 x 800	800 x 800 (APC)	1000 x 1000	1000 x 1000 (APC)	1250 x 1250	1250 x 1250 (APC)	1400 x 1600	
	T-slots Size	mm	20 x 5		22 x 7		22 x 7		22 x 7		22 x 7		24 x 7	
	Maximum Load	kg	2000 (2500)	2000	2500	2000	4000	3000	4000	3000	5000		8000	
	Indexing Degree		1° (0.001°)						1° (0.001°)		1° (0.001°)		1° (0.001°)	
TRAVEL	X-Axis	mm	1200 (1600)		1600		1600 (2000)		1600 (2000)		2000		2000 (2500/3200)	
	Y-Axis	mm	1200 (1350)	1000 (1200/1350)	1200 (1350)	1000 (1200/1350)	1200 (1350)	1000 (1200/1350)	1200 (1350)	1000 (1200/1350)	1200 (1350)		1350	
	Z-Axis	mm	1000		1000		1200		1200		1200 (1400)		1200 (1400)	
SPINDLE	Spindle Speed	rpm	6000 (8000)						6000 (8000)					
	Spindle Taper		7/24 taper ISO.50, BT-50						7/24 taper ISO.50, BT-50					
DISTANCES	Spindle Center to Table	mm	0~1200 (1350)	0~1000 (1200/1350)	0~1200 (1350)	0~1000 (1200/1350)	0~1200 (1350)	0~1000 (1200/1350)	0~1200 (1350)	0~1000 (1200/1350)	0~1200 (1350)		0~1350	
	Spindle Nose to Table Center	mm	200~1200 (130~1130)		200~1200 (130~1130)		200~1400 (130~1130)		285~1485 (215~1415)		350~1550 (280~1480)		425~1625 (355~1555)	
	Hight From Ground to Table Surface	mm	1060	1300	1060	1300	1195	1350	1195	1350	1350		1350	
FEED RATE	Rapid Feed Rate X/Y/Z	m/min	20 / 15 / 20						20 / 15 / 20		15 / 15 / 15		10 / 15 / 15	
	Minimum Setting	mm	0.001						0.001					
	Cutting Feed Rate	mm/min	1~5000						1~5000					
MOTOR	Spindle Motor - cont. / 30min.	kW	11/15 (15/18.5)		11/15 (15/18.5)		15/18.5 (22/26)		15/18.5 (22/26)		15/18.5 (22/26)		15/18.5 (22/26)	
	X/Y/Z/B-Axis	kW	4/7/4/4		4/7/4/4		4/7/4/4		4/7/4/4		4/7/4/4		7/7/4/7	
	Lubricator Motor	kW	0.15						0.15					
	Hydraulic Pump	kW	3.7						3.7					
	Coolant Pump	kW	1.62						1.62					
	Chip Conveyor	kW	0.25						0.25					
	Oil Cooler Pump	kW	3.6						3.6					
ATC	No. of Tools	pieces	40 (60)						40 (60)					
	Tool Selection		Random (Absolute)						Random (Absolute)					
	Max. Tool (dia. / leng.)	mm	Dia. Ø125/Ø250 (Without Adjacent Tool) / Length 400						Dia. Ø125/Ø250 (Without Adjacent Tool) / Length 400					
	Max. Tool Weight	kg	18 (25)						18 (25)					
MISCELLANEOUS	Power Required	kVA	40		40		45		45		45		50	
	Compressed Air	kg/cm ²	6						6					
	Machinery Weight	ton	15	19	16	22	18	24	18.5	24.5	20	28	22	

■ Specifications are subject to change without prior notice.

STANDARD ACCESSORIES :

- Linear scale on X, Y, Z-axis
- Spindle oil cooler
- Automatic power off
- Hydraulic system
- Coolant system
- Lubricator system
- Alarm lamp
- Work lamp
- M. P. G.
- RS-232 interface
- Heat exchanger
- Chip conveyor and cart
- Leveling bolts and pads
- Controller manuals and circuit diagram
- Operation manuals
- Machine inspection lists
- Fully enclosed splash guard
- Toolbox with spanners & wrenches
- FANUC OiMF controller
- ATC: 40 Tools (Cam drive arm type)

OPTIONAL ACCESSORIES :

- ATC: 60/90/120 Tools
- Oil mist device
- Variety of controllers
(FANUC / Mitsubishi / SIEMENS / HEIDENHAIN / FAGOR)
- Various auxiliary work tables
- Air conditioner at electrical cabinet
- Coolant through spindle
- 0.001° indexing on B-axis (Simultaneous machining)
- Tool measurement device
- Workpiece centering measurement device
- Swing arm type magazine (Max. tool weight 25kg)
- 2500kg table load on UHM-630T
- Chip auger on Z-axis
- Coolant jets around spindle (independent pump)
- 4, 6, 8 pallets (APC)
- Semi-enclosed splash guard

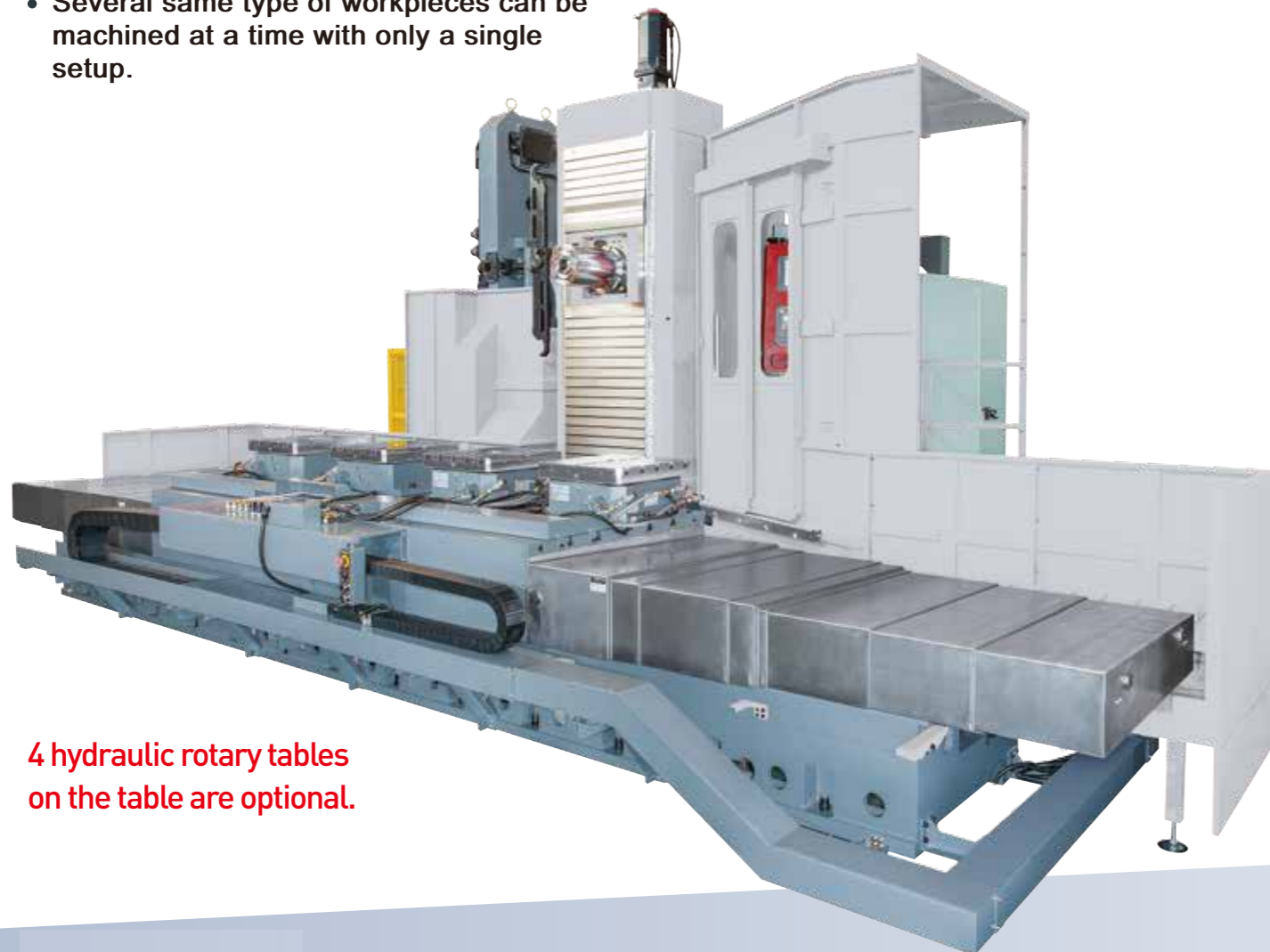


UHM-1212T, 1512T, 1612T UHM-2012T, 3212T

(LONG TABLE)

**CNC HORIZONTAL MACHINING CENTER
(CENTER-MOUNT SPINDLE HEAD)**

- The long table can be fitted with multiple hydraulic rotary tables for clamping several workpieces for machining with only one setup, which increases efficiency significantly.
- For machining a same type of workpiece, one tool can machine several workpieces then perform tool change, thus reducing tool change time.
- Several same type of workpieces can be machined at a time with only a single setup.



**4 hydraulic rotary tables
on the table are optional.**

MACHINE SPECIFICATIONS

(): As Optional

	MODLE	UNIT	UHM-1212T	UHM-1512T	UHM-1612T	UHM-2012T	UHM-3212T	UHM-4212T
TABLE	Table Size	mm	1200 x 800 Long Table		1600 x 900 Long Table	2000 x 1100 Long Table	3000 x 1100 Long Table	4000 x 1100 Long Table
	T-slots Size	mm	22 x 7		22 x 7			
	Maximum Load	kg	4000		4000	5000	6000	10000
	Indexing Degree		-		-			
TRAVEL	X-Axis	mm	1200	1500	1600	2000	3200	4200
	Y-Axis	mm	1270 (1350)		1270 (1350)			
	Z-Axis	mm	1000		1200			
SPINDLE	Spindle Speed	rpm	4000 (6000, 8000)					
	Spindle Taper		7/24 taper ISO.50, BT-50					
DISTANCES	Spindle Center to Table	mm	0~1270 (1350)		0~1270 (1350)			
	Spindle Nose to Table Center	mm	200~1200		200~1400			
	Hight From Ground to Table Surface	mm	1180		1180			
FEED RATE	Rapid Feed Rate X / Y / Z	m/min	20					
	Minimum Setting	mm	0.001					
	Cutting Feed Rate	mm/min	1~5000					
MOTOR	Spindle Motor - cont. / 30min.	kW	11/15 (15/18.5)		15/18.5 (22/26)			
	X / Y / Z / B-Axis	kW	4 / 7 / 4		4 / 7 / 4			
	Lubricator Motor	kW	0.15					
	Hydraulic Pump	kW	3.7					
	Coolant Pump	kW	1.62					
	Chip Conveyor	kW	0.25					
	Oil Cooler Pump	kW	3.6					
ATC	No. of Tools	pieces	40 (60)					
	Tool Selection		Random (Absolute)					
	Max. Tool (dia. / leng.)	mm	Dia. Ø125/Ø250 (Without Adjacent Tool) / Length 400					
	Max. Tool Weight	kg	18 (25)					
MISCELLANEOUS	Power Required	kVA	40		45			
	Compressed Air	kg/cm ²	6					
	Machinery Weight	ton	15	15	16	19	24	29

■ 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 0iMF controller
20. ATC: 40 Tools (Cam drive arm type)

OPTIONAL ACCESSORIES :

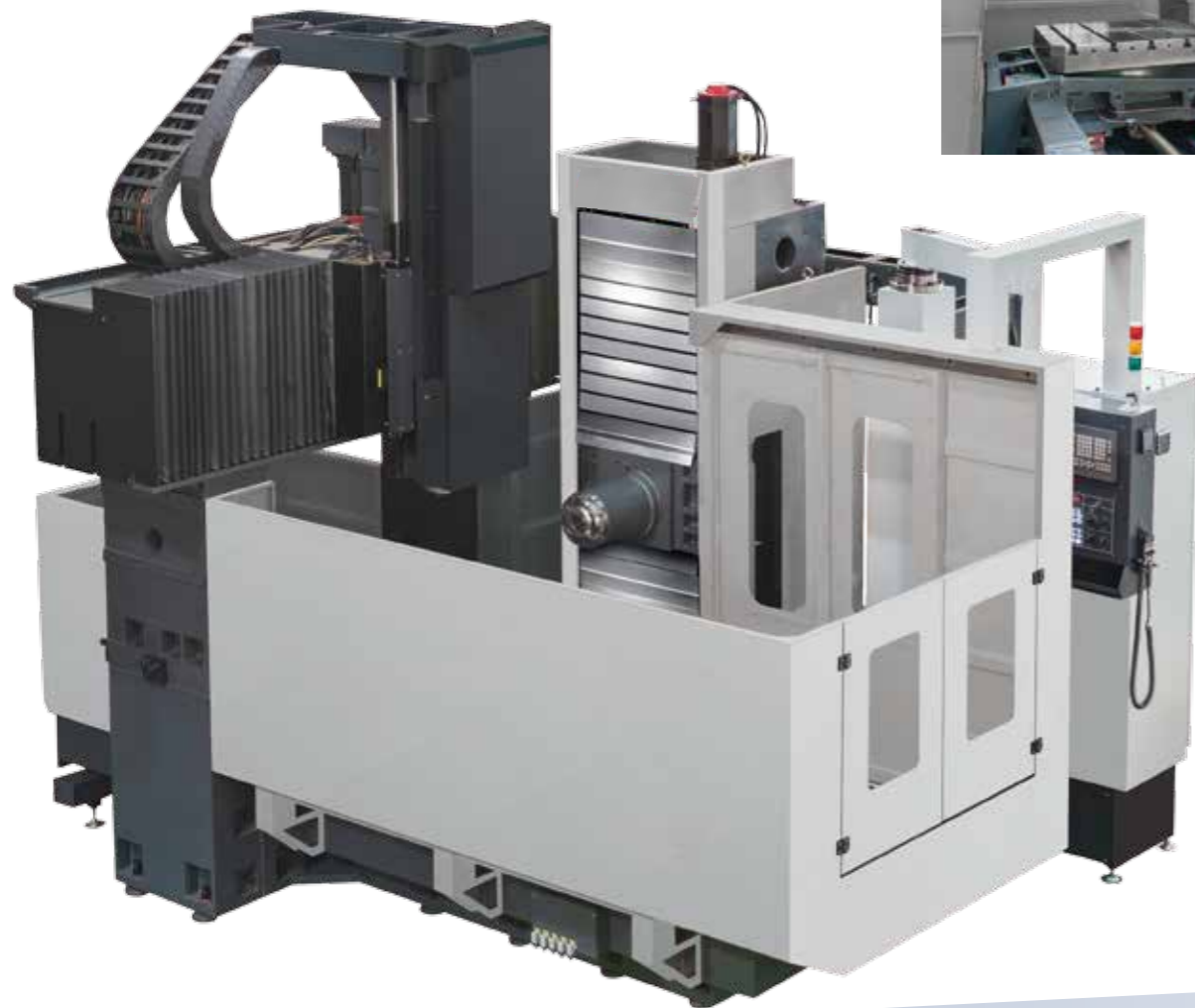
1. ATC: 60 Tools
2. Oil mist device
3. Variety of controllers (FANUC / Mitsubishi / SIEMENS / HEIDENHAIN / FAGOR)
4. Various auxiliary work tables
5. Air conditioner at electrical cabinet
6. Coolant through spindle
7. Tool measurement device
8. Workpiece centering measurement device
9. Swing arm type magazine (Max. tool weight 25kg)
10. Chip auger on Z-axis
11. Coolant jets around spindle (independent pump)
12. Various sizes of hydraulic rotary table
13. Various sizes of servo rotary table

UHM-VH series

UHM-800VH, 1000VH UHM-1250VH, 1416VH

HORIZONTAL VERTICAL 5-FACE MACHINING CENTER

- Multiple faces machining can be accomplished in a single setup.
- No need to setup workpiece repetitively for saving workpiece loading / unloading time.
- Combining two machine functions in one for saving floor area while increasing efficiency.



MACHINE SPECIFICATIONS

[]: As Optional

	MODLE	UNIT	UHM-800VH	UHM-1000VH	UHM-1250VH	UHM-1416VH
TABLE	Table Size	mm	800 x 800 x 1°	1000 x 1000 x 1°	1250 x 1250 x 1°	1400 x 1600 x 1°
	T-slots Size	mm	22			24
	Maximum Load	kg	2000	4000	5000	8000
	Indexing Degree		1° (0.001°)			
TRAVEL	X-Axis	mm	1600	2200		
	Y-Axis	mm	1200	1500	1800	2300
	Z-Axis	mm	760		1000	
	V-Axis (Horizontal upw. / downw.)	mm	1000		1200	
	W-Axis (Horizontal forw. / backw.)	mm	500			
SPINDLE	Spindle Speed	rpm	6,000 (S1 double column spindle) 6,000 (S2 hori. spindle)			
	Spindle Taper		7/24 taper ISO.50, BT-50			
DISTANCES	Double column spindle nose to table surface	mm	200~960		200~1200	
	Hori. spindle center to table surface	mm	0~1000		0~1200	
	Hori. spindle nose to table center	mm	200~700	285~785	350~850	425~925
	Hight From Ground to Table Surface	mm	1060	1195	1250	
FEED RATE	Rapid Feed Rate X/Y/Z/ V/W/B	m/min	20 / 20 / 15 / 15 / 20		15 / 15 / 12 / 15 / 15	
	Minimum Setting	mm	0.001			
	Cutting Feed Rate	mm/min	1~8000			
MOTOR	Spindle Motor - cont. / 30min.	kW	15 / 18.5 (22 / 26)			
	X/Y/Z/V/W/B-Axis	kW	4 / 4 / 4 / 7 / 4 / 4		4 / 4 / 4 / 7 / 4 / 4	7 / 4 / 4 / 7 / 4 / 7
	Lubricator Motor	kW	0.15			
	Hydraulic Pump	kW	3.7			
	Coolant Pump	kW	1.62			
	Chip Conveyor	kW	0.25			
	Oil Cooler Pump	kW	3.6			
MISCELLANEOUS	Power Required	kVA	40			50
	Compressed Air	kg/cm ²	6			

■ Specifications are subject to change without prior notice.

STANDARD ACCESSORIES :

1. Spindle oil cooler
2. Automatic power off
3. Hydraulic system
4. Coolant system
5. Lubricator system
6. Alarm lamp
7. Work lamp
8. M. P. G.
9. RS-232 interface
10. Heat exchanger
11. Chip conveyor and cart
12. Leveling bolts and pads
13. Controller manuals and circuit diagram
14. Operation manuals
15. Machine inspection lists
16. Sheetmetal guard for table
17. Toolbox with spanners & wrenches
18. FANUC OiMF controller

OPTIONAL ACCESSORIES :

1. Tool magazine (vert./hori.)
2. Coolant through spindle
3. Variety of controllers
(FANUC / Mitsubishi / SIEMENS / HEIDENHAIN / FAGOR)
4. Air conditioner at electrical cabinet
5. 10,000 rpm direct-drive spindle
6. Linear scales on various axes
7. Synchronized rotary table
8. Long nose spindle (vert./hori.)

UHM-1250TW

CENTER-MOUNT SPINDLE HEAD
Ø110mm QUILL, SINGLE STATION

UHM-1250TWA

CENTER-MOUNT SPINDLE HEAD
Ø110mm QUILL, TWIN-STATION

CNC HORIZONTAL MACHINING
CENTER



Ø110mm QUILL, 4000rpm



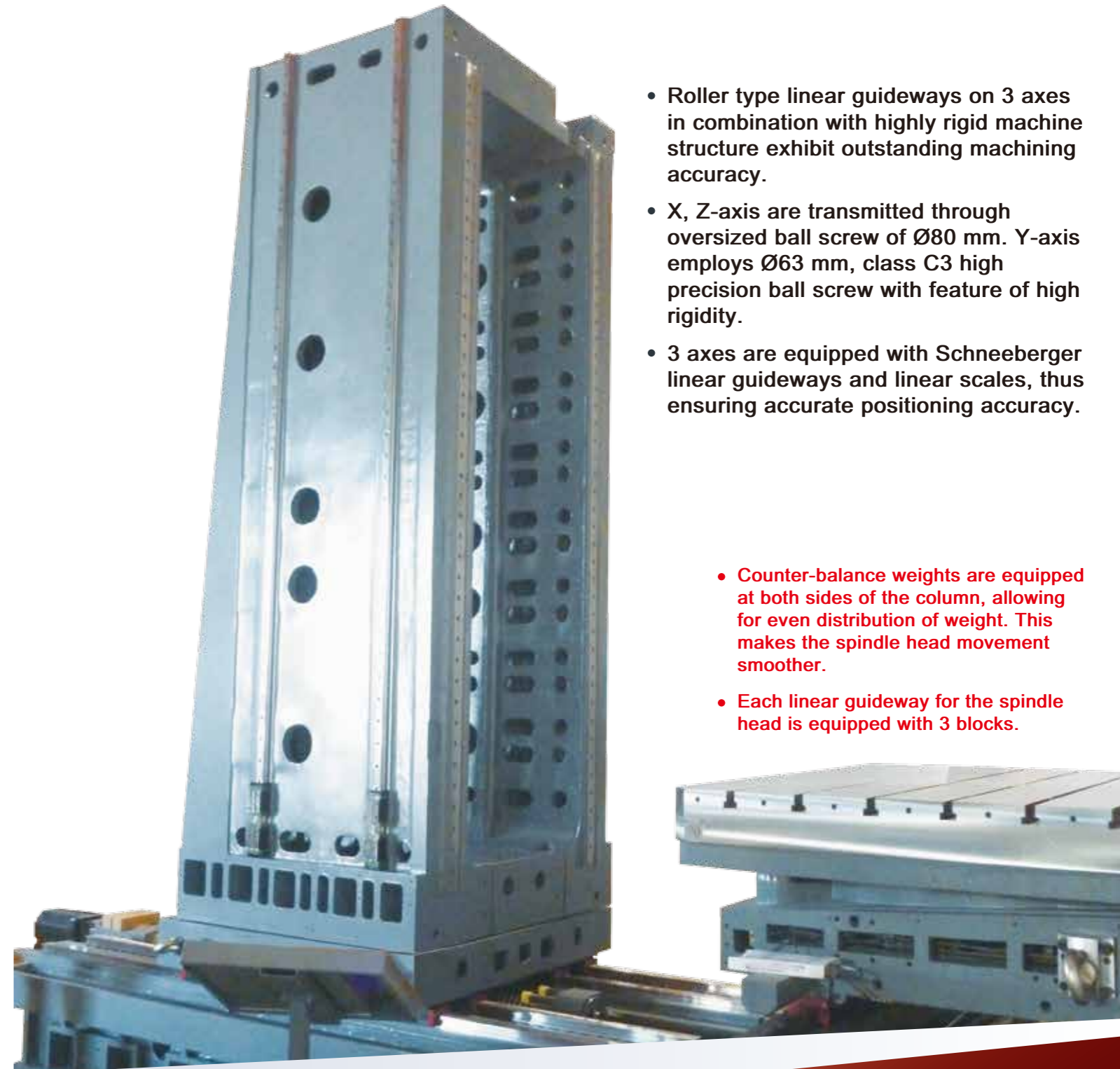
- The back of the spindle head is supported by two linear guide ways to maintain the balance of the spindle head.



- 4 linear ways on Z-axis. (M55 roller type linear ways. Each linear way is equipped with 3 blocks)
- Chip augers are available to mount at both sides of Z-axis (optional).

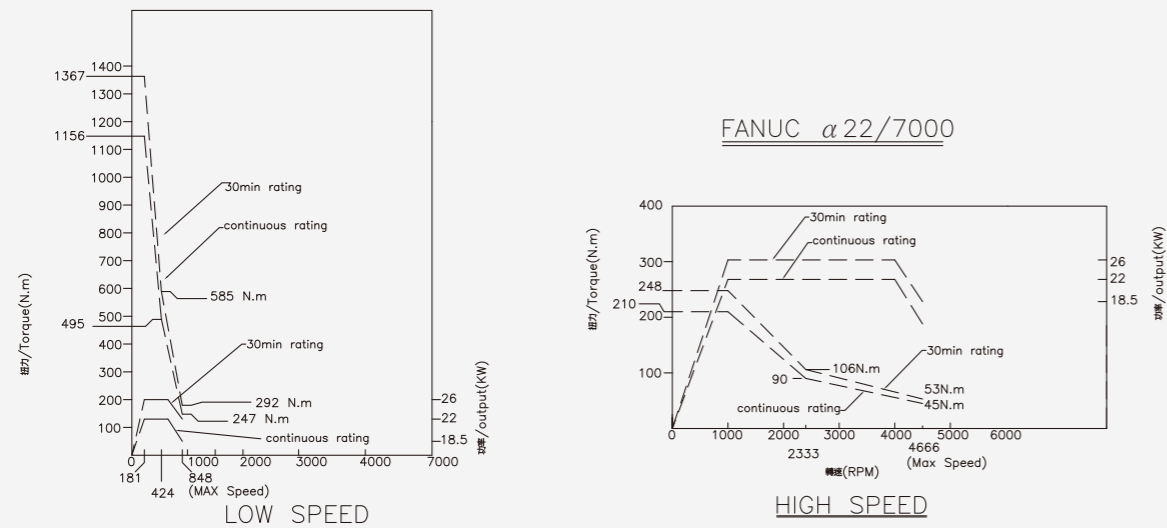
PERFECT STRUCTURE DESIGN

THE ULTIMATE IN RIGIDITY AND STABILITY



- Roller type linear guideways on 3 axes in combination with highly rigid machine structure exhibit outstanding machining accuracy.
- X, Z-axis are transmitted through oversized ball screw of Ø80 mm. Y-axis employs Ø63 mm, class C3 high precision ball screw with feature of high rigidity.
- 3 axes are equipped with Schneebberger linear guideways and linear scales, thus ensuring accurate positioning accuracy.
- Counter-balance weights are equipped at both sides of the column, allowing for even distribution of weight. This makes the spindle head movement smoother.
- Each linear guideway for the spindle head is equipped with 3 blocks.

SPINDLE SPEED / TORQUE DIAGRAM FOR UHM-110xx SERIES FANUC A22/7000 SPINDLE MOTOR



MACHINE SPECIFICATIONS

[]: As Optional

MODLE	UNIT	UHM-1250TW	UHM-1250TWA	UHM-1416TW	
TABLE	Table Size	mm	1250 x 1250	1250 x 1250 APC	1400 x 1600
	T-slots Size	mm	22 x 7		24 x 7
	Maximum Load	kg	5000		8000
	Indexing Degree		1° (0.001°)		
TRAVEL	X-Axis	mm	2000 (2500)		2000
	Y-Axis	mm	1600 (2000)		
	Z-Axis	mm	1200 (1600)		
	W-Axis	mm	400 (500, 550)		500 (550)
SPINDLE	Spindle Speed	rpm	2500 (4000)		
	Spindle Taper		7/24 taper ISO.50, BT-50		
DISTANCES	Spindle Center to Table	mm	0-1600 (2000)		
	Spindle Nose to Table Center	mm	100-1700 (2100) {-50-1650 (2100)}		100-1700 (2100)
	Hight From Ground to Table Surface	mm	1350		
FEED RATE	Rapid Feed Rate X/Y/Z/W	m/min	15/ 15/ 15/ 10		
	Minimum Setting	mm	0.001		
	Cutting Feed Rate	mm/min	1-5000		
MOTOR	Spindle Motor - cont. / 30min.	kW	15/ 18.5 (22 / 26)		
	X/Y/Z/W/B-Axis	kW	4/7/4/4/4		7/7/4/4/7
	Lubricator Motor	kW	0.15		
	Hydraulic Pump	kW	2.25		
	Coolant Pump	kW	1.62		
	Chip Conveyor	kW	0.25		
	Oil Cooler Pump	kW	3.6		
ATC	No. of Tools	pieces	40 (60)		
	Tool Selection		Absolute		
	Max. Tool (dia. / leng.)	mm	Dia. Ø125/Ø250 (Without Adjacent Tool) / Length 400		
	Max. Tool Weight	kg	25		
MISCELLANEOUS	Power Required	kVA	45		50
	Compressed Air	kg/cm ²	6		

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STANDARD ACCESSORIES :

- Linear scale on X, Y, Z-axis
- Spindle oil cooler
- Automatic power off
- Hydraulic system
- Coolant system
- Lubricator system
- Alarm lamp
- Work lamp
- M. P. G.
- RS-232 interface
- Heat exchanger
- Chip conveyor and cart
- Leveling bolts and pads
- Controller manuals and circuit diagram
- Operation manuals
- Machine inspection lists
- Fully enclosed splash guard
- Toolbox with spanners & wrenches
- FANUC 0iMF controller
- ATC: 40 tools (swing arm type)

OPTIONAL ACCESSORIES :

- ATC: 60/90/120 tools (swing arm type)
- 24/32 tools ATC (side mount type)
- Oil mist device
- Variety of controllers (FANUC / Mitsubishi / SIEMENS / HEIDENHAIN / FAGOR)
- Various auxiliary work tables
- Air conditioner at electrical cabinet
- Coolant through spindle
- 0.001° indexing on B-axis (Simultaneous machining)
- Tool measurement device
- Workpiece centering measurement device
- Chip auger on Z-axis
- Coolant jets around spindle (independent pump)
- Various sizes of table
- Semi-enclosed splash guard

UHM-630

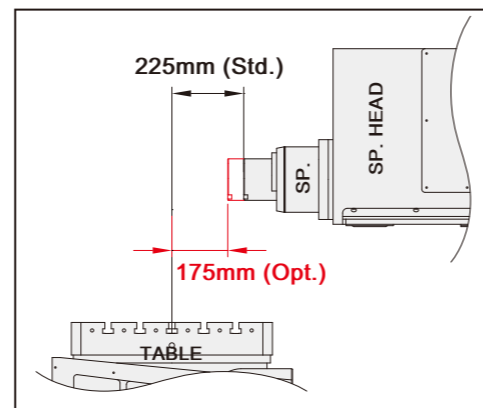
CNC HORIZONTAL MACHINING CENTER (SIDE-MOUNT SPINDLE HEAD)

- 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 (Z-axis)
- 1° indexing rotary table (Standard)
0.001° indexing rotary table (Optional)
- BT50 spindle taper
- Linear scales on three axes



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



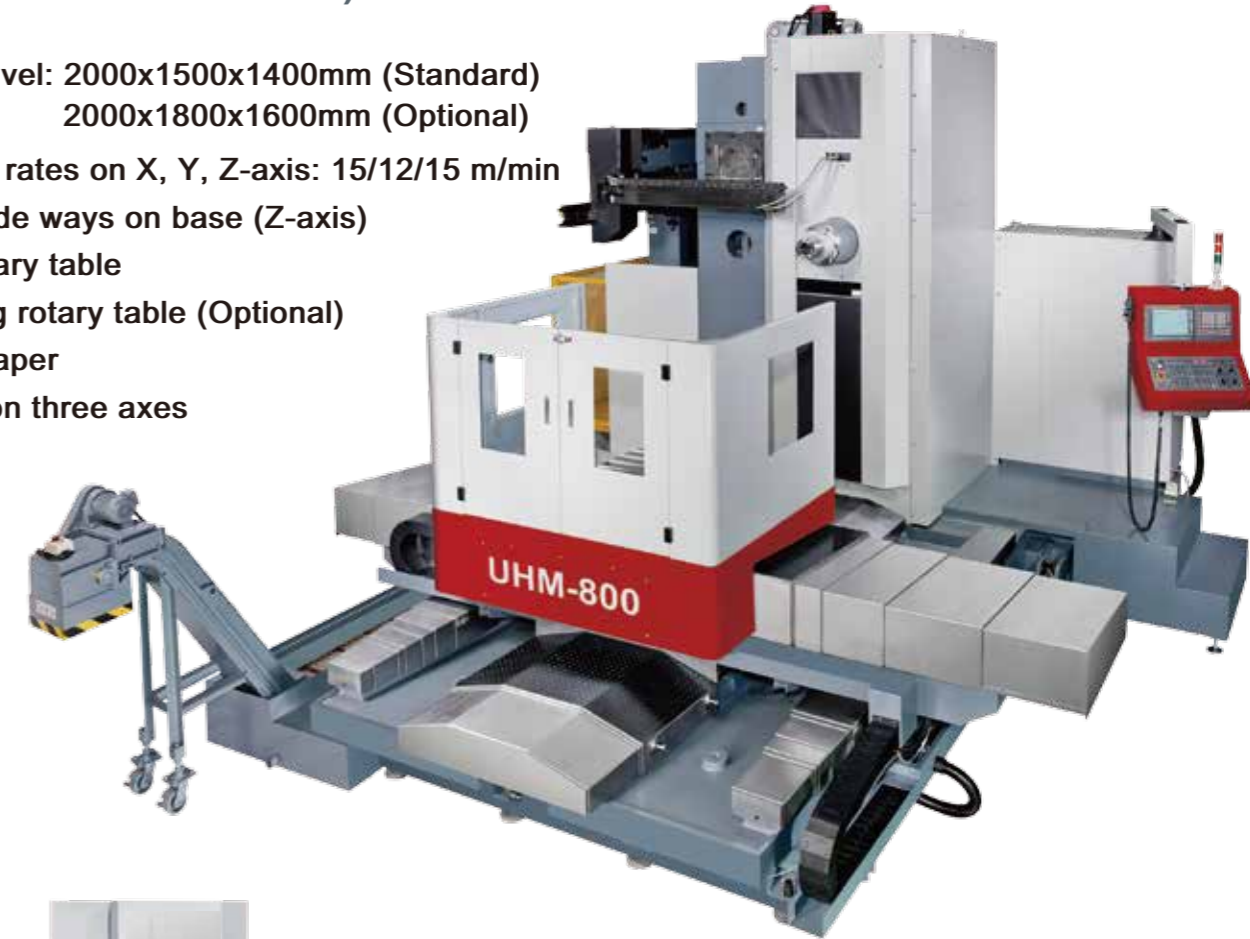
Shorter Distance From Spindle Nose To Table Center

- 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.

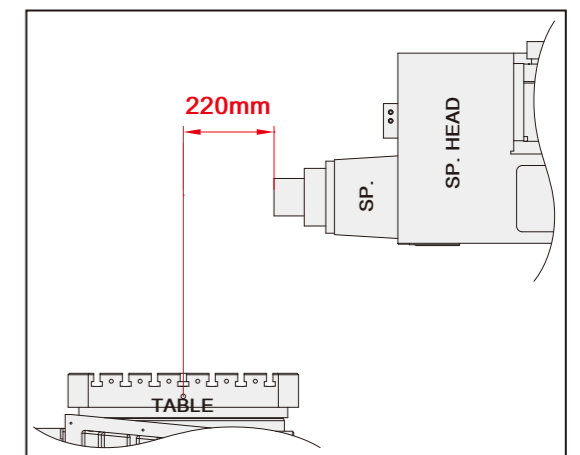
UHM-800

CNC HORIZONTAL MACHINING CENTER (SIDE-MOUNT SPINDLE HEAD)

- X, Y, Z-axis travel: 2000x1500x1400mm (Standard)
2000x1800x1600mm (Optional)
- Rapid traverse rates on X, Y, Z-axis: 15/12/15 m/min
- Four linear guide ways on base (Z-axis)
- 1° indexing rotary table
- 0.001° indexing rotary table (Optional)
- BT50 spindle taper
- Linear scales on three axes



Spacious splash guard (Optional)



Shorter Distance Form 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.

UHM series

Fixed Column With Side-Mount Spindle Head

MACHINE SPECIFICATIONS

(): As Optional

MODLE		UNIT	UHM-630	UHM-800	UHM-800A	UHM-1250	UHM-1250A	UHM-1512	UHM-2015
TABLE	Table Size	mm	630x630x360D	800x800x360D	800x800x360D(APC)	1250x1250x360D	1250x1250x360D(APC)	1100 x 800	1500x800 Long Table
	T-slots Size	mm	20 x 5	22 x 7		22 x 7		20 x 5	
	Maximum Load	kg	2000 (2500)	4000	3000	5000		2500	4000
	Indexing Degree		1° / 360 (0.001°)			1° / 360 (0.001°)		-	-
TRAVEL	X-Axis	mm	1500 (1600)	2000		2000		1500 (1600)	2000
	Y-Axis	mm	1200	1500 (1800)	1500	1500 (1800)	1500	1200	1500 (1800)
	Z-Axis	mm	1000 (1100)	1400 (1600)	1400	1400		1000 (1100)	1400
SPINDLE	Spindle Speed	rpm	4000 (6000)			4000 (6000)		4000 (6000)	
	Spindle Taper		7/24 taper ISO.50, BT-50			7/24 taper ISO.50, BT-50		7/24 taper ISO.50, BT-50	
DISTANCES	Spindle Center to Table	mm	0~1200	0~1500 (1800)	0~1500	0~1500 (1800)	0~1500	40~1240	0~1500 (1800)
	Spindle Nose to Table Center	mm	(175~1175) 225~1225	220~1620 (1820)	220~1620	370~1770		225~1225	220~1620 (1800)
	Hight From Ground to Table Surface	mm	1110	1325	1480	1350	1480	1075	1325
FEED RATE	Rapid Feed Rate X / Y / Z	m/min	15 / 12 / 15			15 / 12 / 15		15 / 12 / 15	
	Minimum Setting	mm	0.001			0.001		0.001	
	Cutting Feed Rate	mm/min	1~5000			1~5000		1~5000	
MOTOR	Spindle Motor - cont. / 30min.	kW	11/15 (15/18.5)	15/18.5 (22/26)		15/18.5 (22/26)		11/15 (15/18.5)	15/18.5 (22/26)
	X / Y / Z / B-Axis	kW	3 / 3 / 4 / 3	4 / 4 / 4 / 3		4 / 4 / 4 / 4		3 / 3 / 4	4 / 4 / 4
	Lubricator Motor	kW	0.15			0.15		0.15	
	Hydraulic Pump	kW	2.25			2.25		2.25	
	Coolant Pump	kW	1.62			1.62		1.62	
	Chip Conveyor	kW	0.25			0.25		0.25	
	Oil Cooler Pump	kW	3.6			3.6		3.6	
	No. of Tools	pieces	40 (60)			40 (60)		40 (60)	
ATC	Tool Selection		Absolute			Absolute		Absolute	
	Tool Change Time (approx.) (T to T)	sec	15			15		15	
	Max. Tool (dia. / leng.)	mm	Dia. Ø125/Ø250 (Without Adjacent Tool) / Length 400			Dia. Ø125/Ø250 (Without Adjacent Tool) / Length 400		Dia. Ø125/Ø250 (Without Adjacent Tool) / Length 400	
	Max. Tool Weight	kg	18 (25)			18 (25)		18 (25)	
MISCELLANEOUS	Power Required	kVA	30	45		45		30	45
	Compressed Air	kg/cm ²	6			6		6	
	Change Time (approx.)	sec.	-	-	90	-	120	-	-

■ Specifications are subject to change without prior notice.

STANDARD ACCESSORIES :

- Linear scale on X, Y, Z-axis
- Spindle oil cooler
- Automatic power off
- Hydraulic system
- Coolant system
- Lubricator system
- Alarm lamp
- Work lamp
- M. P. G.
- RS-232 interface
- Heat exchanger
- Chip conveyor and cart
- Leveling bolts and pads
- Controller manuals and circuit diagram
- Operation manuals
- Machine inspection lists
- Splash guards (around the table)
- Toolbox with spanners & wrenches
- FANUC 0iMF controller
- ATC: 40 Tools

OPTIONAL ACCESSORIES :

- ATC: 60/90/120 Tools
- 24/32 tools magazine (side mount type)
- Oil mist device
- Variety of controllers (FANUC / Mitsubishi / SIEMENS / HEIDENHAIN)
- Various auxiliary work tables
- Air conditioner at electrical cabinet
- Coolant through spindle
- Various work tables are available
700x700, 700x900 mm (for UHM-630)
800x1000, 1000x1000 mm (for UHM-800)
- 0.001° indexing on B-axis
- Oil-feed holder
- Spacious splash guard
- Fully enclosed splash guard (with top guard)
- 2500kg table load on UHM-630

UHM-1250A



UHM-B SERIES

UHM-800B / 1000B / 1250B

UHM-800BA / 1000BA / 1250BA

UHM-800BW / 1000BW / 1250BW

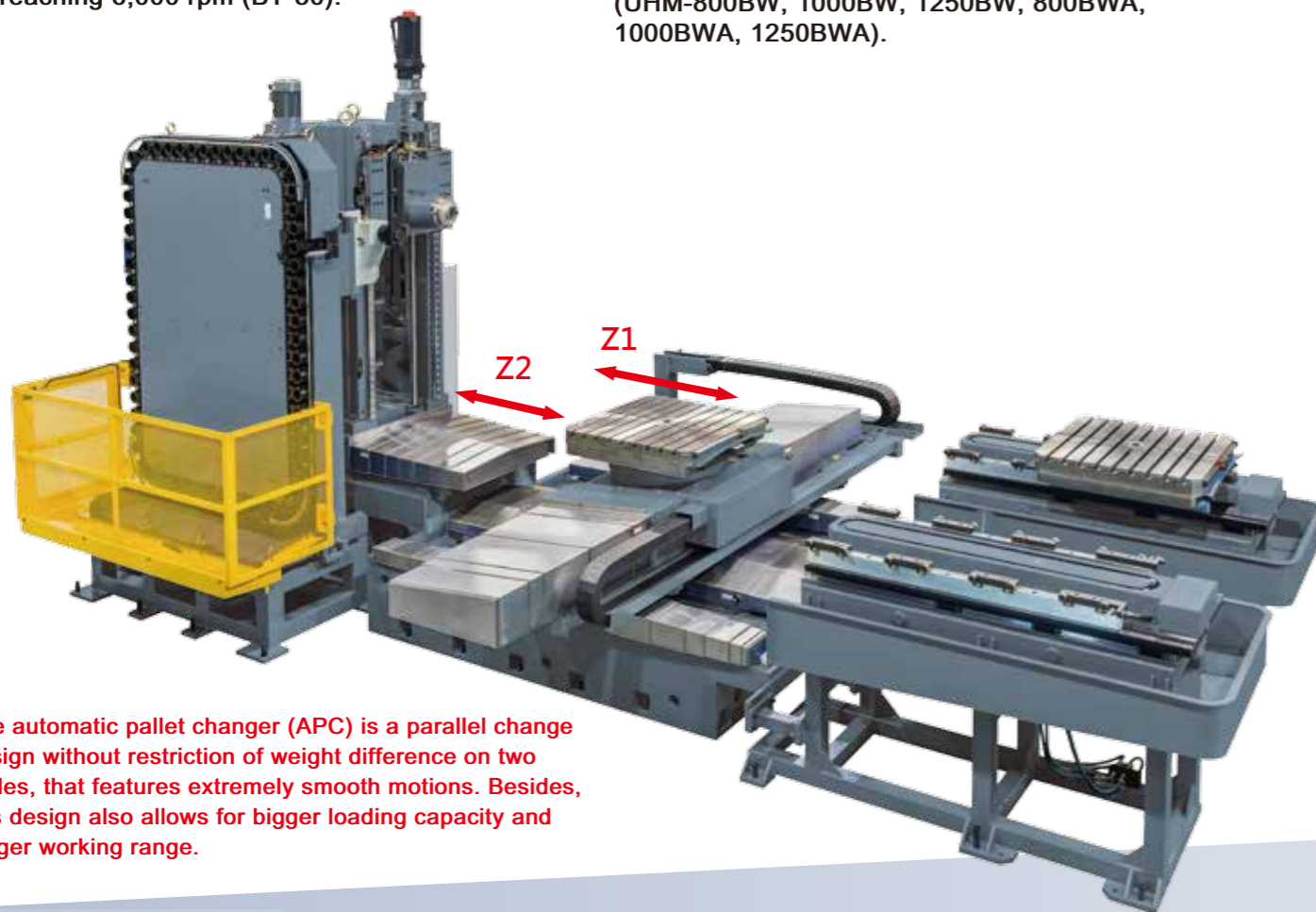
UHM-800BWA / 1000BWA / 1250BWA

CNC HORIZONTAL MACHINING CENTER

Maximized machining range of a horizontal machining center

One-piece bed design that combines the cross slide and the center-mount spindle on the traveling column, thus ensuring optimal rigidity and stability.

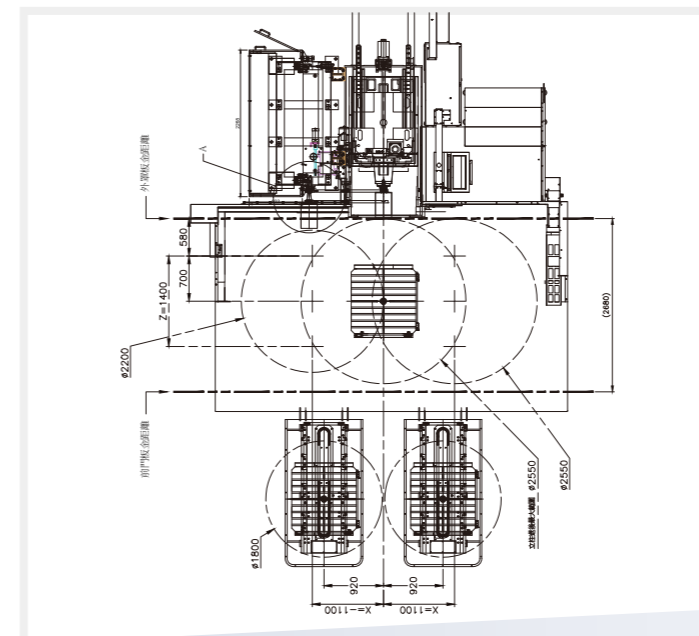
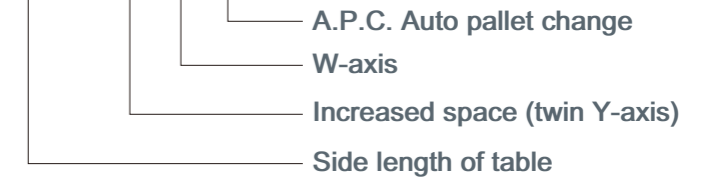
- Twin Z-axis. Maximum swing diameter is of up to $\varnothing 2,600$ mm.
- Linear guideways on X, Y, Z1, Z2-axis.
- Two-step gear-drive spindle with speed reaching 6,000 rpm (BT-50).
- The direct-drive spindle provides a speed selection of 8,000 rpm and 10,000 rpm (BT-50).
- Available to select a spindle head with W-axis, quill diameter $\varnothing 110$ mm and W-axis travel 400mm (500mm optional). Speed can reach 4000 rpm (UHM-800BW, 1000BW, 1250BW, 800BWA, 1000BWA, 1250BWA).



The automatic pallet changer (APC) is a parallel change design without restriction of weight difference on two tables, that features extremely smooth motions. Besides, this design also allows for bigger loading capacity and bigger working range.

MODEL IDENTIFICATION

UHM-XXXXBWA



Max. machining range is more than 50% bigger than that of a similar machine. Max. loading capacity is 30% higher than that of a competitive model. This machine is widely applied in various industries, such as mold machining, structural parts machining and various parts machining.

MACHINE SPECIFICATIONS

[]: As Optional

MODLE		UNIT	UHM-800B	UHM-800BA	UHM-1000B	UHM-1000BA	UHM-1250B	UHM-1250BA	UHM-800BW	UHM-800BWA	UHM-1000BW	UHM-1000BWA	UHM-1250BW	UHM-1250BWA						
TABLE	Table Size	mm	800x800	800x800 APC	1000x1000	1000x1000 APC	1250x1250	1250x1250 APC	800x800	800x800 APC	1000x1000	1000x1000 APC	1250x1250	1250x1250 APC						
	T-slots Size	mm	22x7																	
	Maximum Load	kg	4000			4000			5000			4000			4000			5000		
	Indexing Degree		1° (0.001°)																	
TRAVEL	X-Axis	mm	2000 (2200)																	
	Y-Axis	mm	1200 (1350)						1600 (2000)											
	Z1-Axis	mm	1400				1300				1400				1300					
	Z2-Axis	mm	800																	
	W-Axis	mm	0						400 (500)											
SPINDLE	Spindle Speed	rpm	6000 (4000, 8000)						4000											
	Spindle Taper		7/24 taper ISO.50, BT-50																	
DISTANCES	Spindle Center to Table	mm	0~1200 (0~1350)						0~1600 (0~2000)											
	Spindle Nose to Table Center	mm	220~2420						370~2470						0~2420					
	Hight From Ground to Table Surface	mm	1325	1480	1325	1480	1350	1520	1325	1480	1350	1480	1350	1480	1350	1520				
FEED RATE	Rapid Feed Rate X / Y / Z	m/min	15 / 20 / 15 / 20						15 / 18 / 15 / 18 / 10											
	Minimum Setting	mm	0.001																	
	Cutting Feed Rate	mm/min	1~8000																	
MOTOR	Spindle Motor - cont. / 30min.	kW	15/18.5 (22/26)																	
	X / Y / Z1 / Z2 / B / W-Axis	kW	4 / 7 / 4 / 4 / 4						4 / 7 / 4 / 4 / 4 / 4											
	Lubricator Motor	kW	0.15																	
	Hydraulic Pump	kW	2.25																	
	Coolant Pump	kW	1.62																	
	Chip Conveyor	kW	0.25																	
	Oil Cooler Pump	kW	3.6																	
ATC	No. of Tools	pieces	40 (60, 90)																	
	Tool Selection		Cam drive random type (Absolute tool no.)						Absolute tool no.											
	Max. Tool (dia. / leng.)	mm	Dia. Ø125/Ø250 (Without Adjacent Tool) / Length 400																	
	Max. Tool Weight	kg	18 (25)						25											
MISCELLANEOUS	Power Required	kVA	45						50											
	Compressed Air	kg/cm ²	6																	

■ Specifications are subject to change without prior notice.

STANDARD ACCESSORIES :

- Linear scale on X, Y, Z-axis
- Spindle oil cooler
- Automatic power off
- Hydraulic system
- Coolant system
- Lubricator system
- Alarm lamp
- Work lamp
- M. P. G.
- RS-232 interface
- Heat exchanger
- Chip conveyor and cart
- Leveling bolts and pads
- Controller manuals and circuit diagram
- Operation manuals
- Machine inspection lists
- Fully enclosed splash guard
- Toolbox with spanners & wrenches
- FANUC OiMF controller
- ATC: 40 Tools

OPTIONAL ACCESSORIES :

- ATC: 60/90/120 Tools
- 4, 6, 8 pallets (APC)
- Oil mist device
- Variety of controllers (FANUC / Mitsubishi / SIEMENS / HEIDENHAIN / FAGOR)
- Various auxiliary work tables
- Air conditioner at electrical cabinet
- Coolant through spindle
- 0.001° indexing on B-axis
- Chip auger on Z2-axis
- Coolant jets around spindle (independent pump)
- Semi-enclosed splash guard