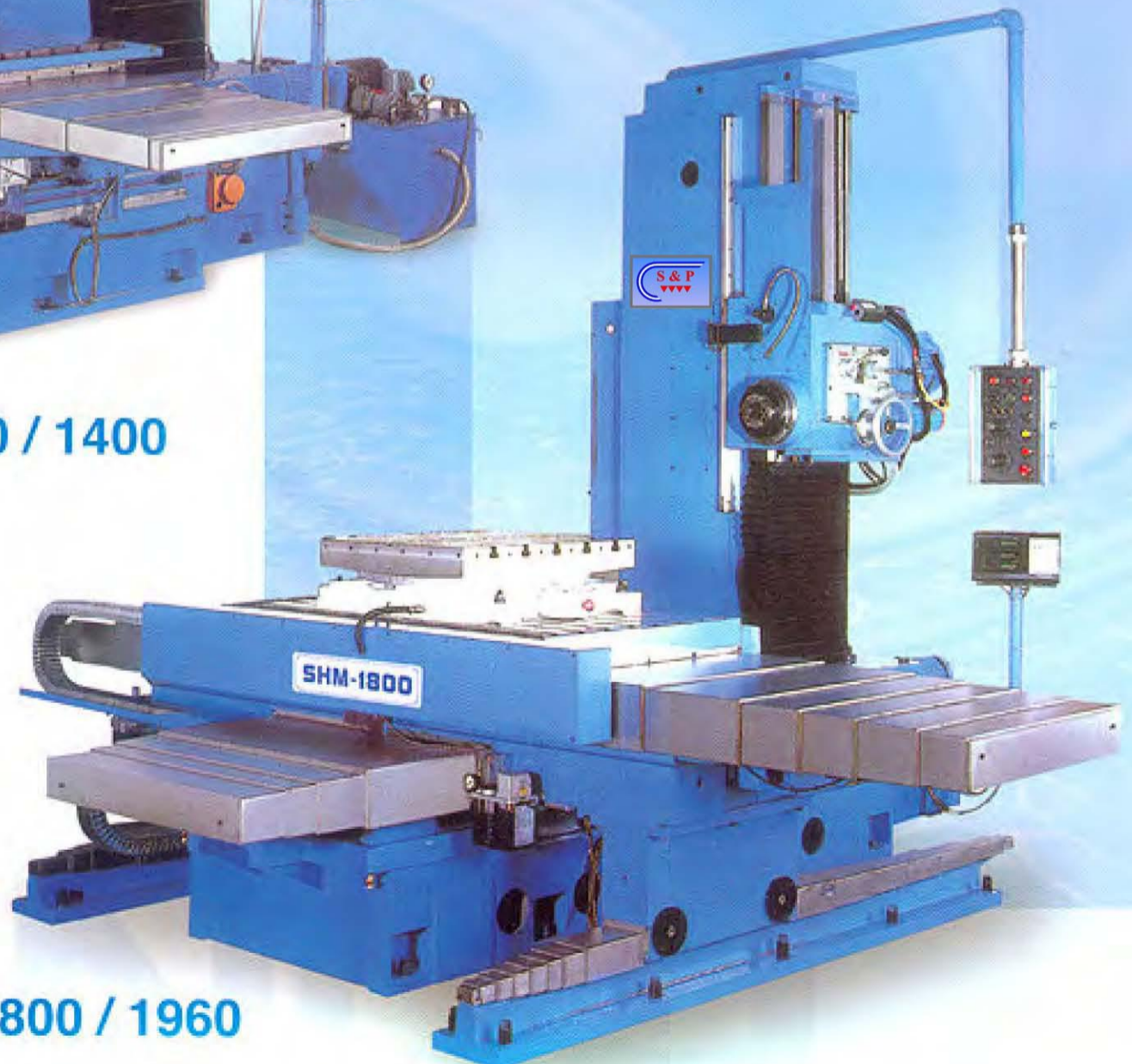


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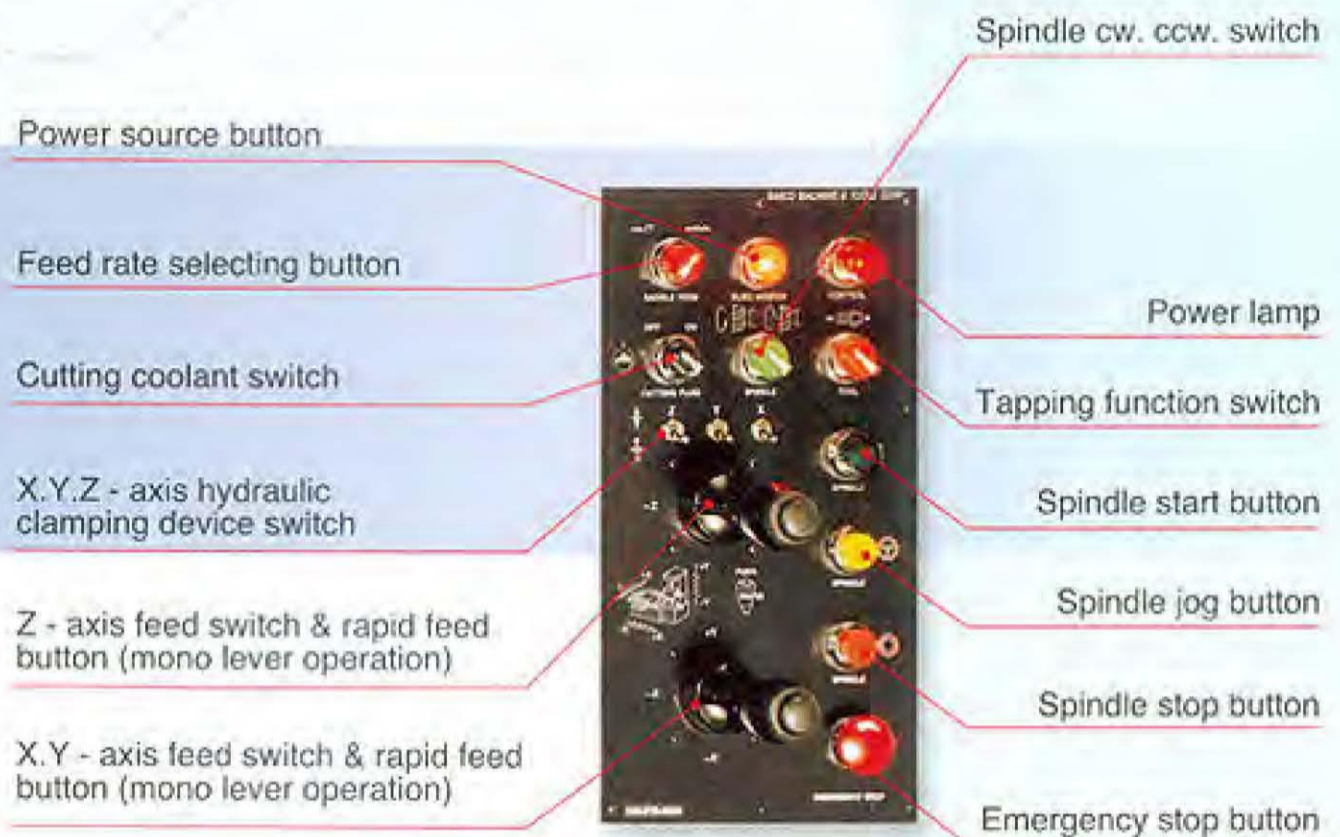
High Precision Horizontal Boring & Milling Machine Series



• SHM-1200 / 1400



• SHM-1800 / 1960



High Precision Horizontal Boring Milling Machine

HIGH ACCURACY

Adopt high class FC30 cast iron & high intensity of alloy steel components, precised gear, and "SANCO" consistent keeps outstanding technology to achieve the highest standard on accuracy, intensity, as well as excellent processing application.

EXCELLENT OPERATION

X.Y.Z axes performance adopt hydraulic clamping system developed by our company, matching with good electricity operation to lock any one axis or three axes at a very short time, and perform the effects of fastness, accuracy, labor-saving while processing, meanwhile cooperating with excellent hydraulic supplement and this locking system makes three axes function more perfect.

MOST RELIABLE DESIGN

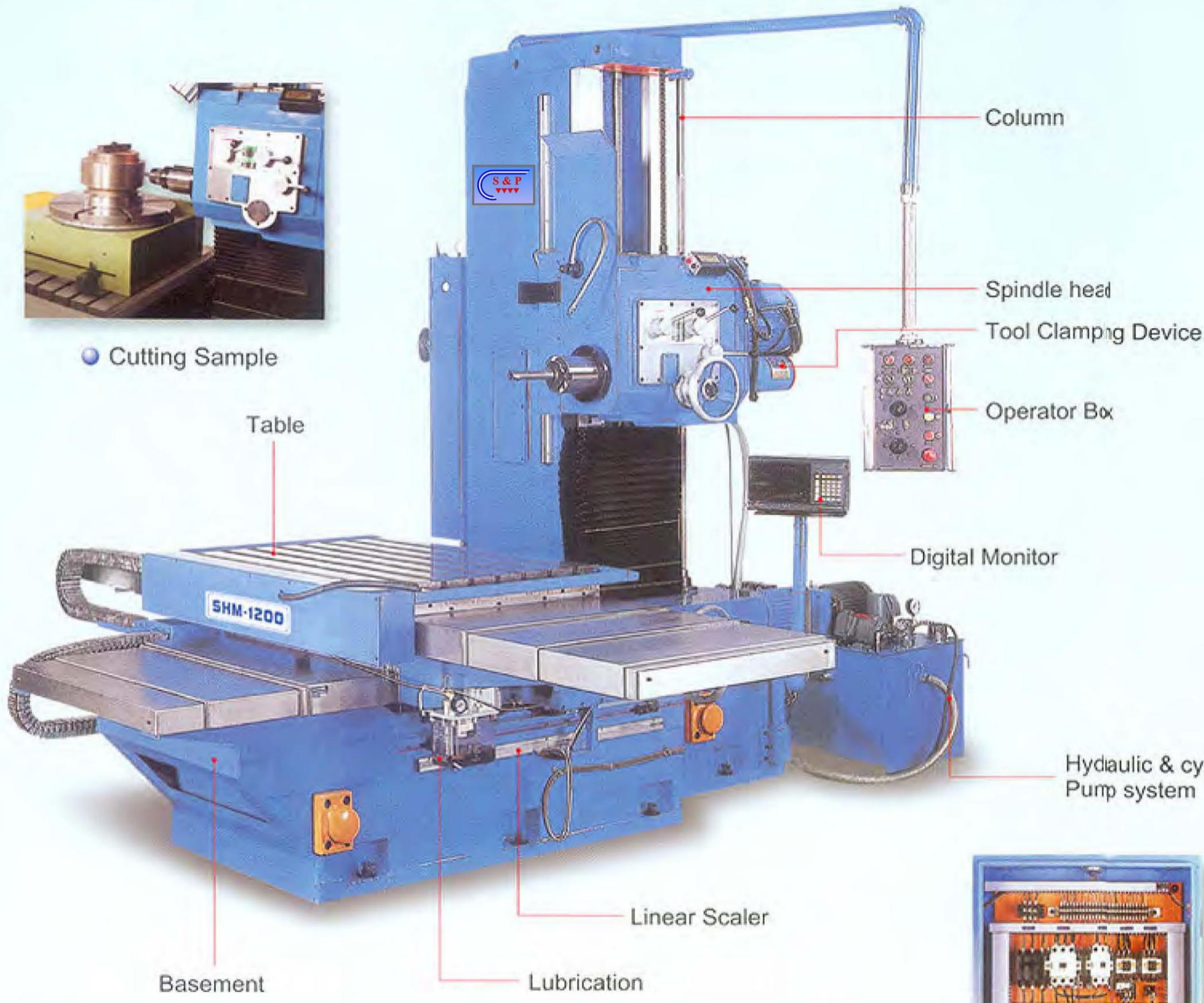
With our many years experience, this machine has been regulated with more reliable, ideal mechanical structure and the range of processing to enable manufacturing from minimum work-piece to maximum one with consistent accuracy of processing. Further matching with fore-mentioned pneumatic locking system, hydraulic clamping system, firm & closed telescopic cover and perfect swarf baffle device to maintain precision of machine through long time processing procedure as well as preventing the stain & damage while machine's cutting.

PRODUCTION BELIEF OF CONTINUOUS PROGRESS

With the spirit of keeping improving and belief of striving for perfection, all our staff struggles to produce much better machine and try the best to improve more and more progress quality based on the conception of Total Quality Management all the time, as well as let SANCO stand on the status of the highest honor. Likewise because of this insistence, push SANCO to supply the excellent machinery to the market still.

SHM-1200/1400

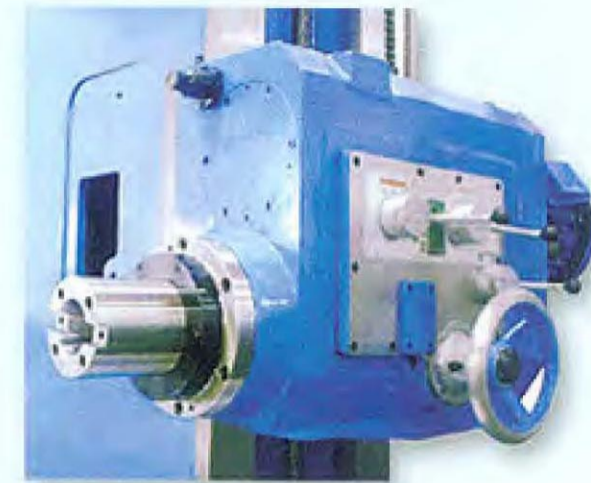
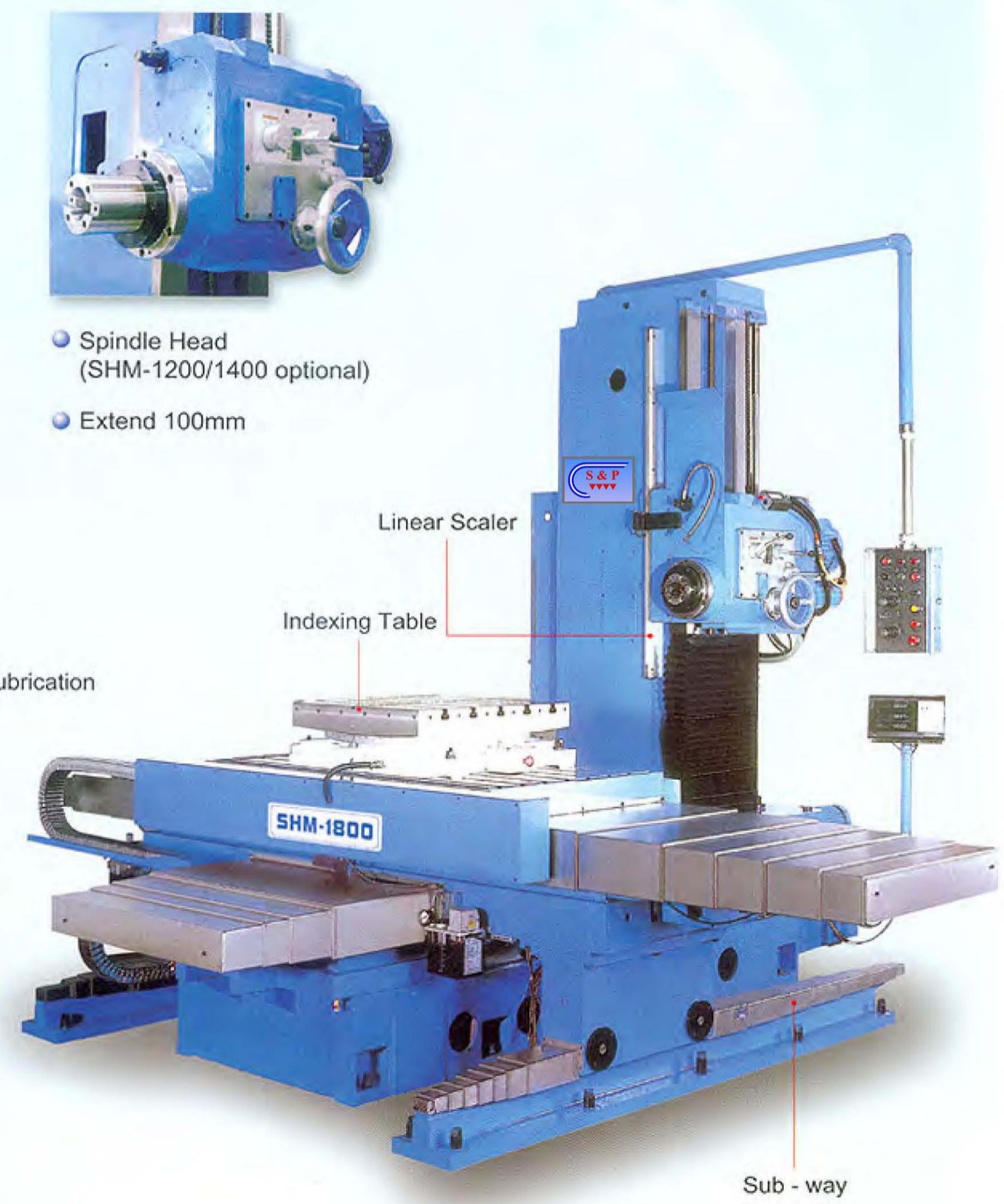
High Precision Horizontal Boring & Milling Machine



● Cutting Sample

SHM-1800/1960

High Precision Horizontal Boring & Milling Machine



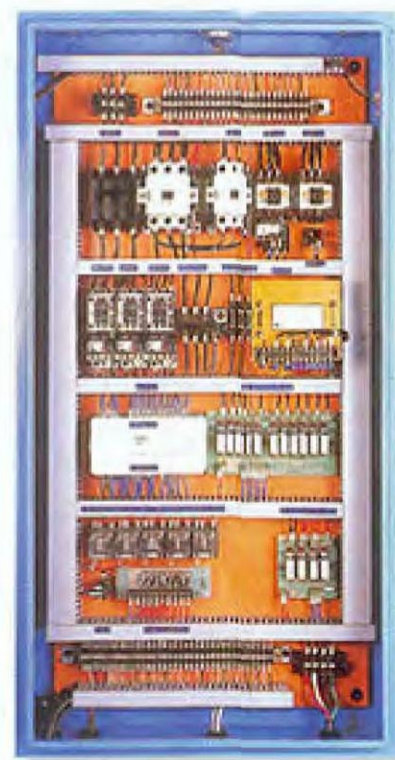
- Spindle Head (SHM-1200/1400 optional)
- Extend 100mm



● Indexing Table

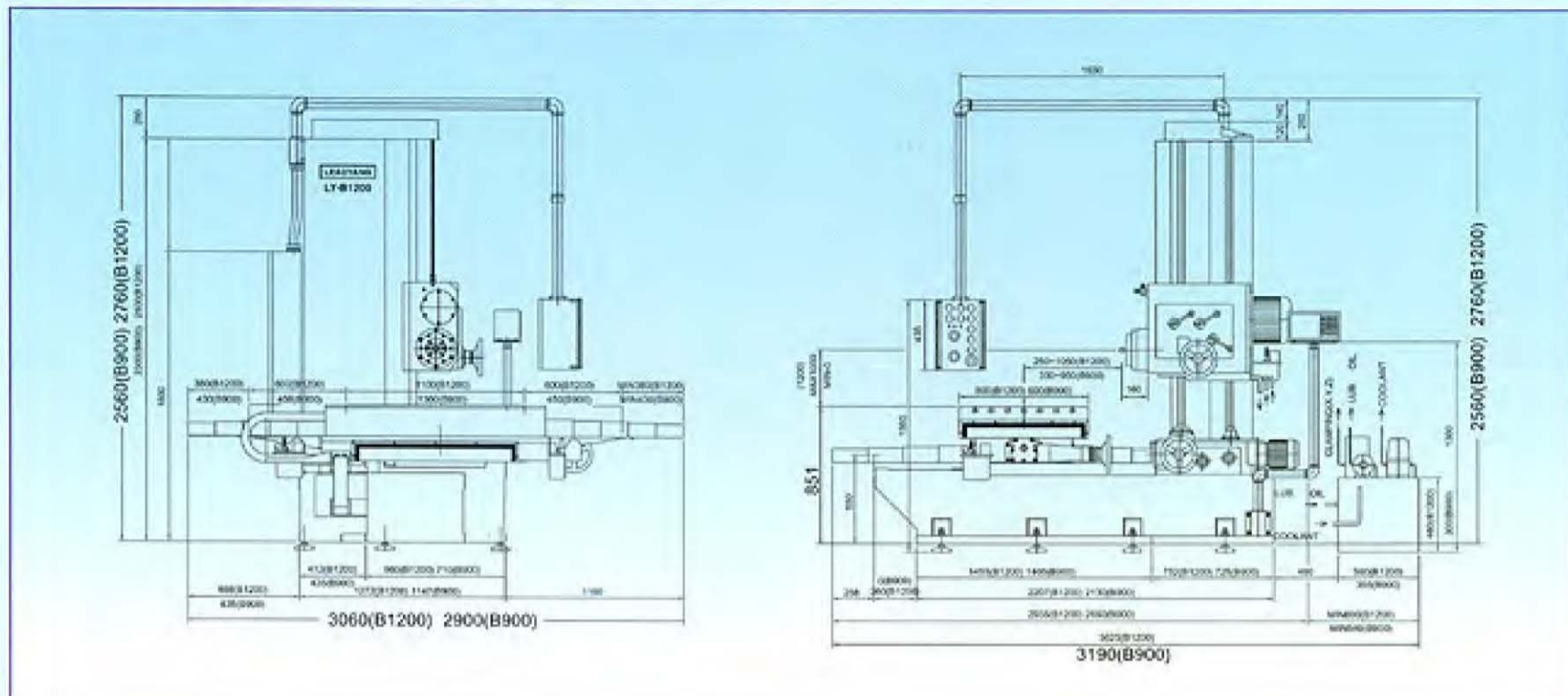


● Digital Monitor

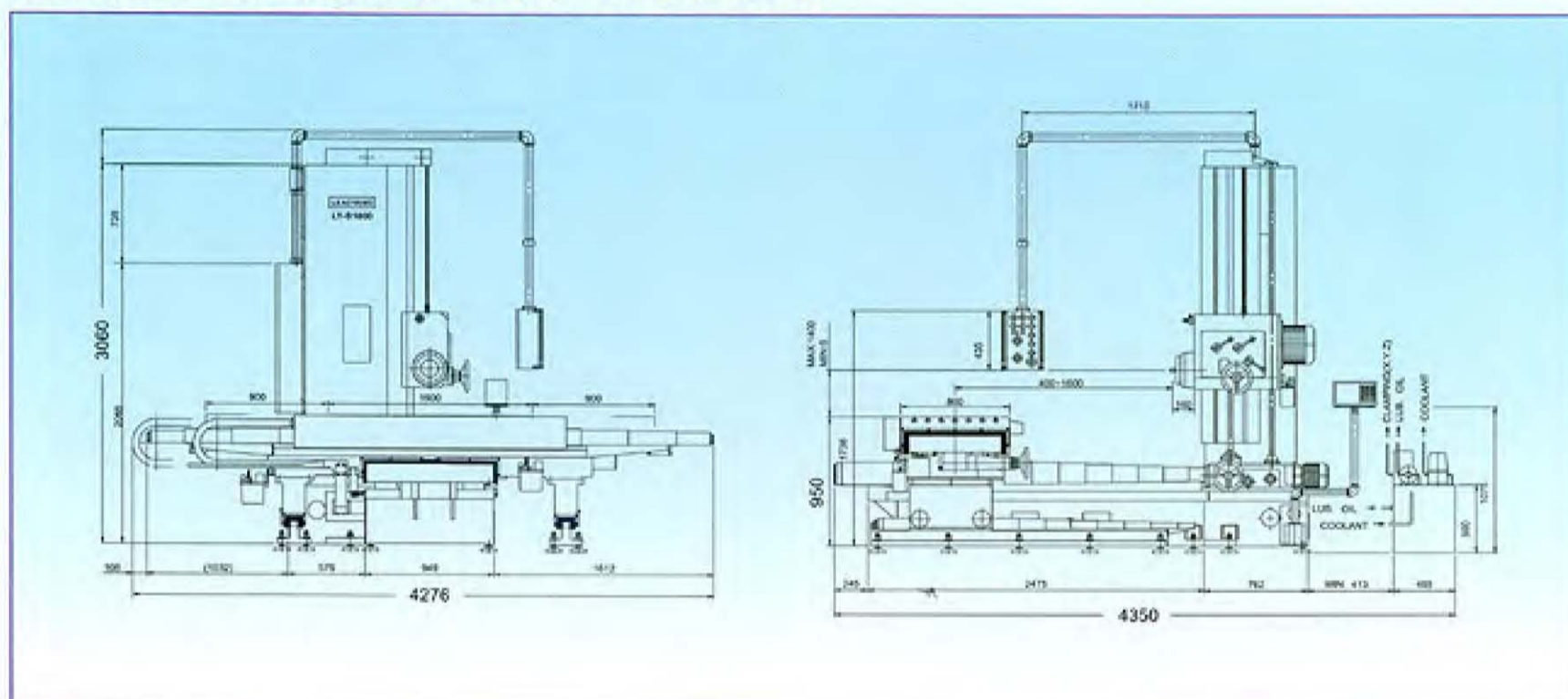


● Electrical Cabinet

Machine Dimension SHM-1200 / 1400



Machine Dimension SHM-1800 / 1960



STANDARD ACCESSORIES:

- * Hydraulic pump.
 - * Index table 600 x 600 mm / 72D.
 - * Pulse scale & display.
 - * Air clamping device.
 - * Adjusting tools kit.
 - * Cycle lubrication pump system.
- (Included: coolant, head stock, guide lubrication)

SPECIAL ACCESSORIES:

- * Index table 700 x 700 mm / 72D
- 800 x 800 mm / 72D.
- * Spindle shaft additional length 100 mm.
- * Indexing table 360D

MACHINE SPECIFICATIONS

ITEM	MODEL	Unit	SHM-1200	SHM-1400	SHM-1800	SHM-1960
Working table dimension		mm	1100 × 800		1500 × 800	
T-slots		mm x slot	20 × 7			
X axis travel		mm	1200	1400	1800	1960
Y axis travel		mm	1200 (1400)		1400 (1700)	
Z axis travel		mm	800 (1000)		1200 (1400)	
Maximum loading		kg	1200		2000	
Working table surface height		mm	850		950	
Spindle taper			NT#50 (BT#50)			
Spindle changing speed		rpm	45-1500 (30-1000)			
Distance between spindle center to working table		mm	0-1200 (0-1400)		0-1400 (0-1700)	
X.Y.Z axis 12 steps cutting speed(60/50HZ)		mm/min	28-875 / 23-730			
Z axis 12 steps boring speed(60/50HZ)		mm/rev.	0.028-0.875 / 0.023-0.73			
X.Y.Z axis rapid speed(60/50HZ)		mm/min	2800 / 2400			
Main motor		kw	5.5 × 4P (6P) / 7.5 × 4P (6P)			
Spindle cycle lubrication motor		kw	0.2 × 4P			
Centralized lubrication motor		w	25			
Auto feed gear box motor		kw	0.75 × 4P		1.2 × 4P	
Cutting coolant motor		kw	0.1 × 4P			
Transmission motor		kw	1.5 × 4P			
Machine weight		kg	6500	6800	10000	10500
Floor space requirement		mm	3200 × 3600	3400 × 3600	4300 × 4400	4500 × 4400


CNC Double Column Machining Center Series

X 1,700 — 6,200 mm

Y 1,200 — 4,000 mm

Z 750 — 1,200 mm

Distance of two Columns 1,400 — 3,500 mm


CNC Bed's Universal Milling Machining Series

SBM-1500 / 2000 / 2600 / 3000

SBM-2000L / 2600L / 3000L / 3500L

X 1,500 — 3,500 mm

Y 1,000 mm

Z 1,000 / 1,200 / 1,500 mm


CNC Vertical Machining Centers

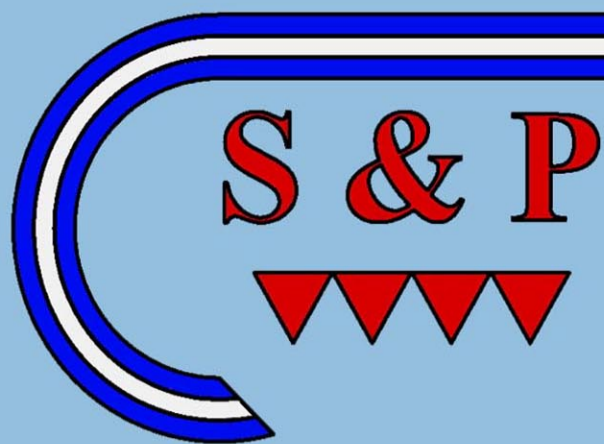
SVM-1100 / 1500L

X 1,100 / 1,500 mm

Y 600 / 800 mm

Z 610 / 750 mm

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CNC HIGH PRECISION HORIZONTAL BORING & MILLING MACHINE (COLUMN MOVING)



SHM-11025 / SHM-11030



- ▲ • Independent tool magazine won't influence the accuracy during machining.
- Tool pockets of the magazine ranges from 40, 60, 90 to 120 tools
- Tool clamping / unclamping employs hydraulic mechanism.
- Spindle taper selection with either BT-50 or CAT-50 tool shank is available.

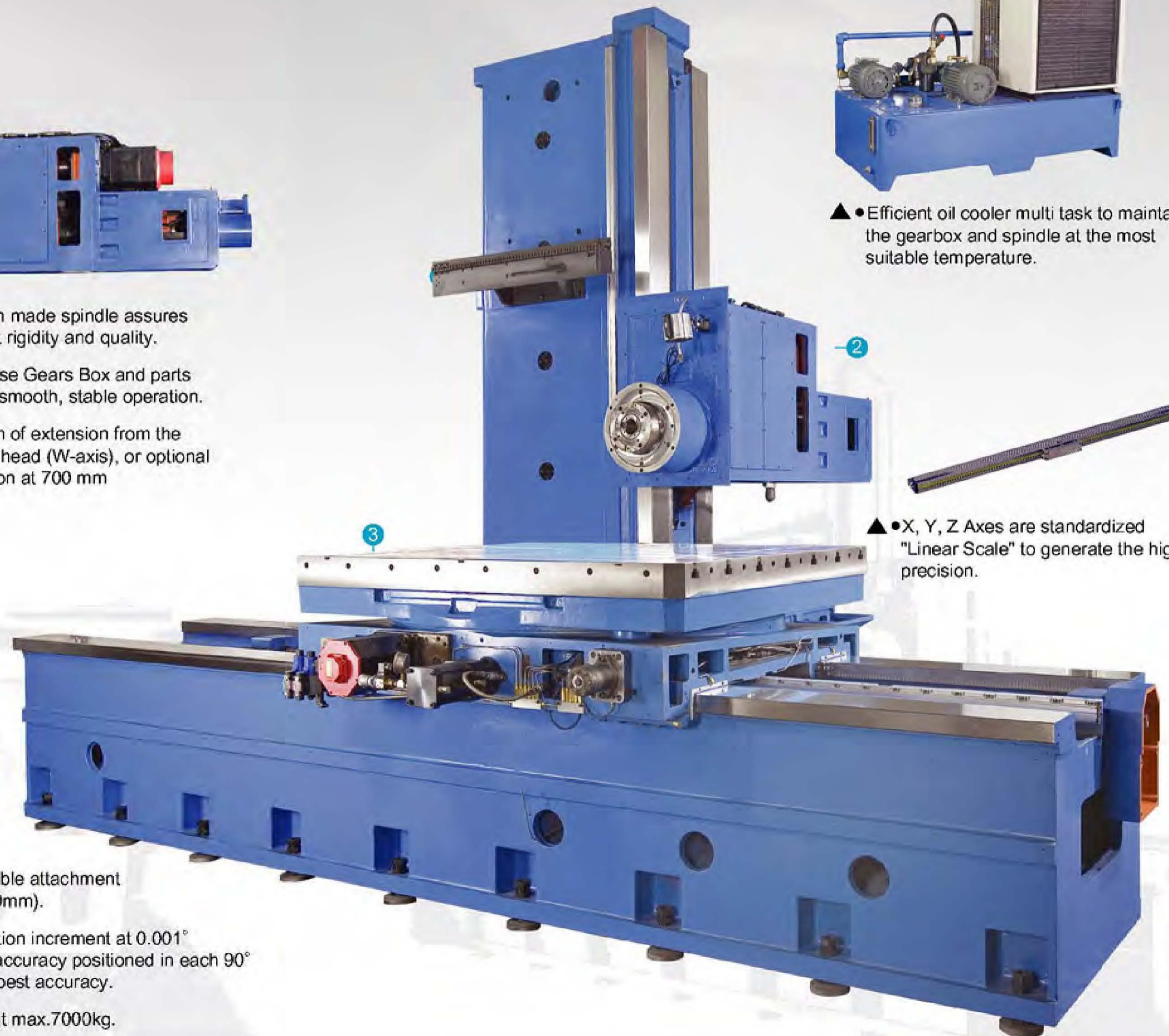
- ▲ • German made spindle assures highest rigidity and quality.
- Japanese Gears Box and parts ensure smooth, stable operation.
- 500 mm of extension from the spindle head (W-axis), or optional extension at 700 mm

- ▲ • Efficient oil cooler multi task to maintain the gearbox and spindle at the most suitable temperature.

- ▲ • X, Y, Z Axes are standardized "Linear Scale" to generate the highest precision.



- ▲ • Direct Rotary Table attachment (1600mm x 1400mm).
- Continuous rotation increment at 0.001° and positioning accuracy positioned in each 90° makes sure the best accuracy.
- Can be loaded at max. 7000kg.





MACHINE STRUCTURE



- Column moving with T 's structure enhance the rigidity and the precision of the overall machine.
- Z-Axis applied the Rolling linear guide (3 Ways) with total of 12 guide blocks keep smooth movement and superior rigidity
- Heat treatment and precision grinding for X, Y Box ways

Various working table can be tailor-made.

Such:

1. 2000mm x 1400mm + X-Axis travel: 2500 mm
2. 3000mm x 1400mm + X-Axis travel: 3200 mm
3. 4000mm x 1400mm + X-Axis travel: 4200 mm

*X-Axis uses "Linear way" if being ordered.



SHM-11025 / SHM-11030



OPTIONAL ACCESSORIES



Angular Block



90° Angle Plate



Spindle Extension Sleeve



Boring & Facing Head



Angle Milling Head



Universal Milling Head



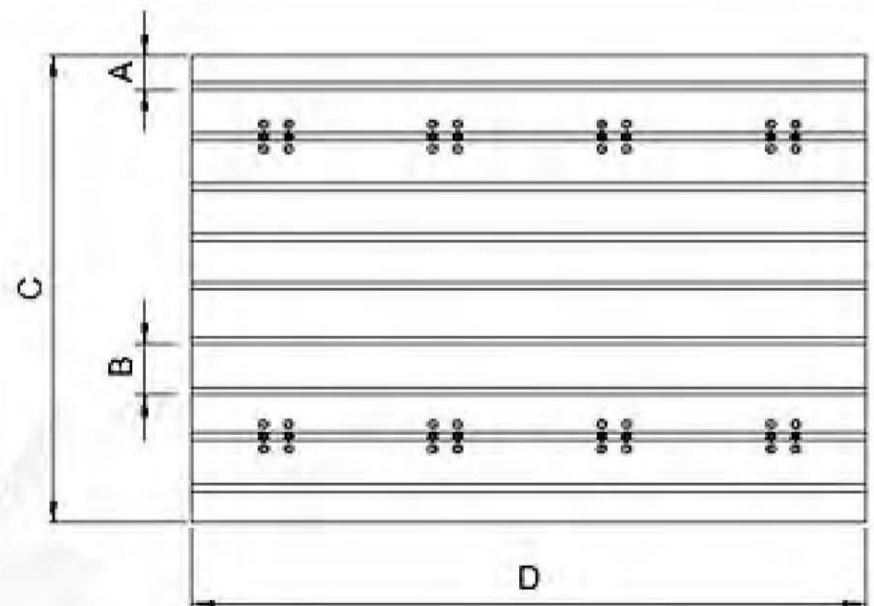
Long Working Table Dimension:

A=100mm

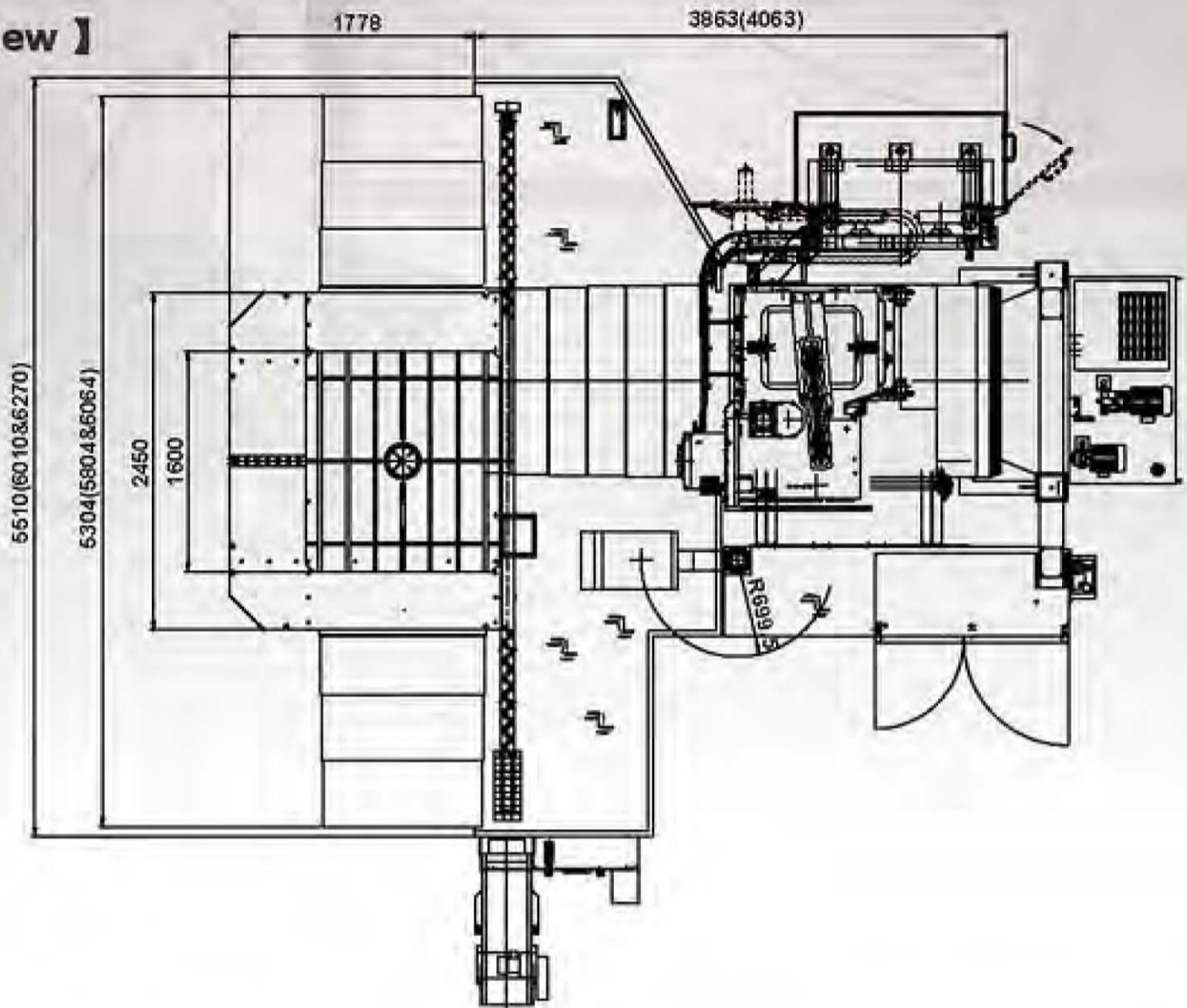
B=150mm

C=1400mm

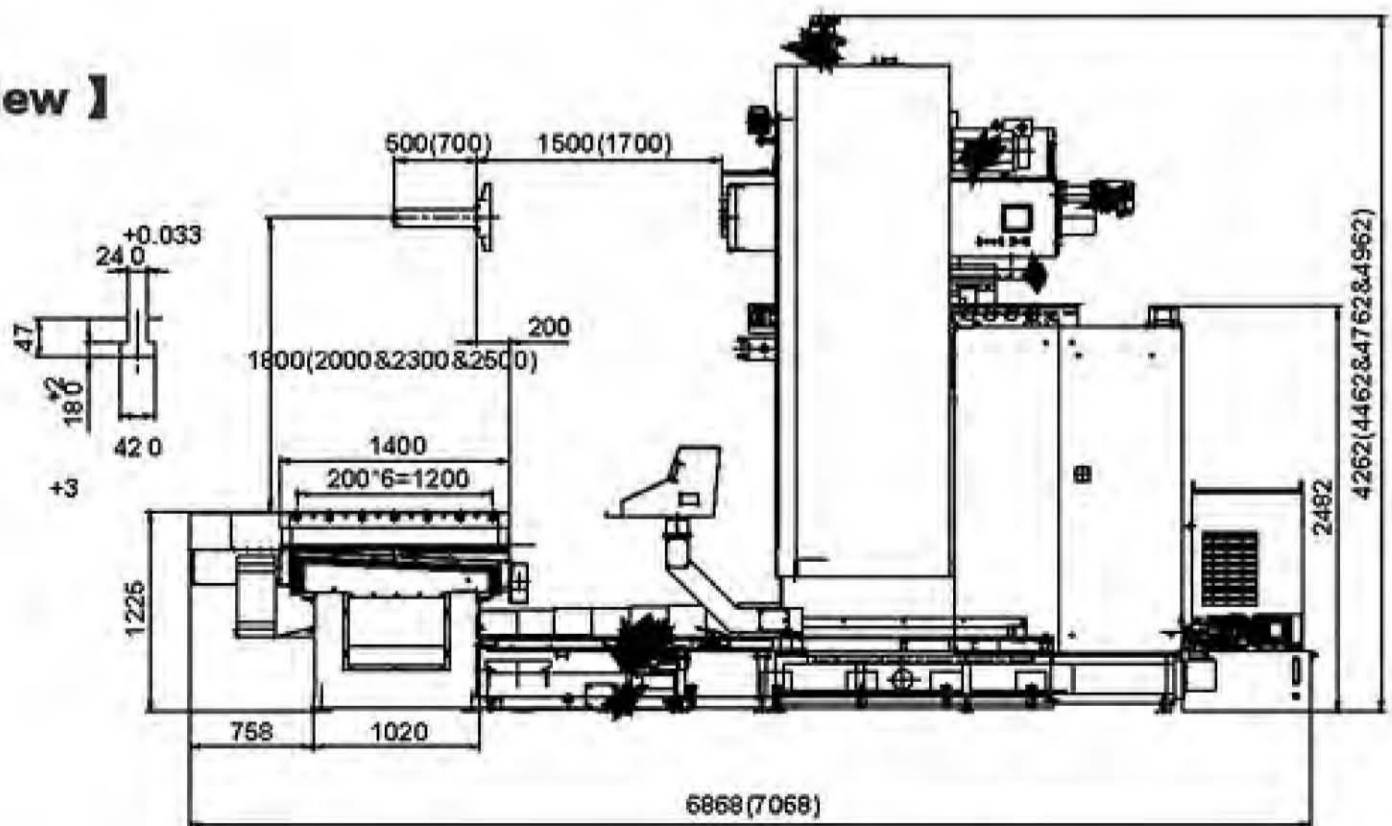
D=2000mm , 3000mm , 4000mm



【 Top View 】



【 Side View 】



SHM-11025 / SHM-11030



MACHINE SPECIFICATIONS

Specifications				
Description	Model	Unit	SHM-11025	SHM-11030
Working Table				
Working Table		mm	1,400x1,600	
T-Slots		mm	24x7	
Table Height (From ground)		mm	1,225	
Max loading weight		kg	7,000	
B-Axis minimum increment			0.001 ^o (90 ^o repositioning)	
Travel				
X axis travel		mm	2,500	3,000
Y axis travel		mm	1,800(2,000 / 2,300 / 2,500)	
Z axis travel		mm	1,500	1,700
W axis travel		mm	500	
Spindle				
Spindle Diameter		mm	ø110	
Spindle Speed		rpm	5-2,500	
Taper			ISO NO.50 7/24	
Feed				
X/Y/Z rapid feed rate		mm/min	10,000	
W axis rapid feed rate		mm/min	1-5000	
B axis		rpm/min	2.5 (Motor at 2,000rpm)	
Minimum setting		mm/min	0.001	
Cutting feed rate		mm/min	5,000	
Feed Motor				
Spindle 30 min/continuous		kw	18.5 / 22 (22 / 26)	
X/Y/Z/W/B axis		kw	7 / 7 / 9 / 3 / 3	
ATC				
No. of tools		pieces	40 (60 / 90 / 120)	
Taper			MAS BT-50 (DIN69871)	
Pull stud			MAS P50T-1 (DIN69872)	
Tool selection			Absolute /Random type	
Tool change		sec	15	
Max tool diameter		mm	ø130 / ø250	
Max tool length		mm	400	
Max tool weight		kg	25	
Miscellaneous				
Power Supply		KVA	45	
Hydraulic tank volume		L	260	
Coolant tank volume		L	400	
Lubrication unit		L	8	
Machine dimension (LxWxH)		mm	6,870x5,510x4,300	7,070x6,010x4,300
Machine weight		kg	21,000	
CNC Controller			Customer Indication	

Standard Accessories

1. Spindle lubrication coolant system
2. Hydraulic system
3. Linear Scales on X, Y, Z axes
4. Lubrication system
5. Chip augers
6. A.T.C with 40 tool holders
7. B axes with 90° automatic repositioning
8. Work lamp
9. NC warning lamp
10. M.P.G
11. RS 232 / RJ 45 Interface
12. Operation manual
13. Foundation / Adjusting bolts
14. Machine Adjusting Tool set
15. Machine Inspection list
16. Auto Power off (M30)

Optional Accessories

1. Coolant system
2. Chain type chip conveyor / Chip cart
3. Air Conditioned cabinet
4. Working table 600*600*900
5. Square table
BP080816 (800mm X 500mm X 800mm)
BP090816 (800mm X 500mm X 800mm)
6. Oil shank device
7. A / B type splash type
8. 60, 90, 120 tool pockets
9. Tool length measurement (Renishaw TS27)
10. Work piece measurement (Renishaw OMP-60)
11. Various type of CNC control
12. Boring & Facing Head
13. Spindle extending sleeve
14. 90° Milling head
15. Universal milling head
16. B-Axis Linear scale
17. Long supporter
18. W axis travel extend to 700mm



CNC Double Column Machining Center Series

X 1,700-7,200 mm
Y 1,200-4,000 mm
Z 750-1,200 mm
Distance of two Columns 1,400-3,500 mm



High Precision Horizontal Boring Series
SHM-1200 / 1400
SHM-1800 / 1900

X 1,200-1,900 mm
Y 1,200-1,700 mm
Z 500-1,400 mm



CNC High Precision Horizontal Boring Machine
SHM-630 / 630L / 800 / 800L

X 1,200-2,000 mm
Y 950-1,600 mm
Z 800 / 1,200 mm



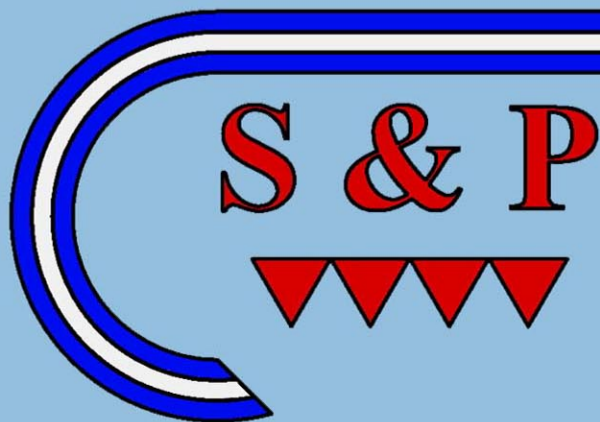
CNC Bed's Universal Milling Series
SBM-2000L / 2600L / 3000L / 3500L

X 2,000-3,500 mm
Y 1,000 mm
Z 1,200 / 1,500 mm

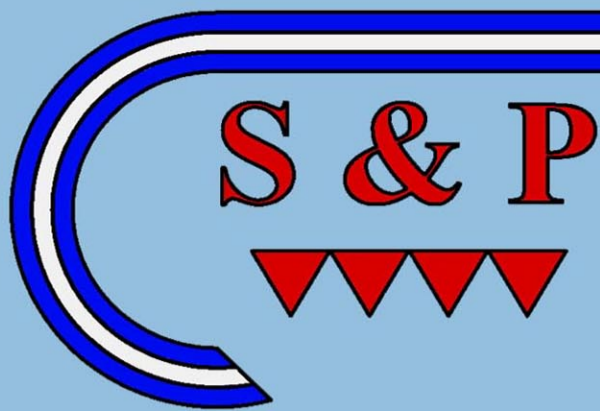


CNC Vertical Machining Centers
SVM-1100 / 1500L

X 1,100-1,500 mm
Y 800 / 800 mm
Z 610 / 750 mm

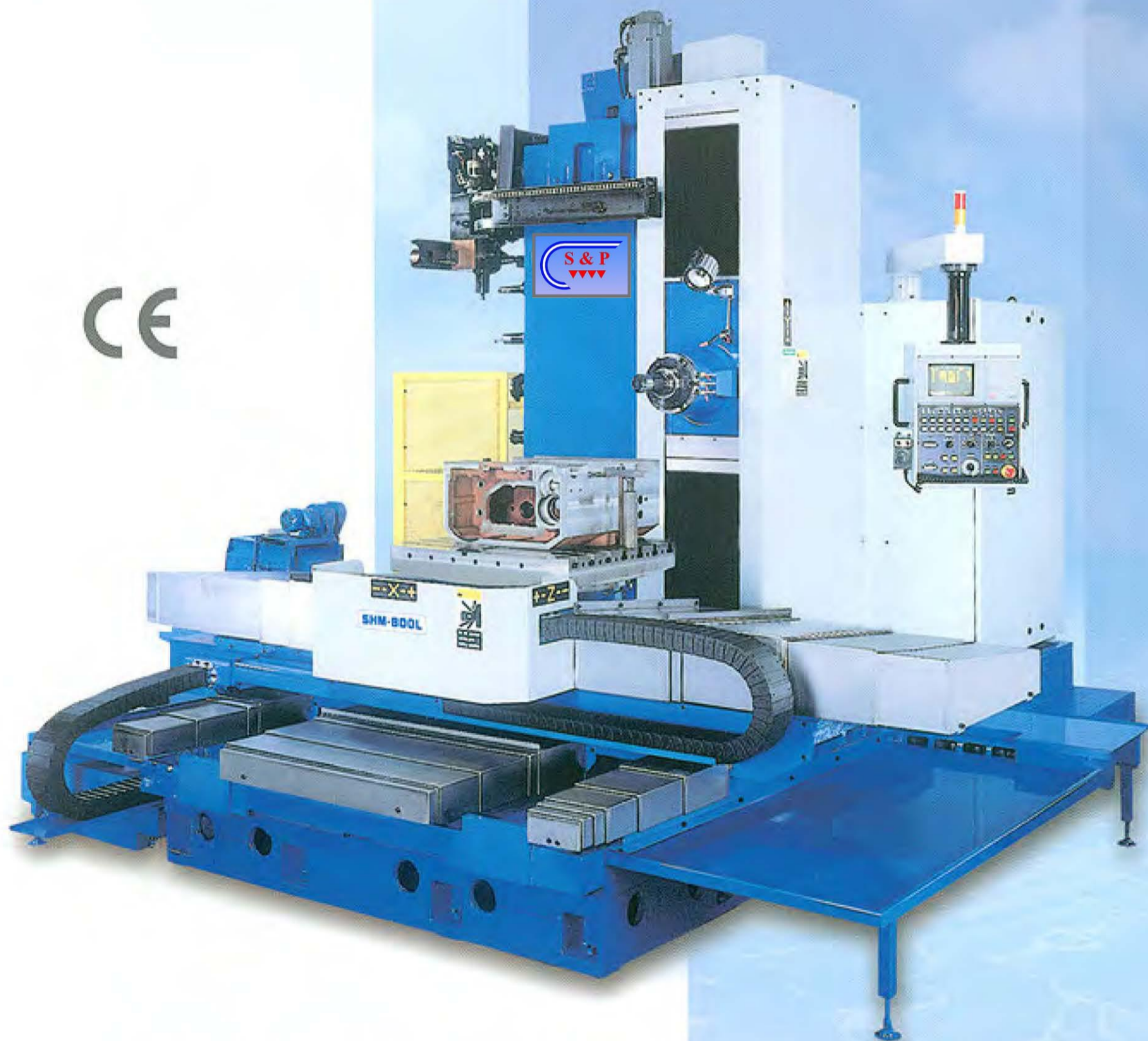


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HIGH PRECISION HORIZONTAL BORING & MILLING MACHINE SERIES



- SHM-630 / 630L
- SHM-800 / 800L
- SHM-1200NC
- SHM-1800NC / 1800NCX

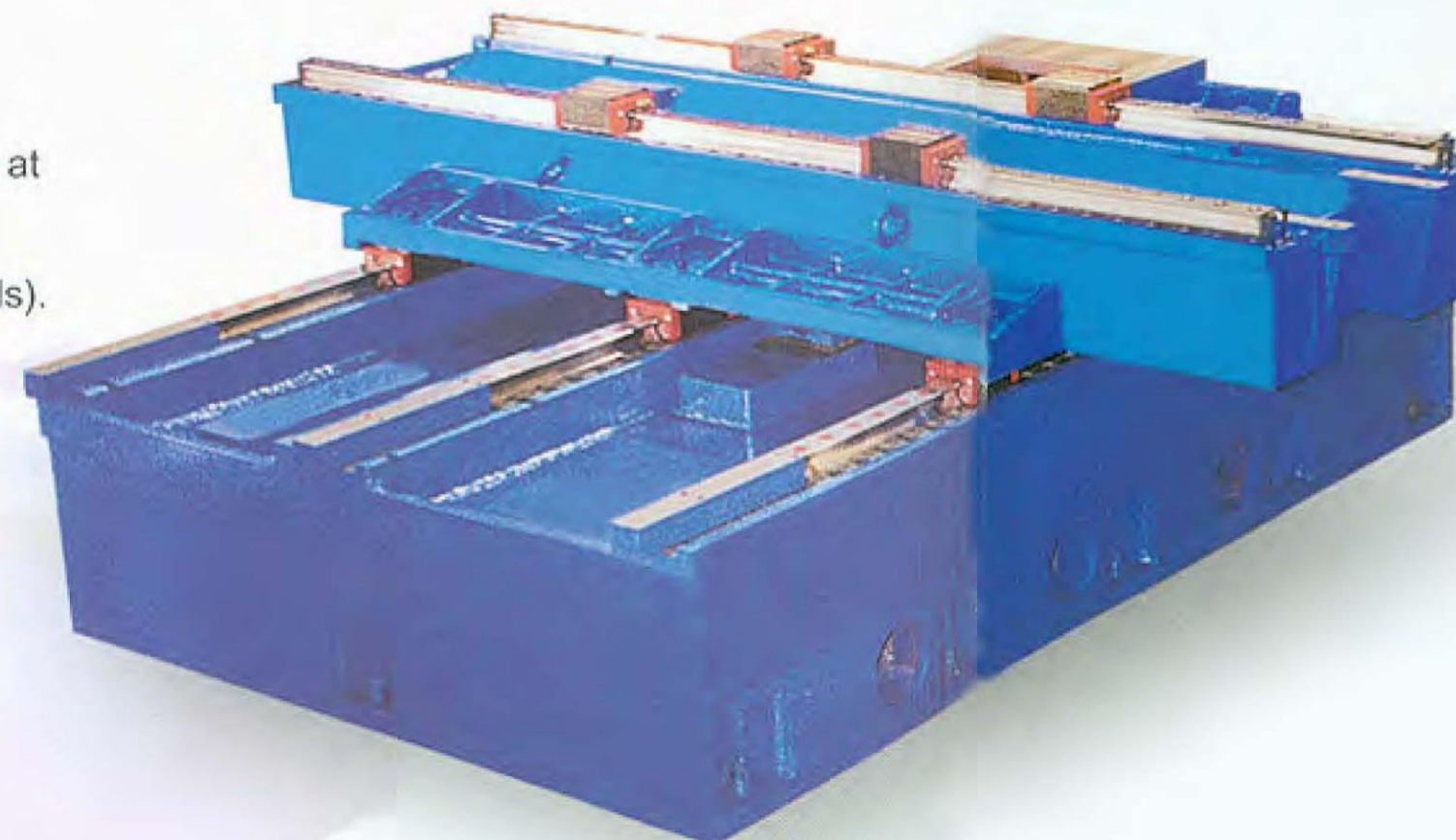
SHM-630

CNC Horizontal Boring & Milling Machine

SHM Series



- Indexing Table with 630 mm x 630 mm at **5° / 72 Positions** (Servo).
- Independent optional ATC unit (40 Tools).
- Shown as Melas M64 Controller.



SHM-630L (Linear way)

CNC Horizontal Boring & Milling Machine

- Indexing Table with 630 mm x 630 mm at **1° / 360** rotation (Servo).
- Independent optional ATC unit (40 Tools).
- Shown as Siemens 810D Controller.



- SHM-630L Basement as shown.
- Z (3 Ways) / X (2 Ways) Mounted Swiss's Made (Schneberger) High Precision, **Rigid linear way**.



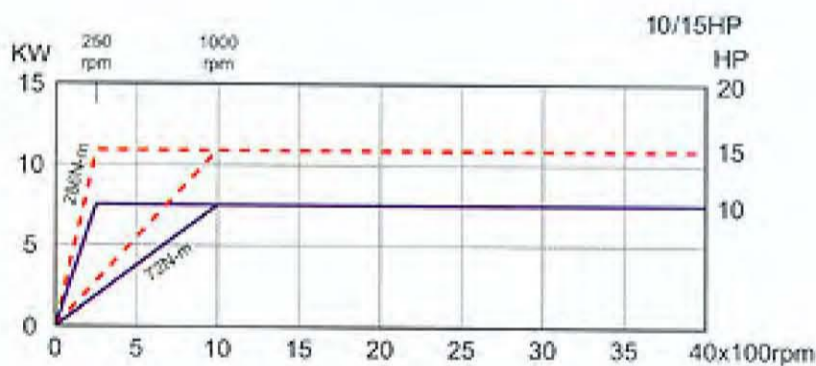
SHM Series



- Very ergonomics designed on Pendant's Operator Sub-Panel.



- Wider operation room, easy to access.



- 15HP Spindle Motor Torque & Power Diagram.
- Adopted "ZF" Gear Box, Offers various speed as Low Speed with High torque, High Speed with constant power output to meet many kind of requirements.



- High Precision indexing Table by $5^\circ / 72$ Positions, $1^\circ / 360$ (Optional).
- Loaded 1,500 kgs with 630 mm x 630 mm Table.
- 100mm x 5 mm x 100mm T-Slots.



- Equipped 40 Tools Chain's ATC independently, 60 Tools are available.



- Excellent removable chips device, easy to convey.

MACHINE SPECIFICATIONS (21i MB as standard)

ITEM	MODEL	Unit	SHM-630	SHM-630L
TABLE				
Size		mm	630 × 630 (700 × 700, 700 × 900)	
T-Slots		mm	20 × 5	
Max. Loading		kg	1,500	
Height From Ground		mm	1,110	
Indexing Degree		sec	5°/72 (1°/360)	1°/360
Clamping Force		kg	4,000	
TRAVELER				
X Axis Travel		mm	1,200	1,200 (1,400)
Y Axis Travel		mm	1,000 (1,200)	
Z Axis Travel		mm	800	800 (1,000)
DISTANCE				
Spindle Nose to Table		mm	250~1,050 (160~960) (250~1,250)	
Spindle Center to Machine		mm	0~1,000 (0~1,200)	
SPINDLE				
Spindle Taper		mm	ISO # 50 / BT-50	
Spindle Speed 2 Steps		rpm	20~4,000 (30~6,000)	
FEED RATE				
X/Y/Z Rapid Traverse		M/min	10/10/10	12/10/12
Cutting Feed rate		mm/min	1~5,000	
Least Input		mm	0.001	
ATC				
No. of Tool		tool	40 (60/90)	
Tool Specification			BT-50 / P50T-1	
Max. Tool Length		mm	400	
Max. Tool Weight		kg	20	
Max. Tool Diameter		mm	φ 125 - φ 250 (W/o Adjacent Tool)	
Tool selection			Random	
Tool Changed Time		sec	14	
MOTORS				
Spindle Servo Motor		kw	7.5/11 (11/15)	
X/Y/Z/B Servo Motors		kw	4/4/4/3	
Lubricator Motor		kw	0.025	
Hydraulic Pump		kw	2.25	
Indexing Table		kw	2	
Chip Conveyor		kw	0.2	
Coolant Pump		kw	0.9	
MISSCELLANEOUS				
Pneumatic Required		kg/cm ²	6	
Power Required		KVA	30	
Hydraulic Tank Volume		/	120	
Spindle Oil Cooler		/	8	
Coolant Tank Volume		/	300	
ACCURACY				
Positioning		mm	± 0.005/300	
Repeatability		mm	± 0.003	
Roundness		mm	0.02/300mm	
MACHINE DIMENSION				
Machine Outline		mm	5,995 × 3,740 × 3,270	
Machine Weight		kg	11,000	12,000

STANDARD ACCESSROIES :

- Spindle Oil Chiller
- Auto Power off
- Hydraulic Pump
- Coolant's Pump & Tanks
- Lubricator unit
- Alarm Light
- Work Light
- Handle Remote Box
- RS232C Interface
- Foundation Bolts
- Operation Manual
- Accuracy Inspection Lists
- Chip Auger
- Chip Conveyor
- Tool Box

OPTIONAL ACCESSROIES :

- Linear Scale
- Tool Shank With Oil
- ATC 60 Tools
- Oil Mist
- Indexing Table 1° / 360 (SHM-630)
- Multi - Controller
(Meldas, Siemens)

★ Shown as Fanuc's specifications
★ () As Optional

SHM Series

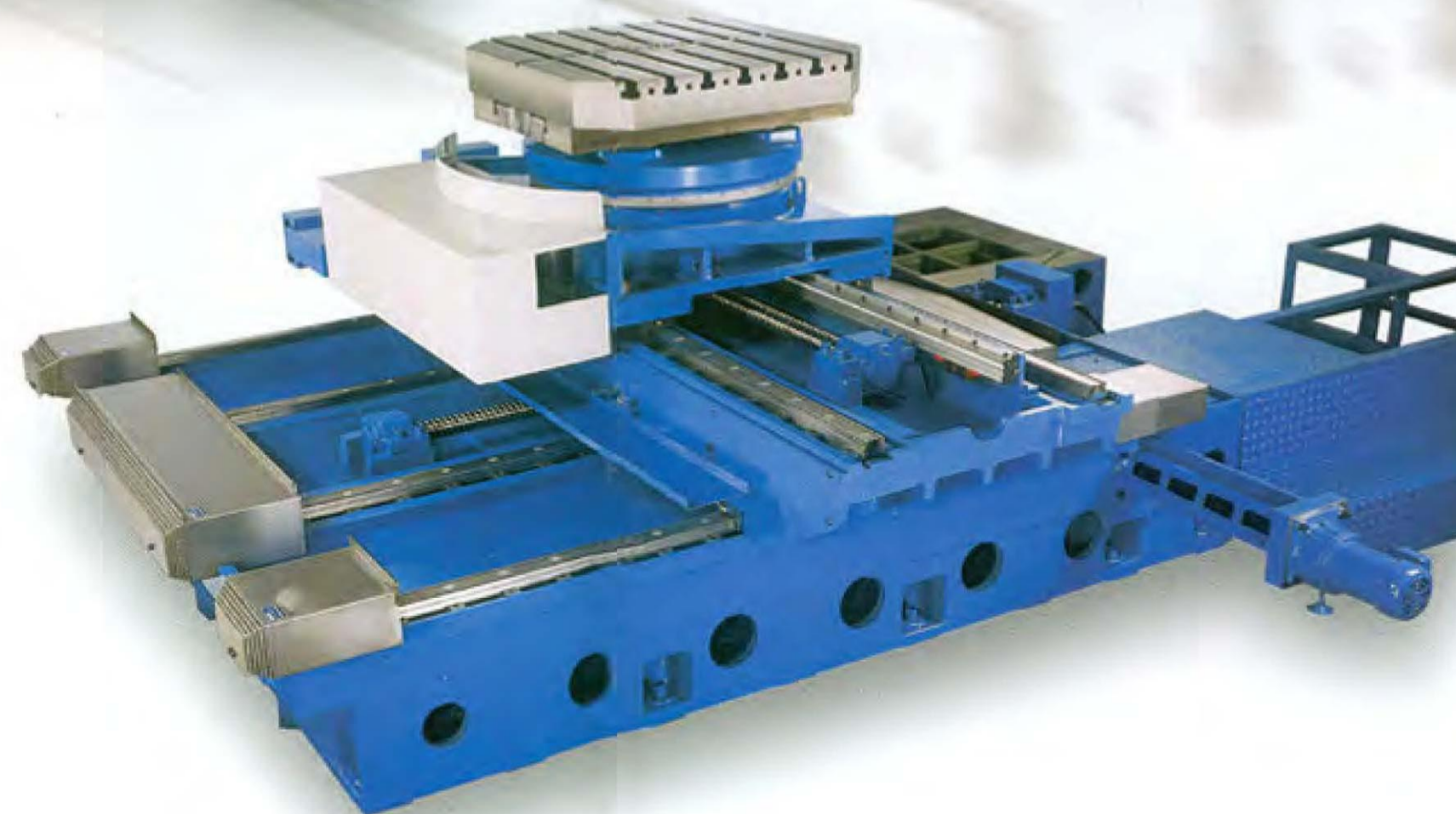
SHM-800L (Linear)

CNC Horizontal Boring & Milling Machine



- Heavy indexing Table with 800 x 800 mm at $1^\circ / 360$, (Servo) Loaded 3,500 kgs.
- 40 Tools ATC equipped separately.
- Splash Guard enclosed.
- HEIDENHAIN's **Linear scale** mounted on X / Y axes, makes sure Machine's more Precised.

- Independent Chain's ATC, 40 / 60 / 90 / 120 Tools be optional.
- "Turcite-B" on Y-axis Slide way, more harder surfacing and stably, moreover, 70 mm difference between 2 slide ways applied Ladder's designed, enhances the cutting force.
- Hydraulics Balancer on Spindle head.



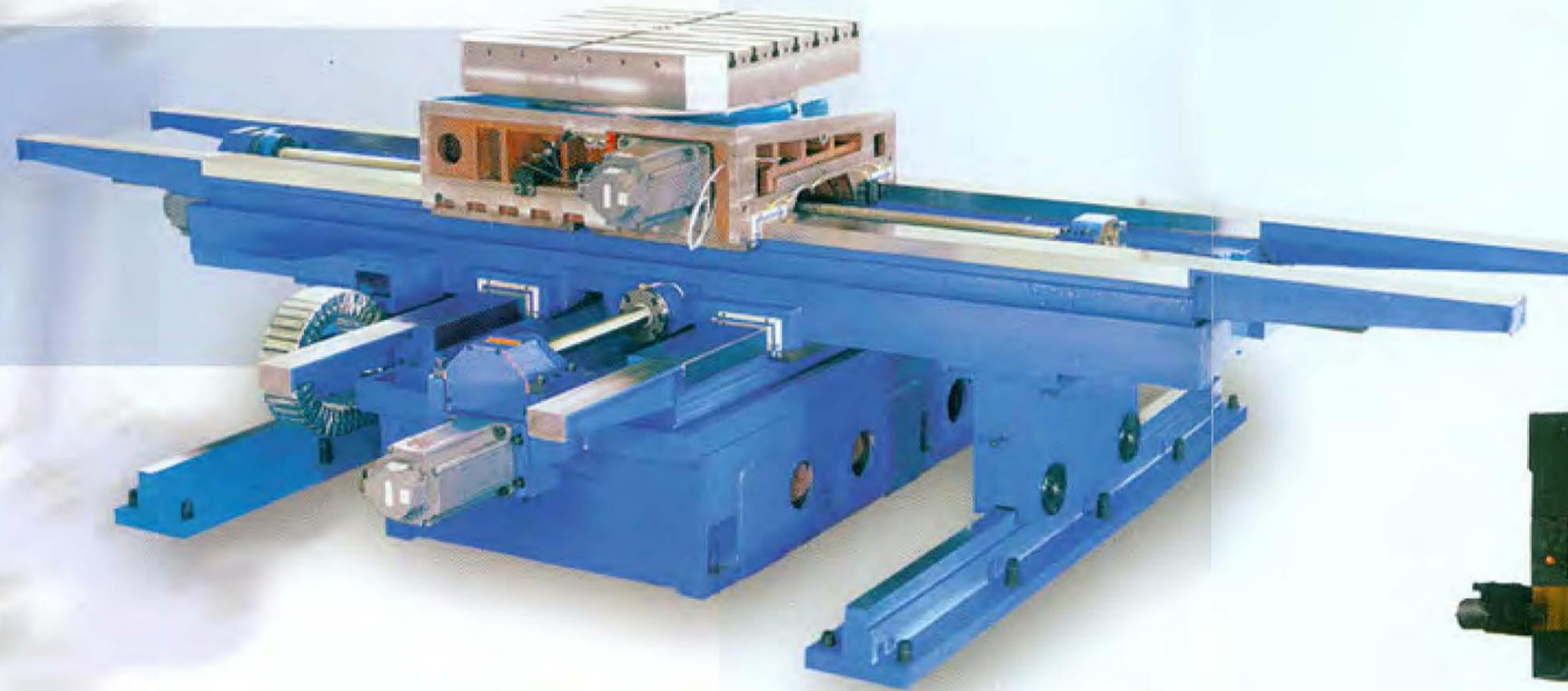
- High Rigid, Performance construction on basement around dense ribs completely, **4 Linear ways** installation on Z-axis movement.
- Excellent oil / water separation being designed.
- With THK's-NRS Type High Rigid, Low friction **Linear way**, endures machine performance and keeps its accuracy permanently.

SHM-800

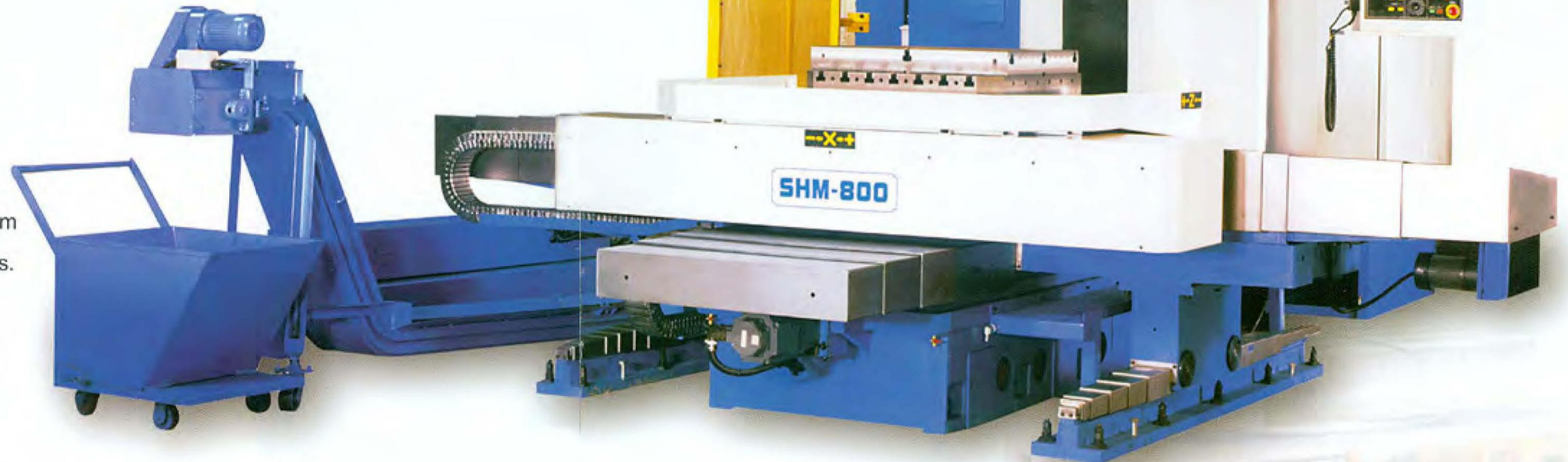
CNC Horizontal Boring & Milling Machine

SHM Series

- Chain's magazine as 40, 60, 90 tools.
- High stable, hard wear on 3 axes with "Turcite-B" surface.
- Various spindle head to be selected.
- Shown as spindle 7.5 / 11kw, 4000rpm.



- High rigid bed body design, plus two sub-way supporting makes sure best accuracy.
- Heavy indexing Table with 800 x 800 mm at $1^\circ / 360$, (Optional) Loaded 3,500 kgs. (1000 x 1000 x 1°) optional
- Mounted HEIDENHAIN linear way on 3 axes as optional.



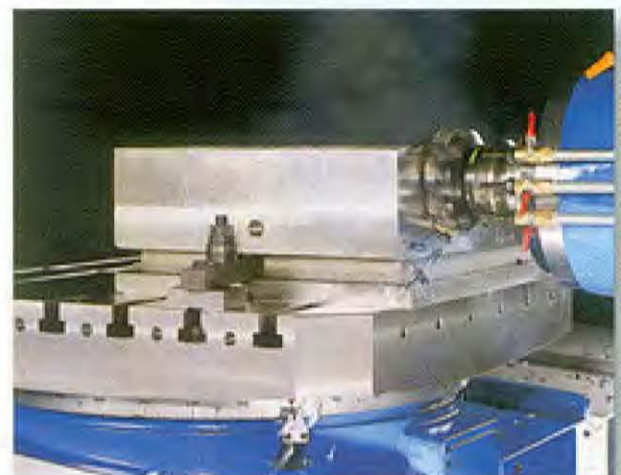


SHM Series

- Only 260mm between spindle nose and table, slight interference on boring by such spindle head.
- Mounted "ZF" gear box to enhance torque in heavy boring.



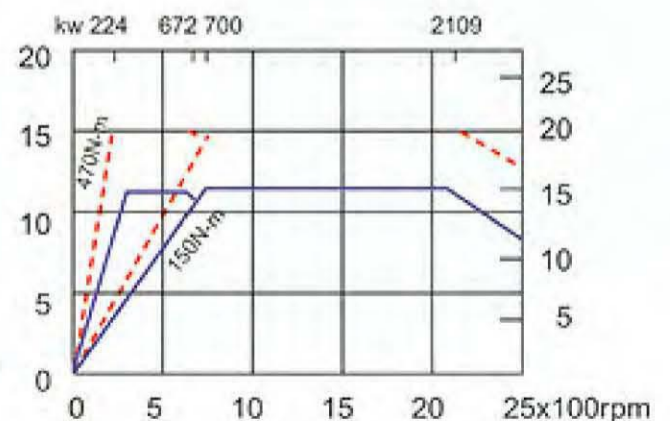
- Applied floating unclamping structure, makes sure Spindle's precision and longest life.



- Various applicable boring on such closely distance (225mm) between Spindle Nose and Table center under side edge designed on Spindle head.



- High Rigid, Precise Spindle equipped oil temperature chiller, fits a variety of machining at 2500, 4000, 6000rpm.



- Spindle's Torque & Power Output Diagram With 20/15 HP Motors as 2,500rpm.

MACHINE SPECIFICATIONS (21 i MB as standard)

ITEM	MODEL	Unit	SHM-800	SHM-800L
TABLE				
Size		mm	800×800 (1,000×800, 1,000×1,000)	
T-Slots		mm	22×7	
Max. Loading		kg	3,500	
Height From Ground		mm	1,250	1,170
Indexing Degree		sec	1/360	
Clamping Force		kg	6,000	
TRAVELER				
X Axis Travel		mm	2,000	1,600
Y Axis Travel		mm	1,300(1,600)	1,200(1,600)
Z Axis Travel		mm	1,200(1,400)	1,000(1,200)
DISTANCE				
Spindle Nose to Table		mm	260~1,460	225~1,225(225~1,425)
Spindle Center to Table		mm	0~1,300(0~1,600)	0~1,200(0~1,600)
SPINDLE				
Spindle Taper		mm	ISO # 50, 7/24	
Spindle Speed 2 Steps		rpm	20~4,000(30~6,000)	10~2,500(4,000,6,000)
FEED RATE				
X/Y/Z Rapid Traverse		M/min	15/12/15	
Cutting Feed rate		mm/min	1~5,000	
Least Input		mm	0.001	
ATC				
No. of Tool		tool	40 (60/90/120)	
Tool Specification			BT-50 / P50T-1	
Max. Tool Length		mm	400	
Max. Tool Weight		kg	20	
Max. Tool Diameter		mm	φ 125 - φ 200 (W/o Adjacent Tool)	
Tool selection			Random	
Tool Changed Time		sec	14	
MOTORS				
Spindle Servo Motor		kw	7.5/11(11/15)	11/15(15/18)
X/Y/Z/B Servo Motors		kw	4/4/4/3	
Lubricator Motor		kw	0.025	
Hydraulic Pump		kw	2.25	
Indexing Table		kw	3	
Chip Conveyor		kw	0.2	
Coolant Pump		kw	0.9	
MISSCELLANEOUS				
Pneumatic Required		kg/cm ²	6	
Power Required		KVA	40	45
Hydraulic Tank Volume		/	180	
Spindle Oil Cooler		/	25	
Coolant Tank Volume		/	400	
ACCURACY				
Positioning		mm	±0.005/300	
Repeatability		mm	±0.003	
Roundness		mm	0.02/300mm	
MACHINE DIMENSION				
Machine Outline		mm	6,450×5,600×3,450	6,250×4,150×3,500
Machine Weight		kg	13,000	14,000

★ Y-axis without Hydraulic's Balancer Instead of Motor Brake

★ () As optional

STANDARD ACCESSROIES :

- X/Y Linear Scale
- Spindle Oil Chiller and Gear
- Box Chiller
- Coolant's Pump & Tanks
- Auto Power off
- RS232C Interface
- Alarm Light
- Heat Exchanger
- Work Light
- Chip Conveyor & Chips Tank
- Chips Auger
- Air Mist
- Tool Box & Foundation Bolts
- Operation Manual
- Accuracy Inspection Lists
- Removable Covers

OPTIONAL ACCESSROIES :

- Multi- Controller (Meldas, Siemens)
- Indexing Table 1°/360 (SHM-800)
- ATC 60/90/120 Tools
- Linear Scale On Z-Axis
- ZF Gear Box (4000, 6000rpm)
- Fully Splash Guard
- Lager Table
(800×1000, 1000×1000mm)
- Tool Shank With Oil
- Spindle Through Coolant
- Various Table:
600x600x900 mm
1000 x 1000 x 1000mm
BP080312 (630x350x700mm)
BP090312 (630x350x700mm)

SHM Series

SHM-1200NC

CNC Horizontal Boring & Milling Machine

- Shown M64 controller.
- "ZF" gear box attached.



SHM-1800NCX (Extra Traveler)

CNC Horizontal Boring & Milling Machine

SHM-1800NC

CNC Horizontal Boring & Milling Machine

- Attached conventional head.
- Shown O_i MC.
- Standard 7.5 / 11kw spindle motor, ZF gear box up to 4000-6000rpm.



- Heavy cutting head with 15 / 18.5kw / 2,500rpm motor.
- Shown as 21 i MB.



SHM Series

- 1 Keep Spindle most stable with oil chiller control based upon setting temperature, the accuracy maintains very long period.
- 2 High force's Lubrication unit, 15kg/cm² pressure to be output, adopts dispensing valve to check each oil pipe whether has reaches its own pressure besides a detection switch has been attached ensures pipes to be broken and clogged.



High Rigid Spindle's Construction, Attached Oil Chiller .



Mounted ZF Gear Box (1:4), Little gaps Meets High Speed Running.



60 Tools ATC



Manually Rotary Table
600 × 600 × 5" (1")
700 × 700 × 5" (1")
800 × 800 × 5" (1")



CNC Rotary Table
630 × 630 × 5" (1")
700 × 700 × 5" (1")
800 × 800 × 5" (1")



Directed CNC Rotary Table
630 × 630 × 5" (1")
700 × 700 × 5" (1")
800 × 800 × 1" (1")
1000 × 800 × 1"
1000 × 1000 × 1"

MACHINE SPECIFICATIONS (21 i MB as standard)

ITEM	MODEL	Unit	SHM-1200NC	SHM-1800NC	SHM-1800NCX
TABLE					
Size		mm	1,100×800	1,500×800	1,500×800
Max. Loading		kg	1,500	2,000	2,000
Height From Ground		mm	850	950	950
TRAVELER					
X Axis Travel		mm	1,200(1,400)	1,800(1,960)	1,800(1,960)
Y Axis Travel		mm	1,100(1,300)	1,300(1,600)	1,200(1,600)
Z Axis Travel		mm	800(1,000)	1,200(1,400)	1,200(1,400)
DISTANCE					
Spindle Nose to Table		mm	250~1,050(1,250)	260~1,460(1,660)	225~1,425(1,625)
Spindle Center to Table		mm	100~1,200(1,400)	100~1,400(1,700)	220~1,420(1,820)
SPINDLE					
Spindle Taper		mm	ISO 50 / BT-50		
Spindle Speed 2 Steps		rpm	20~4,000 (30~6,000)		10~2,500 (4,000, 6,000)
FEED RATE					
X/Y/Z Rapid Traverse		M/min	10/10/10		
Cutting Feed rate		mm/min	1~5,000		
Least Input		mm	0.001		
ATC					
No. of Tool		tool	40,60		
Tool Specification			BT-50 / ISO 50		
Max. Tool Length		mm	400		
Max. Tool Weight		kg	20		
Max. Tool Diameter		mm	φ 127 - φ 200 (W/o Adjacent Tool)		
Tool selection			Random		
Tool Changed Time		sec	14		
MOTORS					
Spindle Servo Motor		kw	10/15		
X/Y/Z/B Servo Motors		kw	3/3/4/3	3/3/4/3	4/4/4/3
Lubricator Motor		kw	0.025		
Hydraulic Pump		kw	0.75	0.75	5
Coolant Pump		kw	0.9		
MISSCELLANEOUS					
Pneumatic Required		kg/cm ²	4.6	6	6
Power Required		KVA	30	40	45
Hydraulic Tank Volume		/	120	180	180
Coolant Tank Volume		/	300	400	400
ACCURACY					
Positioning		mm	±0.005/300		
Repeatability		mm	±0.003		
Roundness		mm	0.02/300mm		
MACHINE DIMENSION					
Machine Outline		mm	3,900×3,150×3,130	4,300×5,600×3,450	4,300×5,600×3,500
Machine Weight		kg	8,000	12,000	13,000

★() As optional

STANDARD ACCESSROIES :

- Auto Power off
- Spindle Oil Chiller and Gear Box Chiller
- Hydraulic Pump
- Coolant's Pump & Tanks
- Lubricator unit
- Alarm Light
- Work Light
- Handle Remote Box
- RS232C Interface
- Foundation Bolts
- Operation Manual
- Accuracy Inspection Lists
- Tool Box

OPTIONAL ACCESSROIES :

- Indexing Table (Manually / CNC)
- Linear Scale On X/Y/Z Axes
- ATC 40/60 Tools
- Auxiliary Table
- Oil Mist
- Tool Shank With Oil
- Spindle Through Coolant
- Chips Auger
- Chips Conveyor



SHM Series

CNC STANDARD FUNCTIONS / FANUC / 21iMB

- * Control Axes : 4 (X,Y,Z,B)
- * Simultaneously Axes Control 4 Axes
- * Mirror Image
- * Follow Up
- * Backlash Compensation
- * Pitch Error Compensation
- * Exact Stop
- * Skip Function
- * 2nd Reference Point
- * Over Traveler
- * ABS/INC Input and Programming
- * Work Coordinate 6+48 Pairs
- * Rotation Coordinate
- * Preset Coordinate
- * Customer Macro B
- * Programmer Data Input
- * M/S/T Codes
- * Rigid Tapping
- * Tool Offset 99 Pairs
- * Tool Length Compensation
- * Cutter Compensation C
- * Fixed Canned Cycles
- * Program Register 150
- * Program Memory 640M
- * Background Editing
- * Clock Display
- * Self Diagnostics
- * 10.4 " TFT Screen"
- * Spindle Orientation
- * Least Input 0.001
- * EIA/ISO Codes
- * AICC Control
- * DNC Connection
- * Graphic Display

Multi- Controller



Meldas M64/M65



Fanuc 21iMB/18iMB/5

Optional Functions:

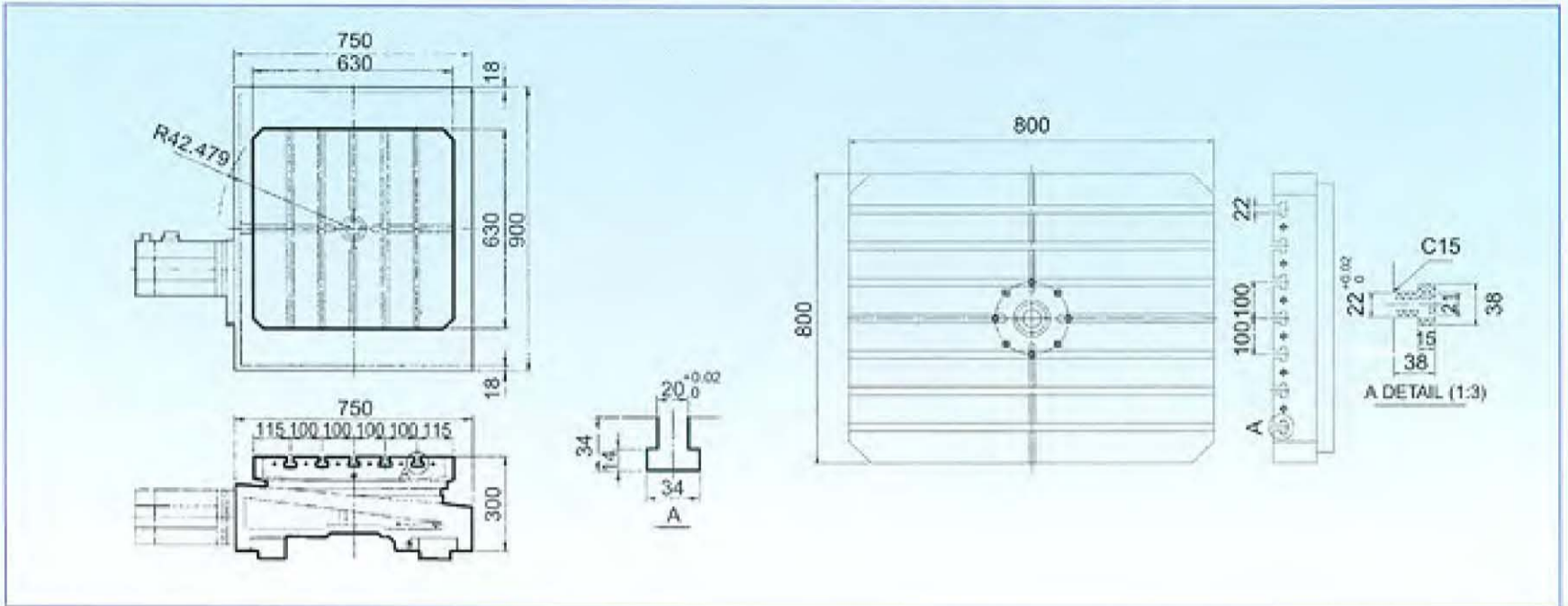
- * Multi-Language
(French, Italian, Germany, Spanish)
- * Program Memory Extend 1,280 M
- * HPCC (18iMB)
- * RISC & NURBS (18iMB)
- * Data Server With ATA 1GB Card
- * 4-Axis Rotary Table
- * 5 Axes Facing (18iMB5)



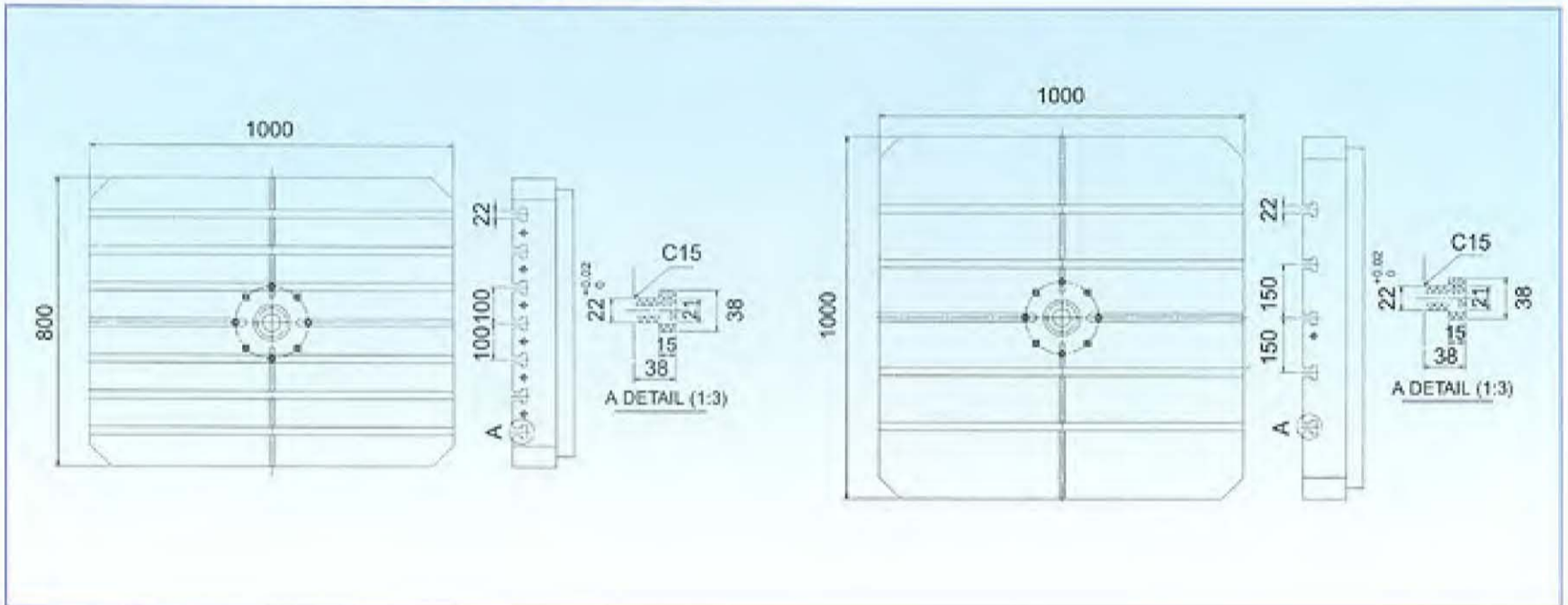
Siemens 810D/840D

SHM-630L Table Size

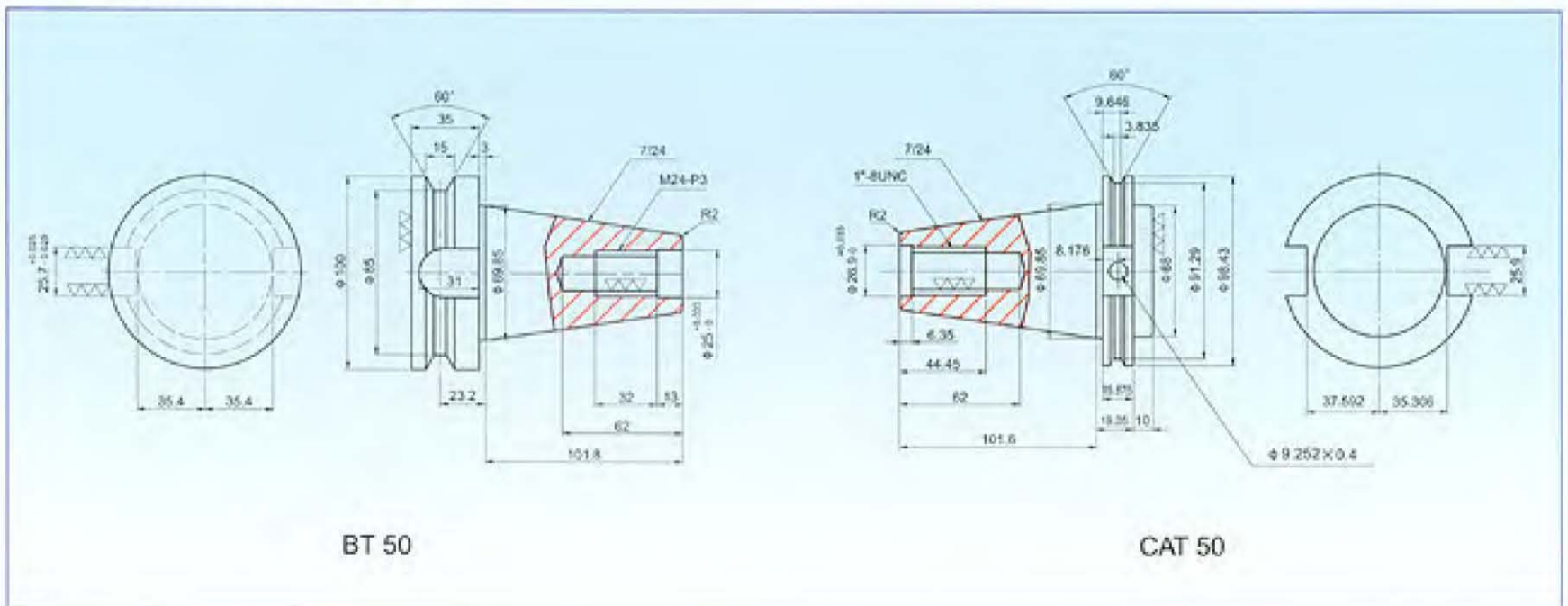
SHM-800L Table Size



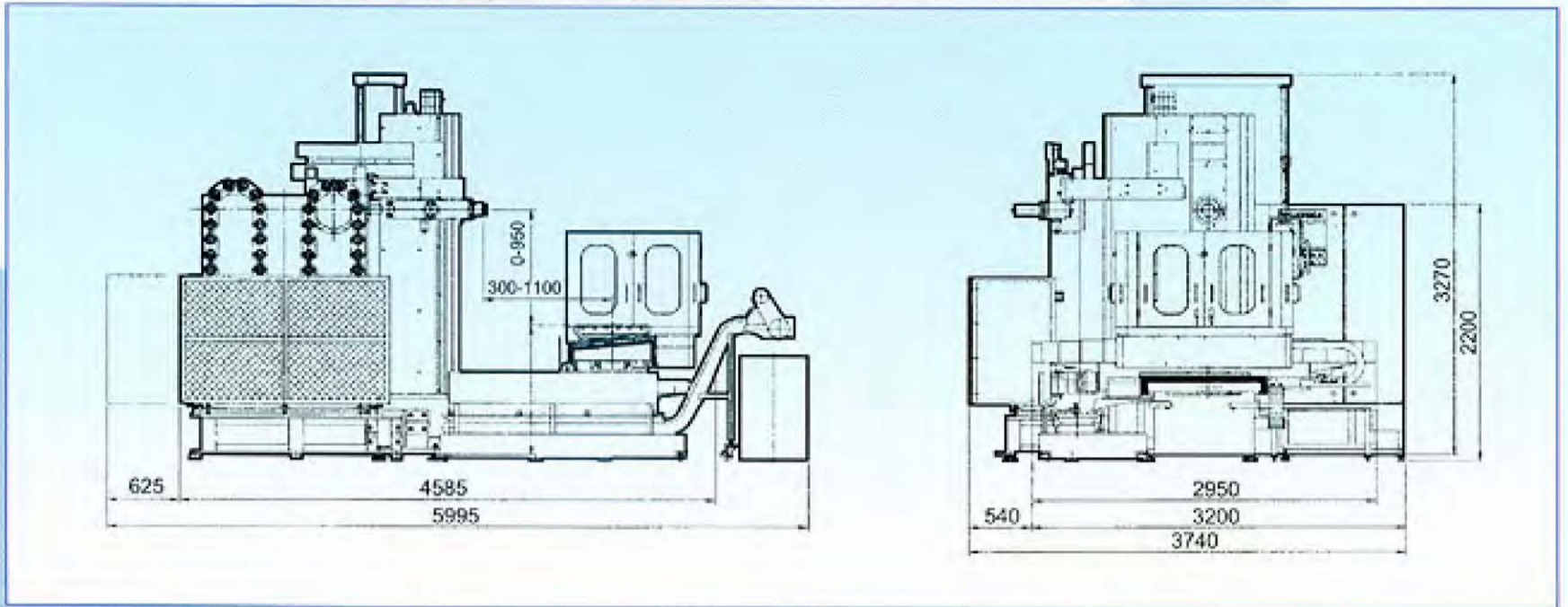
SHM-800/L Table Size (Optional)



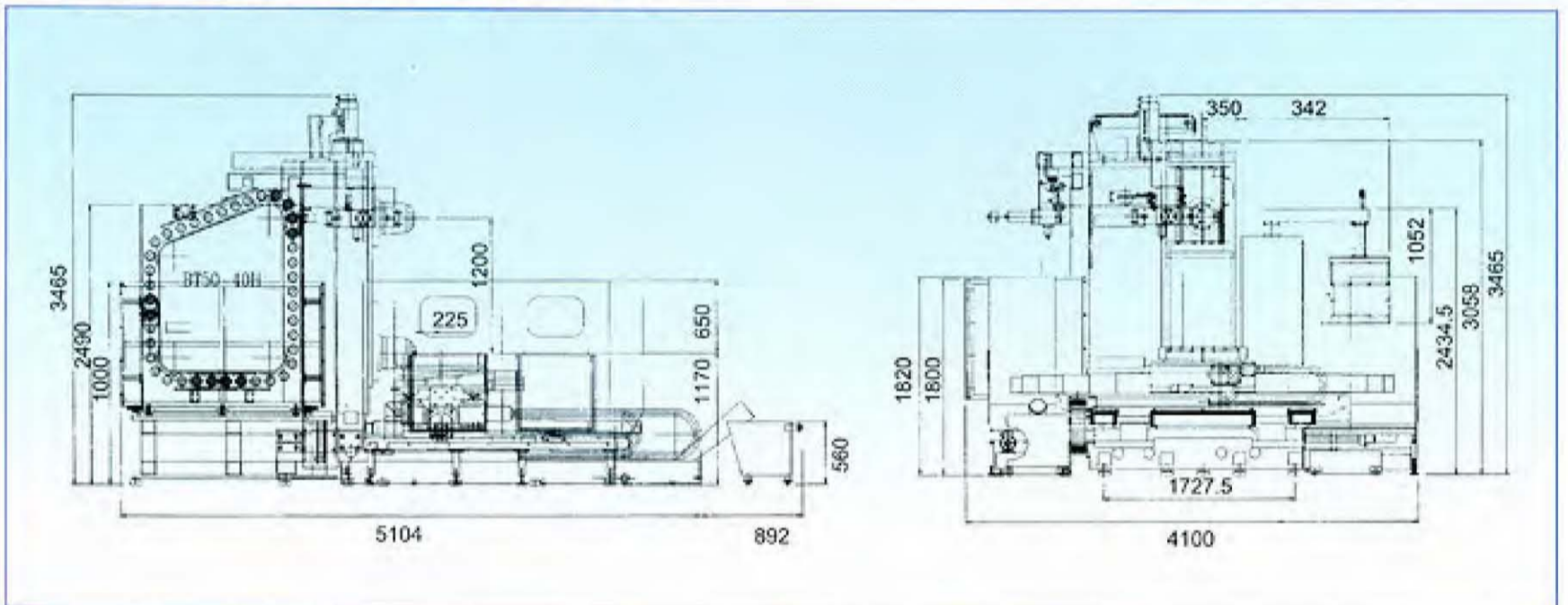
Tool Specification



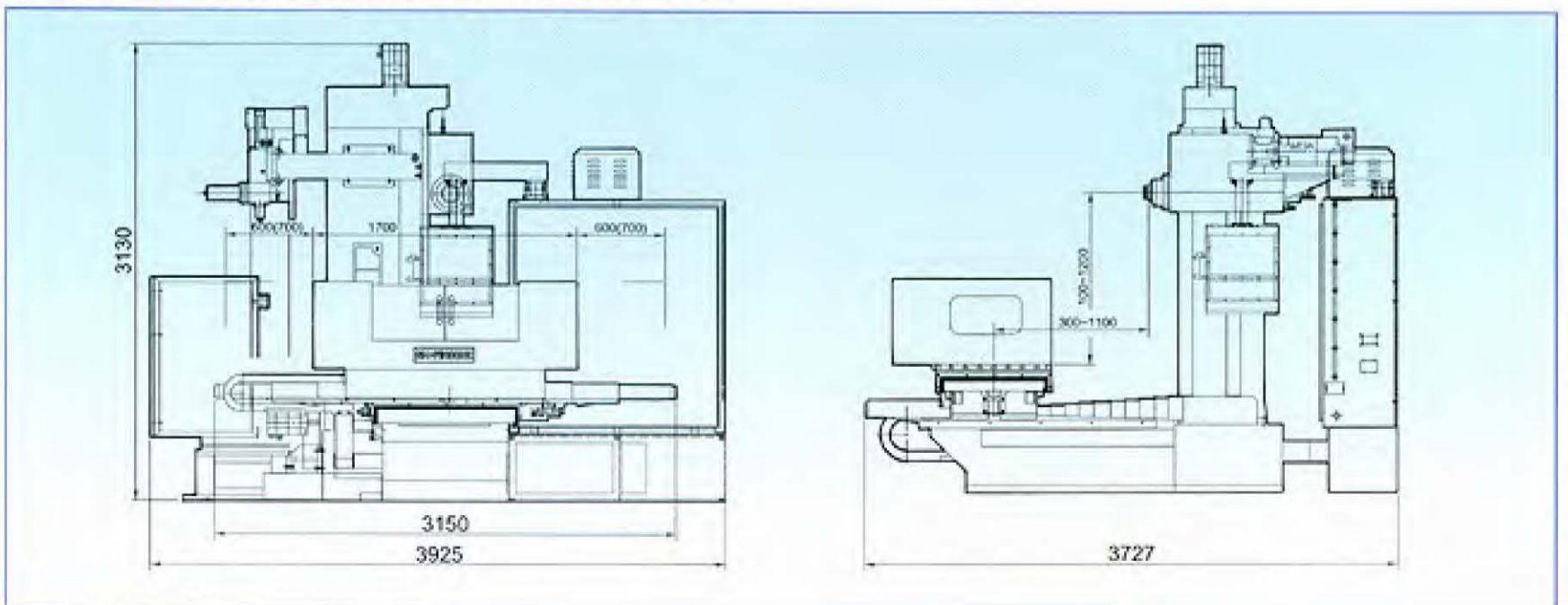
Machine Dimension SHM-630/L



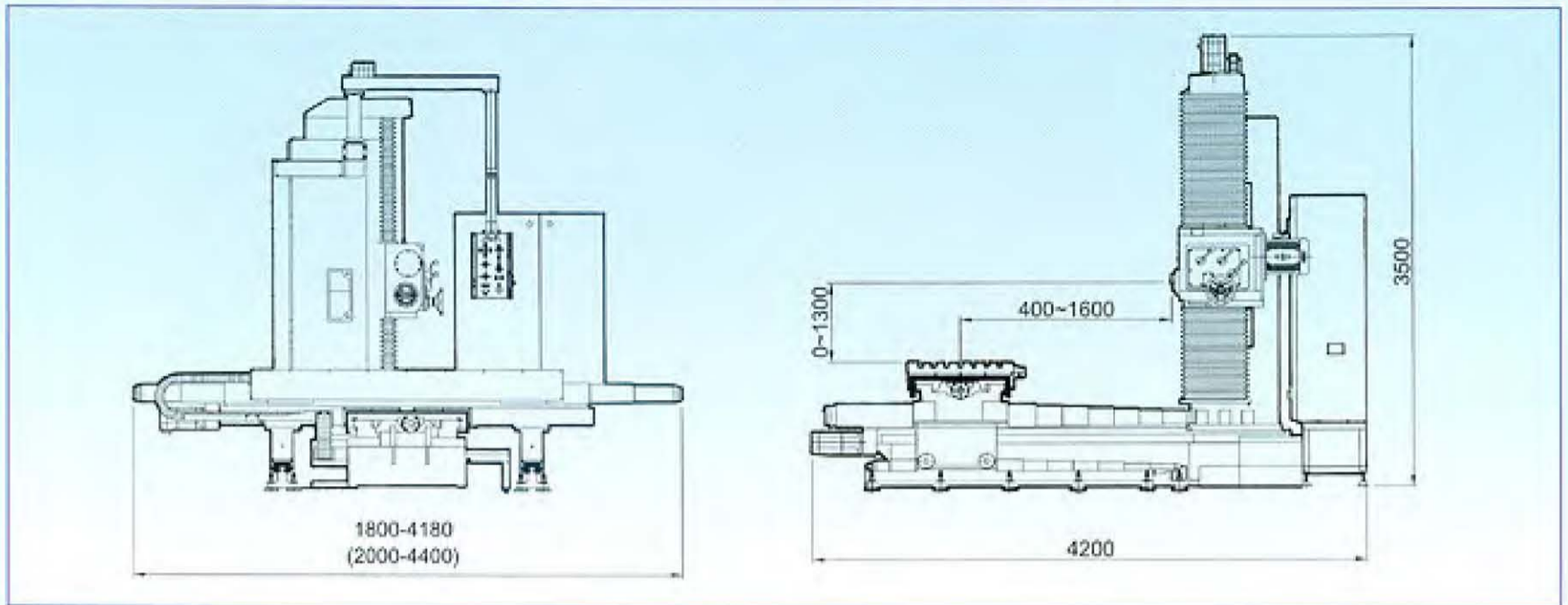
Machine Dimension SHM-800/L



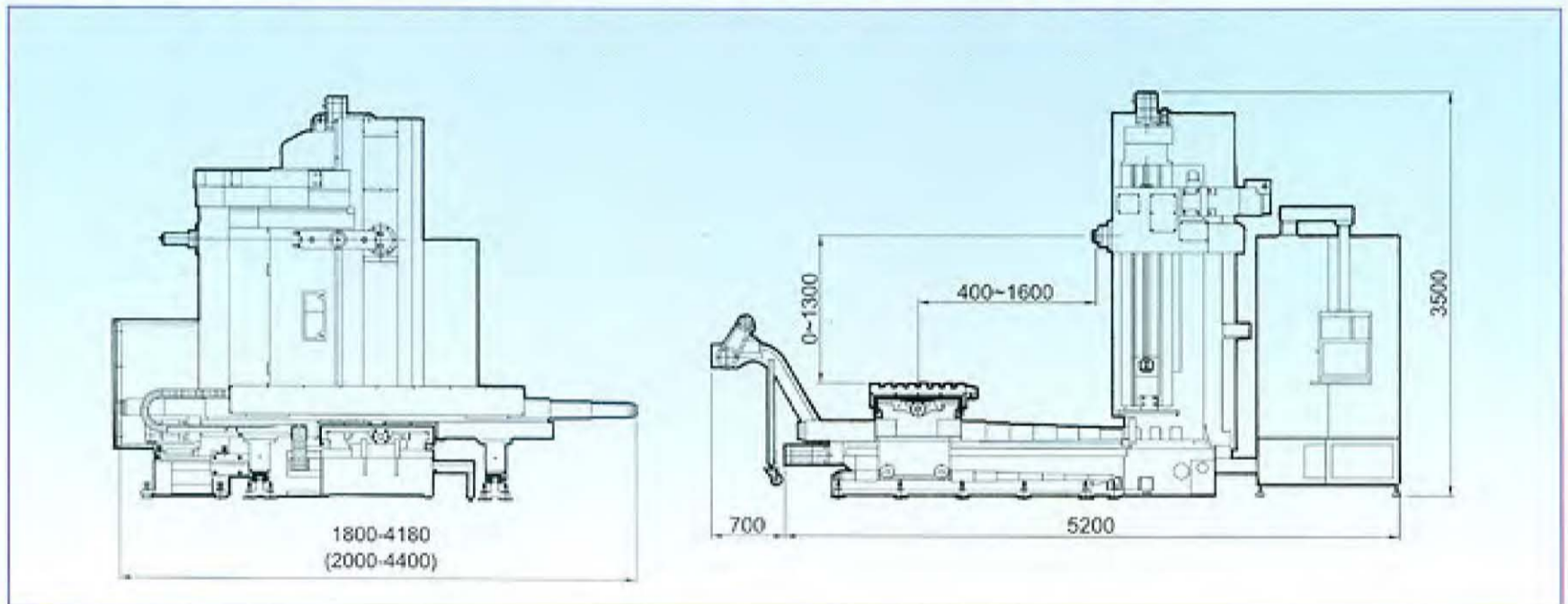
Machine Dimension SHM-1200NC



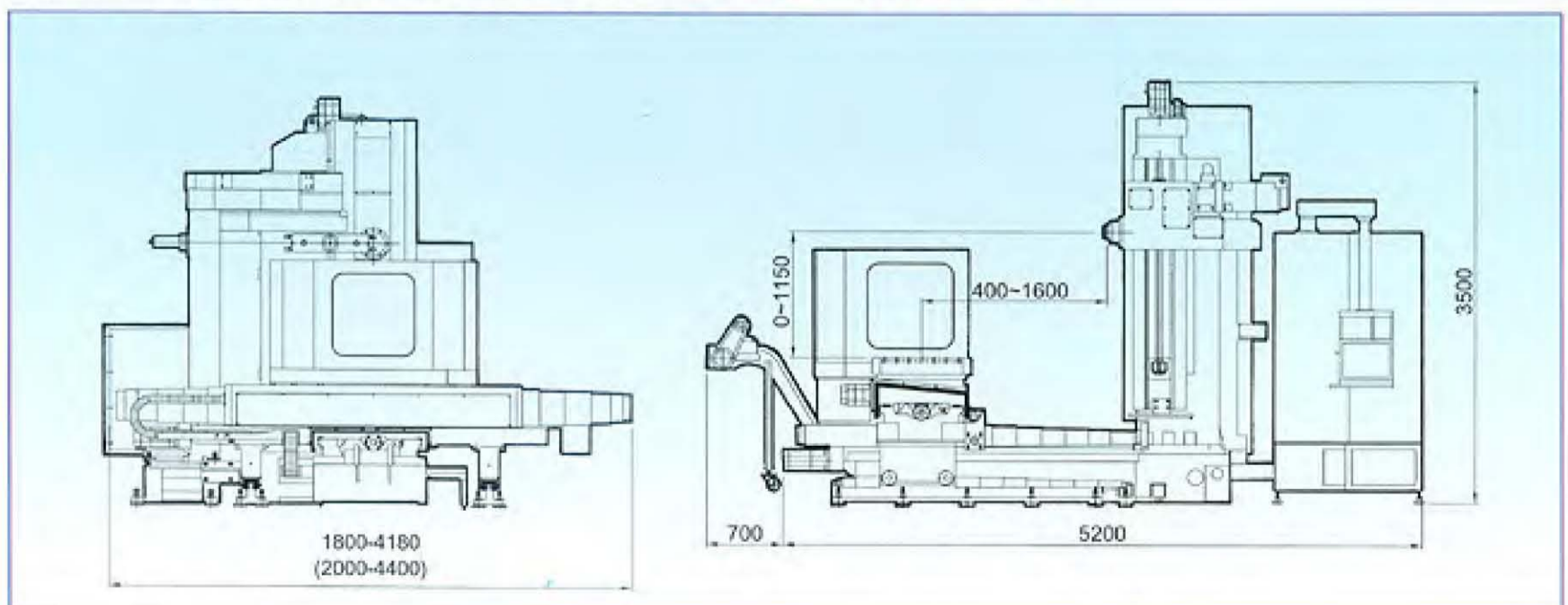
Machine Dimension SHM-1800NC with conventional head



Machine Dimension SHM-1800NC with standard table



Machine Dimension SHM-1800NC with index table



CNC Double Column Machining Center Series

X 1,700 — 6,200 mm

Y 1,200 — 3,800 mm

Z 750 — 1,200 mm

Distance of two Columns 1,400 — 3,500 mm



High Precision Horizontal Boring Series

SHM-1200

SHM-1800

X 1,200 — 1,960 mm

Y 1,100 — 1,700 mm

Z 800 — 1,400 mm

CNC Bed's Universal Milling Series

SBM-1500 / 2000 / 2600 / 3000

SBM-2000L / 2600L / 3000L / 3500L

X 1,500 — 3,500 mm

Y 1,000 mm

Z 1,000 / 1,200 / 1,500 mm

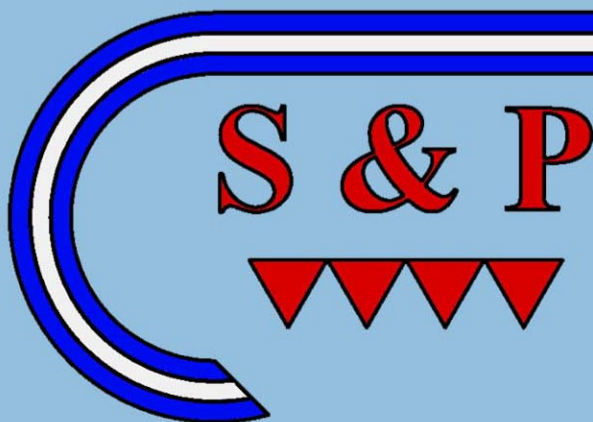
CNC Vertical Machining Centers

SVM-1100 / 1500L

X 1,100 / 1,500 mm

Y 600 / 800 mm

Z 610 / 750 mm



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