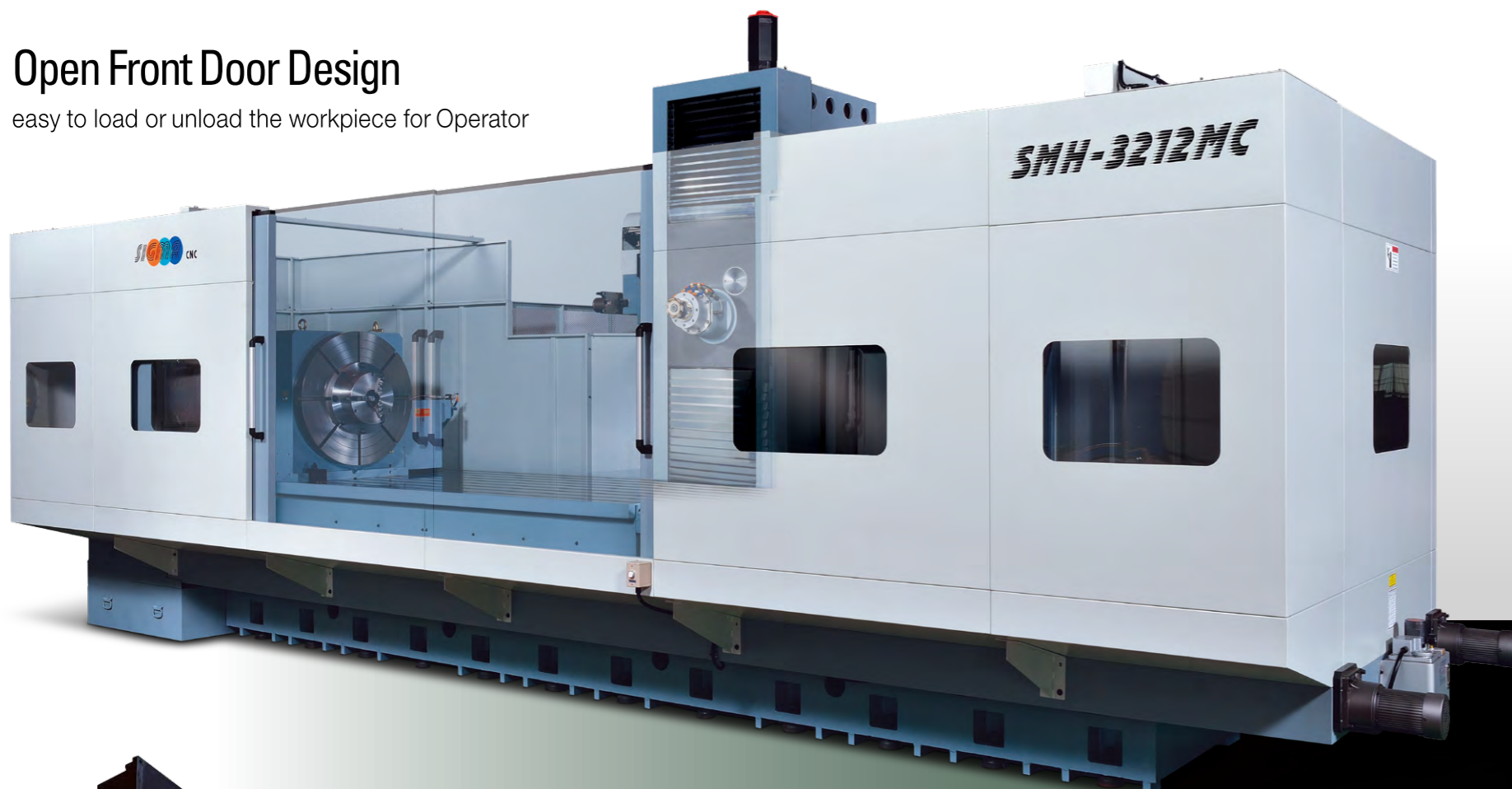


CNC Moving Column Horizontal Machining Center **SMH-MC Series**

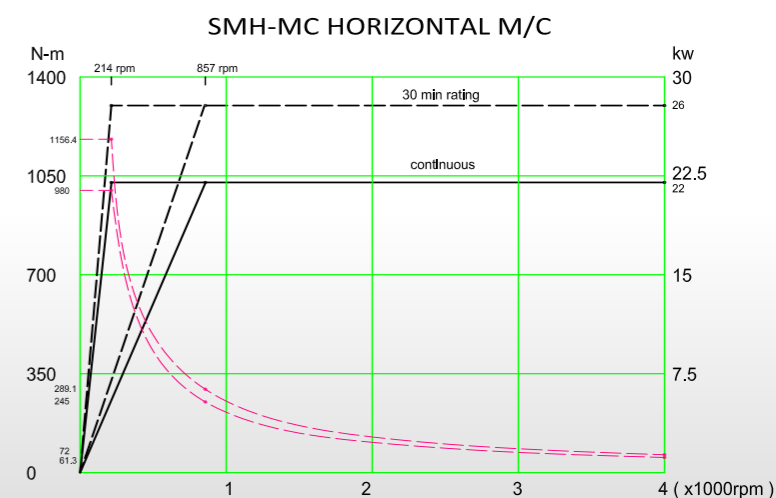
Open Front Door Design

easy to load or unload the workpiece for Operator

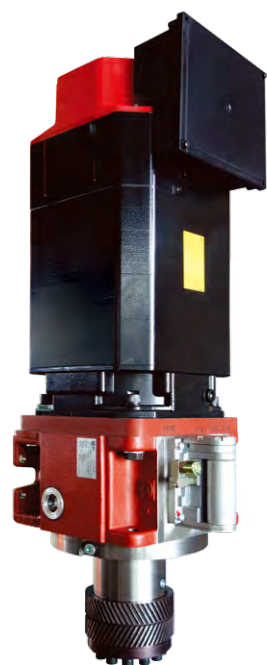


Spindle Speed & Torque

4000 rpm



α22 Motor 26/22kw BT-50 spindle 4000rpm
 output power and torque characteristic
 RATE:(1:7,1:1.75)with 2-steps Planetary Gearbox



Spindle Transmission

is by Spindle motor with Planetary Gearbox (two steps) to drive. It has greater Torque to improve machining ability.

Close-circuit Hydraulic Balance System

To raise up the Sensitivity, Precision, Stability of machining for Y-axis Moving (up and down) & Spindle Head.



4th or 5th Rotary Table / Optional /

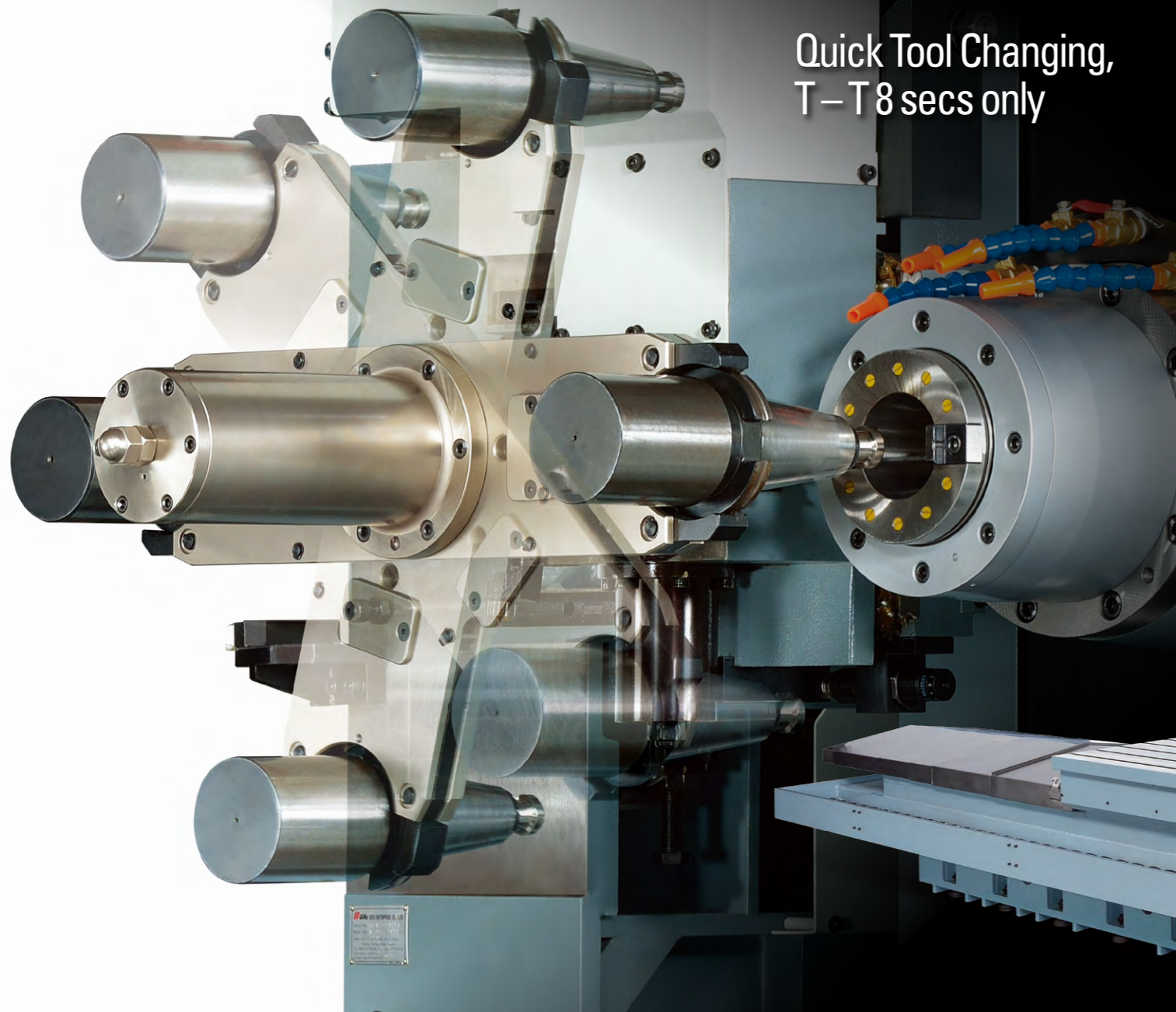
According to the machining needs of customer, can be used with 4th or 5th rotary table.



Construction

High Efficiency, High Precision & Process Stability
Typical Extra Quality **FROM SIGMA CNC**

Quick Tool Changing,
T – T 8 secs only



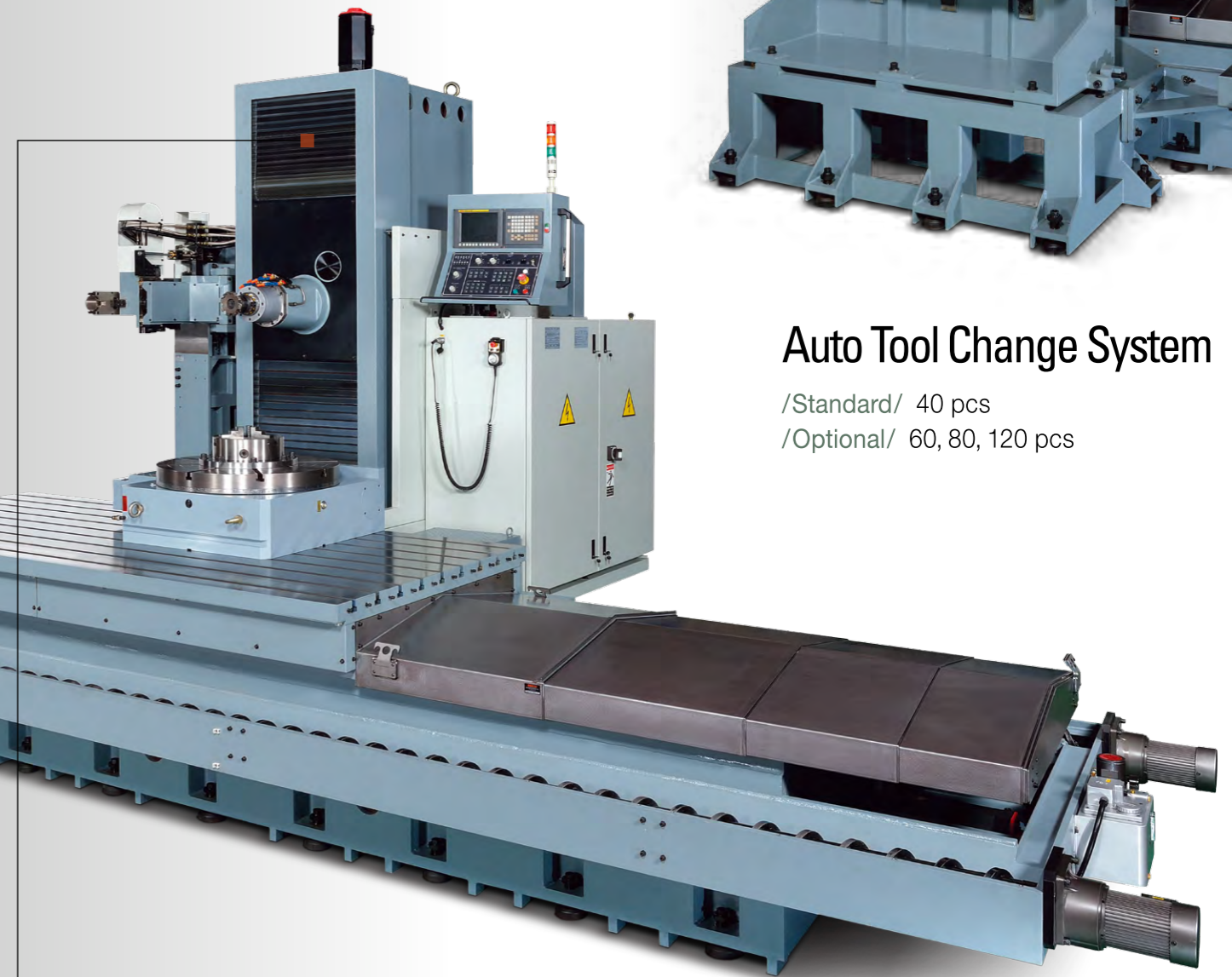
Full Travel Support Design

for the work-table of X-axis, any positions are maintained high accuracy. It has high loading capacity, not easy to warp and no vacant.



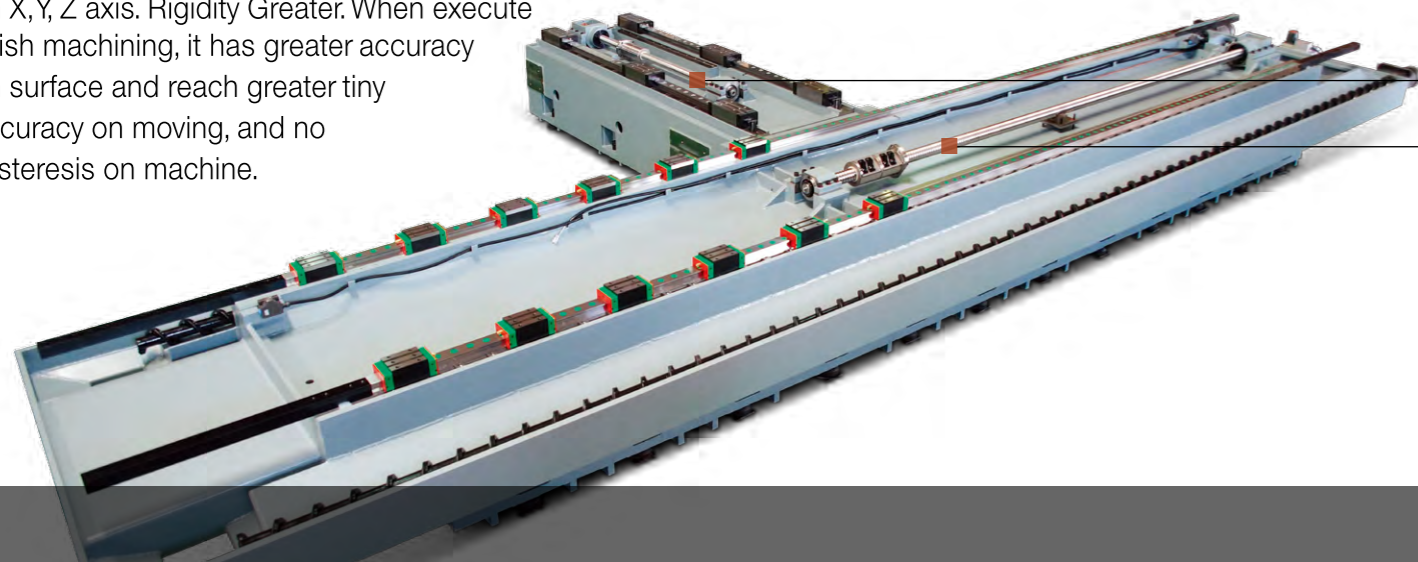
Auto Tool Change System

/Standard/ 40 pcs
/Optional/ 60, 80, 120 pcs



Use High Loading Roller Type Linear Guideways

on X,Y,Z axis. Rigidity Greater. When execute finish machining, it has greater accuracy on surface and reach greater tiny accuracy on moving, and no hysteresis on machine.



All of Three Axes Employ High Precision C3 Double-nut Ball Screw with Appropriated Preload

Lay-out & Specifications

SMH-MC Series

Item	Model	Unit	SMH-1608MC	SMH-2010MC	SMH-3212MC
Table	Size	mm	1,600 x 1,000	2,000 x 1,000	3,000 x 1,400
	T-slots (W x No.)	mm	22 x 7		22 x 9
	Top to Ground Height	mm	850		
	Max. Loading Capacity	kgs	3,000	3,500	7,000
Travel	X-axis	mm	1,600	2,040	3,200
	Y-axis	mm	800	1,000	1,200
	Z-axis	mm	950 (1,200)		
	Table Center to Spindle Nose	mm	135 ~ 1,085	135 ~ 1,085	235 ~ 1,185
Spindle	Table Top to Spindle Center	mm	400 ~ 1,200	300 ~ 1,300	300 ~ 1,500
	Taper		ISO NO50		
Feed	Speed	rpm	20 ~ 4,000		
	Rapid Speed (X.Y.Z)	mm/min	15,000		
	Cutting Feed	mm/min	1 ~ 5,000 (8,000)		
	Min. Input Increment	mm	0.001		
A.T.C	Detector of Servo		Pulse Coder (Linear Scale)		
	Tools Magazine Capacity	pcs	40 (60, 80, 120)		
	Tool Shank Taper		BT-50		
	Tool Selection Method		Random BI (ABS)		
	Max. Tool Diameter / Adjacent Pockets Empty	mm	Ø 125 (Ø 250)		
	Max. Tool Length	mm	400		
Drive Motor	Max. Tool Weight	kgs	25		
	Tool Change Time (T-T)	secs	8		
	Spindle	HP	30 / 35		
	X-axis	HP	5.4	9.3	9.3
	Y-axis	HP	5.4	5.4	5.4
	Z-axis	HP	5.4	5.4	5.4
	Hydraulic Unit	HP	5		
	Spindle Oil Cooler	HP	1		
	Lubrication Unit	W	25		
	Chip Conveyor	HP	¼		
Else	Coolant System	HP	1		
	Hydraulic Tank Capacity	L	120		
	Oil Cooler Tank Capacity	L	30		
	Coolant Tank Capacity	L	400	450	500
	Lubrication Tank Capacity	L	6	6	8
	Dimension of Machine	mm	5,200 x 5,000 x 3,300	6,200 x 5,000 x 3,600	8,800 x 5,000 x 4,000
Machine Weight (Approx) (Included A.T.C. Magazine)	kgs	17,500	21,000	25,000	
CNC Controller		FANUC, MITSUBISHI, SIEMENS, HEIDENHAIN			

Note: 1. Description is optional accessories.

2. To research and improve our company keep the right of changing design and structure at any time, this data is just for reference.

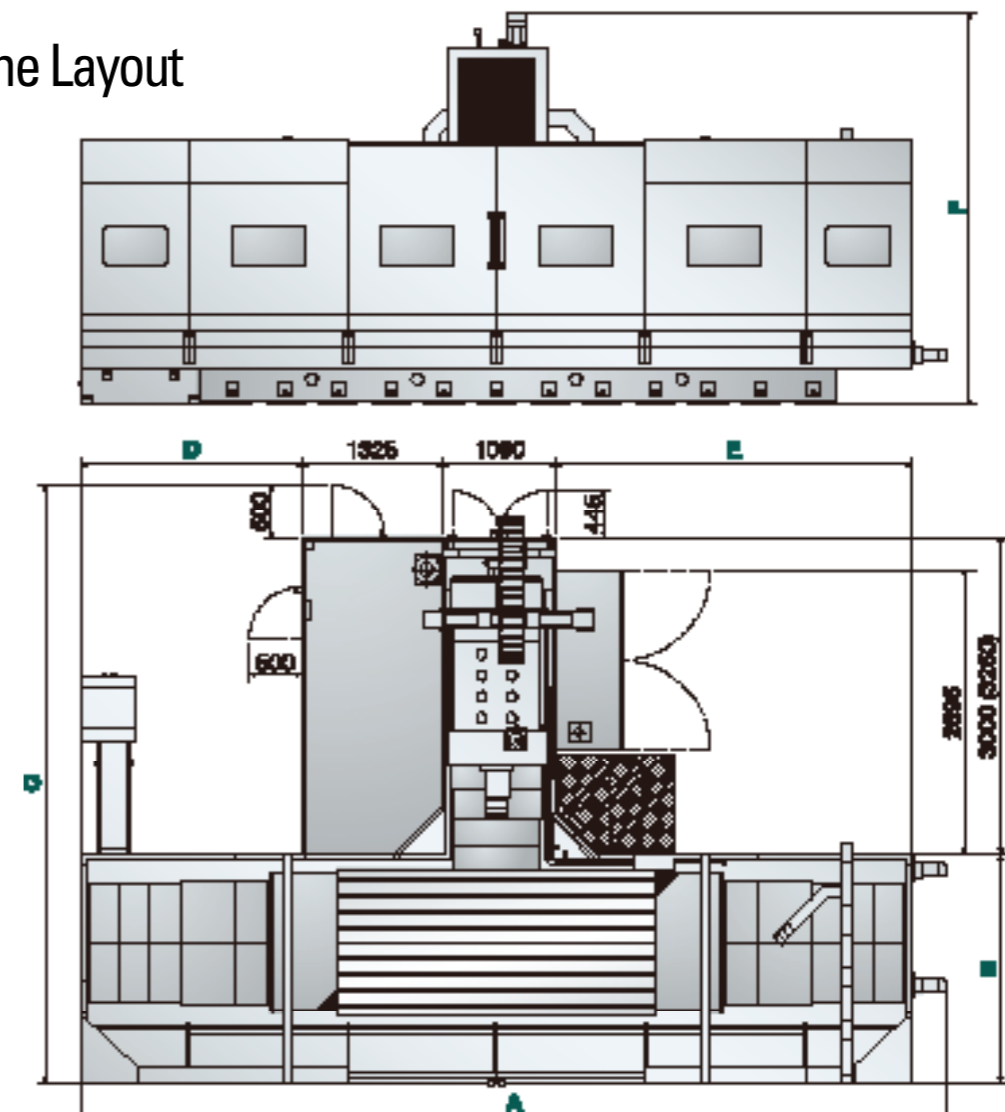
Standard Accessories

- Spindle Cooler System
- Hydraulic System
- Coolant Tank Unit
- Centralized Lubrication System
- A.T.C Magazine Capacity: 40 pcs
- Screw Type, Chain Type Chip Conveyor
- Leveling Blocks & Bolts
- Tool Kit
- Auto-Power Off System
- Program End & Alarm Lamp
- Work Lamp
- M.P.G
- RS232 Interface
- Main Tenance & Operation Manual

Optional Accessories

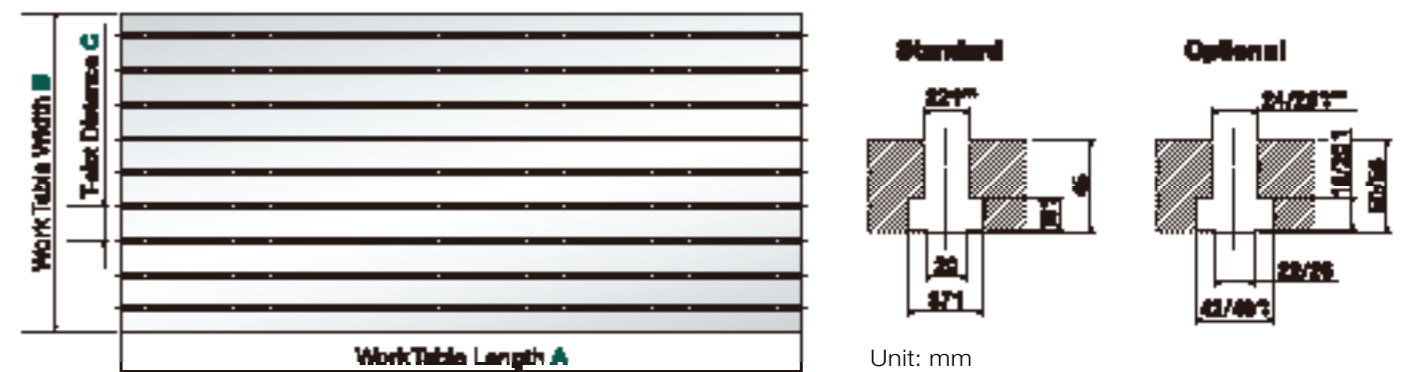
- 4th or 5th CNC Rotary Table
- A.T.C Magazine Capacity (60, 80, 120)
- Coolant Through Spindle System (20 kg / cm²)
- Coolant Through Tool Shank (Max 6 kg / cm²)
- Vertical Square Work Table (600 X 600 X 900 mm)
- Auxiliary Work Table (900 X 900 X 100 mm)
- Vertical Square Clamping Cube BP080312 (630 X 350 X 700 mm)
- BP090312 (630 X 350 X 700 mm)
- Auto Tool Length Diameter Measurement (Renishaw TS-27R) (NC4 Non-Contact)
- Auto Touch Probe System (Renishaw RMP-60)
- Tool Presttler
- Coolant Temperature Control
- Different Type, Function CNC Controller
- Axis Linear Scale Feedback

Machine Layout

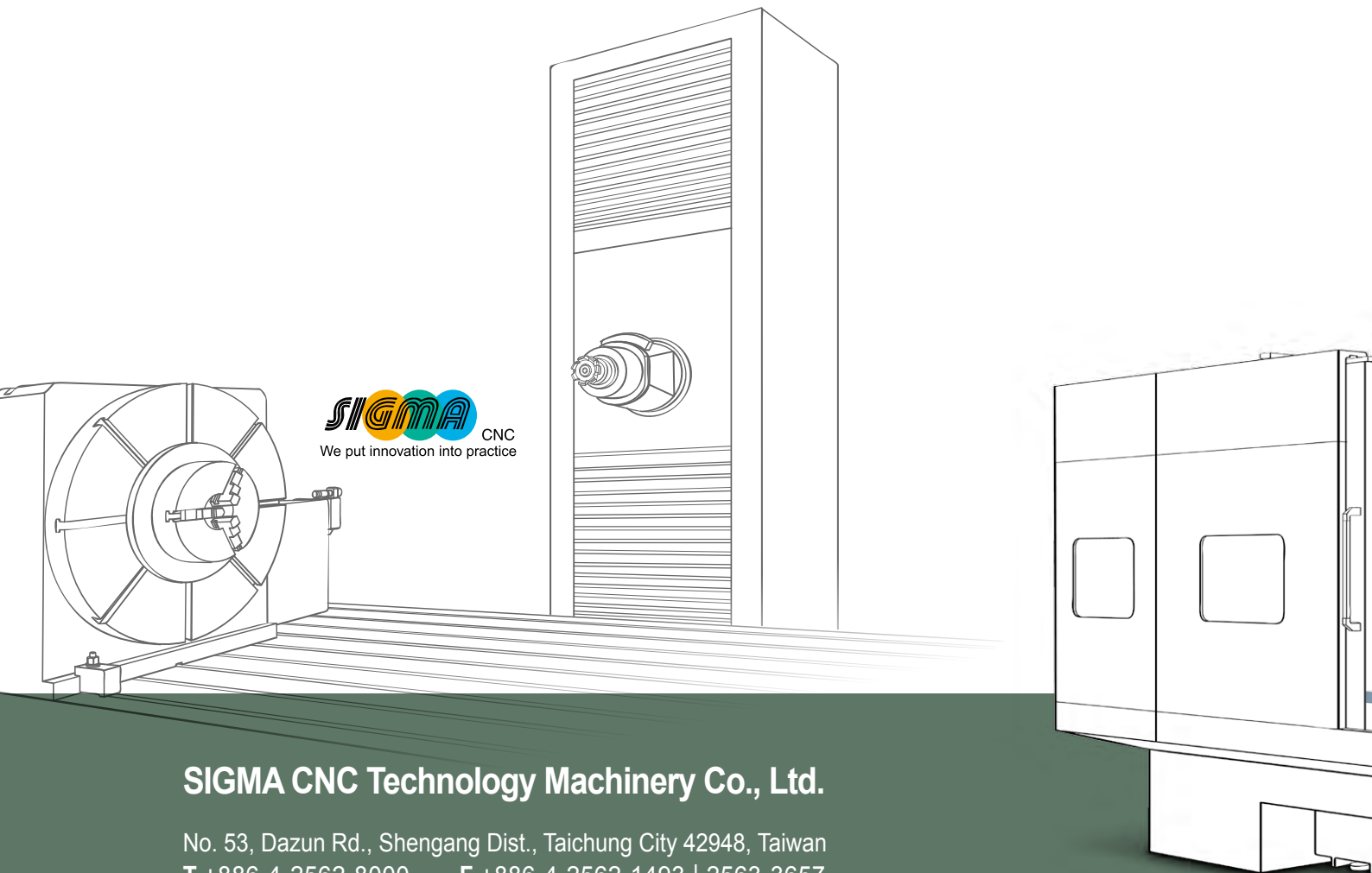


Item	Model	Unit	SMH-1608MC	SMH-2010MC	SMH-3212MC
A		mm	5,165	5,925	8,165
B			1,855	1,855	2,155
C			5,355 (5,605)	5,355 (5,605)	5,655 (5,905)
D			575	955	2,075
E			1,850	2,230	3,350
F			3,350	3,450	3,750

Table Dimensions



Model	SMH-1608MC	SMH-2010MC	SMH-3212MC
Work Table Length A	1,600 mm	2,000 mm	3,000 mm
Work Table Width B	1,000 mm	1,000 mm	1,400 mm
T-slot Distance C	150 x 6	150 x 6	150 x 8
Amount of T-slot	7	7	9



SIGMA CNC
We put innovation into practice

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Products

- CNC Double Column Machining Center
- CNC Double Column High Speed Machining Center
- CNC Double Column 5-face Machining Center
- CNC Double Column 5-Axis Machining Center
- CNC Double Column Crossrail Machining Center
- CNC High Speed Horizontal Machining Center
- CNC High Precision Grinding Machine

