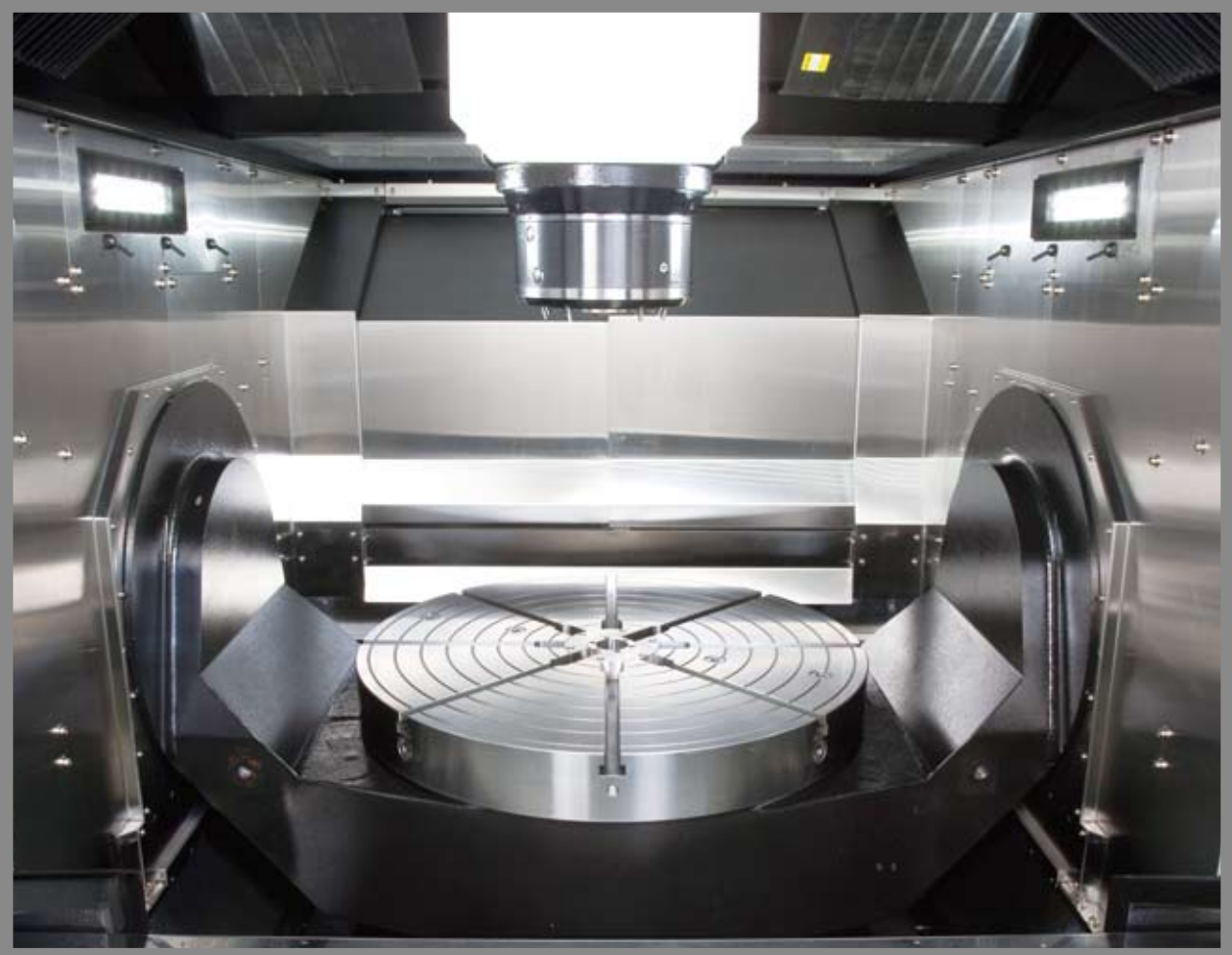


# Eumadon

*Always A Step Ahead*



**5 AXES GANTRY TYPE  
MACHINING CENTER**

**A PROFESSIONAL CNC MACHINES MANUFACTURER**

# ***GVM-800U DESIGNED FOR HIGH PRECISION ONLY ONE SINGLE SET UP, EVEN TURNING***

The latest 5 axes machine provides not only improving production lead time, machining accuracy but also optimizing working environment due to compact design and even improving the company whole management.



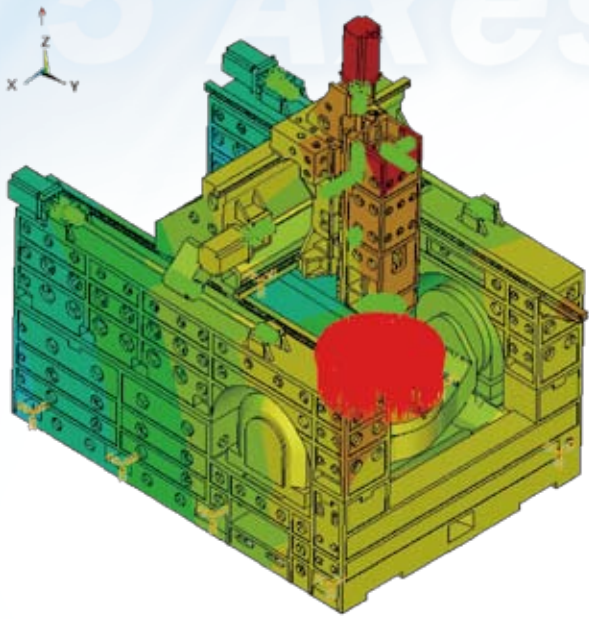
# ***ION MULTIPLE SURFACES MILLING IN NG IS POSSIBLE!***



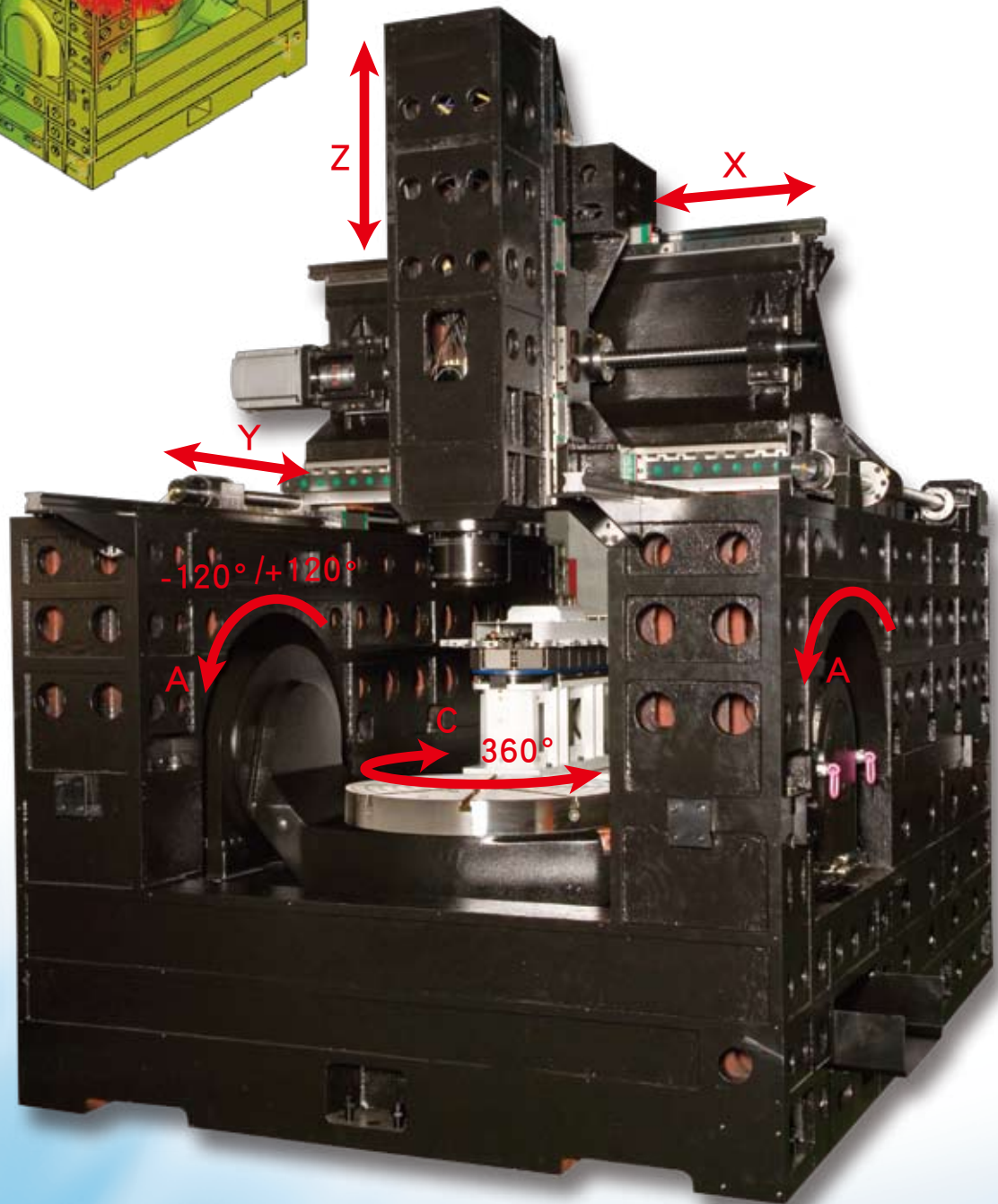
**Ergonomic orientated design for easy loading / unloading heavy work piece by overhead crane due to removable top roof cover.**

# ROBUST RIGID FRAME

5 Axes Series



The robust frame with each key component all has been very well optimized from the standpoint of static rigidity and dynamic quality in order to be the highest performance gantry 5 axes machine.



The highest rigidity and latest innovation with twin Y axis driven gantry construction which definitely suppresses the vibration generated by the very high speed ( 48M/Min ) acceleration / deceleration !

# POWERFUL MOTOR SPINDLES



**P18 / 24**



**C18 / C24**



**C27T**

Applications	Milling			Mill turn	
Model	P18	P24	C18	C24	C27T
Max. speed RPM	18000	24000	18000	24000	10000
Rated speed RPM	1000	2000	2000	4500	2000
Power S1 / S6 KW	26 / 32	21 / 27	21 / 27	34 / 43	27 / 31
Torque S1 / S6 Nm	124 / 154	85 / 116	100 / 130	72 / 91	130 / 170
Taper	HSK-A63				HSK-T63
Country made	Italy			Germany	
In Use	standard	optional			

# AUTOMATIC TOOL CHANGER



Driven by AC servo motor(s) in order to provide spindle picking up at simple, fast, trouble-free and extremely smooth tools exchanging; standard 32 stations, optional 40x1, 60x1, 32x2, 40x2, 60x2 stations, biggest tool dimension is Dia. 75mm or Dia.125mm / 300mm length / 8kg weight.

# TORQUE MOTORS DRIVEN

## MILLING (STANDARD)

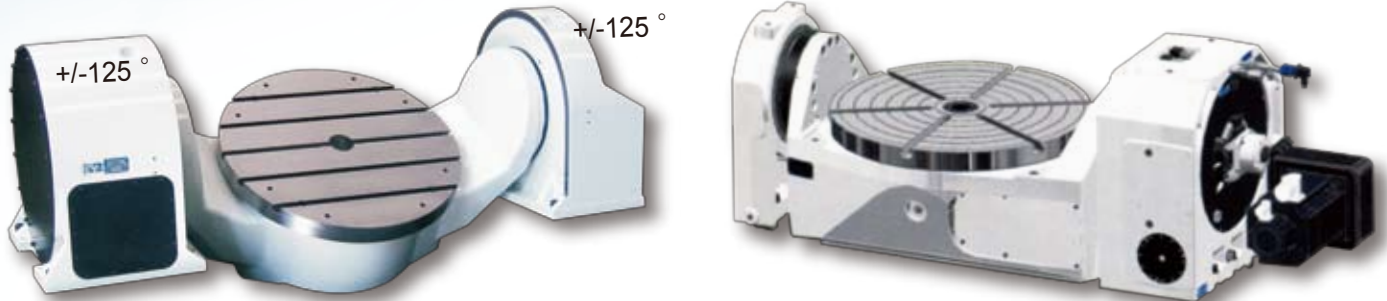


Table is driven by 2 torque motors, one each at A & C axis, maximum speed are 10RPM & 50RPM, maximum load 1200kg.

## MILLING TURNING (OPTION)

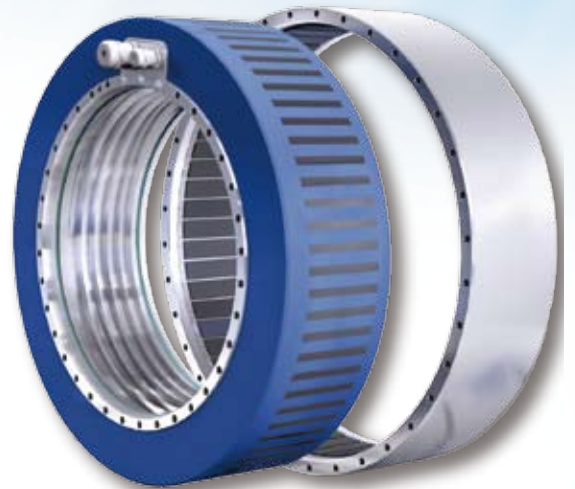
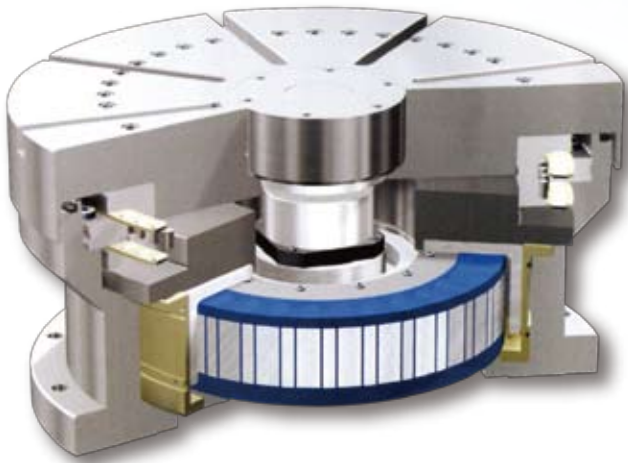


Table is driven by 3 torque motors when both twin A axes at either 90° or 0° , maximum C axis speed is 800RPM, also because twin A axes are rigidly clamped (more than 10000Nm) so turning operation smoothly is ensured.

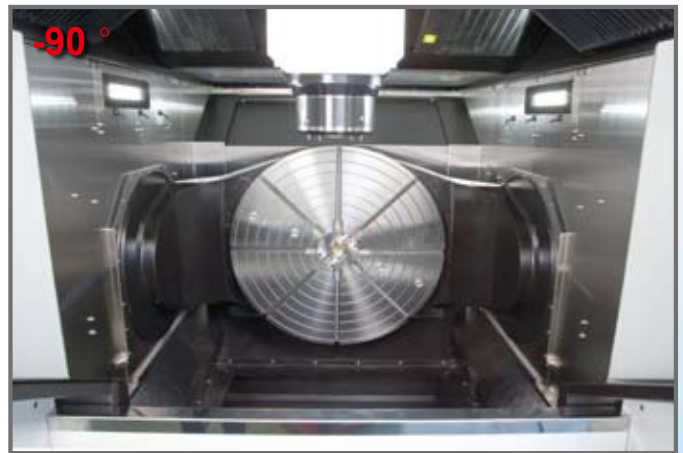


Turning table is made of extreme high dynamic one piece casting and machined by 5 axes machine to ensure its high accuracy.

# TILTING ROTARY TABLE :



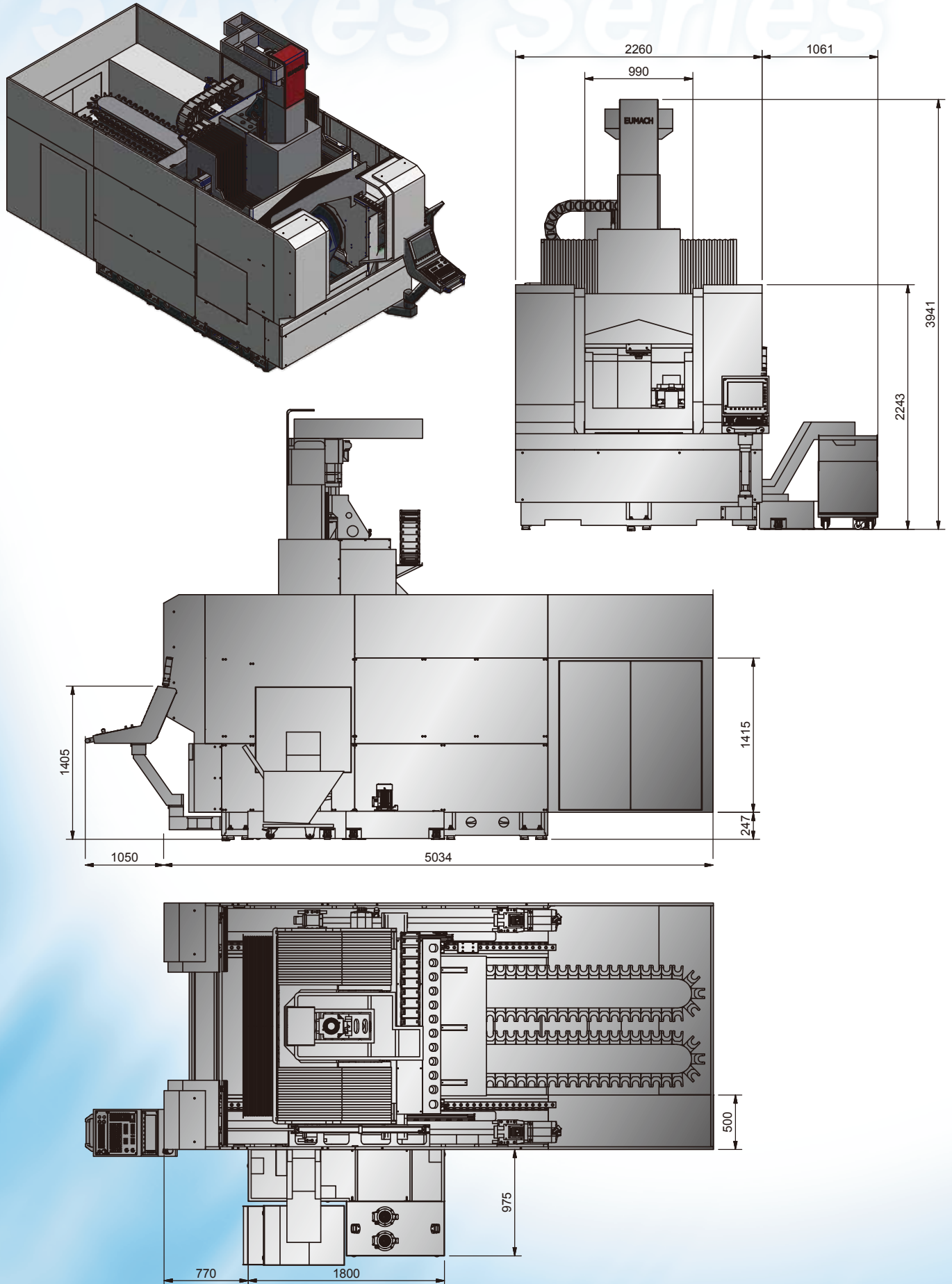
Extended dynamic and power : the core of the direct drive table is with the new torque motor generation, the sophisticated cooling technology of the coils offers 30% more power than before, very high efficiency and dynamic and is possible to reach a new level of high dynamic milling & turning operations !



Efficient chip removal : cutting chips, coolant water, oil etc. are easily falling down directly to the machine bed where has a well integrated chain type chip conveyor, it bring out chips etc. efficiently

Heavy duty ram construction with extreme section and well rib design ensures high speed and heavy cutting is possible without vibration

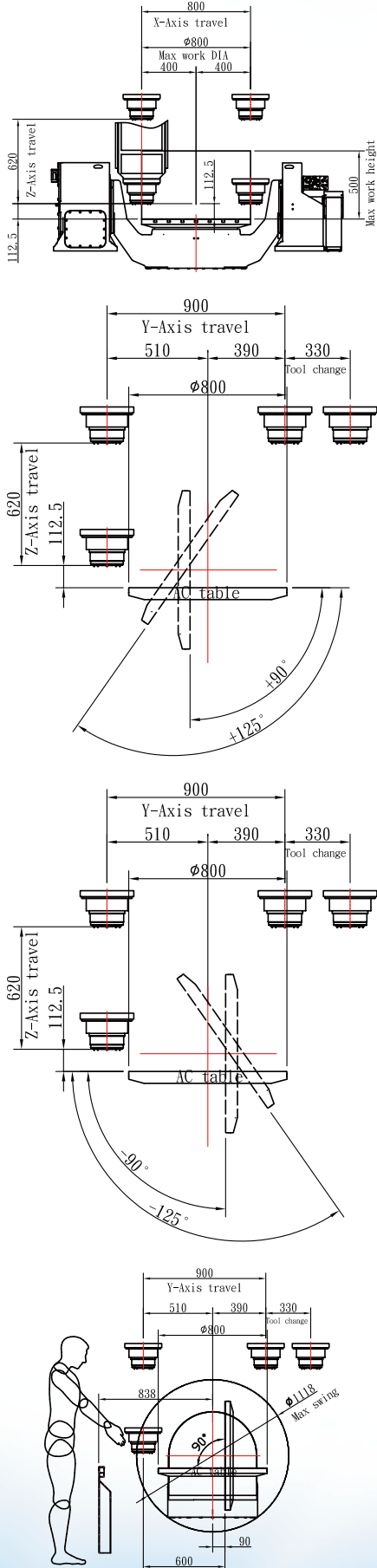
# MACHINE DIMENSION :



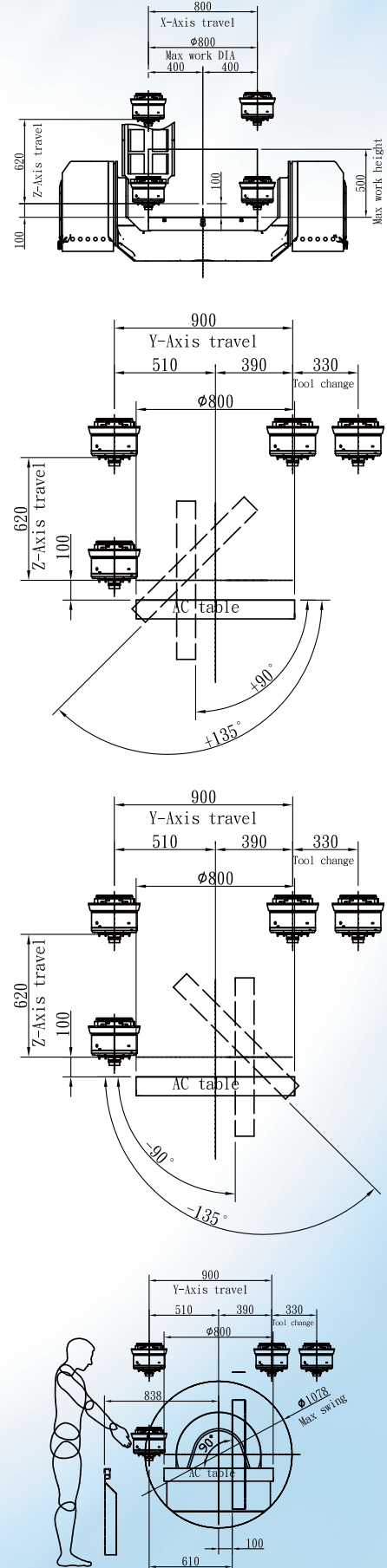
**Note : above dimension may change due to continuous improvement !**



# MILLING ENVELOPE :



# MILLING TURNING ENVELOPE :



The operator standing in front of machine has excellent access to the table edge for easy work piece loading/unloading or set up due to ergonomics design.

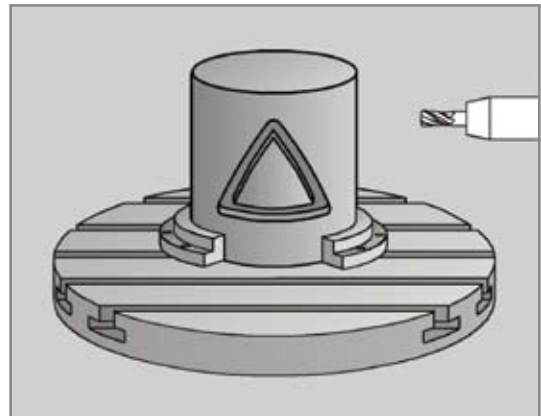
# DIGITAL CNC CONTROL



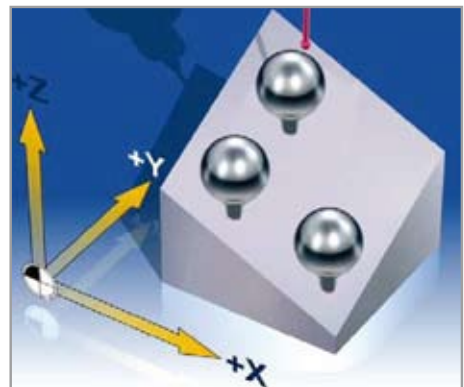
Inspecting and optimizing machine accuracy by calibrating rotary axes with kinematics

## Heidenhain iTNC-640 HSCI newest control :

1. MC 7522 1.8GHz more powerful CPU than before
2. 32G SSDR storage media resistance to vibration
3. New HEROS 5 operating interface with PDF viewer
4. TE 730 key board & MB 720 panel & 15" XGA screen

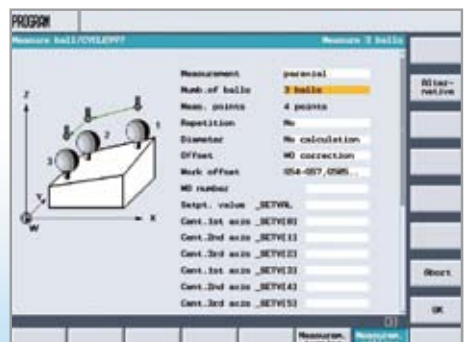


Cylindrical surface interpolation



## Siemens 840Di Solution Line newest control :

1. NCU 730.2 with PLC 317 - 2DP + 40GB HD
2. PCU 50.3 1.5Ghz , 512Mb, WinXP/Pro interface
3. Shopmill + 3D simulation 1 & HMI Advanced
4. MCP483C panel + OP 015A 15" TFT screen



MEASURING 3 SPHERE

# GVM-800 GANTRY TYPE 5 AXES MACHINES SPECIFICATIONS

Model	Specifications	Milling	Milling turning
<b>Travel</b>	X Y Z axis	800 / 900+330 / 620mm	
<b>Distance</b>	Spindle nose to table top	112.5 ~ 732.5mm	100 ~ 720mm
	Spindle nose to table center	0 ~ 732.5mm	0 ~ 720mm
<b>Rotary table tilt A axis</b>	Maximum rotation	50 RPM	25 RPM
	Transmission via torque motor	1 set	2 sets
	Tilt angle	± 125°	± 135°
	Continuous / peak torque	2680 Nm-peak	4980 / 9500 Nm
	Brake torque	6000 Nm	10000 Nm
<b>Rotary table rotary C axis</b>	Table dimension	Φ 800mm	
	Maximum loading	1200kg	
	Maximum rotation	100 RPM	800 RPM
	Transmission	Torque motor	
	T slots	14mm x 7	Radial 18mm x 8
	Continuous / peak torque	1230 Nm-peak	1127 / 2065 Nm
	Brake torque	3000 Nm	4000 Nm
	Table top to floor	876 mm	891 mm
<b>Motor spindle</b>	Maximum spindle speed	18000 RPM	10000 RPM
	Spindle power S1/S6	26 / 32 KW	27 / 31 KW
	Spindle torque S1/S6	124 / 154 Nm	130 / 170 Nm
	Spindle taper	HSK-A63	HSK-T63
<b>Ball screws</b>	X / Y / Z Diameter x pitch	Φ 50 / 50 x 2 / 50mm x 16mm FDC, oil thru cooled	
<b>X / Y / Z axis Roller guide</b>	Width	55 / 55 / 45mm	
	Runner blocks number	4 / 4 / 4	
<b>Feed rate</b>	Rapid feed X / Y / Z	48 / 48 / 48 M/min.	
	Cutting feed	20M / min.	
<b>ATC</b>	Tool holder type	HSK-A63	HSK-T63
	Tools number	32 (40, 64, 80, 120)	
	Maximum tool D / L / W	Φ 75mm & Φ 125mm / 300mm / 8kg	
	Tools exchanging type	Armless carousel pick up, servo motor driven	
<b>Weight</b>	Before packing	24 tons	25 tons
<b>Measuring</b>	Direct	4 linear scales (Yx2) & 2 rotary encoders	
<b>CNC</b>	Brands	Heidenhain & Siemens	

Note : above based on standard spindles.

## Standard Features & Accessories

1. FULL SPLASH GUARD WITH TOP ROOF
2. PROGRAMMABLE COOLANT SYSTEM
3. AUTOMATIC LUBRICATION SYSTEM
4. SPINDLE AIR BLAST SYSTEM
5. WORK ALARM, INDICATON LAMPS
6. SPINDLE WATER COOLER
7. LEVELLING BOLTS & PADS
8. RS-232 TERMINAL INTERFACE PORT
9. MACHINE & CONTROL MANUALS
10. TOOLBOX WITH SPANNERS & WRENCHES
11. CHAIN TYPE CHIP CONVEYORS + 2 SCRCW CHIP AUGERS
12. 3 AXIS LINEAR SCALES + 2 AXIS ROTARY ENCODERS



# EUMACH FAMILIES



◦ **VMC-2150**  
Vertical machine center  
400MM ~ 3200MM X axis travel



◦ **TVMC-2000 / 3000**  
Moving column machine center  
2320MM & 3320MM X axis travel



◦ **LBM-1500**  
High speed bridge type machine center  
1100MM ~ 2200MM X axis travel



◦ **FBM-10040**  
Floor type milling center  
4M~20M X axis travel



◦ **EBM-2150**  
5 Face machine center  
1400MM ~ 3200MM X axis travel



◦ **MB-1500**  
Moving column horizontal machine center  
1100MM ~ 2200MM X axis travel



◦ **DVM-4025**  
5 Face & double column machine center



◦ **FBE-1500**  
Universal milling machine  
1500MM ~ 4000MM X axis travel



◦ **UMC-1000**  
5 Axis machine center  
1000MM x 800MM x 700MM travel

**Eumach Co.,LTD.**

★ Specifications subject to change without notice.  
Catalogue No.A6040104

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