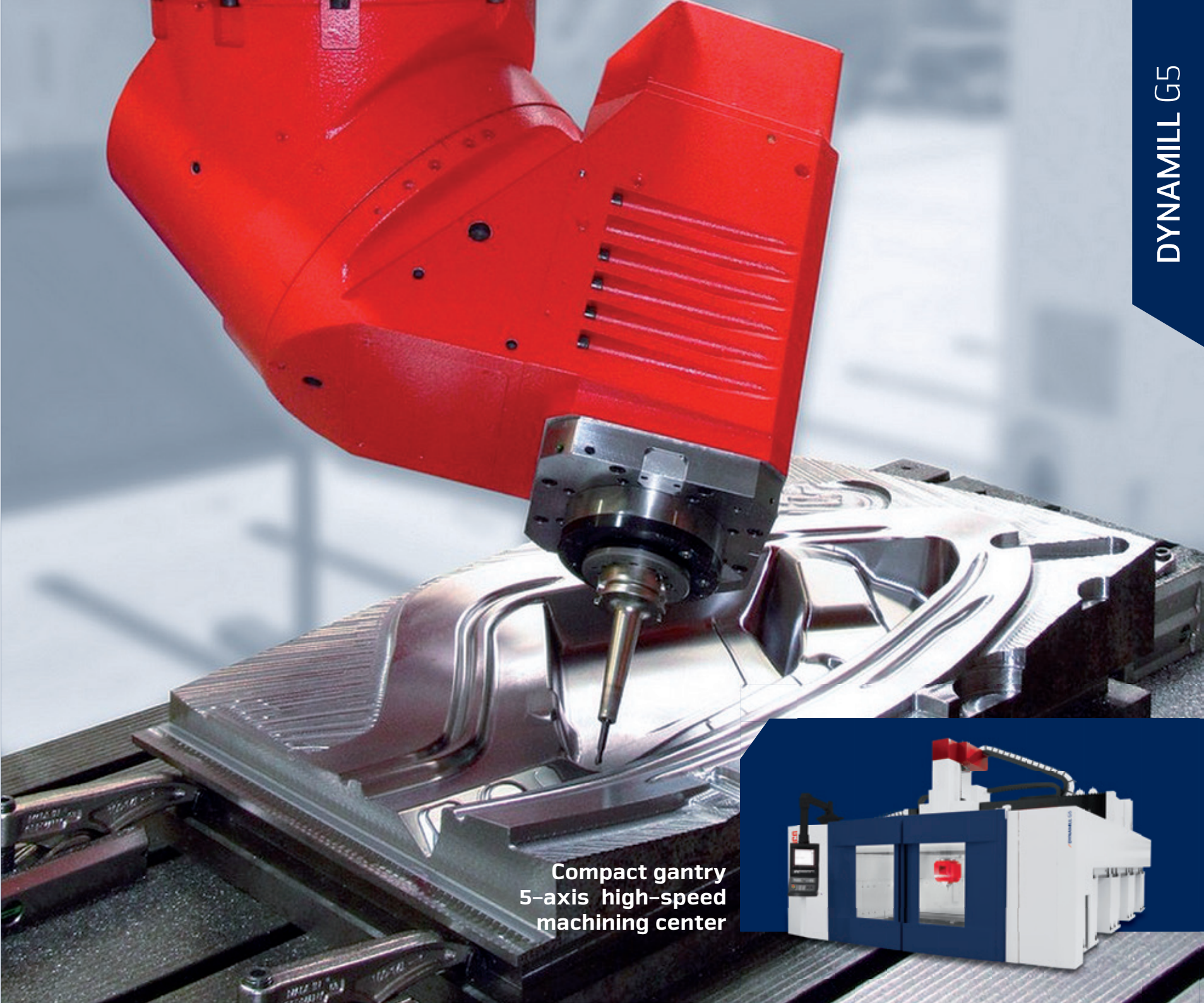
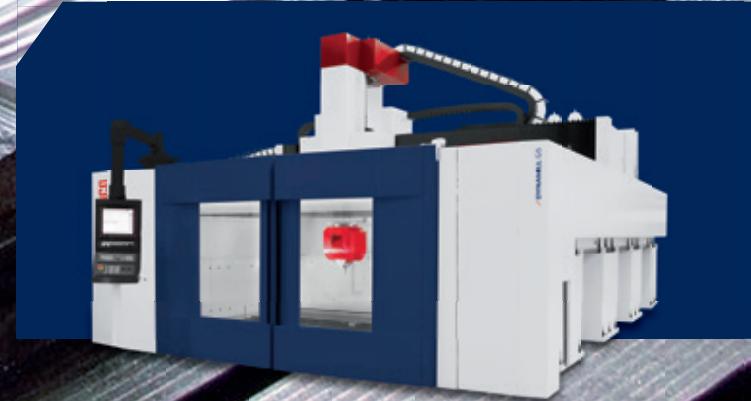


**EMCO**



**DYNAMILL G5**

**Compact gantry  
5-axis high-speed  
machining center**



# 5-AXIS MACHINING IN ONE SET-UP

The Dynamill G5 is the most suitable solution for 5-axis machining in one single set up. The proven machine impresses with its high pre-processing performance and excellent finishing properties with high surface quality and precision. The portal design ensures excellent rigidity and stability combined with high dynamics.

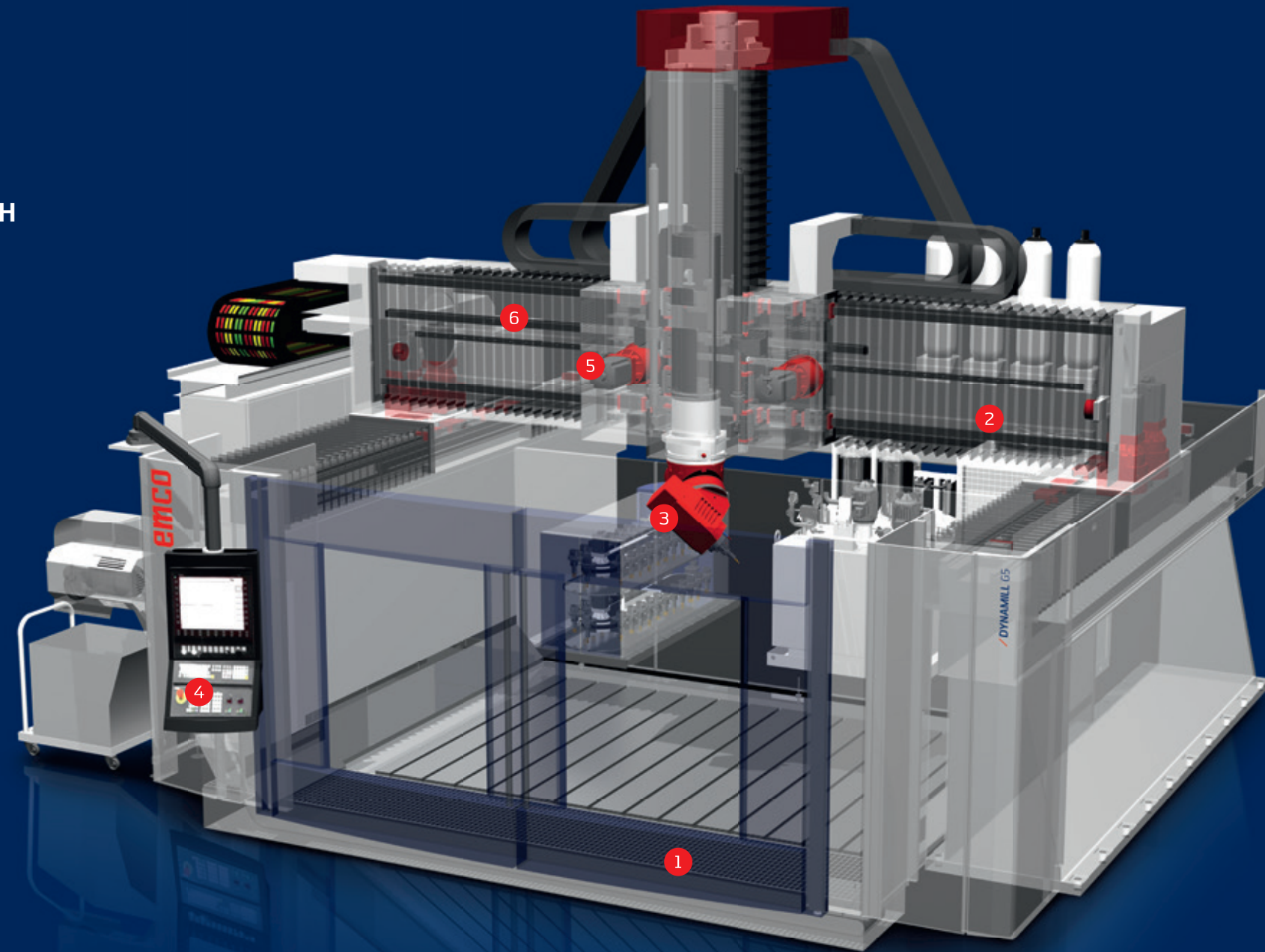


Z-axis saddle integrated in the machine crossbeam, its structure ensures highest stiffness results and utmost dynamic.

- 1 **COMPACT DESIGN**  
/ Maximum precision with top dynamics thanks to extraordinarily stable gantry design
- 2 **ROLLER RECIRCULATING UNITS AND AXES GUIDEWAYS – BOSCH REXROTH**



- 3 **DIRECT DRIVE 5-AXIS MILLING HEADS BY MECOF DESIGN**  
/ Milling  
/ Drilling  
/ Tapping  
/ Turning, etc.

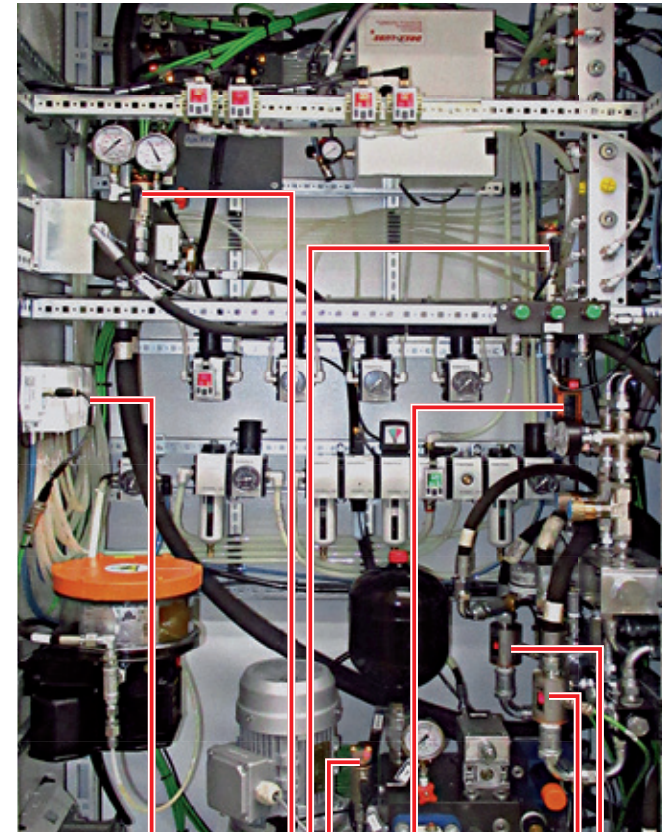


- 4 **CONTROL**  
/ Heidenhain TNC 640 HSCI or Sinumerik ONE



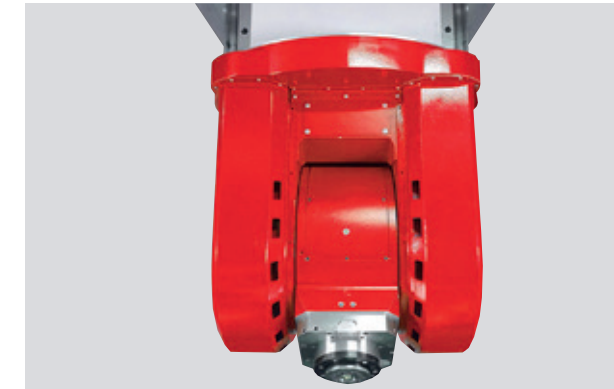
- 5 **AXES MOTORS BY SIEMENS SERVO-GEAR BY REDEX**
- 6 **HEIDENHAIN ENCODERS**

# TECHNICAL HIGHLIGHTS



## SMART DEVICES

IO-Link smart devices are the state-of-the-art technology for a quick and effective diagnosis on the functioning of: high-speed spindle, cooling system on milling head and high-speed spindle, hydraulic unit, air/oil lubrication of milling head and high-speed spindle, pneumatic system, hydraulic system and thermal compensation system.



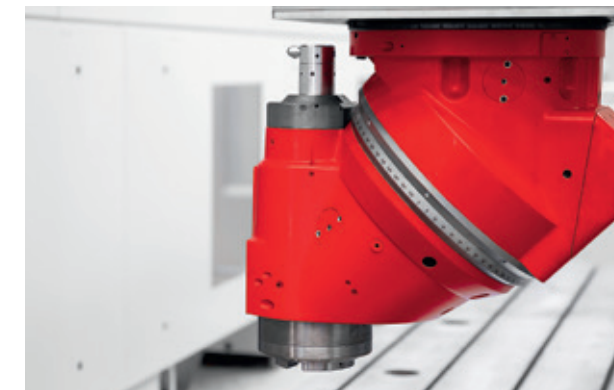
## SUCTION SYSTEM

Dust and fumes can be easily conveyed by Mecof suction system integrated in the fork type milling head.



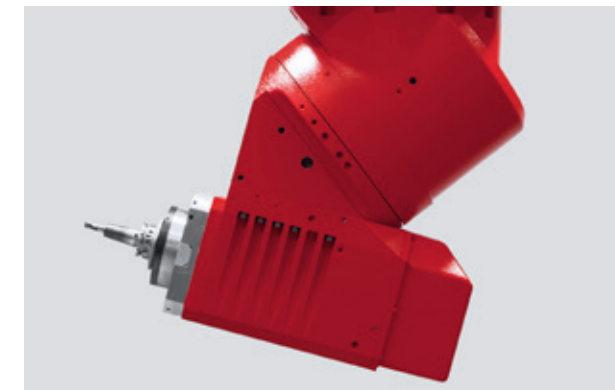
## EASILY ACCESSIBLE WORK AREA

Wide sliding doors on the machine front side for easy loading and unloading of large workpieces.



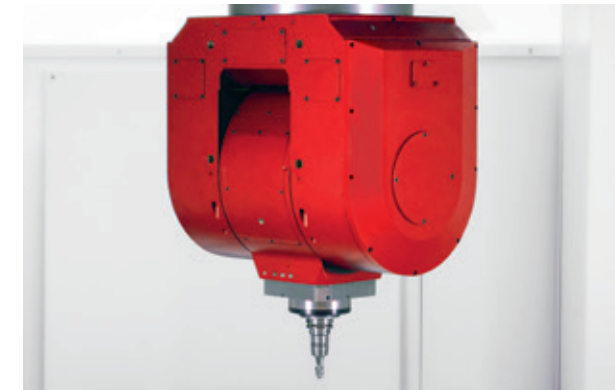
## TCB6-E / MECOF DESIGN

Universal milling head with automatic millesimal positioning. A powerful mechanical spindle with high torque for heavy-duty machinings.



## TWT / MECOF DESIGN

Direct drive universal milling head with high-speed spindle. New design 15° undercut makes it more agile in machining of complex workpieces.



## SP20\_SP21 / MECOF DESIGN

Fork type milling head with high-speed spindle and torque motors. 20° undercut.

## HIGHLIGHTS

- / High dynamics and accuracy by means of direct drive milling heads
- / Large working area – small installation surface
- / Simple foundation design
- / Machine ready for Industry 4.0
- / 15° undercut on universal milling head with high-speed spindle
- / Direct drive technology on all milling heads with high-speed spindle
- / Automatic tool changer up to 200 tools

## TECHNICAL DATA

### Linear axes

Longitudinal travel in X	2500 mm	4000 mm	6000 mm	8000 mm
Cross axis travel in Y	3500 mm	2200 mm		
Vertical axis travel in Z	1300 mm	1500 mm		
Feedrate	40 m/min			
Acceleration	4 m/s <sup>2</sup>			

### Accuracy

	X=2500 mm	Y=3500 mm	Z=1300 mm
Linear accuracy positioning P [µm]	10	12	8
Repeatability accuracy Ps [µm]	5	6	4

### Spindle motor

Standard	51 kW 330 Nm (S1)
Option	74 kW 615 Nm (S1)

### Workpiece/tool cooling system

External cooling	28 l/min; 6 bar
Internal cooling	20 l/min; 20 bar    40 bar    60 bar
Nebulized air/oil	available
Minimal lubrication system	available

### Universal milling head with automatic millesimal positioning

	mechanical spindle	
Power (S1/S6)	38 / 48 kW	38 / 56 kW
Torque (S1 / S6)	300 / 373 Nm	615 / 900 Nm
Speed	6000 rpm	6000 rpm
Tool Taper	ISO 50 / HSK 100-A	ISO 50 / HSK 100-A

### Universal milling head with automatic millesimal positioning and high-speed spindle TWT Fork type milling head with high-speed spindle SP21

	E61G	E62G	E55
A/C-axes rotation speed	60 rpm	60 rpm	60 rpm
Positioning accuracy	≤ 12"	≤ 12"	≤ 12"
Repeatability accuracy	≤ 8"	≤ 8"	≤ 8"
Power (S1/S6)	50 / 63 kW	50 / 63 kW	42 / 55 kW
Torque (S1 / S6)	100 / 125 Nm	100 / 125 Nm	67 / 87,5 Nm
Speed	20000 rpm	12000 rpm	24000 rpm
Tool Taper	HSK 63-A	HSK 100-A	HSK 63-A
Undercut	15° / 20°	15° / 20°	15° / 20°

### Fork type milling head with high-speed spindle SP20

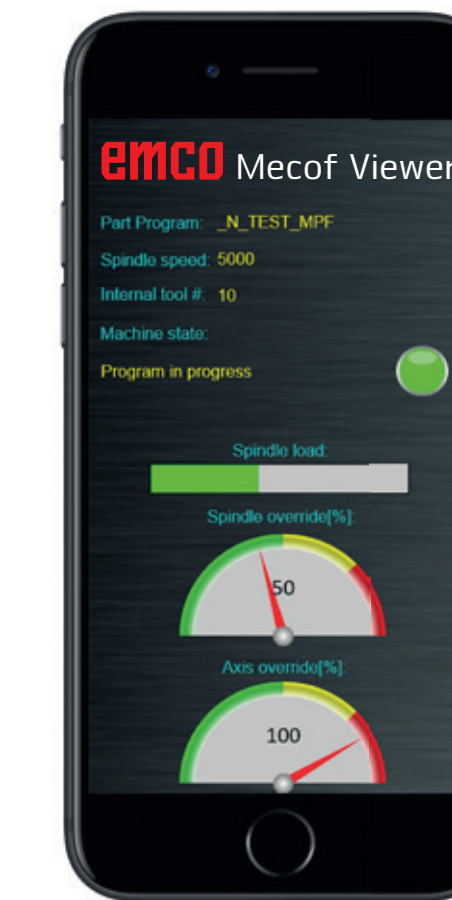
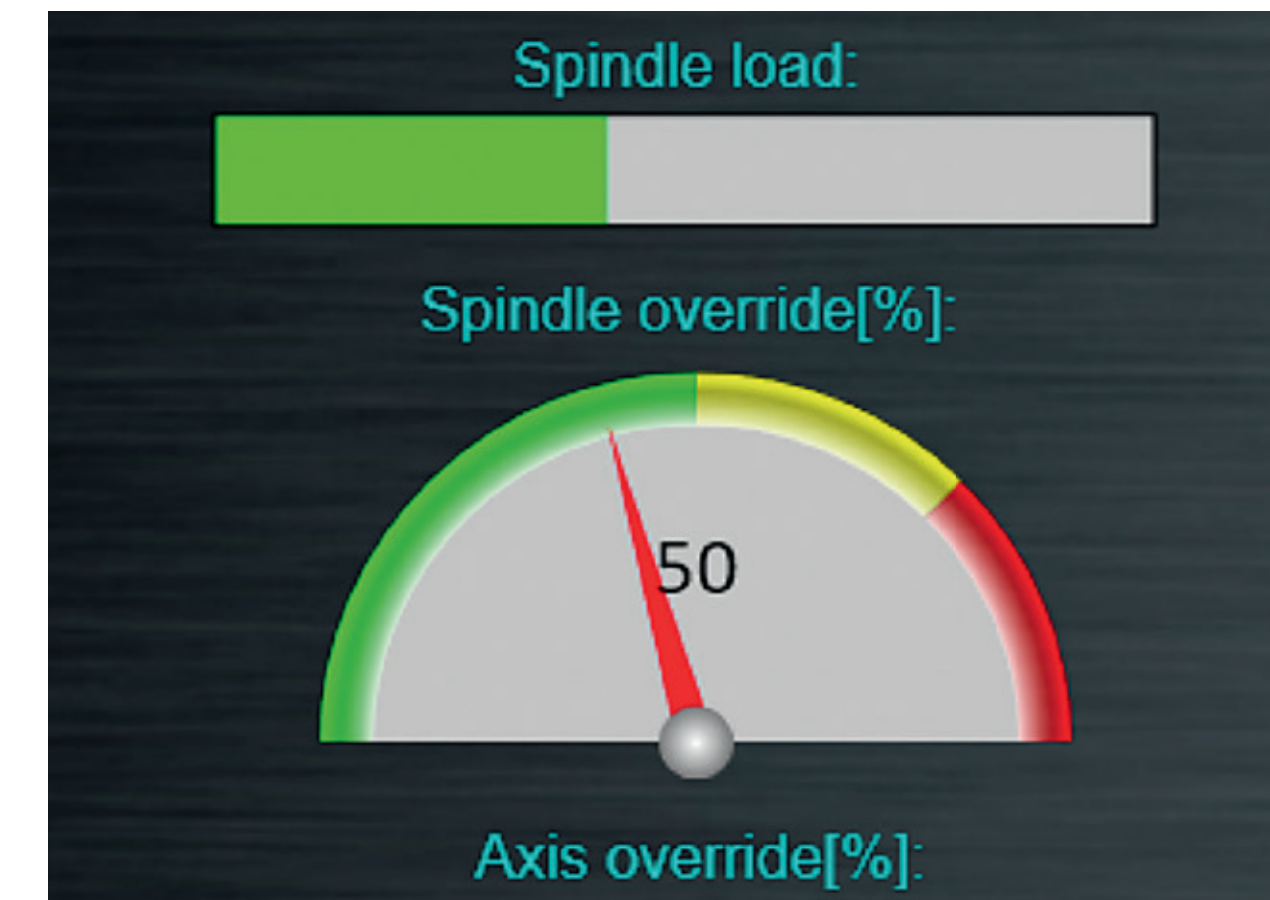
	E58G	E68
A/C-axes rotation speed	60 rpm	60 rpm
Positioning accuracy	≤ 12"	≤ 12"
Repeatability accuracy	≤ 8"	≤ 8"
Power (S1/S6)	45 / 58 kW	70 / 85 kW
Torque (S1 / S6)	300 / 372 Nm	160 / 220 Nm
Speed	12000 rpm	15000 rpm
Tool Taper	HSK 100-A	HSK 100-A
Undercut	20°	20°

### Main options

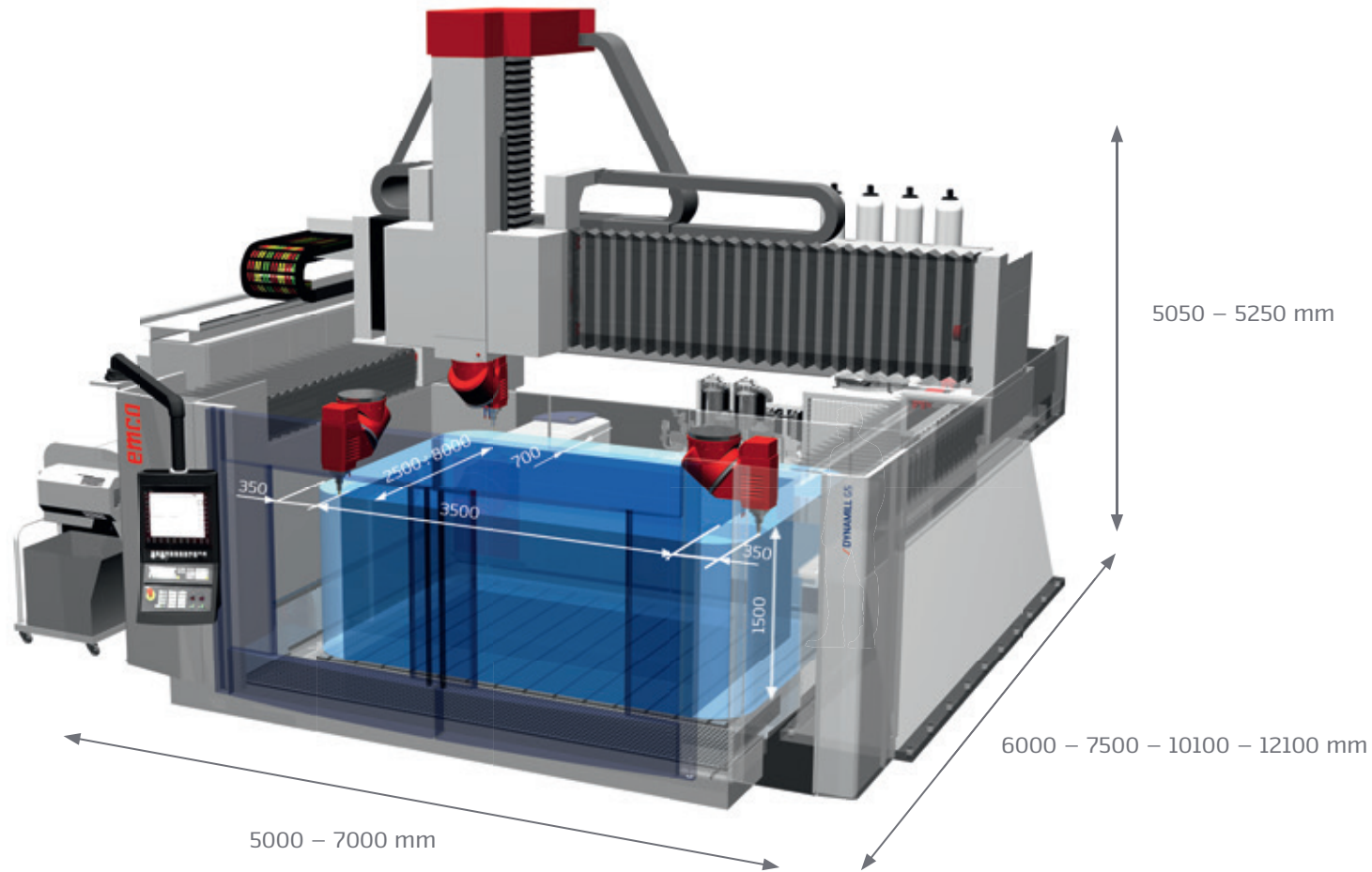
Tool changer	24 / 48 / 64 pockets
--------------	----------------------

## REMOTE ACCESS WITH THE EMCO MECOF VIEWER APP

Through the implementation of smart sensors in the machine cabinets and the development of a dedicated software, Mecof created a mobile phone application that can support machine operators in identifying any problem to the electric and electronic components.



# OVERALL DIMENSIONS & WORKING AREA



beyond standard /

EMCO GmbH / Salzburger Str. 80 / 5400 Hallein-Taxach / Austria / T +43 6245 891-0 / F +43 6245 86965 / info@emco.at

[www.emco-world.com](http://www.emco-world.com)