# MISSION: PRECISION

#### MAXXMILL 630





#### PRODUCT RANGE MILLING



VERTICAL











HORIZONTAL

MAXXMILL

HIGH-PERFORMANCE MILLING CENTRES FOR LARGE-VOLUME PARTS









VERTICAL MACHINING CENTRES



EMCOMILL







### MAXXMILL 630



Vertical milling center for 5-sided machining

 Modern moving column concept

 Cutting-edge control technology from Siemens or Heidenhain

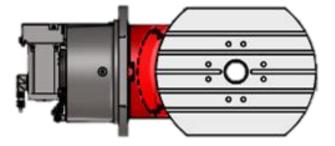




# Highlights

# Swivel-rotary table with 630 x 500 mm clamping area

# Machine workpieces with an edge size of 445x445x290 mm





# Highlights



/ The B-axis travel range of +/- 100° provides a large work area

Automatic tool changer for 30 tools



#### **Technical data**

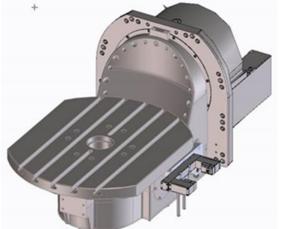
Travel and feed	
X-axis travel	500 mm
Y-axis travel	460 mm
Z-axis travel	450 mm
Distance spindle nose/table	175 / 675 mm
Rapid motion speed X-Y-Z	30 m/min
Max. acceleration	3 m/s²
Main spindle (mechanical spindle)	
Max. power	15 kW (S6)
Max. torque	100 Nm (S6)
Speed range	12.000 rpm
Tool taper	ISO 40 DIN 69871
Pull stud	ISO 7388/2 Type B
Drive	Direct drive

Tilting table	
Clamping area	630 x 500 mm
Table-floor distance	855 mm
Slot number	5
Distance between two T- slots	75 mm
Groove wide	14 mm
Max. workpiece weight	200 kg
Dimensions	
Total height	3060 mm
Total dimensions (without chip conveyor)	2500 x 3120 mm
Weight	4800 kg



# Machine structure: basement and table





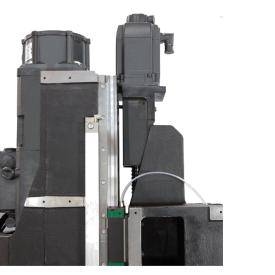
- New welded steel and FEM optimized basement
- Shaped rotary table plate for enhanced milling working area

New laser measure layout installed directly on the table side



# Machine structure: axis structure





Y- and Z-axis rigidity increase, thanks to:

- / New vertical machine structure
- Cast iron frame for both X-Y-Z sliding structure
- Z-axis precision and reliability improvement with direct motor design
  - Optimized Z-axis frame (cast iron) symmetrical and dimensions' contained for a bigger workspace

# Machine structure: head and spindle





Motor spindle 15.000 rpm

Mechanical spindle 12.000 rpm (not continuous) / The spindle and the motor are prepared for the coolant flow through the spindle

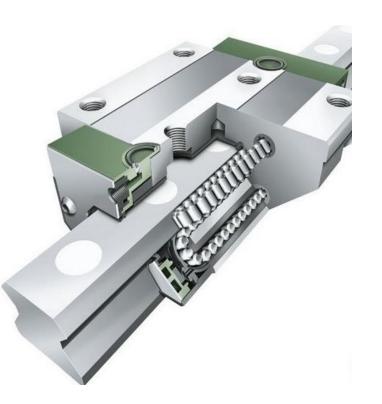
15.000 rpm motor spindle available (optional)

✓ Tool taper ISO 40 DIN69871 with pull stud ISO 7388-2 (standard), also available DIN 69872, BT40 and HSK A63 (HSK A63 and DIN 69872 only for motor spindle)

Bigger distance spindle nose-table: 175-150 mm (mechanical spindle)



#### Machine structure: guides



/ Roller guide technology

/ X-Y-Z guide size: 45-35-35

 Grease lubrication solution for high lubrication performance, improvement of machine cleaness and lower lubricant consumption (environmentally friendly)



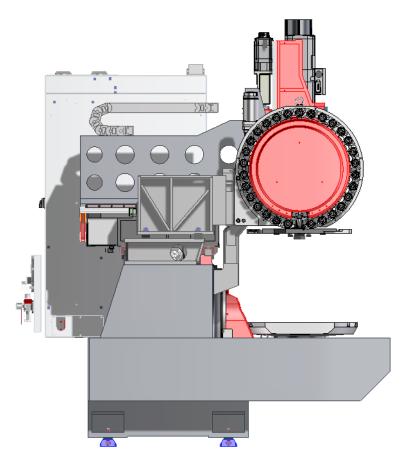
# Machine structure: ball screw



- / Grinded ball screw ISO 3
- / Diameter 40 mm
- / X-Y-Z Pitch 20-20-10 mm
- / X-Y-Z Feed force 5000 N

 Grease lubrication solution for high lubrication performance, improvement of machine cleaness and lower lubricant consumption (environmentally friendly)

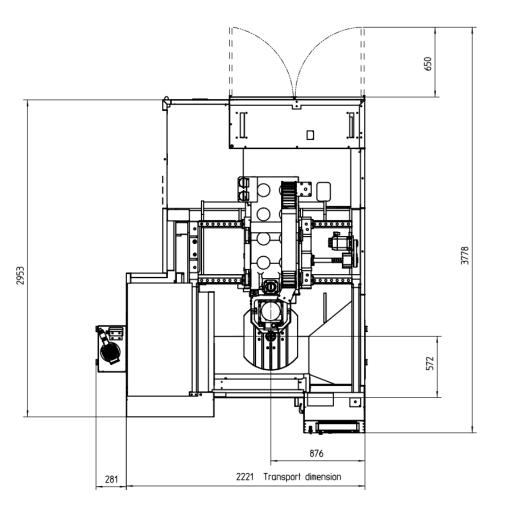
# Machine structure: tool changer



Capacity: 30 tools Max tool diameter: 80 (125) mm Max tool length: 250 mm Max tool weight: 8 kg Tool change time: 2 sec.

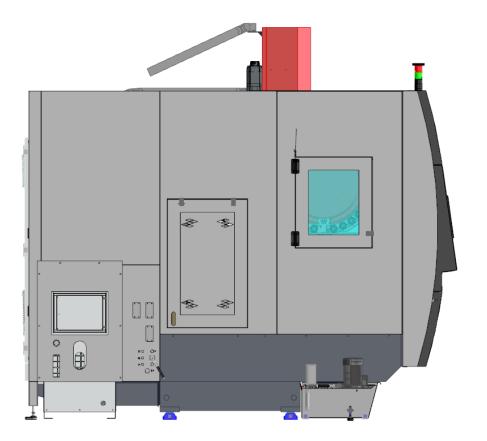


#### Machine layout



#### New optimized machine footprint

# Machine layout: ergonomy



One side access to most of the machine systems: tool changer, pneumatic panel, hydraulic unit, process cooling plant and machine cooling system are accessible from the left side of the machine

Right side free for automation system

\*aktuell nur für Siemens 840Dsl



#### In favor of EMCO ...

Solution Provider: complete processes and solutions, not only machines

Turning and milling machines with customizable automation concepts

Customer proximity: flexible, regional service and spare parts supply

European technology and production

# beyond standard