

MISSION: PRECISION





PRODUCT RANGE MILLING

UMILL

UNIVERSAL MACHINING CENTRES FOR 5-AXIS SIMULTANEOUS MACHINING

EMCO MMV













VERTICAL

HIGH-PERFORMANCE MILLING CENTRES FOR LARGE-VOLUME PARTS









HORIZONTAL

HIGH-PERFORMANCE MILLING CENTRES FOR LARGE-VOLUME PARTS









MAXXMILL

VERTICAL MACHINING CENTRES

EMCOMILL













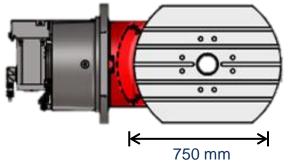
MAXXMILL 750



- Vertical milling center for 5-sided machining
- / Modern moving column concept
- Cutting-edge control technology from Siemens or Heidenhain





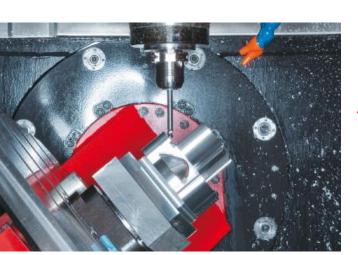


Highlights

Swivel-rotary table with 750 x 600 mm clamping area

Machine workpieces with an edge size of 530 x 530 x 417 mm







Highlights

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

Automatic tool changer for 30 tools (40 or 60 tools as option)



Technical data

Travel and feed		Tilting table	
X-axis travel	750 mm	Clamping area	750 x 600 mm
Y-axis travel	610 mm	Table-floor distance	805 mm
Z-axis travel	500 mm	Slot number	5
Distance spindle nose/table	175 / 675 mm	Distance between two T-slots	100 mm
Rapid motion speed X-Y-Z	30 m/min	Groove wide	14 mm
Max. acceleration	3 m/s ²	Max. workpiece weight	300 kg
Main spindle (mechanical spindle)		Dimensions	
Max. Power	15 kW (S6)	Total height	3060 mm
Max. torque	100 Nm (S6)	Total dimensions (without	2770 x 3350 mm
Speed range	12.000 rpm	chip conveyor)	70001
Tool taper	ISO 40 DIN 69871	Weight	7900 kg
Pull stud	ISO 7388/2 Type B		

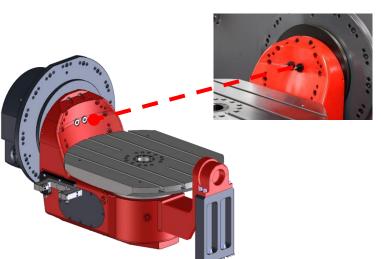
direct drive

Drive



Machine structure: basement and table

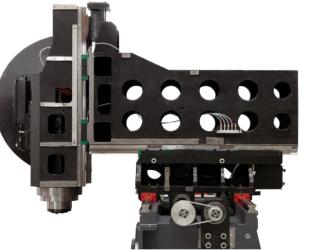




- New welded steel and FEM optimized basement
- Shaped rotary table plate for enhanced milling working area
- Extra central levelling element for a better load distribution
- Improved table load capabilities with front table support, 500kg (optional)
- Rotary table chip flushing system option available
- 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 structures
- Z-axis precision and reliability improvement with direct motor design
- Optimized Z-axis frame (cast iron) symmetrical and dimensions' contained for a bigger workspace



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Motor spindle 15.000 rpm

Mechanical spindle 12.000 rpm (not continuous)

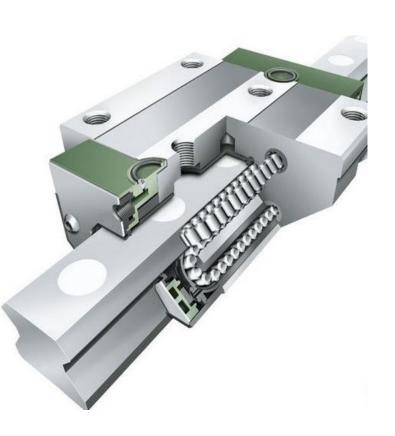
Machine structure: head and spindle

- 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)

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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)



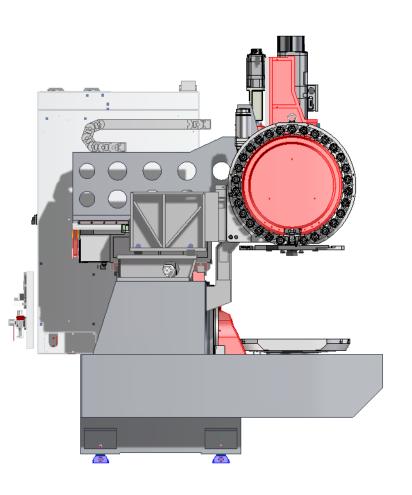
Machine structure: ball screw



- 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 (40/60) tools

Max tool diameter:

80 (125) mm

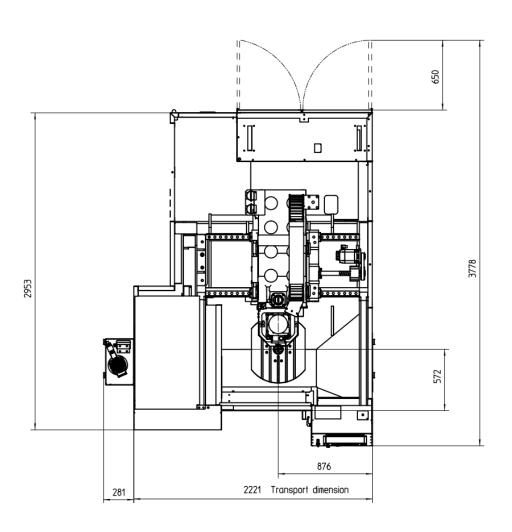
Max tool length: 250 mm

Max tool weight: 8 kg

Tool change time: 2 sec.



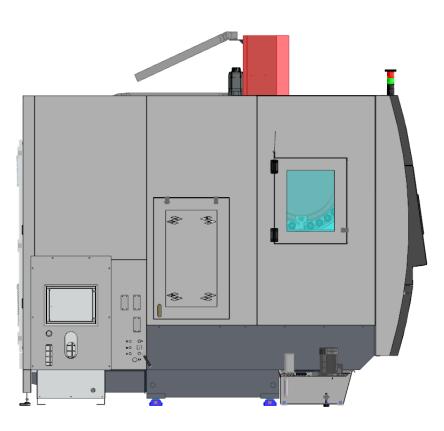
Machine layout



New optimized machine footprint (motor spindle cooler inside the machine structure)



Machine layout: ergonomy



Standard tool magazine's door

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