



# THE NEW LOOK OF PERFORMANCE

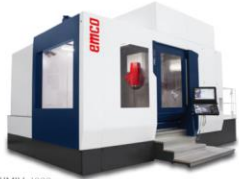


## PRODUCT RANGE MILLING

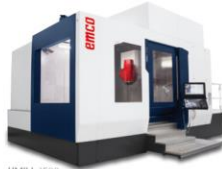
### UMILL

UNIVERSAL MACHINING CENTRES FOR 5-AXIS SIMULTANEOUS MACHINING

### EMCO MMV



UMILL 1000



UMILL 1500



UMILL 750



UMILL 630



MMV 3200



MMV 2000

### VERTICAL

HIGH-PERFORMANCE MILLING CENTRES FOR LARGE-VOLUME PARTS



DYNAMILL G5



DYNAMILL



MEGAMILL



POWERMILL

### HORIZONTAL

HIGH-PERFORMANCE MILLING CENTRES FOR LARGE-VOLUME PARTS



ECOMILL



ECOMILL PLUS



MECMILL



MECMILL PLUS

### MAXXMILL

VERTICAL MACHINING CENTRES

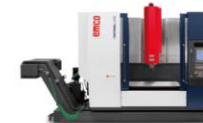
### EMCOMILL



MAXXMILL 750



MAXXMILL 630



ECOMILL 1200



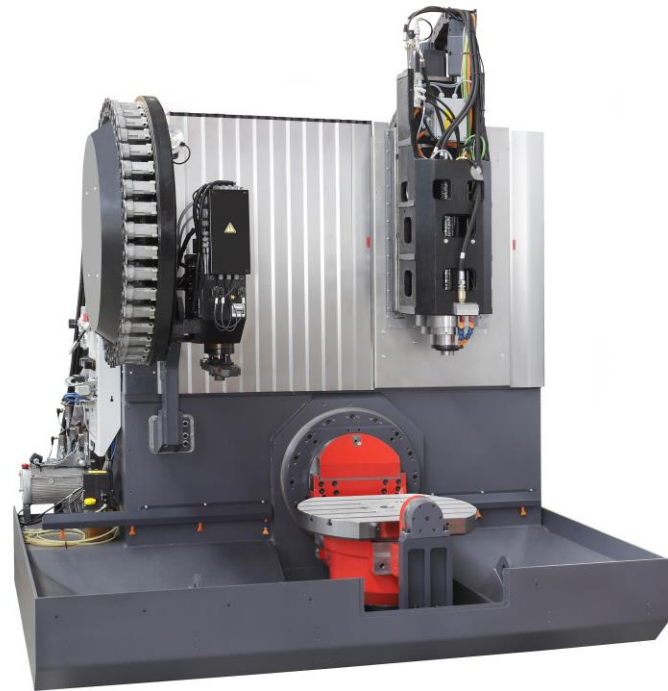
ECOMILL 750



ECOMILL E350

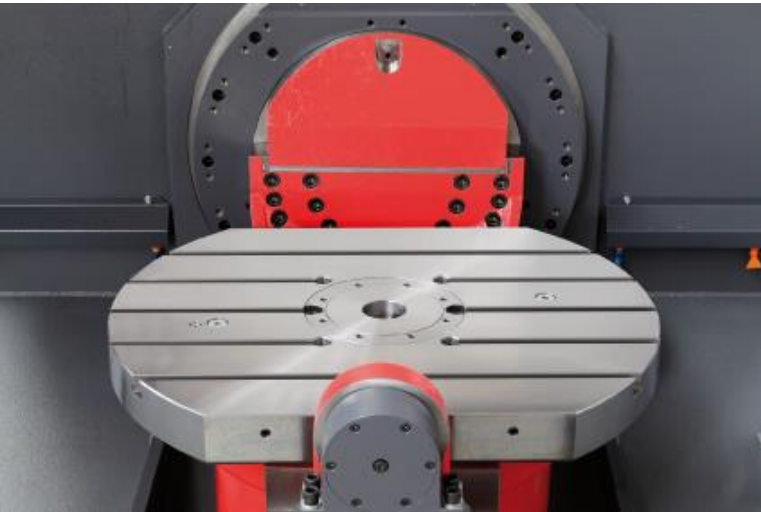
## Highlights

- ✓ **Torque drives** in the B- and C-axis
- ✓ **5-axis simultaneous machining**
- ✓ Modern travelling column machine concept
- ✓ Machine bed: welded steel construction
- ✓ X- / Y- / Z-slide made of cast iron
- ✓ All guides, ball screws and axle motors behind protective claddings



## Highlights

- / Sturdy machine table incl.
- / Counter bearing
- / 40-fold tool magazine
- / Motor spindle 15.000 rpm
- / Glass scales X / Y / Z
- / Large machining area,  
loading opening & large window
- / Optimum chip removal

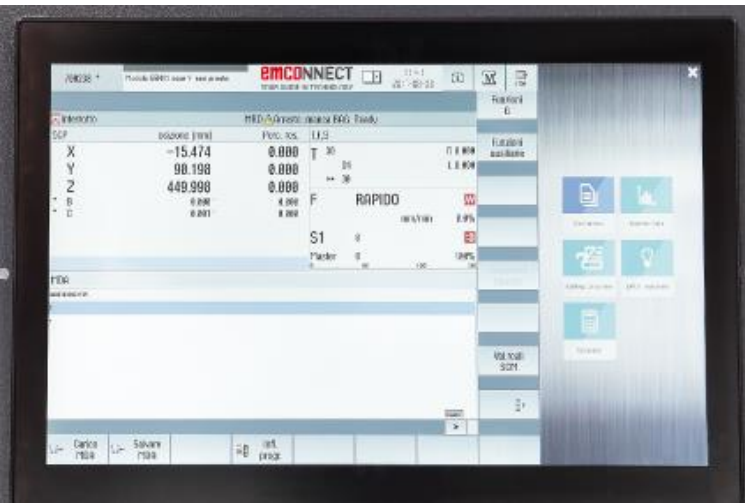


## Highlights

- / Extensive options list for more flexibility
- / State-of-the-art controls  
SIEMENS 840D sl  
HEIDENHAIN TNC640
- / Digital Process Assistant

# emcoCONNECT

YOUR GUIDE IN TECHNOLOGY



## Travel area

/ Travel X-axis	750 mm
/ Travel Y-axis	610 mm
/ Travel Z-axis	500 mm
/ Swivel range B-axis	$\pm 100^\circ$
/ Rotation range C-axis	n x $360^\circ$
/ Distance spindle nose – table	150 - 650 mm
/ Machine weight	8.900 kg



## Feed

- / Rapid traverse speed X / Y / Z
- / Work feed rate
- / Feed force X / Y / Z
- / Acceleration
- / Reference variables X / Y / Z
- / Diameter ball screw X / Y / Z
- / Central lubrication system  
Guides, ball screw and motor spindle

50 m/min

15 m/min

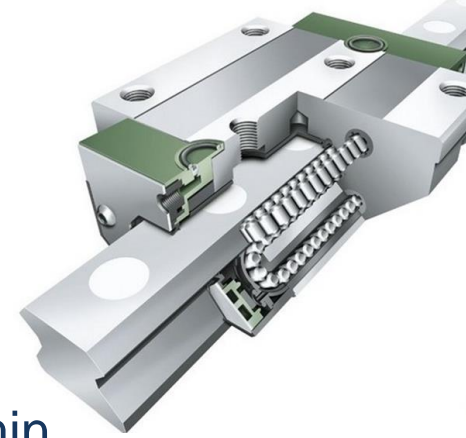
5.000 N

6 m/s<sup>2</sup>

45 / 45 / 35

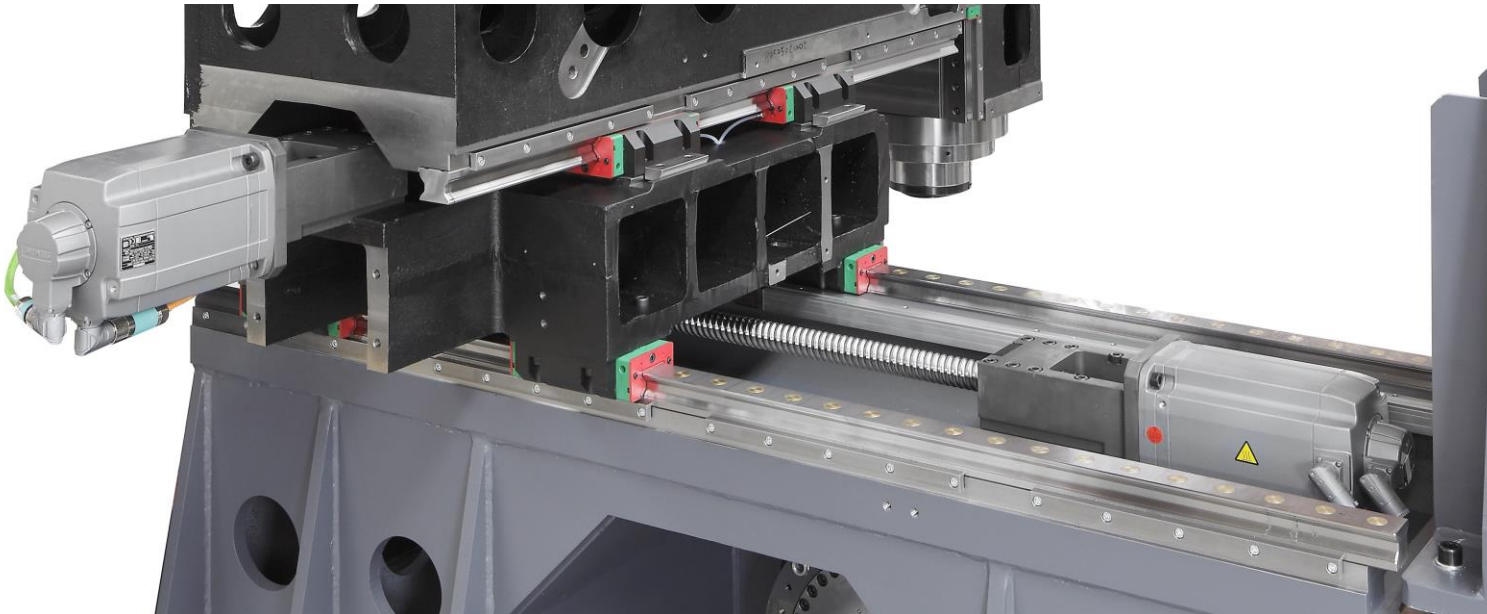
40 mm

Grease



## Feed

- / Drive motors **directly connected** to the mounted ball screw
- / **Higher dynamics**
- / Higher (continuous) precision compared to the belt drive



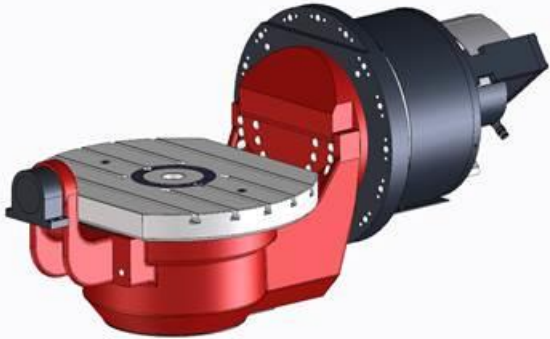


## Rotary table

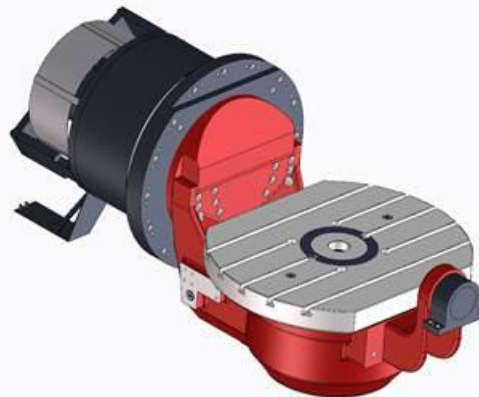
/ Table top dimensions	750 x 600 mm
/ Distance floor - table top	805 mm
/ T-slot size (center H7, remainder H12)	14 mm
/ Number of slots	5
/ Groove distance	100 mm
/ Max. speed B-axis	50 rpm
/ Max. speed C-axis	100 rpm
/ Max. workpiece weight (evenly distributed)	400 kg



## Rotary table



- / B- and C-axis are driven by torque motors
- / Highest dynamics and precision
- / Long-term accuracy due to backlash and wear-free movement

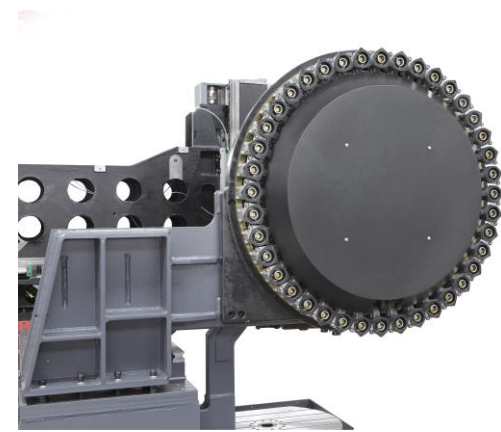


## Spindle

/ Speed range	50 – 15.000 rpm
/ Torque (S6)	100 Nm
/ Spindle power (S6)	15 kW
/ Tool holder	HSK-63A
/ Drive	Motorspindle
/ Manufacturer	Weiss



## Tool magazine



/ Number of tool positions	40 (60/90)
/ Alternating principle	S-Arm
/ Tool management	Random
/ Chip-to-chip time	4.9 s
/ Max. tool diameter	80 mm
/ Max. tool diameter (empty space)	125 mm
/ Max. tool length	250 mm
/ Max. tool weight	8 kg
/ Max. load weight drum	130 kg

## Control

/ SIEMENS 840D sl / OPERATE

/ HEIDENHAIN TNC 640

TFT Monitor 22"



TFT Monitor 19"

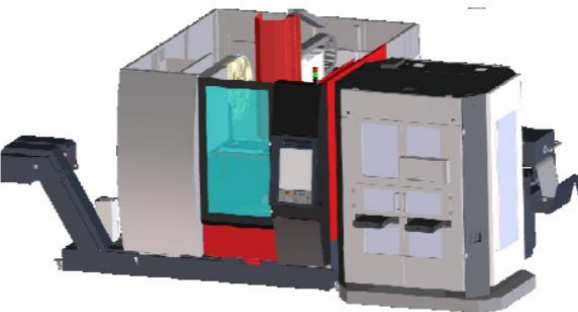


## EMCONNECT



- ✓ Direct interaction of the EMCO apps with the controller
- ✓ Intuitive user interface optimized for touch operation
- ✓ Ongoing expansion of the available apps
- ✓ Customer-specific applications  
Optimized for EMCO machine portfolio
- ✓ Simple update and upgrade option

## Machine options



- ✓ Air/coolant through the spindle with/without belt filter system
- ✓ Tool and workpiece measurement
- ✓ 60- and 90-fold tool changer (other sizes on request)
- ✓ Automation options e.g. rotary union table, automatic machine doors, interfaces for robots and pallet systems, etc.

# Highlights

- / Torque drives in B- and C-axis
- / Counter bearing in the table
- / Glass scales X / Y / Z as standard
- / Performance spindle 15.000 rpm, 100 Nm, 15 kW
- / B-axis  $\pm 100^\circ$
- / Fast tool change and high acceleration
- / EMCONNECT
- / Very good price-performance ratio
- / Modern design



## 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** /