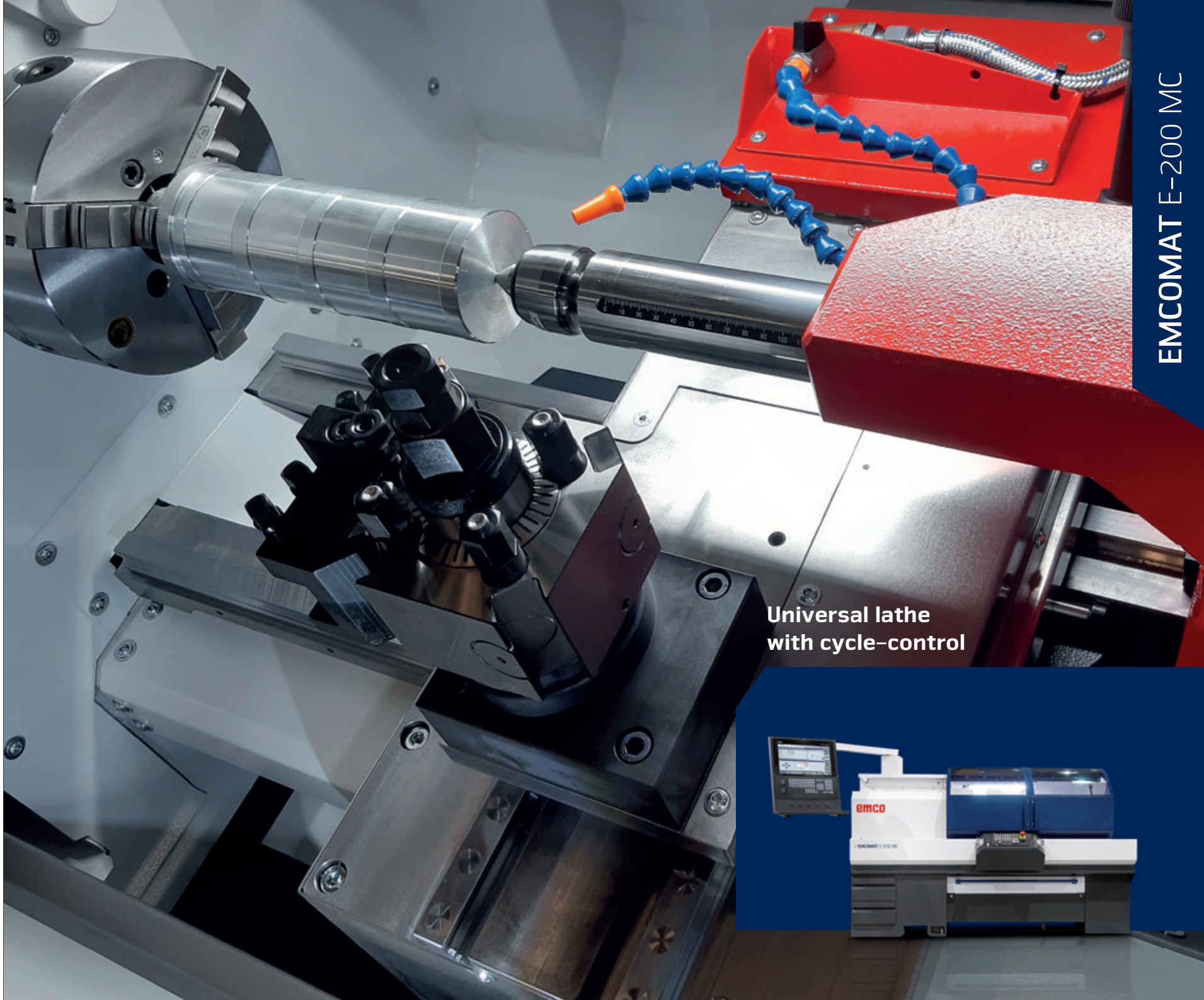


**EMCO**



Universal lathe  
with cycle-control



EMCOMAT E-200 MC

# PROCESSING OF LARGE WORKPIECE

The EMCOMAT E-200 MC is characterized by great cutting performance, high precision and universality of use. The generously dimensioned working area enables the machining of large workpieces. For precise positioning of the axes, the EMCOMAT E-200 MC is equipped with backlash-free ball screws. The machine can be used manually with the handwheels or feed keys and also as a cycle-controlled lathe with Sinumerik 828D for single parts or small batches. The „Manual Machine“ user interface of the Sinumerik 828D provides optimum support for the user's usual point of view during setup, programming and machining. Even the most difficult machining problems can be solved quite easily with the extensive accessories.



Connecting sleeve  
(Steel)

## 1 HEADSTOCK

- / Solid cast-iron construction
- / Powerful Siemens drive system
- / Short taper spindle nose with CAMLOCK adaptor
- / Spindle bore diameter  $\varnothing$  53 (50) mm

## 2 CONTROL

- / Sinumerik 828D
- / Easy programming
- / 15" Multi-Touch Display
- / State-of-the-art digital drive and control technology

## 3 MACHINE BASE

- / Most rigid welded steel construction
- / Channel for easy fork lift transportation
- / Integrated chip tray
- / 2 drawers for tool storage
- / Filled with special granulate sand for dampening

## 4 CONTROL PANEL

- / Ergonomically placed by sliding control panel
- / Easy and flexible handling



## 5 MACHINE BED

- / Diagonally ribbed
- / Hardened linear guides
- / Tension-free three point integration

## 6 TOOL HOLDER

- / Various manual tool system

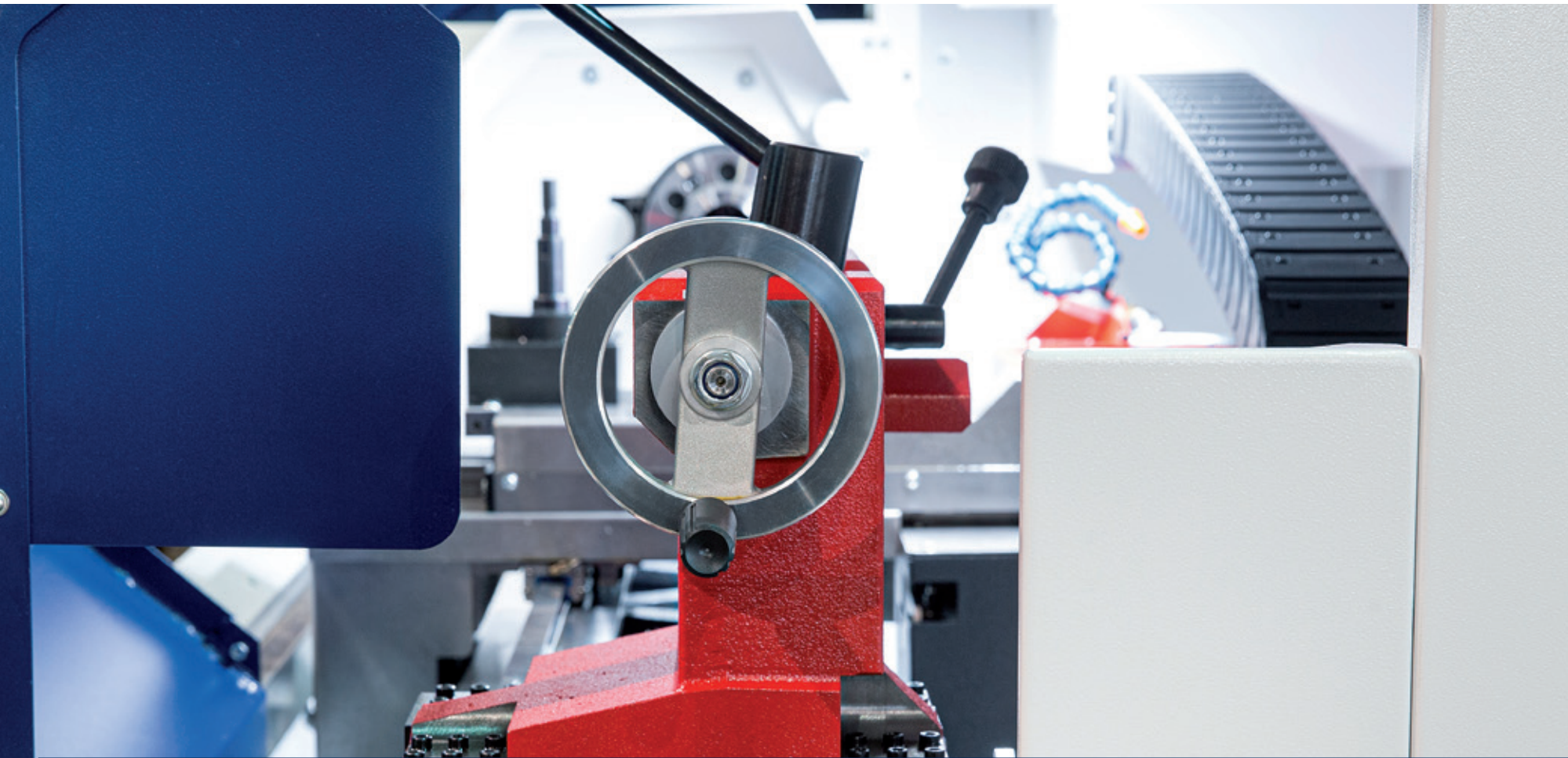
## 7 TAILSTOCK

- / Made from high-quality, vibrationdamping gray cast iron
- / Sits on linear guides

Machine with optional equipment



# TECHNICAL HIGHLIGHTS

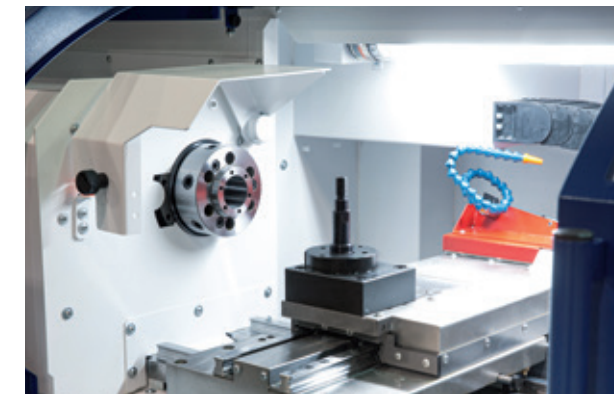


## WORK AREA

During machining in automatic mode the work area is closed by two slideable chip protection doors. When using the manual mode machining with opened doors is possible.

## STANDARD MACHINE EQUIPMENT

- / Hardened linear guides in X- and Z-axis
- / Recirculating ball spindles for X- and Z-axis
- / Sinumerik 828D with „manual machine“ and 15“ Multi-Touch Display
- / Coolant system
- / Central lubrication of guides and recirculating ball spindles
- / Electronic handwheels for X- and Z-control
- / Machine lighting
- / Partly covered workspace with sliding chip-stop doors
- / Loading drawers
- / Operator tools
- / User guide and spare parts list
- / Documentation of the electrical systems



## OPTIONAL EQUIPMENT

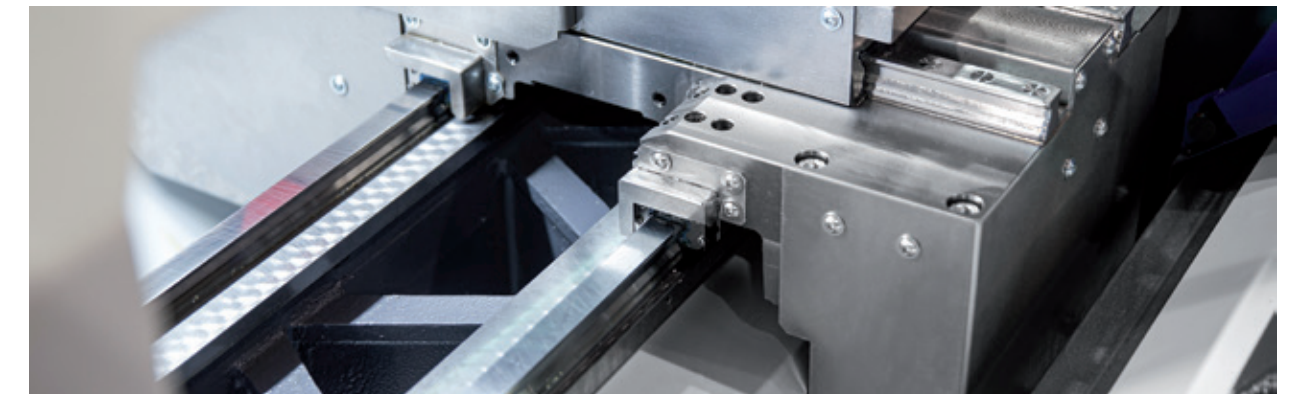
EMCOMAT E-200 MC can be fitted with various chucks and tool holder systems.

## HIGHLIGHTS

- / High cutting power
- / High quality casting with strong ribs for low-vibration machining operations
- / Fully automatic central lubrication of the X- and Z-slides and the recirculation ball spindles
- / Electronic handwheels are available for manual operation of X- and Z-axis
- / Made in the Heart of Europe

## OPTIONS

- / Quick-change tool holder systems
- / Tapered rod chuck
- / Collet chuck
- / Steady rests
- / Plane spiral chucks
- / And much more



## LINEAR GUIDES

Soid and hardened linear guides in both axis.

# SINUMERIK 828D.

SINUMERIK 828D: High performance CNC control for ultimate accuracy and machining speed. SINUMERIK 828D and SINAMICS drive and motors are perfectly tailored for state of the art turning machines. Powerful CNC-functions enable highest work-piece accuracy at a minimum of machining time. With a flexible CNC programming language and the state of the art ShopTurn machining step programming, parts can be programmed and machined with maximum effectiveness. The 'manual machine' with handwheels or feed buttons provides you with machining capabilities as for a cycle turning machine. All important machining actions can be performed without an associated part program needing to be created.

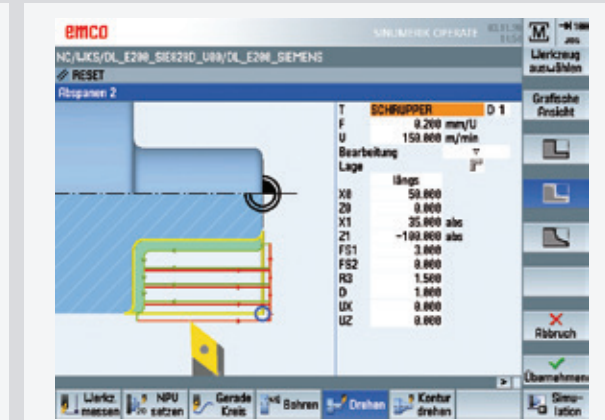
The following functions are available:

- / Measure tool
- / Traverse axes
- / Set zero offset (Z0)
- / Turn straight line / circle
- / Drill, such as centered drilling, centering, deep-hole drilling
- / Turn, such as stock removal, grooving, thread cutting
- / Turn contour

- / Digital drive interface, Safety Integrated
- / User interface „Manual Machine“
- / Manual mode (Digital Readout)
- / Integrated DXF Reader (Option)
- / Measuring/set workshift (edge, corner, pocket/drill, journal, plane)
- / Single cycle processing without part program
- / Easy workpiece processing: Axis movement, Angel milling, straight line, circle

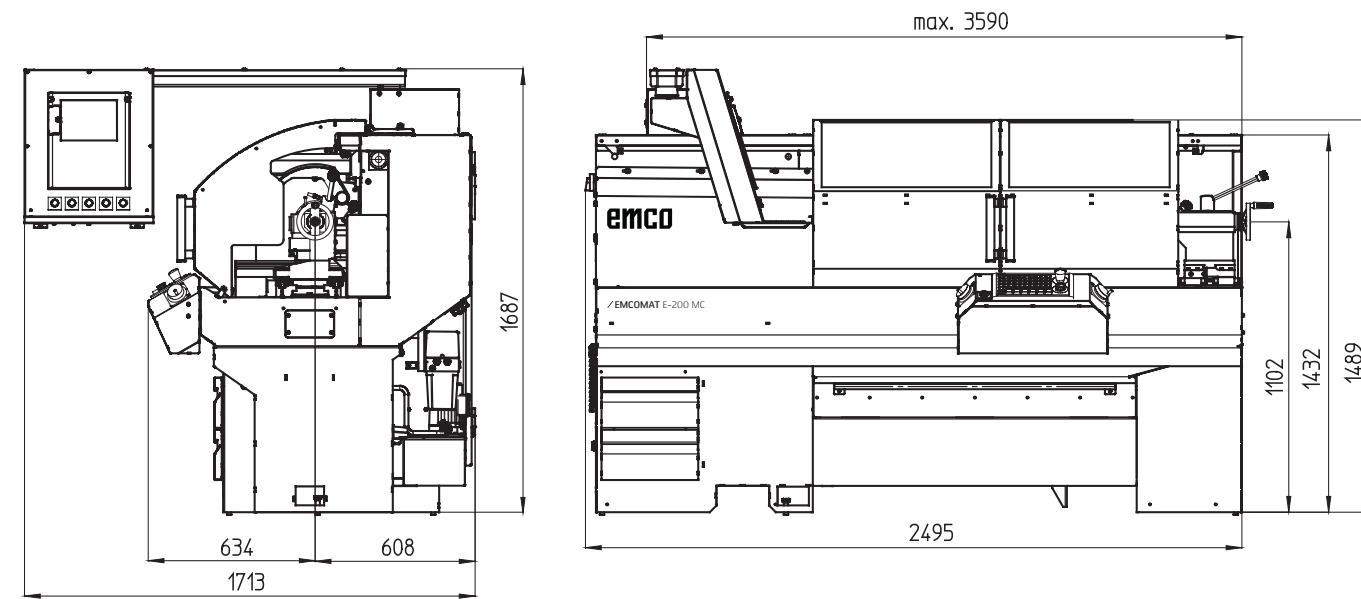
User-friendly input screens with help screens and animated elements are available for parameterizing the cycles. For the manual workpiece machining, the axes and spindles are controlled using the following options:

- / Control of the cross slides using Handwheels of the X- and Z-axis, or Axis direction switches
- / Spindle control using Spindle rotation direction switches



# MACHINE LAYOUT

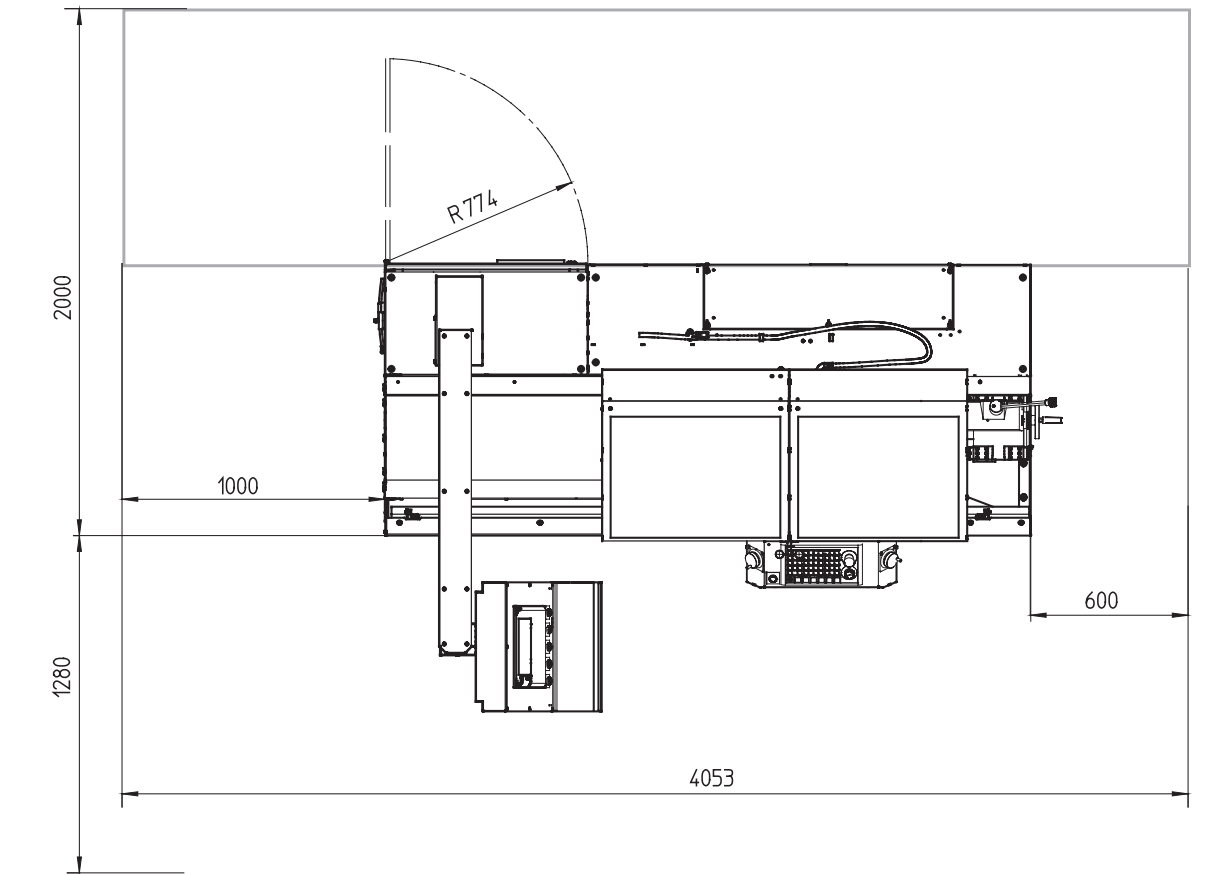
EMCOMAT E-200 MC



Specifications in millimeters

# MACHINE LAYOUT

EMCOMAT E-200 MC



Specifications in millimeters



# TECHNICAL DATA

## Work area

Distance between centers	1000 mm
Center height	200 mm
Swing over bed	Ø 400 mm
Swing over cross slide	Ø 220 mm
Travel longitudinal	900 mm
Travel cross slide	220 mm
Cross slide - width	150 mm

## Main spindle

Spindle bore A2-5/DIN 55029	Ø 53 / 50 mm
Spindle diameter	Ø 80 mm
Max. chuck diameter	Ø 200 mm
Max. face plate diameter	Ø 260 mm
Spindle speeds	50 – 4000 rpm
Spindle speed regulation	Stufenlos

## Main drive

AC motor	infinitely adjustable
Power at 100% / 40% E.D.	7,5 / 10 kW
Max. torque at main spindle	108 Nm

## Feed X/Z

Feed range X- / Z-axis	0 – 8000 mm/min
Rapid motion speed X- / Z-axis	10 m/min
Max. feed force	4 kN

## Tailstock

Quill diameter	Ø 50 mm
Inner tape quill	MK3
Quill travel	120 mm

## Allowable workpiece weights

Flying (max 5kg at 4000 r.p.m.)	30 kg
With tailstock	80 kg

## Dimensions

Total length	2495 mm
Total width	1730 mm
Total height	1700 mm
Weight of machine with 1000 mm center distance	1500 kg

beyond standard /

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