

[E[M]CONOMY]
means:

emco industrial
training

Designed for your profit



Small Machine. Big Impact. CONCEPT TURN 55

CNC training with
industrial performance

Concept TURN 55

The Concept TURN 55 is a PC-controlled 2-axis CNC tabletop turning machine conforming to the industry standard in terms of design and function. All the key processes in modern manufacturing can be illustrated using this device and implemented in a practical and realistic way. With appropriate simplification, clear machine design and ease-of-operation, operators will quickly learn how to use it successfully.

[Main spindle]

- Max. speed 4000 rpm
- Clockwise/Counterclockwise spindle rotation
- Spindle bore \varnothing 16 mm

[Main drive]

- Infinitely adjustable main drive
- 3-phase AC asynchronous motor
- High-resolution axis motors

[Tool turret]

- Disc turret
- 8 stations

[Work area]

- Fully enclosed work area
- Large safety glass window in door
- All-round protection against chips

[Swivel table]

- Extensible drawer for PC keyboard
- Arranged ergonomically

[Machine base]

- With extensible drawer
- Additional space for PC tower

[Machine design]

- Industry-standard inclined-bed design
- Core components made from stable cast iron



Round-head bolt



Pin



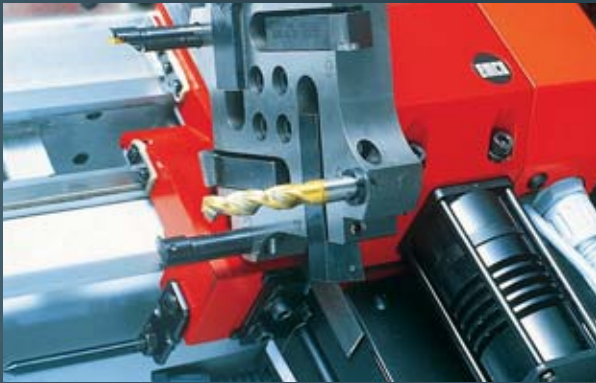
Attachment

[Engineering]



Highlights

- The most compact table-top CNC turning machine
- Industry-standard inclined-bed design
- High-resolution axis motors
- Clockwise/anticlockwise spindle rotation
- Infinitely adjustable main drive
- Automatic 8-position tool turret
- Automatic referencing
- EMCO EASY CYCLE integrable
- Made in the Heart of Europe



Options

- Electro-mechanical tailstock
- Robotic interface
- Automatic clamping devices
- Electronic handwheel
- Control keyboard with TFT display
- Machine base with swivel table

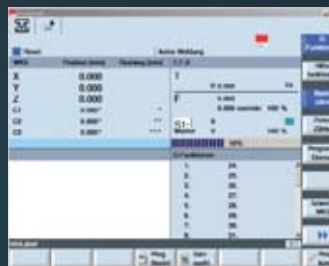
[The interchangeable control]

The unique concept of the interchangeable control can be fitted to all Concept machines. In doing so, the user is trained on all CNC industry controls that are common on the market.

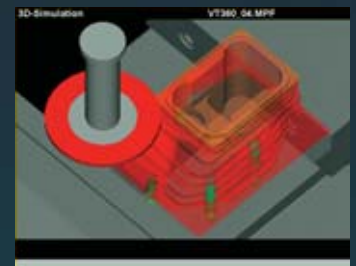
The result: All CNC technicians can be applied more flexibly. And this is a decisive plus: for qualified employees as well as for the companies.



The conversion to another control system is carried out within a minute by calling up the respective software and by simply replacing the control specific keyboard module



Simple to program using the EMCO WinNC control units



Simulation suitable for training using EMCO Win3D-View

[Technical data]

CONCEPT TURN 55

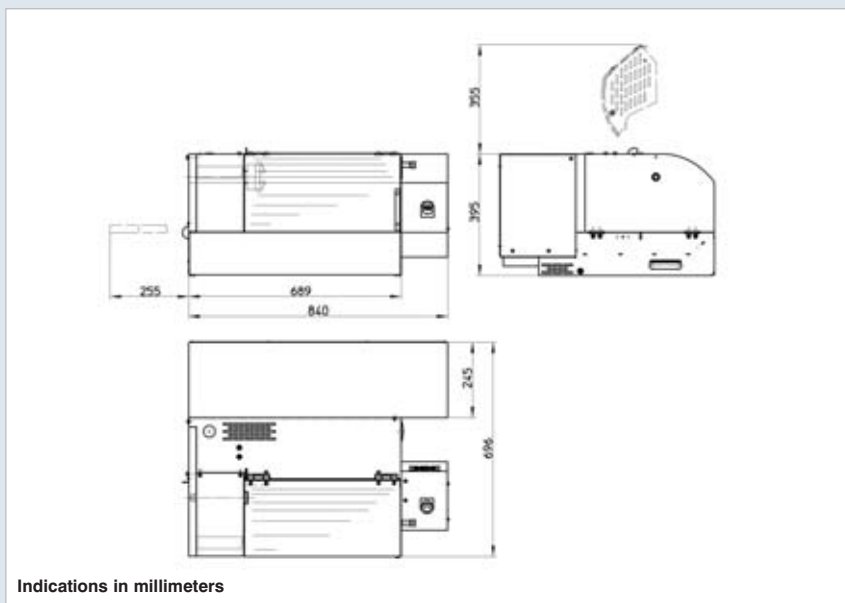
Work area	
Swing over bed	130 mm (5.1")
Distance between spindle noses	335 mm (13.2")
Max. turning diameter	52 mm (2.1")
Max. part length	215 mm (8.5")
Travel	
Travel in X	48 mm (1.9")
Travel in Z	236 mm (9.3")
Main spindle	
Speed range	120 - 4000 rpm
Power (3 phase asynchronous motor)	0.75 kW (1.01 hp)
Spindle diameter at front bearing	30 mm (1.2")
Spindle bore	16 mm (0.6")
Feed drives	
Rapid motion speed X/Z	2 m/min (78.7 ipm)
Feed force X/Z	1000 N
Positioning variation Ps (acc. VDI 3441) in X/Z	8 µm (0.0003")
Tool turret	
No. of tool stations	8
Tool-cross section	12 x 12 mm (0.5x0.5")
Shank diameter for boring bars	10 mm (0.4")

Tailstock	
Quill stroke	35 mm (1.4")
Quill diameter	22 mm (0.9")
Dimensions	
Height of center above floor	320 mm (12.6")
Dimensions W x D x H	840 x 695 x 400 (33.1x27.4x15.8")
Total weight	85 kg (187 lb)

EMCO WinNC controls

Sinumerik 810D/840D	GE FANUC Series 21
Sinumerik 820	GE FANUC Series 0
Sinumerik 810	Fagor 8055
Sinumerik Operate	Emcotronic TM02
Heidenhain TNC 426/430	EMCO Easy Cycle
CAMConcept	

Machine layout



Power

