emco industrial training

Designed for your profit

E[M]CONOMY means:

Small Machine. Big Impact. CONCEPT TURN 60

CNC training with industrial performance

Concept TURN 60

The Concept TURN 60 is a PC-controlled 2-axis CNC tabletop turning machine conforming to the industry standard in terms of design and function. Based on the successful CT 55 the new CT 60 offers the user more functionality and an even better performance, in accordance with the demands of ISO23125.
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.

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

[Tool turret]
- Disc turret
- 8 stations

[USB-control keyboard]
- Interchangeable key module (control specific)
- TFT screen (workshop-proven)

[Main spindle]
- Max. speed 4200 rpm
- Clockwise/Counterclockwise spindle rotation
- Spindle bore Ø 16 mm

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

[Swivel table]
- Extensible drawer for PC keyboard
- Arranged ergonomically

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

[Machine base]
- With extensible drawer
- Additional space for PC tower

[Security]
- In accordance with ISO 23125
- Door lock
- Standstill and speed limit monitoring

[Operation]
- Permissive
- Emergency stop pushbuttons
- Mode selection

Round-head bolt

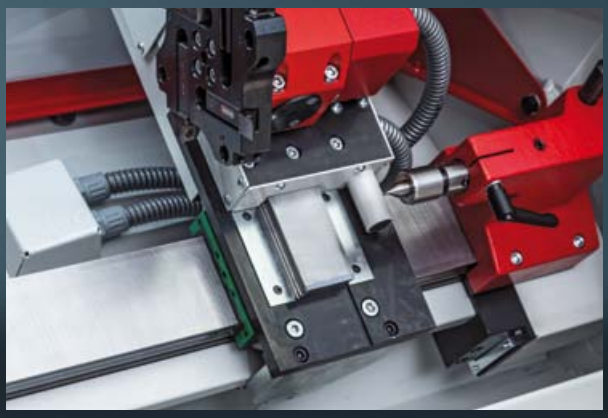
Pin

Attachment
(only turning process)

[Engineering]

Highlights

- The most compact table-top CNC turning machine
- Industry-standard inclined-bed design
- High-resolution axis motors
- Clockwise/counterclockwise spindle rotation
- Infinitely adjustable main drive
- Automatic 8-position tool turret: above the center of rotation for improved chip removal and optimal reachability of the workpiece by the operator
- Automatic referencing
- Profile rail guides (linear guides)
- EMCO EASY CYCLE integrated
- Premium industrial Components
- Safety technology according to the latest lathes standard
- Made in the Heart of Europe



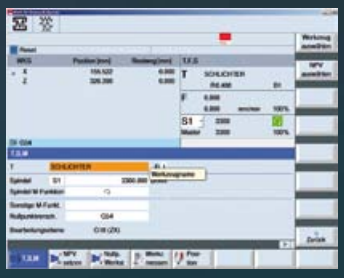
Options

- Robotik-Interface
- DNC-interface (for integration in FMS and CIM)
- Automatic clamping devices
- Automatic door and electromechanical tailstock
- Electronic handwheel
- Minimal quantity lubrication
- Control keyboard with TFT display
- Machine base with swivel table

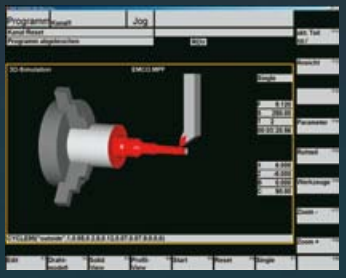
[The interchangeable control]

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 business.

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



Simple to program using the EMCO WinNC control units



Simulation suitable for training using Win3D-View

[Technical data]

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CONCEPT TURN 60

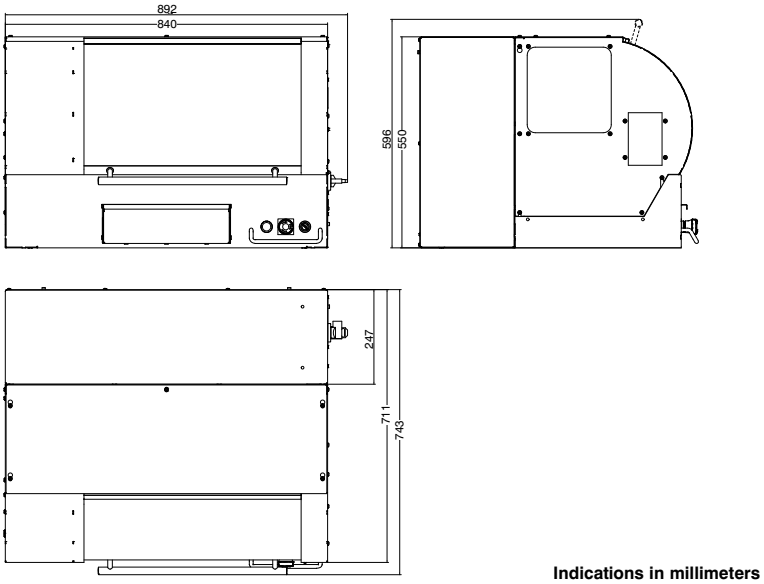
Work area	
Swing over bed	130 mm (5.1“)
Distance between spindle noses	335 mm (13.2“)
Max. turning diameter	60 mm (2.36“)
Max. part length	215 mm (8.5“)
Travel	
Travel in X	60 mm (2.36“)
Travel in Z	280 mm (11.0“)
Main spindle	
Speed range	300 – 4200 rpm
Power (3 phase asynchronous motor)	1.1 kW (1.47 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	340 mm (13.4“)
Dimensions W x D x H	850 x 700 x 550 (33.5 x 27.5 x 21.6“)
Total weight	150 kg (330.7 lb)

EMCO WinNC controls

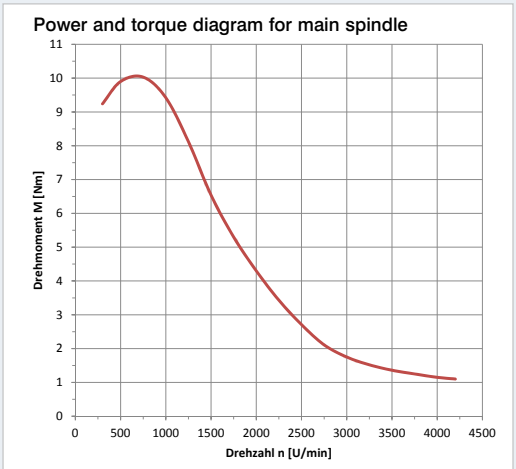
Sinumerik 810D/840D	CAMConcept
Sinumerik 810	GE FANUC Series 21
Sinumerik 820	GE FANUC Series 0
Sinumerik Operate	Fagor 8055

Machine layout



Indications in millimeters

Power



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