CONCEPT TURN 60
Technical data

**Work area**
- Distance between spindle noses: 335 mm (13.2”)
- Swing over bed: 130 mm (5.1”)
- Max. turning diameter: 60 mm (2.36”)
- Max. part length: 215 mm (8.5”)

**Travel**
- Travel X / Z: 60 / 280 mm (2.36 / 11.0”)

**Main spindle**
- Spindle bore: 16 mm (0.6”)
- Spindle diameter at front bearing: 30 mm (1.2”)
- Speed range: 300 – 4200 rpm

**Main Power**
- Power (3 phase asynchronous motor): 1.1 kW (1.47 hp)

**Feed drives**
- Rapid motion speed X / Z: 3 m/min (118.1 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 (0.5 x 0.5”)
- Shank diameter for boring bars: 10 mm (0.4”)

**Dimensions**
- Height of center above floor: 325 mm (12.8”)
- Dimensions w x d x H: 895 x 745 x 550 mm (35.2 x 29.3 x 21.6”)

**Total weight**
- Total weight: 150 kg (330.7 lb)

**EMCO WinNC controls**
- Sinumerik Operate 840D sl / 828D
- Fanuc Series 31i
- Fagor 8055
- CAMconcept

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**Torque**

Torque diagram for main spindle

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CNC training with industrial performance
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 ISO 23125. All the key processes in modern manufacturing can be illustrated using this device and comprehended 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 4200 rpm
- Clockwise/counterclockwise spindle rotation
- Spindle bore Ø 16 mm

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

### Machine Base
- With extensible drawer
- Additional space for PC tower

### Tool Turret
- Disc turret
- 8 stations

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

### Safety
- In accordance with ISO 23125
- Door lock
- Standstill and speed limit monitoring

### Operation
- Enabling key
- Emergency stop pushbuttons
- Mode selection

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

### Operation
- Enabling key
- Emergency stop pushbuttons
- Mode selection

### EMCO Easy2control
- On-screen control keyboard in conjunction with Easy2operate
- Operation is also possible using a 16:9 full-HD touchscreen

### 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.

### 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)
- Premium industrial Components
- Safety technology according to the latest lathes standard

### Options
- Mechanical tailstock
- Robotik-Interface
- DNC-interface (for integration in FMS and CIM)
- Automatic clamping devices
- Automatic door and electromechanical tailstock
- Electronic handwheel
- Minimal quantity lubrication
- Machine base with swivel table
- Easy2operate

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### Easy2control: New operating concept
Optional it is possible to equip the machine with the latest software of the interchangeable control, with which control specific and machine keyboards of the WinNC can be displayed on a 16:9 Full-HD screen – Easy2control. The different panels for machine, control and quick access can be switched via tabs. The buttons and rotary knobs can either be operated by using the mouse or in case a Full HD touchscreen is used directly on the keys and switches on the monitor.

To operate the software on the Concept machine a license dongle and a small machine control panel – „Easy2operate“ – is required.