emco group

Designed for your profit

CONCEPT TURN 260

CNC training with industrial performance

TURNING

EMCO-WORLD.COM

CONCEPT TURN 260

As a systematic advancement of the CT250, the CT260 convinces by its extreme solid machine bed, a thermosymmetric spindle head, precision spindle bearing, preloaded roller guides in all axes and a fast tool turret. The interchangeable control EMCO WinNC for all current industrial controls completes the machine.

1 WORK AREA

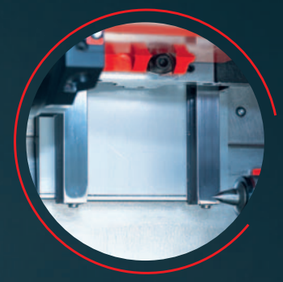
- Straight chip drop
- Excellent ergonomics
- All-round protection against chips
- Large safety glass window in door

2 MAIN SPINDLE

- High drive performance
- Thermoresistant construction
- Large speed range
- Bar capacity Ø 25 mm
- Hollow clamping device

3 TOOL TURRET

- 12 stations VDI16 axial
- 6 stations driven on request for milling work
- Synchronized thread cutting



4 ROLLER GUIDES

- In X and Z axes
- No backlash
- No wear
- High speed

5 CONTROL

- Latest digital AC control technology
- 21.5" touchscreen
- MOC: integrated PC
- WinNC concept: all standard NC controls on one machine
- Multifunctional handwheel

6 MACHINE BASE

- Small installation area
- Large coolant reservoir
- Easy to clean

Highlights

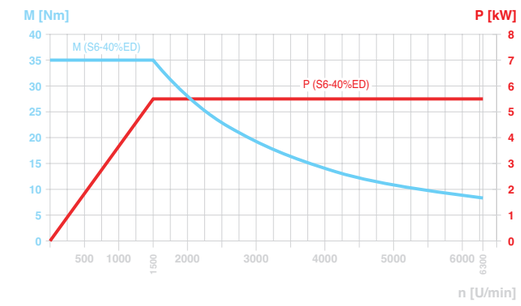
- PC-controlled CNC turning machine
- Extremely solid machine base, top thermostability
- Highest precision
- Compact construction
- USB and ethernet interface integrated
- Servo-motor technology in all axes
- New drive generation from Siemens
- Siemens Safety Integrated
- Absolute encoder (no referencing necessary)
- Field bus system integrated with PROFINET
- Made in the Heart of Europe

Options

- Chip conveyor
- 3-jaw chuck Ø 95 mm (3.7")
- Collet chuck 385 E
- Automatic door
- Integration into FMS and CIM systems using DNC and robotic interface
- Attractive tool packages for the TC and TCM versions
- Coolant equipment

Performance

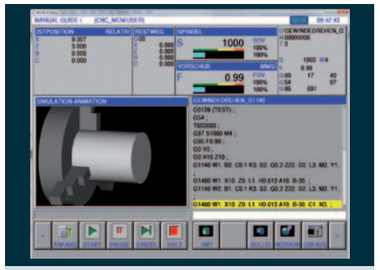
Working spindle performance and torque diagram



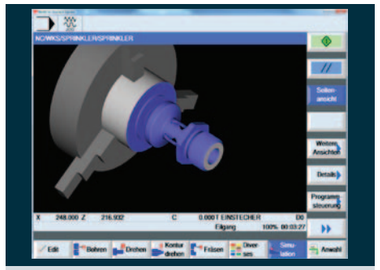
[Interchangeable Controls]

The concept of the interchangeable control unit, which can be fitted to all Concept machines, is unique. It enables the user to be trained on all CNC industry controls that are common on the market needing just one machine. The result: The CNC technicians can be applied more flexibly, which provides a significant competitive advantage for both the company and employees.

The change to a different control system is carried out within a minute by calling up the respective software



Simple to program using the EMCO WinNC control units



Simulation suitable for training using Win3D View

[Operating Concept: Easy2control]

The machine is equipped with the Easy2control operating concept. It displays the control-specific keyboards of WinNC controls on a 16:9 Full HD screen. Tabs are used to toggle between the different operator panels for machine, control unit and shortcuts. Operators may use the mouse or their fingers to operate the buttons.

Easy2control with Easy2operate

[Workpieces]

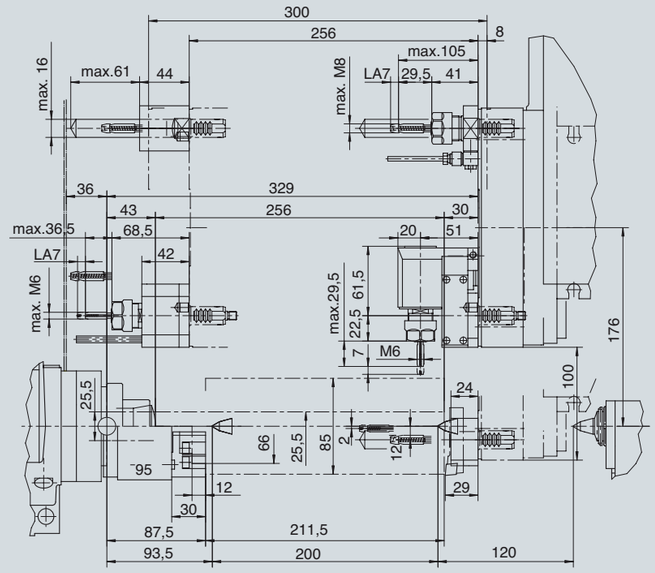
1. Engraving using cylinder interpolation
2. Contour milled using cylinder interpolation
3. Polygon - milled by driven tool (axial)
4. Tapped or turned inside thread

Fitting (Stainless steel)

Valve cap (Stainless steel)

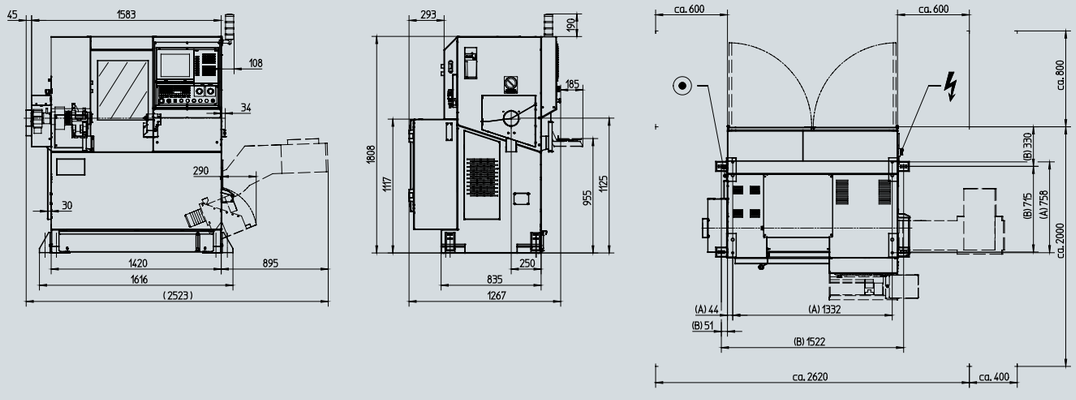
Plug (Stainless steel)

Work area



Specifications in millimeters

Machine layout



Specifications in millimeters

CONCEPT TURN 260
Technical data

Work area	
Swing over bed	Ø 250 mm (9.8")
Swing over cross-slide	Ø 85 mm (3.3")
Distance between centres	405 mm (16.0")
Maximum turning diameter	Ø 85 mm (3.3")
Max. part length TC / TCM	270 / 255 mm (10.6 / 10")
Maximum bar diameter	Ø 25.5 mm (1.0")

Travel	
Travel in X	100 mm (4.0")
Travel in Z	300 mm (11.8")

Main spindle	
Speed range	60 – 6300 rpm
Spindle torque	35 Nm (25.8 ft/lbs)
Spindle nose	Ø 70 h5
Spindle bore	Ø 30 mm (1.1")

C axis (0ption)	
Circular axis resolution	0.01°
Rapid speed	100 rpm

Main motor	
Drive performance	5.5 kW (7.4 hp)

Tool turret	
Number of tool positions	12
VDI shaft (DIN 69880)	16
Tool cross section	12 x 12 mm (0.4 x 0.4")
Shank diameter for boring bars	Ø 16 mm (0.6")
Turret indexing time	1.0 sec.

Driven tools (option)	
Number of tool stations	0 or 6
Power	1.2 kW (1.6 hp)
Torque	4 Nm (3.0 ft/lbs)
Speed range	200 – 6000 rpm

Feed drives	
Rapid speed X / Z	15 / 24 m/min
Feed force in the X / Z axis	3000 / 3500 N
Acceleration time	0.1 sec
Position variation Ps (according to VDI 3441) X / Z	0,003 / 0,004 mm (0.00011811 / 0.00015748“

Tailstock	
Quill stroke	120 mm (4.7")
Quill diameter (with integrated live centre)	Ø 35 mm (1.3")
Quill thrust	2500 N

Coolant system	
Tank volume	140 litres
Pump performance	0.57 kW (00.8 hp

Dimensions	
Height of centres above floor	1131 mm (44.5")
Machine height	1820 mm (71.6")
Machine installation area (W x D	1700 x 1270 mm (67.0 x 50.0“)
Total weight	1100 kg (2425.1 lb)

EMCO WinNC controls
SIEMENS Operate 840D sl / 828D
FANUC Series 31i
FAGOR 8055 TC

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