CONCEPT MILL 55

CNC training with
industrial performance
Concept MILL 55

This compact milling machine is well suited to the training bench and has almost all the features of an industrial machine: optional with 8-station tool changer with swivel arm and pick-up system, NC indexing device as fourth axis, minimum quantity lubrication and latest state-of-the art control technology.

**Main drive**
- Infinitely variable main drive
- Three-phase asynchronous motor

**Tool changer**
- 8 stations
- Swivel arm with pick-up system

**Working area**
- Full cover of working area
- Large safety glass window in door
- All-round protection against chips

**Machine design**
- Stable, gray cast-iron construction

**Machine base**
- With removable drawer
- Space for PC tower

Attachment

Piston

Milled part
**Technical**

**Highlights**
- Stable, gray cast iron construction, suitable for industrial use
- Clockwise/anticlockwise spindle rotation
- Infinitely variable main drive
- Automatic reference points
- Fully covered working area
- Made in the Heart of Europe

**Options**
- 8-station tool changer
- Minimum quantity lubrication
- Electronic handwheel
- Engraving spindle attachment
- NC indexing attachment as optional fourth axis
- DNC robotics interface for integration in FFS or CIM systems
- Machine base with swivel table

**The interchangeable control**

The unique concept of the interchangeable control can be fitted in all Concept machines. In doing so, the user is trained on all CNC industry control units that are common on the market. Up to eight different control units can be installed and taught on one single machine at present. The result: All CNC technicians can be applied more flexibly. And this is a decisive plus: for the 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 control specific module.
[Technical Data]

CONCEPT MILL 55

Working area
Positioning range X axis longitudinal 190 mm (7.48")
Positioning range Y axis latitudinal 140 mm (5.51")
Positioning range Z axis vertical 260 mm (10.24")
Effective Z axis travel 120 mm (4.72")
Spindle nose-table distance 77 - 337 mm (3.03 - 13.26")

Milling table
Clamping area (L x W) 420 x 125 mm (16.54 x 4.92")
Maximum table load 10 kg
2 T-slots to DIN 650 11 mm (0.43")
T-slots gap 90 mm (3.54")

Milling spindle
Bearing type tapered roller bearings
Tool changer (optional, ex works)
Number of tool stations 8
Max. tool weight 1 kg
Max. tool diameter Ø 40 mm (1.57")
Tool swivel arm traverse speed 10 m/min (0.39 ipm)
Tool clamping automatic

Milling spindle drive
Three-phase asynchronous motor, power rating 0.75 kW

Feed drives
Working feed and rapid traverse in X/Y/Z axes 0 - 2 m/min (0-78.74 ipm)
Average positioning variation to VDI 3441 in X/Y/Z 8µm/ 8µm/ 8µm
Maximum feed power X/Y/Z [N]* 800/ 800/ 1000

Lubrication system
Guideways Oil lubrication
Main spindle bearing service life Grease lubrication

Dimensions/Weight (Approximate values)
Overall height 980 mm (38.55")
Installation area B x W 960 x 1000 mm (37.76 x 39.33")
Total weight of machine incl. tool changer 220 kg

Power supply
Power supply (reversible) 1/N/PE [V] 115/230
Max. voltage fluctuations +5/-10 %
Frequency 50/60 Hz
Connected load for machine 0.85 kVA
Max. power fuse for the machine 12 A

EMCO WinNC control units
Siemens 810D/840D GE FANUC Series 21
Siemens 820 GE FANUC Series 0
Siemens 810 Fagor 8055
Heidenhain TNC 426/430 Emcotronic TM 02
CAMConcept

Machine layout

Power

EMCO MAIER Ges.m.b.H.
Salzburger Str. 80 · 5400 Hallein-Taxach · Austria
Phone +43 6245 891-0 · Fax +43 6245 869 65 · info@emco.at

www.emco-world.com