

## EDUCATIONAL CNC MILLING MACHINES



The **CNC F-100** milling machine is a flexible, accurate and affordable technical training machine designed by our company to meet cost effectiveness training needs. Despite the small size, the **CNC F-100** complies with industrial standards assuring the same machine operations performed by on much larger and more expensive machine tools; rather than impairing the training potential, its compact size enhances it, allowing the student to thoroughly understand both the programming and the on board machining. All mechanical, electrical and electronic components are high-quality ones, perfectly fit for a continuous and heavy-duty operation. The machine is built according to current international regulations and the operator personal safety is safeguarded by a number of design features. The **CNC F-100** can be connected to any CAD-CAM or fit into any CIM or FMS system. The **CNC F-100** is supplied with the widespread **FAGOR mod. 8025** industrial CNC control unit and equipped with:

- Manual tool changer
- automatic cooling system
- lubrication system
- manual clamp
- total safety protection
- supporting table
- tool kit
- training and technical manuals
- all the accessories required for immediate machine operation.

The **CNC F-100** can be provided with other CNC control units different from the standard one (FAGOR). The availability of a rich range of options and the comprehensive technical and training manuals enable the achievement of ambitious teaching goals at very competitive costs.

## CNC F-100 MILLING MACHINE

### MAIN TECHNICAL FEATURES

- Electrically welded steel plate frame with cast iron saddle
- Rolled balls re-circulating threads
- CNC control unit: FAGOR 8025
- DC motor drives with closed loop speed control
- Digital feedback DC motors, with encoder position control
- Axis motors: 0.17Nm permanent magnets DC with 1:5 reduction gear
- Axis strokes: X=160 mm, Y=100mm, Z=120mm
- Repeatability: 0.03 mm
- Precision: 0.03 mm
- Spindle nose/board surface distance: 180mm
- Board size: 380 x 130mm
- Tool holders: ISO 30
- Max. tool diameter: 20 mm
- Spindle motor power: 1HP AC
- Axis fast displacement speed: 2500mm/1'
- Spindle rotation speed: 5.600 RPM
- Manual tool holder
- Cooling and lubrication included
- Manual clamp and 3 clamp holders kit – 3 clamps and 6 tools included
- Power supply: two-phase 230V/50-60 Hz (Other voltage available on request)
- Size: 1300 x 700 x 980 (h) mm
- Weight: about 250 kg approx.

### OPTIONS

- Electronic handwheel
- Fast tool-change (Pneumatic)
- Pneumatic clamp
- Table base with sliding doors and adjustable feet
- Software: CAD-CAM, Quality Control (Hardware and Software) , Production Planning Software
- CNC editing and machining simulation software

