

Computer Integrated Manufacturing

CAD/CAM SOFTWARE

CNC Software for Milling Machines

Video Conferencing

Virtual Reality

Technical support

DENFORD

www.denford.com

Novamill



- Suitable for all levels of training
- Easy-to-use VR CNC Milling machine software
- Graphical verification of designs prior to machining
 - Complete with manuals and start-up guide
- Cut wax, plastic, acrylic, copper, aluminum, and steel
 - Link to CAD/CAM software

Novamill

A compact three axis CNC bench milling machine suitable for all levels of training.
An optional six station Automatic Tool Changer (ATC) is available.



Standard Equipment

- VR CNC Milling software
- Machine cable (RS232)
- Manuals
- Maintenance tools
- Quick Change Tool Holder

Safety Features

- Emergency stop button
- Program stop from keyboard
- Totally enclosed steel cabinet
- Interlocked guard
- Tool path graphics to verify programs prior to machining
- Automatic tool retraction and spindle stop for tool changes
- Axes limit switches

Mechanical Details

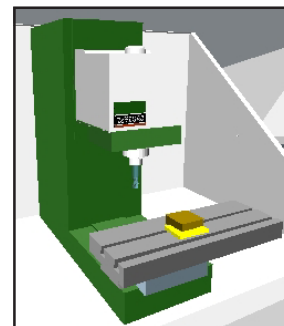
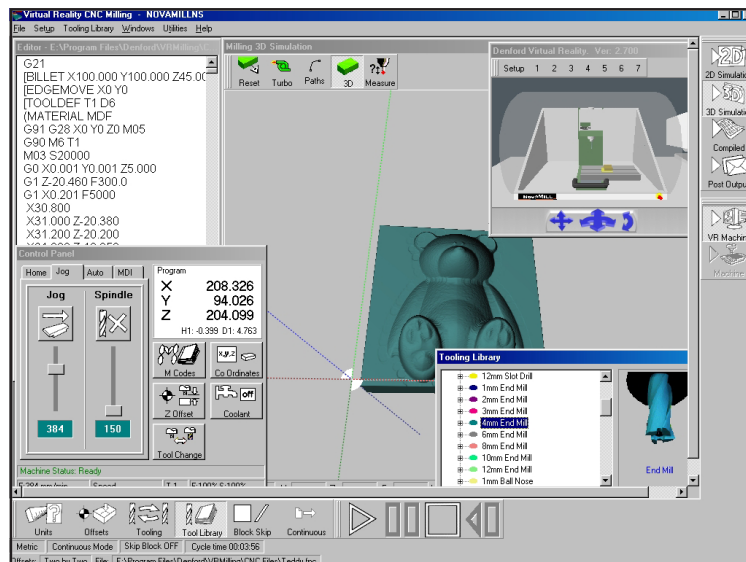
Table size 14 in. x 5 in.
(356 x 127 mm)
Working Envelope 9 in. x 6 in.
(229 x 152 mm)
X axis travel 9 in. (229 mm)
Y axis travel 6 in. (152 mm)
Z axis travel 4½ in. (114 mm)
Spindle to Table 7½ in. (191 mm)
Spindle to Column 5 in. (127 mm)
Spindle Taper ISO 30
Manual Tooling BT 30
Spindle Speed:.. 0-5000 rpm, prog.
Feed rates XY 60 in./min.
Z 20 in./min.
Resolution0004 in. (0.01 mm)
Machine Length 41 in. (1041 mm)
Machine Depth 35 in. (889 mm)
Machine Height ... 25½ in. (648 mm)
Machine Weight ... 375 lbs. (170 Kg)

Electrical Details

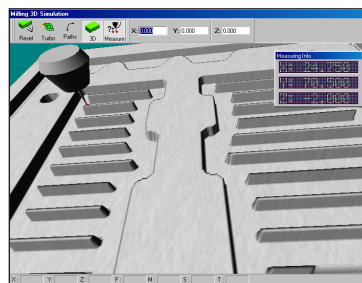
Main Supply: 1 Phase, 220/240
or 110/115 VAC
Spindle Motor: 1/2 HP
Axes Motors: Stepper Motors
200 steps/rev.

Machine Software Features

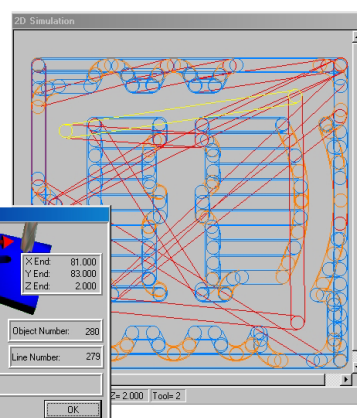
- Fanuc format programming through a computer keyboard, optional Desktop Tutor, or Fanuc 21i/0-M on-screen operator panels
- 3 axis continuous path
- Circular & linear interpolation
- Spindle speed override 50-120%
- Feed rate Override 0-150%
- Inch & metric programming
- Subprogramming
- Tool radius compensation
- Circular & rectangular pockets
- Peck drilling cycles
- Manual & programmable machine stops
- Datum shift
- Tool Length Offsets
- Programmable dwell
- Mirror imaging
- Full G & M code and context sensitive help
- Single block or auto execution
- Comprehensive 2D & 3D color simulation, tool path plot, & machining simulation
- Zoomed or sectional views with rotation
- Programming wizards
- Virtual CNC machines
- Virtual measuring tools
- Source Track™ technology
- Program merge
- Full edit mode
- Block skip and search
- Local Area Network integration
- Software can be setup for different languages
- Automatic error checking with messages
- Cycle start/Feed hold
- Absolute or distance-to-go



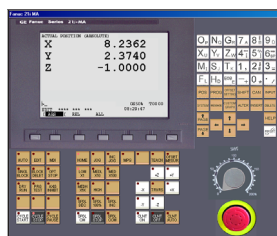
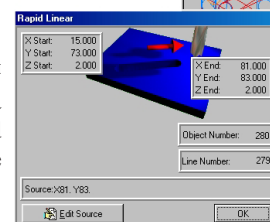
VR CNC Milling machine software offers actual or virtual machine use along with dynamic part simulation.



Virtual measuring tool helps measure the simulated part.



Source Track™ technology allows a tool path to be tracked back to the source code.



Fanuc 21i-MA & 0-M operator panels

Total Commitment to Manufacturing Technology in Education, Training, and Prototyping Worldwide

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