Microturn 2000

• Low cost CNC lathe
• Easy-to-use VR CNC Turning machine software
• Graphical verification of designs prior to machining
• Complete with manuals and start-up guide
• Ideal for small part manufacture
• Link to CAD/CAM software

Proud to be members of and involved in:

SkillsUSA
V I C A

AMT
The Association For
Manufacturing Technology
Founded 1902 as National Machine Tool Builders' Association

RI/SME
Robotic Technology
and Engineering
Challenge

Microturn 2000

The Microturn 2000 provides an ideal introduction to CNC. It is controlled by software designed specifically for educational users, ensuring that manufacturing is simple and straightforward.

DENFORD

Standard Equipment
- VR CNC Turning software
- Machine cable (RS232)
- Manuals
- Interlocking machine guard
- Work light
- Robot I/O
- Spindle and feed override
- Industrial Chuck
- Multifix tool holder
- Turning, threading, and cut-off tools
- Spare fuses
- Allen wrenches

Safety Features
- Emergency stop button
- Program stop from keyboard
- Totally enclosed steel cabinet
- Interlocked guard
- Tool path graphics to verify programs prior to machining
- Illuminated key operated power switch
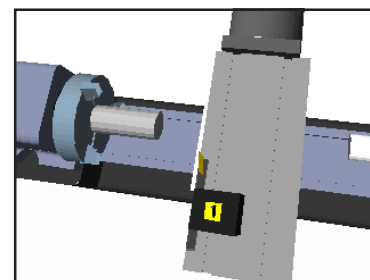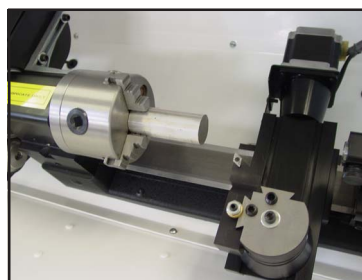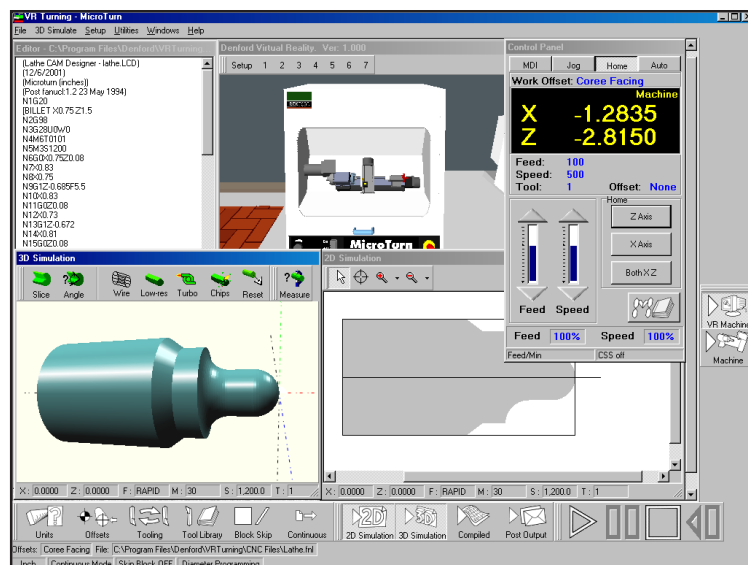
Mechanical Details
Swing over Bed .... 6" (150mm)
Swing over Carriage 4.5"(114mm)
Distance between Centers .... 8.5" (216mm)
Hole through Spindle .... .405" (10mm)
Spindle Nose Thread ... ¾" 16 TPI
Spindle Nose Taper ...... #1 Morse
X axis Travel .... 1.96" (50mm)
Z axis Travel .... 4.96" (126mm)
Travel of Tailstock ...... 2" (51mm)
Tailstock Spindle Taper: #0 Morse
Spindle Speed .... 0-2800 rpm
Machine Length ...... 27" (686mm)
Machine Width .... 25.5" (648mm)
Machine Height ...... 27" (686mm)
Shipping Weight .... 225 lbs.
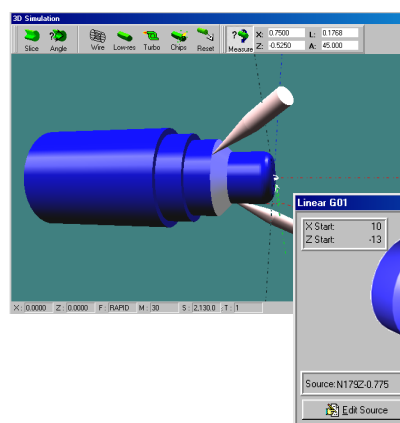
Electrical Details
Main Supply: 1 Phase, 220/240 volts or 110/115 VAC
Spindle Motor: 1/2 HP 90 VDC
Axes Motors: Stepper Motors 200 steps/rev.

Software Features
- Fanuc format programming through a computer keyboard, optional Desktop Tutor, or Fanuc 21i/0-T on-screen operator panels
- Circular & linear interpolation
- Constant surface speed
- Leading edge threading
- Inch or metric programming
- Internal/external screwcutting
- Diameter or radius programming
- Subprograms
- Programmable dwell
- Canned turning cycles
- Roughing & finishing cycles
- Work piece offsets
- Tool nose radius compensation
- Tool wear compensation
- Single block & auto execution
- Datum shift
- Block skip & search
- Context sensitive help
- Single step or continuous program execution
- Axes jog with variable feed rate
- Programmable feed rate 0-20 IPM
- Programmable spindle 0-2800 rpm
- Tool path graphics including 2D & 3D color simulation, tool path plot, and machining simulation with tool animation
- Cycle start/Feed hold/Cycle stop
- Comprehensive error messages
- Emergency stop
- Continuous & incremental jog modes
- Absolute or distance-to-go values
- Programming wizards
- Virtual CNC machines
- Over 50 industrial G and M codes available
- Spindle speed override 50-120%
- Feed rate override 0-150%

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

Virtual micrometers help measure the simulated part.

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

To get you up and running...
Denford also offers a range of curriculum, tooling packages, workholding, and machining material such as aluminum, steel, and plastic.

Computer and machine bench sold separately.