

3D CNC CAD/CAM CENTRE
MT2i



A floor standing Combined Lathe and Mill designed for educational and training installations

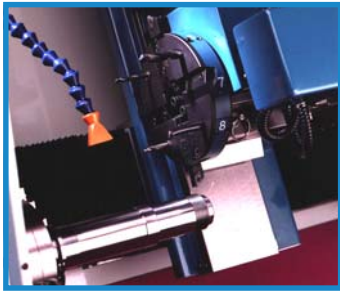
The PC controlled Boxford MT2i combined lathe and mill is ideally suited to a classroom environment and offers the perfect solution for high tech. education and training requirements. The unique combination Lathe Turret and 3rd Mill Axis allows steel to be cut to close tolerances. Operating on IBM/100% compatible computers, the inclusive user-friendly software has routines for Computer Aided Design [CAD] at varying levels and will process the drawings through to a full machining routine.

CNC features

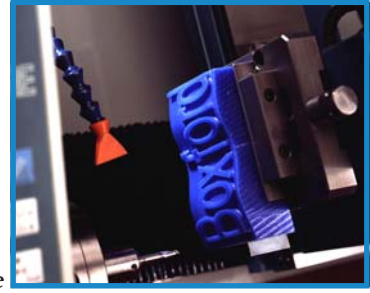
- The Boxford software is an integrated suite of powerful CAD/CAM tools.
- The CAD includes the handling of most text fonts with excellent manipulation routines.
- Drawings from other CAD applications can also be imported and processed. A full 3D simulation of the manufacturing process, including a cycle time, can be shown enabling work to be proven without the need for trial cutting. Manual Data Input allows programs to be entered using the International Standards Organization [ISO] convention.
- As with all Boxford PC machines, the MT2i incorporates hardware capable of continuous 3 axis movement and utilises Continuous Path Manufacture allowing large programs, imported from Major CAD/CAM packages, to be machined extremely efficiently. This is particularly useful for Rapid Prototyping of 3D reliefs.
- Touch sensitive control panel incorporating illuminated push buttons allows the machines to be operated without a computer.
- Active and accurate tool path graphics continuously displayed line by line during program write, test run and manufacture.

Safety equipment and features

- Full perimeter guarding with interlocking switches on access doors arranged in the positive (safety) mode for spindle stop and feed hold.
- Overload cut-out on spindle drive.
- Positive end stops on all axes.
- Mandatory graphics run required for new programs before machining cycle can be commenced and step by step graphics in advance of cut in machining cycle.
- Integrated electrical panel with no volt supply protection.
- Feed rate override.
- Feed hold.
- Single block operation.
- Latching emergency stop button.
- Power on indicator lamp.
- Low voltage control circuitry.

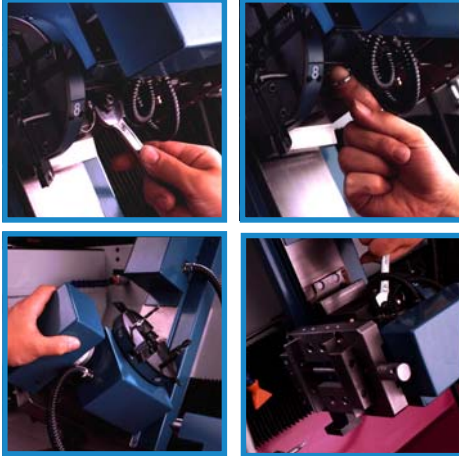


Lathe Mode



Mill Mode

Machine specification



Precision linear ways.

Linear ball bearings on all axes.

Three axis simultaneous operation.

Fully enclosed see through guarding for safety and improved student viewing.

Integrated electrical panel.

100mm diameter 3 jaw chuck.

Automatic 8 station lathe turret.

Machine vice for mill workholding.

Unique 4 stage conversion from lathe to mill mode in less than a minute (see illustrations opposite).

LATHE *specification summary*

Swing Over bed	210mm
X Axis travel	150mm
Z Axis travel	350mm
Distance between centres	400mm
Spindle bored to pass	20mm

MILL *specification summary*

Axis travel	X(longitudinal)	150mm
	Y(cross)	110mm
	Z(vertical)	320mm

Spindle motor	1.1 Kw
Spindle speed	200 - 4000 rpm
Electrics	220/240v 1 PHASE
Programmable feed (linear and circular interpolation modes)	0 - 1500mm/min
Rapid feed rate at 100%	1500mm/min

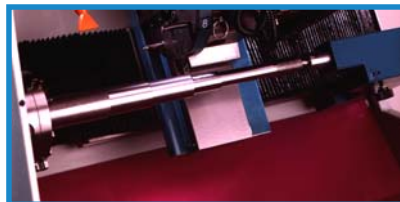
Accessories

Accessories are available, including:-

Tailstock Steady

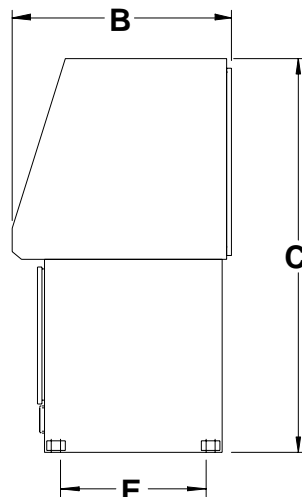
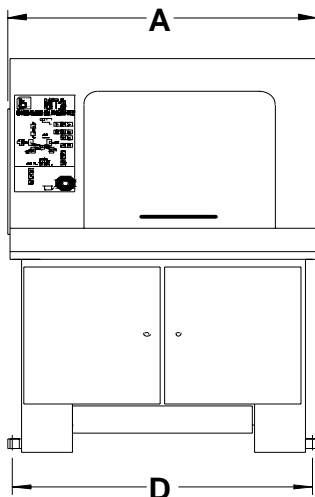
Flood Coolant System

T Slotted Milling Table with clamps



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Machine Dimensions

A	1000mm
B	720mm
C	1530mm
D	965mm
E	476mm

Machine Weight

310kg (682lbs)