

# ML35/120

Combination Lathe

• Swing: 36.2" • Spindle Bore: 6.02"



**MILLTRONICS USA**

LET'S INVENT

*Serving Industry Worldwide Since 1973*



Slant Bed  
Turning  
Centers



Combination  
Lathes



Horizontal  
Boring  
Mills



Toolroom  
Machining  
Centers



50 Taper  
Box Way Machining  
Centers



Rigid Head  
Toolroom  
Bed Mills



Bridge  
Mills



Linear Way  
Machining  
Centers

## SPECIFICATIONS

### CAPACITY:

|                               |                           |
|-------------------------------|---------------------------|
| X / Z Axis Travel             | 19 / 120" (480 / 3000 mm) |
| Swing Over Bed (Diam)         | 36.2" (920 mm)            |
| Swing Over Gap (Diam)         | 45" (1150 mm)             |
| Gap Distance                  | 14.6" (370 mm)            |
| Swing Over Cross Slide (Diam) | 21.6" (550 mm)            |

### SPINDLE:

|                     |  |
|---------------------|--|
| Spindle Nose (STD)  | A2-11  |
| Spindle Bore (STD)  | 6.02" (153 mm)                                   |
| Spindle Range (STD) | 10-900 RPM<br>Low Range 10-375 High Range 10-900 |
| Spindle Nose (OPT)  | A2-15  |
| Spindle Bore (OPT)  | 10" (254 mm)                                     |
| Spindle Range (OPT) | 10-750 RPM<br>Low Range 10-375 High Range 10-750 |
| Spindle Nose (OPT)  | A2-20  |
| Spindle Bore (OPT)  | 14" (355 mm)                                     |
| Spindle Range (OPT) | 10-500 RPM<br>Low Range 10-375 High Range 10-500 |
| AC Spindle Motor    | 35/25 HP (26/18 kW) 2 Speed                      |
| Spindle Torque      | 1850 ft-lbs (2500 N.m)                           |

### TAILSTOCK:

|                          |                |
|--------------------------|----------------|
| Tailstock Quill Travel   | 8" (200 mm)    |
| Tailstock Quill Diameter | 4.92" (125 mm) |
| Tailstock Quill Taper    | MT6            |

### AUTOMATIC TURRET:

|                     |                |
|---------------------|----------------|
| Number of Tools     | 8              |
| Tooling Size        | 1.5" (38 mm)   |
| Boring Bar Capacity | 2" (50 mm)     |
| Tool Selection      | Bi-directional |

### MOTION:

|                               |                              |
|-------------------------------|------------------------------|
| X, Z Axis Rapid Traverse Rate | 500 IPM (12.7 m/min)         |
| Max. Cutting Feed Rate        | 100 IPM (2540 mm/min)        |
| X Axis Ball Screw Diameter    | 1.57" (40 mm)                |
| Z Axis Ball Screw Diameter    | 2.48" (63 mm)                |
| Positioning Accuracy          | +/- 0.00025" (+/- 0.0063 mm) |
| Repeatability                 | 0.00039" (0.010 mm)          |
| Axis Thrust Force X,Z         | 6700 lbs (3000 kg)           |

### GENERAL:

|                              |                             |
|------------------------------|-----------------------------|
| Machine Height               | 90" (2286 mm)               |
| Floor Space Required (W x D) | 232 x 110" (5893 x 2794 mm) |
| Machine Weight               | 25,200 lbs (11,500 kg)      |
| Power Required               | 48 KVA / 125 amps           |
| Voltage Required             | 208-240 Volts / 3 Phase     |

## MACHINE FEATURES

### Machine Standards

- Fully ground square box ways with Turcite
- Automatic metered lubrication with low lube fault
- Flood coolant system
- Chuck guard with safety switch
- Heavy duty metal enclosure with sliding doors
- Tail stock with adjustable quill and safety switch
- Precision ground ball screws
- Chip drawer chip containment system
- Gap bed design
- Door interlock safety switch
- Handwheel controlled program execution
- Dual electronic handwheel for teach, manual or automatic operation
- Single spare "M" function and CNC "wait" channel
- Work lamp
- End of cycle light
- Remote electronic handwheel
- Tail stock latch and auto-position
- Edit key lock out switch
- High torque AC digital servo drives
- 8 position turret
- Rear chuck mount
- UL certified

### Machine Options

- Roller type steady rest
- Follow rest
- Manual chucks
- Hydraulic chuck packages
- Chip conveyor
- 10" bore option with rear chuck mount
- 14" bore option with rear chuck mount

## CONTROL FEATURES

### Control Standards

- PC-based 8200-B CNC includes 1 GB parts storage memory
- Enhanced CPU with block processing speed of 2000 bps with enhanced jerk control and look ahead
- 12" LCD active matrix color display
- Conversational plus G & M code programming including drilling, boring, tapping, turning, facing, threading, bolt hole (C axis), tangent/circle generate
- Auto DXF file import
- 3D part and wire frame tool path graphics plus solid modeling graphics
- Management software that allows editing of very large program files at the machine
- Spindle load meter
- User definable macros with trig assist
- USB connectivity
- MTConnect compliant
- Networking

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