



ProLIGHT 3000

SPECIFICATIONS

Construction

- Cast iron machine base
 - Built-in chip tray
 - Gortite® way covers
- Precision-ground steel table
- Digital spindle speed display
- Connector for automatic tool turret

Linear motion system

- Zero backlash ball screws
- 3/4" (19.05mm) precision-ground and hardened shaft
 - Wipers on all slides
- Low-friction linear bearings
- Easily accessible oil ports

Tooling/Accessories

- 4" (102mm) 3-jaw self-centering chuck
- Chuck key, spindle wrench, oil can
 - AC power cord
- Accessory port adapter cable
 - 25 pin computer cable

Axis travel

- X Axis: 4" (102mm)
- Z Axis: 10" (254mm)
- Swing over bed: 6" (152mm)
- Swing over cross slide: 3.9" (99mm)

Work area

- Table size: 11.5" x 7" (292mm x 178mm) · Table load capacity: 100 lbs. (45kg)

Spindle

- Drive motor: 1 hp (746 W)
- Motor type: DC permanent magnet
- Speed range: 0-1,200 RPM and 0-3,600 RPM
- Spindle nose: threaded 2.25-8 UN-2A-RH
- 5C collet capacity: up to 1- 1/16" (25mm)

Tailstock (optional)

- Specify at time of ordering for factory-installed tailstock.
 - Taper: Morse #1
 - Stroke: 1.5" (38mm)
 - Center distance 9" (229mm)

Accuracy

- Ball screw: 0.001"/ft (0.025mm/300mm)
- Repeatability: 0.0005" (0.0127 mm)

Axis Drive Motors

- Linear feed rate: 0.1-25 ipm (2-635mm/min)
- Circular feed rate: 0.1-18 ipm (2-457mm/min)
- Rapid feed rate (X,Y): 50 ipm (1270 mm/min)
- Stepper motors: 150 oz. in. (105 Ncm), 200 step/rev

Power requirements

- United States: 115 VAC (+5%/-10%), 60 Hz, 15A
- International: 230 VAC (+5%/-10%), 50-60 Hz, 8A

Dimensions

- Width: 36" (914mm)
- Depth: 22" (559 mm)
- Height: 24" (610 mm)
- Weight (approximate)
 - Turning Center: 245 lb (111 kg)
 - Shipping: 315 lb (143 kg)

Interpolation

- Rapid and linear interpolation
- Circular interpolation with center point or radius input
 - Threading, single-point with multi-pass

Programming standards

- EIA RS274-D standard G&M codes
 - Subprograms
 - Fanuc® -compatible
 - CAD/CAM compatible

Programming and control

- Controller Box
- PCI computer interface card
- CNCBase - programming and control software
- CNCMotion - 3D simulation software (optional)
 - PCI bus to host computer
- Robotic interface with TTL I/O

Safety features

- Transparent safety shield with interlock switch
 - Emergency stop switch on front panel
 - Emergency stop on keyboard
- End of travel limit switches and stops on each axis
 - Keylock on electronic control box