Hardinge QUEST® lathes feature a custom-designed CNC control with many standard features other machine tool builders charge extra for—graphic toolpath display, rigid tapping, tool life management, stored stroke check 2 & 3, variable lead thread cutting, and run time and parts counter.

### General
- Two Interpolating Axes
- Programmable Resolution—0.0001"/.001mm (Super-Precision® Models—0.00001"/.0001mm)
- Tool Offset Capability—0.0001"/.001mm (Super-Precision Models—0.00001"/.0001mm)
- Inch/Metric Data Selection by G-Code
- 160 Meters Part Program Storage
- Part Program Storage (320, 640 or 1,280 meters total)

### Data Input/Output
- MDI (Manual Data Input) Operation
- Reader/Punch Interface (RS-232 Software/Hardware)

### Programming Functions
- Absolute/Incremental Programming
- Additional Tool Offsets (32 pair total)
- Additional Custom Macro Variables
- Auto Coordinate System Setting
- Auto Acceleration/Deceleration
- Background Editing
- Canned Cycles (Drilling), Chamfer/Corner Rounding
- Constant Surface Speed Programming
- Continual Thread Cutting
- Coordinate System Setting (G50)
- Custom Macro B
- Decimal Point Programming

### Programming Functions (cont'd)
- Diameter/Radius Programming
- Direct Drawing Dimension Programming
- Exact Step
- External Part Program Edit
- External Workpiece Number Search
- Graphic Toolpath Display
- Hardinge Safe Start Format
- Input of Offset Value by Programming (G10)
- Interpolation (Linear and Circular)
- Multiple Repetitive Canned Cycles I (Turning)
- Multiple Repetitive Canned Cycles II (Pocket)
- Program Number Search
- Reference Point Return
- Registered Part Programs — (125, 200 or 400 total)
- Rigid Tapping
- Sequence Number Search
- Single Block Operation
- Stored Stroke Check 2 & 3
- Thread Cutting Cycle Retract
- Thread, Synchronous Cutting
- Tool Life Management
- Tool Nose Radius Compensation
- Variable Lead Thread Cutting

### Operation
- Block Delete
- Dry Run
- Dwell Time
- Emergency Stop

### Operation (cont'd)
- Feed Hold
- Feedrate Override (0 to 150%)
- Incremental Jog
- Jog Feed
- Machine Lock
- Manual Pulse Generator (MPG)
- On-Screen Spindle Load Meter
- Option Stop
- Rapid Traverse Override (Low-25-50-100%)
- Spindle Speed and T-Code Displays on all Screens
- Tool Geometry and Tool Wear Offsets — (32 pairs each)

### Miscellaneous
- 1-Degree Spindle Orient
- Actual Cutting Speed Display
- C-Axis with Polar and Linear Interpolation
- Color LCD Display with Full Keyboard — English, French,German, Italian or Spanish
- Ladder Diagram Display
- Mechanical Run Meter
- On-Screen "HELP" Functions for Alarms
- PC Front-End Control (Windows NT® 4.0)
- Program Protect
- Run Time and Parts Counter
- Self-Diagnosis Function
- Stored Pitch Error Compensation
- Y-Axis with offsets (32 pair)

- Standard
- Optional

- 1 - Included with Live Tooling Option

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