



TURNING

HARDINGE
CONQUEST H51

COLLET-READY
SPINDLE



THE CLEAR LEADER IN PIONEERING THE COLLET-READY SPINDLE



www.hardinge.com

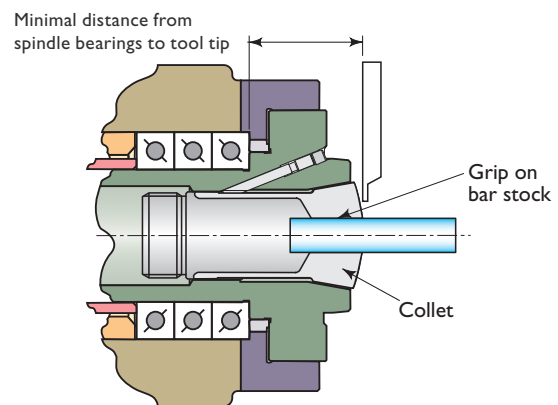
 **HARDINGE**[®]

Our Collet-Ready Spindle Advantage

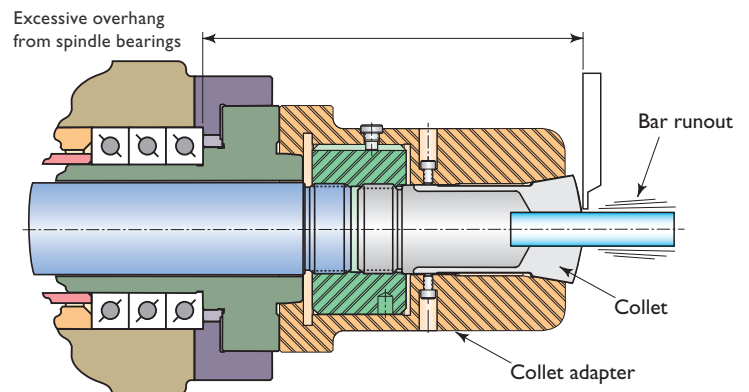
The Hardinge spindle design is both collet and jaw chuck-ready and does not require a spindle adapter

- Collets, step chucks with closers, dead-length systems, FlexC™ quick change, Sure-Grip® expanding systems, Sure-Grip® 3 jaw chucks and custom solutions to meet the flexible demands of manufacturing today.
- Collet seats directly in the Hardinge spindle
- Minimum overhang from the spindle bearings assures that spindle accuracy is transferred directly to the workpiece
- Maximum rigidity and gripping power is transferred to the part
- Minimum weight on spindle
- Maximum utilization of RPM
- Optimum T.I.R.
- Gripping force directly over the workpiece
- Superior tolerances and finishes
- Capable of using maximum machine stroke capacity
- Quick changeover—collet draw tube is easily and accurately adjusted from the back of the spindle
- Longer tool life

Collet-Ready Spindle Design

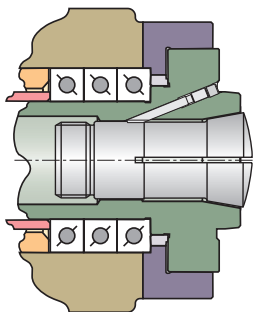


Collet Adapter Configuration

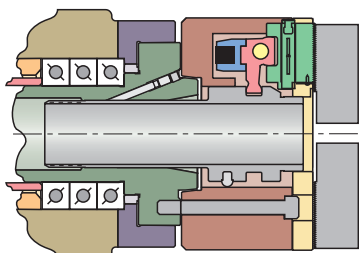


The Hardinge spindle design allows quick changeover from bar work to chucking work.

Hardinge Spindle shown with Collet



Hardinge Spindle shown with 3-Jaw Chuck





Swing Diameter

Maximum Swing Over Way Covers	27.87" (708mm)
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Work Capacities

Chuck Size	8" (200mm)
Maximum Bar Capacity	2" (51mm)
Maximum Machining Diameter (BMT-55)	12.34" (313.7mm)
Maximum Machining Diameter w/Tailstock (BMT-55)	25.53" (648.5mm)

Spindle

Maximum Speed	5,000-rpm
Maximum Power Rating (30 mins)	20-hp (15 kW)
Maximum Torque (30 min)	168 ft-lb (228 Nm)
Spindle Nose	A2-6 / 20 C
Chuck Size	8" (200mm)
Spindle Bore	2.378" (60.4mm)
Spindle Orient	1.0 degree

Travels and Feedrates

Maximum X-Axis Travel	7.75" (196mm)
Maximum Z-Axis Travel	28.15" (715mm)
Maximum Y-Axis Travel	+2.56 to -1.0" (65mm to -25.4mm)
X-Axis Rapid Traverse Rates	1,100-ipm (28m/min)
Z-Axis Rapid Traverse Rates	1,500-ipm (38m/min)
Y-Axis Rapid Traverse Rates	236-ipm (6.0m/min)

Hardinge BMT-55 Live Tooling Top Plate

BMT-55 bi-directional	12-station + ½ station index
Square Shank	1" (25mm)
Round Shank Tooling	1.50" (38mm)
Index Time (rotation/including clamp-unclamp)	0.40/1.45 Seconds
Live Tooling Power Rating (30 Min Rating)	7.5HP (5.5 kW)
Live Tooling Max Speed	8,000-rpm

Hardinge T-Style Static Top Plate

Block Type (Static) bi-directional	12-station
Square Shank (Left, Right or Inverted Tooling)	1" (25mm)
Round Shank Tooling	1.5" (38mm)
Index Time (rotation/including clamp-unclamp)	0.40/1.45 Seconds

Servo Driven Tailstock

Morse Taper (no quill needed)	MT # 4
Maximum BMT Cutting Length	27" (698.5mm)
Maximum Traverse Rate	1500-ipm (38m/min)

Sub Spindle

Maximum Speed	6,000-rpm
Maximum Power Rating (30 min)	10-hp (7.5 kW)
Maximum Torque (30 min)	41.3 ft-lb (56 Nm)
Spindle Nose	A2-5/16C
Chuck Size (Chuck Not Included)	6" (150mm)
Spindle Bore	1.89" (48mm)
Spindle Center Height	42.96" (1091mm)
Spindle Reach	16.3" (414mm)
Spindle Orient (optional)	1.0 degree
Maximum Travel	28.275" (718mm)
Maximum Traverse Rate	1500-ipm (38m/min)

Standard Features

- State of the art Fanuc OiD or Mitsubishi M720V Control
- .000010" (.1µm) resolution control
- High Precision and Super Precision models
- Linear scales – X SP models
- Through tool coolant
- Bar feed Interface
- Three position stack light
- Chip conveyor interface
- Ethernet ready
- PCMCIA memory card
- Rigid tapping
- Mist collector ready
- RS232 C ready
- Power down
- Ready 2 cut

Major Configurations:

- T / MT / MYT / MSY
- Super & High Precision



Choose the H-SERIES when you need to hold 5 microns

HARDINGE COMPANIES WORLDWIDE

Over the years, The Hardinge Group™ steadily diversified both its product offerings and operations. Today, the company has grown into a globally diversified player with manufacturing operations in North America, Europe and Asia. In addition to designing and building turning centers, and collets, Hardinge is a world leader in grinding solutions with the addition of the Kellenberger, Jones & Shipman, Hauser, Tschudin, Usach and Voumard brands to the Hardinge family. The company also designs and manufactures Bridgeport machining centers and other industrial products for a wide range of material cutting, turnkey automation and workholding needs.

Expect more from your Hardinge products. Choose Hardinge precision and reliability for increased productivity and value!

Call us today, we've got your answer.



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