



Star PTG-1 Hob Sharpener



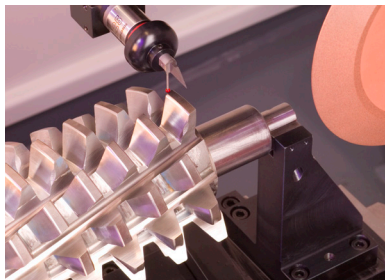
The PTG-1 Hob Sharpening and Tool Reconditioning Grinder is an affordable solution for hob sharpening and in-house tool maintenance. Equipped with a manual HSK spindle, this machine is ideal for repetitive jobs without changes in setup, particularly during the manufacturing and re-sharpening of straight and spiral gash hobs, dish, shank and helical gear shaper cutters as well as a wide range of round tools.

Features

- 5-Axis machine featuring NUM Control
- NUMROTO Software
- 10 HP HSK direct drive grinding spindle
- Linear glass scales for positioning
- Max Hob Capacity: 8" OD x 10" OAL
- Precision workholding solutions
- 22" user interface display
- Up to 250 mm diameter Saw Cutters
- Constant rake angle
- Constant rake offset

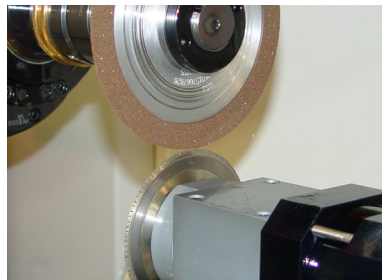
Options

- Engineered tailstocks and steady rests
- On-board wheel dressing



Part Probing

Various probe designs available covering a wide range of geometries and applications.



Onboard Grinding Wheel Dressing

Required for profile dressing of spiral gashed hobs.



In-house Maintenance

Straight and spiral gash hobs, dish and helical gear shaper cutters, Sykes cutters and a wide range of round tools.

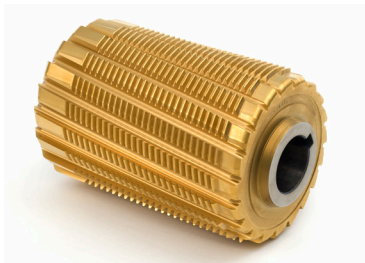
PTG-1 Tooling Applications and Machine Specifications

Tooling Applications

The Star PTG-1 features quick change tooling to accommodate a broad range of tools including:



Tapered Saw Cutter



Rack Milling Cutter

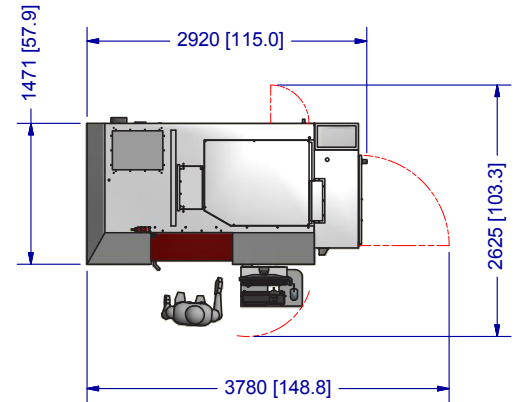
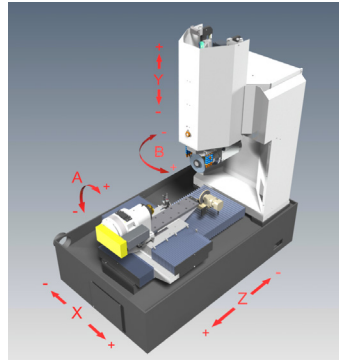


Steel and Carbide Gear Hobs



Milling Cutters

Machine Dimensions and Specifications



	Metric	Inch
Base Machine Dimensions (L x W x H)	2920 x 1471 x 2600 mm	115 x 57.9 x 102.4 in
Total Weight: Base Machine	3,900 kg	8,598 lbs
Maximum Workpiece Diameter	200 mm	8 inches
Maximum Hob Length	254 mm	10 inches
Maximum Round Tool Length	*610 mm	*24 inches
C - Axis Headstock Spindle 360° Rotation	125 rpm	125 rpm
B - Axis Grinding Spindle Swivel +/- 120°	12 rpm	12 rpm
X - Axis Horizontal Travel	300 mm	11.8 inches
X - Axis Travel Speed	10 m/min	400 inches/min
Y - Axis Vertical Travel	285 mm	11.2 inches
Y - Axis Travel Speed	10 m/min	400 inches/min
Z - Axis Horizontal Travel	500 mm	19.7 inches
Z - Axis Travel Speed	10 m/min	400 inches/min
Grinding Spindle Speed	10,000 rpm	10,000 rpm
Continuous Spindle Horsepower	7.5 kw	10 hp
Peak Spindle Horsepower	14 kw	19 hp
Maximum Grinding Wheel Diameter	254 mm	10 inches
Smallest Programmable Movement - Linear	0.00254 mm	0.0001 inches
Linear Axis Glass Scale Feedback Resolution	0.00001 mm	0.0000004 inches
Smallest Programmable Movement - Rotary	0.0001 deg	0.0001 deg
Rotary Axis Feedback Resolution: A-axis	0.000068 deg	0.000068 deg
Rotary Axis Feedback Resolution: B-axis	0.00000006 deg	0.00000006 deg

* Dependent upon grinding operation being performed



Star SU LLC
 5200 Prairie Stone Parkway,
 Suite 100
 Hoffman Estates, IL 60192
 Tel.: **847 649 1450**
 Fax: **847 649 0112**
 e-mail: **sales@star-su.com**
 web: **www.star-su.com**

Star Cutter Company
Elk Rapids Engineering
 210 Industrial Park Drive
 Elk Rapids, MI 49629-0728
 Tel.: **231 264 5661**
 Fax: **231 264 5663**
 e-mail: **sales@starcutter.com**
 web: **www.starcutter.com**