



# Star PTG-6L Tool and Cutter Grinder



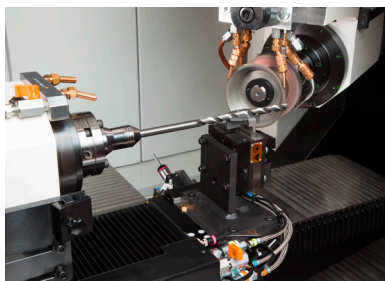
Engineered to manufacture complex cutting tools, the new Star PTG-6L is a five axis, CNC controlled cutter grinder for manufacturing, sharpening and reconditioning a wide variety of cutting tools. Made in the U.S.A. and equipped with a six-station wheel pack changer, the PTG-6L is built for high productivity and precision.

## Features

- 5-Axis machine featuring NUM Control
- NUMROTO Software
- Mineral cast base and column
- Full linear motor and direct drive rotary technology
- 20 HP HSK direct drive grinding spindle
- Linear glass scales for positioning
- Fluting capability up to 16.5 inches
- Precision workholding solutions
- 22" user interface display

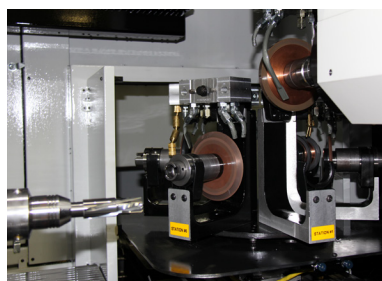
## Options

- Integrated high volume loader
- CNC traveling steady rest
- Engineered tailstocks
- Onboard Wheel Dressing
- Grinding wheel auto-sticking capabilities for unmanned operations



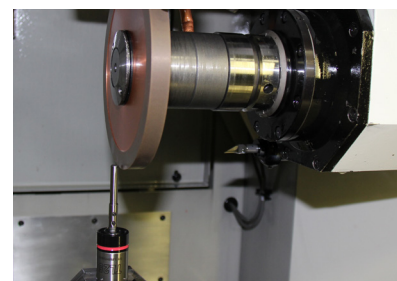
### Traveling Steady Rest

Fully integrated CNC sixth axis for continuous tool support during grinding operations.



### 6-Station Wheel Changer

Provides the ability to hold multi-wheel arbors and automatically change wheelpacks and coolant manifolds in one step. Accommodates wheels up to 6 inches.



### Wheel Probing

Enables operator to measure wheel diameters and linear positions.

# PTG-6L Tooling Applications and Machine Specifications

## Tooling Applications

The Star PTG-6L features quick change tooling to accommodate a broad range of tools including:



Cylinder Form Tool

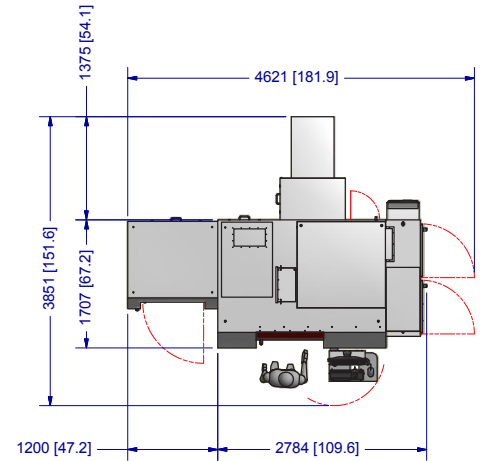
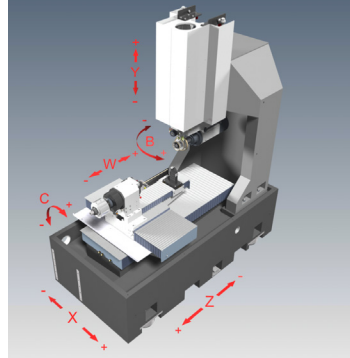


2 Flute ISO Porting Tool



Long Helical Twist Drill

## Machine Dimensions and Specifications



	Metric	Inch
Base Machine Dimensions (L x W x H)	2784 x 3851 x 2600 mm	109.6 x 151.6 x 102.4 in
Total Weight: Base Machine	5,800 kg	12,760 lbs
Maximum Workpiece Diameter	254 mm	10 inches
Maximum Workpiece Length	*675 mm	*26.6 inches
C - Axis Headstock Spindle 360° Rotation	1,000 rpm	1,000 rpm
B - Axis Grinding Spindle Swivel +/- 120°	12 rpm	12 rpm
X - Axis Horizontal Travel	350 mm	13.8 inches
X - Axis Travel Speed	50 m/min	2,000 inches/min
Y - Axis Vertical Travel	285 mm	11.2 inches
Y - Axis Travel Speed	50 m/min	2,000 inches/min
Z - Axis Horizontal Travel	680 mm	26.8 inches
Z - Axis Travel Speed	50 m/min	2,000 inches/min
W - Axial Travel Optional Steady Rest Slide	340 mm	13.4 inches
W - Axis Travel Speed	15 m/min	600 inches/min
Grinding Spindle Speed	10,000 rpm	10,000 rpm
Continuous Spindle Horsepower	15 kw	20 hp
Peak Spindle Horsepower	45 kw	60 hp
Maximum Grinding Wheel Diameter	152 mm	6 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



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