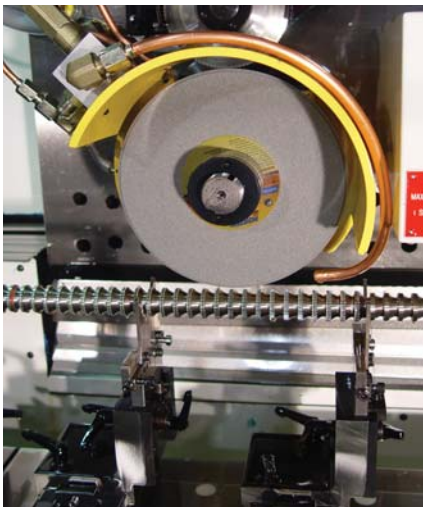




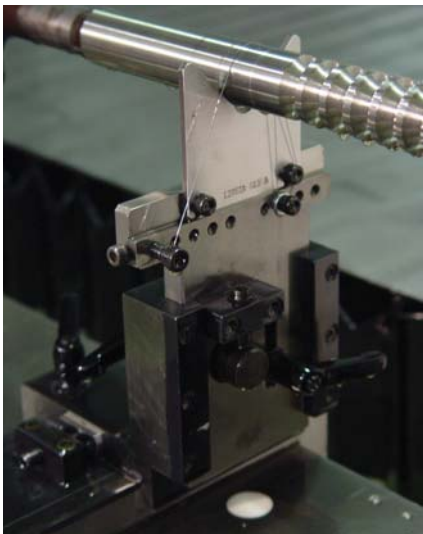
The Star Model SPG, 5-axis Spline Grinder



Part Probing



Star "Smart Stroke" grinding



"Quick set-up" steady resting

### Star SPG - 5-axis CNC Spline Grinder

Star Cutter Company designed the SPG with broach manufacturers in mind. The five-axis CNC spline grinder harnesses the knowledge and experience of skilled craftsmen and combines it with the speed, accuracy and power of CNC equipment. The result in an affordable, American-built grinding machine designed to meet current and future needs. The Star SPG makes grinder hands more productive and also makes it easier to train new staff to do the job.

#### Make it easier

- Grinds any tooth form—straight to involute
- Onboard wheel truing and forming
- Automatic program to verify stock removal and centrality
- Allows experienced operators to grind broaches more quickly
- Simpler training for inexperienced operators

#### Make it faster

- Use either conventional or super abrasives
- Fully programmable feedrates from 0 to 1000 inches per minute
- Low center of gravity and minimized cantilever for accuracy and stability

#### Make it better

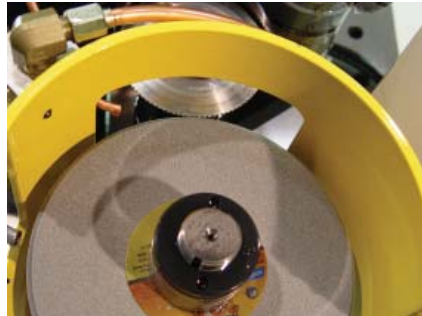
- Glass scales on all machine axes
- Rotating ball nut eliminates vibration
- Quick-change HSK wheel mounting—repeats to within one-tenth (0.0001")
- Constant surface speed as grinding wheel diameter changes
- GE Fanuc CNC

Make it easier. Make it faster. Make it better. Make bigger profits.

# The Star Spline Grinding Solution



Fanuc control with Star interface



Rotary form dressing



Anti-runout drive dog system



Wheel probing

The Star SPG features:

- Dual probing system
- 10 HP grinding spindle
- Onboard form dressing
- 0 to 1000 IPM feedrate
- Software



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Machine capacity SPG		
Maximum workpiece diameter	4	inches
Maximum workpiece length	76.2	inches
A - axis workhead spindle rotation	0 to 50	rpm
U - axis horizontal dresser slide	2.36	inches
V - axis vertical dresser slide	2.36	inches
X - radial travel work spindle slide	6.0	inches
Y - vertical travel tool head slide	6.0	inches
Z - axial travel tool spindle column slide	70.87	inches
Grinding spindle	10	HP
Maximum grinding spindle speed	10,000	rpm
Maximum grinding wheel diameter	8	inches
Smallest programmable movement: linear	.000 039	inch
Machine linear axis glass scale feedback resolution	.00002	inch
Dresser linear axis glass scale feedback resolution	.000 009 843	
Smallest programmable movement: rotary	.001	degrees
Rotary axis feedback resolution: A-axis	.0005	degrees
Main dimensions, base machine (l x w x h)	19.5 x 8.33 x 7.5	feet
Total weight, base machine	22,000	pounds