



## Gear Capabilities

Gear Types	Min. Diameter (inch.)	Max. Diameter (inch.)	DP / Mod Range	Max. Helix Angle	Face Width Max. (inch.)	Machines Used
<b>Helical (Ground)</b>						
<i>External</i>	0.5	27.5	1.7 - 48 / 14.94 - .53	45	12.9	Gear Grinders
<b>Helical (Cut)</b>						
<i>External</i>	0.5	72	1.5 - 120 / 16.93 - .21	45	24	Hobbers, Shapers
<i>Internal</i>	0.5	10	4 - 120 / 6.35 - .21	30	4	Shapers
<b>Spur (Ground)</b>						
<i>External</i>	0.5	27.5	1.7 - 48 / 14.94 - .53		12.9	Gear Grinders
<b>Spur (Cut)</b>						
<i>External</i>	0.5	72	1.0 - 120 / 16.93 - .21		24	Hobbers, Shapers
<i>Internal</i>	0.5	36	3 - 120 / 8.47 - .21		6	Shapers, Broaches
<b>Splines</b>						
<i>External</i>	0.5	36	3 / 6 - 48 / 96		24	Hobbers, Shapers
<i>Internal</i>	0.5	36	3 / 6 - 48 / 96		6	Shapers, Broaches
<b>Straight Bevels</b>	0.5	36	1.25 - 96 / 20.32 - .265		4.5	Gleason Bevel Generators
<b>Worms*</b>	0.5	9.5	2 - 48 / 6.35 - .53			
<b>Worm Gears</b>	0.5	36	2 - 48 / 6.35 - .53			Hobbers
<b>Sprockets</b>	0.5	72	0.125" - 3"			Hobbers, Shapers

\*Typically outsource the thread milling and grinding

# Gear Machines

## Gear Grinders

- (2) Reishauer RZ400 with Robotic Loading
- (3) Reishauer RZ300E
- (1) Kapp Kx300p with Auto Load
- (1) Höfler Helix 400K CNC
- (1) Höfler Helix 700 CNC
- (2) Gleason Tag 400 CNC
- (1) Gleason 245 TWG CNC

## Hobbers

- (1) Liebherr LC 380
- (1) Gleason 782 G-Tech 6 Axis
- (1) Mitsubishi GC20
- (1) Mitsubishi GD20
- (1) Mitsubishi GE15A
- (1) Koepfer 200 with Automation
- (1) 16" Pfauter P400
- (1) 24" Pfauter P630
- (1) 36" Pfauter P900
- (1) 72" G&E
- (1) 60S G&E Gasher
- (2) Richardson R200 CNC
- (6) Barber Coleman from 6" to 16"
- (1) MIKRON 132.02
- (1) Gleason Genesis 400H

## Shapers

- (1) Fellows 10-4 CNC
- (1) Fellows No. 4AGS
- (2) Fellows No. 36

## Broaches / Keyseaters

- (1) Ohio Horizontal Broach Model 10-60, 10-Ton
- (1) Mini-Broach Model A, 1-Ton
- (1) Colonial Horizontal Broach Model HAS-15-72, 15-Ton
- (1) Davis Keyseater
- (2) Mitts & Merrill Keyseater: 3A, 6HFR-KS
- (1) Oil Gear 20-Ton, 64" Stroke Horizontal Broach
- (1) Mini-Broach 20-Ton, 64" Stroke Horizontal Broach

## Bevel Gear Generators

- (1) Gleason #24A Coniflex Bevel Generators
- (2) Gleason #14 Coniflex Bevel Generators
- (1) Gleason #2A Coniflex Bevel Generators
- (2) Gleason #104 Coniflex Bevel Generators

## Other Capabilities

Turning, Milling, Honing, Deburring, Assembly  
– Including an Almco 48", 2-Spindle,  
Semi-Automatic Spindle Deburring System

## Grinding (ID, OD, Surface)

- (1) SNI – CNC 2-Axis, Bore and Face
- (1) Tripet TST 100 2R CNC
- (1) Bryant Twin Spindle Bore and Face
- (1) Kellenberger URS 175/1000 Universal,  
CNC 2-Axis, ID/OD Anglehead Grinder:  
12.5" dia. x 40" long
- (1) Toyoda GL4A, CNC 2-Axis,  
30° Anglehead Grinder: 12" dia. x 20" long
- (1) Toyoda GL4A, CNC 2-Axis,  
30° Anglehead Grinder: 12" dia. x 40" long
- (1) Cincinnati 215, CNC 2-Axis,  
30° Anglehead Grinder: 14" dia. x 48" long
- (1) Norton 6 x 30 CTU Cylindrical
- (1) Cincinnati 6R-18L Cylindrical
- (2) Myford High Precision O.D.
- (1) Elgin 36" Rotary Surface
- (2) Heald No. 361 Rotary Surface
- (1) Blanchard No. 18 Surface
- (1) Heald 271 Slide-Bar, Twin-Spindle Bore and Face
- (4) Heald ID Bore: Model 171, 271, 273A, 274

## Gear Inspection

- (1) Wenzel GearTec WGT350 CNC Analyzer
- (1) Höfler ZME 402 Gear Analyzer
- (1) Höfler EMZ 402 Gear Inspection and  
CMM System
- (1) Klingenberg PSFU1200 with Tri-check®  
Computer Analysis
- (1) Klingenberg PNC 60 CNC  
Gear Inspection Machine

## Other Inspection

- (1) Zeiss Numerex BT 1518-12 CMM
- (1) Helmel Microstar 325-202 DCC CMM
- (1) Brown & Sharpe Global Class 555 SCAN CMM
- (2) United Tool 8600 Unite-A-Matic  
Gear Size Checkers
- (2) Fellows 12M Involute Instrument
- (1) Fellows 12H Lead Instrument
- (1) Profile Engineering PC-20 Composite  
Gear Analyzer