



CUSTOM GEARING SOLUTIONS

Any Industry. Any Application. Unlimited Solutions.

Winsmith offers a comprehensive array of custom gearing solutions engineered to meet the demands of the most challenging applications. Our experienced team of engineers and skilled machinists work closely with customers to understand specific needs to design any custom configurations and deliver results that are optimized for any industry.

Gearing Types

- Single and Double Enveloping Worm Gears
- Helical/Spur
- Planetary/Planocentric Options

Input Capabilities

- Motion Control Servos
- NEMA Rated Devices
- IEC Compact Devices
- Hydraulic Inputs
- Solid Shaft Extension for Coupling or Pulley Driven Applications

Gearing Specifications

Gear Ratios

- Range from 1.1:1 to 180,000:1

Torque

- Custom gearing solutions capable of delivering torque from 69 lb-in to 460,000 lb-in

Backlash

- To minimize position error in any motion control application, we can provide a minimum of 2 arcminutes of backlash

CAPABILITIES

Gear Cutting and Finishing

- Hobbing
- Grinding
- Shaping
- Shaving
- Worm Thread Whirling
- Worm Thread Grinding
- 5-Axis CNC Thread Grinding

Machining Capabilities

- Bore Honing
- CNC Turning | Y-Axis and Live Tooling
- 5-Axis CNC Multi-Task Turning
- CNC OD Grinding
- CNC Milling Centers
 - 4-Axis Horizontal
 - Vertical
 - 4-Axis Rotary

Seals and Lube

- Winsmith offers a variety of gearbox lubrication and sealing options to match any application

Heat Treatment

- Induction Hardening
- Carburizing
- Nitriding

Quality Control

- Cutting-Edge CMM Equipment with Gear-Specific Inspection and Measurement
- Precise and Reliable Material Hardness Testers
- High Quality Optical Comparator

Support

- Winsmith is ISO 9001 Certified which displays our commitment to providing high-quality products and services
- Dedicated customer service team to provide personalized efficient support
- Outstanding Sales Team to provide information and guidance to help solve any problem
- Innovative engineering team to ensure optimal performance of any custom gearing solution

