

Our Manufacturing Capabilities

- Advanced Engineering Capabilities & Support
- Continuous Improvement + Six Sigma Quality Methodologies
- Ultra Precision Grinding (ID, OD, Surface, Creep)
- CNC Thread Grinding
- CNC Drilling
- Multi-Axis CNC Turning with Full Y-Axis
- Swiss Style Turning
- EDM Wire, Electrode & Production Drilling
- High Accuracy CNC Milling
- Precision Production Honing
- Laser Marking
- Internal Vacuum Heat Treat / Braze (including High Temperature Gold-Nickel)
- Assembly
- KANBAN / JIT
- Quality Planning Expertise
- Build to Forecast

Pointe Precision Milling

CNC Milling Centers

(32) Makino a51nx	60 Tool, Horizontal, 400mm x 400mm, 2 Pallet
(5) Mori-Seiki NH5000 – DCG	60 Tool, Horizontal, 500mm x 500mm, 2 Pallet
Mori-Seiki NH5000 – DCG	120 Tool, Horizontal, 500mm x 500mm, 2 Pallet
Mori-Seiki NH4000 – DCG	60 Tool, Horizontal, 400mm x 400mm, 2 Pallet
Mori-Seiki SV-500-40	30 Tool, Vertical, 30 x 20 Table
Mori-Seiki SV-500-40	40 Tool, Vertical, 30 x 21 Table, 2 Pallets
Hermle C22 5-Axis	55 Tool, 450mm x 600mm x 330mm
Makino PS95	30 Tool, Vertical, 36 x 20 Table

Pointe Precision Turning

CNC Turning Centers

(3) Mori-Seiki NZ 2000	T3Y3 triple turret multi-tasking turning center
Mori-Seiki NZ 2000	T2Y Twin Turret multi-tasking turning center
Mori-Seiki NL2500SY/1250	12 Station, sub spindle with Y-axis control
(6) Mori-Seiki NLX2500SY/700	12 Station, sub spindle with Y-axis control
Mori-Seiki SL154	12 Station, sub spindle with Y-axis control
Mori-Seiki NL 3000Y/1250	10 Station, 15" Chucking capacity with steady rest
Mori-Seiki NL 2500	2-axis capability, 12" chucking capacity
Mori-Seiki SL-150	1 5/8 Bar Capacity (2 Axis)
Citizen M-32	13-axis capability, twin-spindle, internal multi-tasking
(2) Citizen L720	7-axis capability, twin spindle, internal multi-tasking
(5) Citizen L20-X	Twin Spindle, internal multi-tasking





Pointe Precision Grinders

Studer S31 Lean

- Universal 3 in 1 CNC Grinder (I.D., O.D., and Side)
- OD Grind (max) 9" Round x 24" Long
- ID Grind (max) 3" Round x 6" Long
- Ground External Diameters +/- .0001 (50 millionths roundness)
- Ground Internal Diameters +/- .0001 (50 millionths roundness/straightness)
- Ground Shoulders +/- .0001

Studer S33 Grinder

- Universal Cylindrical Grinding Machine
- 31.5" Distance Between Centers
- Resolution: 0.000004"
- Concentricity: 0.000016"
- Equipped with P7ME Marposs In Process Gauging System

Remanufactured Model #20M Cincinnati CNC Centerless Grinder

- 100% Replaced or Restored to Original Manufacturers Specifications or Better
- Frelon Coated Hand Scraped Slide Ways
- 0 to 3" Diameter Capable
- Thru Feed Capable

Chevalier Surface Grinder

- Smart B1224II Surface/Creep Grinder
- Surface Grinding +/- .0001
- 12" X 18" Work Table

(2) Voumard CNC 130

- 3 Spindle High Precision ID Grinder
- Ground Internal Diameters +/- .0001 (>50 millionths roundness/straightness)
- Match Grind to .000050 to .0001
- Scale resolution of 0.000004"

Sunnen Stroker Hone – ML 2000

- .060" to 6.500" Diameters
- 1/8 to 16" lengths
- 3 additional Sunnen Manual Hones

Ex-Cell-O EXL – Thread Grinder

- Thread Grind (max) 6" Round x 6" Long

Additional Equipment

- Cincinnati Size-Matic - ID Grinder
- (1) Myford MG12-HPM - Groove, Side, Collet and OD
- (2) Cincinnati M2H1W-455 - End-Feed Centerless OD
- Gallmeyer & Livingston GL-450 - 12 x 24 Creep Grinder
- Model 3A Mini-Broach – 10 ton with 38" pull



Pointe Precision NADCAP Accredited Non-Conventional Machining (EDM)

Makino EDBV3 CNC EDM Machine

- Travel X 14.5", Y 10.6", Z 19.6"
- 1000 RPM Rotating Spindle
- 2 Axis Integrated 360° Rotary Table
- 24 Station Tool Change

Mitsubishi FA20S Submerged Wire EDM

- Travel X-Y 19.7" x 13.8", Work piece 41.3" x 31.5" x 11.7"
- Highly Reliable High-Speed Threading
- Average Dimensional Variance .0001"
- Surface Finish 6-8 Ra
- Machining Range from .250"-6.0"

Mitsubishi M35 8-Tool CNC Sinker EDM

- Travel X/Y/Z 13.78" X 9.84" X 9.84", Table size 27.56" x 19.69"
- 8 Position Electrode Changer
- System 3R C-Axis Head
- Precision deep hole electrode drilling

Mitsubishi ED-2000M Manual EDM Drill (Holepopper)

- Work Table 15.7" x 11.8"
- High Speed Processing with very low electrode consumption
- Electrode wear at tip is good (No bullet nosing)

Pointe Precision Inspection Capabilities

Pointe Precision has over 9000 pieces of inspection equipment, including over 5000 plug gages ranging in size from .010 to 4.000 and in increments from .0001 in smaller gages to .001 in larger gages. All are calibrated in our state-of-the-art, climate-controlled metrology lab using NIST traceable equipment. Our inspection equipment also includes:

- (1) NITON XLt Material Alloy Analyzer
- (4) Servo-driven Coordinate Measuring Machines
- (3) Optical Comparators
- (1) Toolmaker's Microscope
- (1) Magnetic Particle Inspection Unit
- (2) Mahr MMQ400, Servo Driven Roundness Checker
- (2) Electronic Pocket Surface Finish Checkers
- (1) Fluorescent Penetrant Inspection Unit
- (1) JenOptik Vision System
- (3) Marposs M39S Match Grinding Gauges
- (1) Optiv Multi-Sensor Optical Measuring System
- (1) Hommel-Etamic Match Grinding Gauges





Pointe Precision Special Processes

Nondestructive Testing

- Magnetic Particle Inspection
- Fluorescent Penetrant Inspection

Micro Deburring

- Clean Room with Isolated Buffing Room
- Tumbling

Clean Room Sub-Assembly

- S.T.I.
- Lee Plugs
- Pins and Components
- Heat and Freeze Bushings
- Soldering

NADCAP Accredited Heat Treating and Brazing

- Abar-Ipsen HR - 26 x 36 Vacuum Furnace with diffusion pump
- Ipsen-Titan H402113 Vacuum Furnace with diffusion pump
- Deep Freeze Unit
- Blue-M Draw Furnaces (2)
- Gold-Nickel Furnace Brazing

Part Washing and Cleaning

- Ramco Parts Washer
- 3 Ultrasonic Cleaning Stations
- Pressure washing

Laser Marking

- (2) Mobile Laser Markers Systems

Production Support Resources

- Gibbs & Esprit – CAM Software
- SolidWorks – Engineering Software – 3D Assemblies/Drawings
- Epicor/Avante ERP
- Epicor Advance Quality Powered by IQS, Quality Management Software
- Wireless DNC System

Tolerances

- Turned Diameters +/- .0002
- Turned Lengths +/- .0004
- Ground External Diameters .0001 (50 millionths roundness)
- Ground Internal Diameters +/- .0001 (50 millionths roundness/straightness)
- Match Grind to .000050 to .0001
- Ground Shoulders +/- .0001
- Surface Grinding +/- .0001
- Turned Diameters to 14"
- OD Grind (max) 9" Round x 24" Long
- ID Grind (max) 3" Round x 6" Long
- Thread Grind (max) 6" Round x 6" Long
- Milling (max) 30" x 40" x 25" (Vertical)
- Milling (max) 28" x 28" x 29" (Horizontal)