

Asteroid Precision

Swiss Turning & Precision Grinding | Des Plaines & Wheeling, IL | Est. 1966

Asteroid Precision is a contract manufacturer founded in 1966, specializing in tight-tolerance Swiss turning and precision grinding for automotive, firearms, defense, hydraulic, and medical programs. Swiss lathes to 32 mm with up to 11 axes, plus centerless, cylindrical, and ID grinding with robotic loading – parts-complete delivery with metrology to 0.00001" roundness.



| Centerless Grinding | ID Grinding | Cylindrical Grinding | Swiss Turning |
|---|---|---|--|
| <ul style="list-style-type: none"> ● Robotic loading, lights-out runs ● Multi-feature grinds per cycle ● Auto gauging & compensation ● Cincinnati Milacron, Agathon 255 ● MPC-600/450/250 grinders | <ul style="list-style-type: none"> ● Leak-critical bore finishing ● Roundness to 0.00001" ● Okamoto & Studer S122/S110 ● Hydraulic & medical applications ● Tight concentricity to print | <ul style="list-style-type: none"> ● Up to 5" dia x 30" length ● Plunge & angle wheel configs ● Toyoda GL4, Studer Favorit ● Auto dressing, multi-feature ● CNC controlled precision | <ul style="list-style-type: none"> ● Bar dia 0.04 mm–32 mm ● Tolerances to ±0.0001" ● Up to 11 axes, live tooling ● B-axis capability ● Secondary grind & hone in-house |

SPECIFICATIONS

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|------------------------|--|
| Core Processes | Swiss turning, milling, precision grinding (centerless, cylindrical, ID), honing |
| Swiss Window | Bar dia 0.04 mm–32 mm (to 1.25"). Lengths 0.01"–6". Tolerances to ±0.0001". Up to 11 axes. |
| Grinding Window | Cylindrical to 5" dia x 30" length. Centerless, cylindrical & ID all in-house. Auto gauging. |
| Metrology | OGP Vision w/ laser, MMQ 400, CS-3200, MicroVu. Roundness to 0.00001". Laser mic to 0.00002". |
| Equipment | Cincinnati Milacron, Agathon 255, MPC grinders; Toyoda, Studer (cyl); Okamoto, Studer (ID); Engis (hone) |
| Documentation | PPAP Level 3, SPC, FAI, Cert of Compliance, staged inspections (FAI, in-process, final) |
| Finishing* | Heat treat, nitriding, phosphate, black oxide, nickel plating, tumble, deburr, bead blast |
| Locations | Des Plaines, IL and Wheeling, IL |

KEY EQUIPMENT

- Swiss Lathes to 32 mm (11-axis)
- Agathon 255 Robotic Centerless
- Toyoda GL4 & Studer Favorit CNC
- Okamoto & Studer S122/S110 ID
- Engis Multi-Station Honing

MARKETS SERVED

- Automotive OE & Aftermarket
- Firearms & Defense
- Hydraulics & Pneumatics
- Medical & Dental
- General Industrial

IN-HOUSE CAPABILITIES

- Swiss Turning
- Milling / Mill-Turn
- Centerless Grinding
- Cylindrical Grinding
- ID Grinding
- Honing
- Auto Gauging
- Robotic Loading
- Metrology Lab
- PPAP / SPC / FAI

* Outside processes managed through approved partners

