



# Equipment List

---

## Single Spindle Automatics

---

- 4 #2 Brown & Sharpe, 1 5/8" capacity
- 1 #2 Brown & Sharpe, 3/4" capacity
- 5 #00 Brown & Sharpe, 3/4" capacity
- 5 #00 Brown & Sharpe, 1/2" capacity
- 3 Traub – 1" capacity, form cutoff
- 1 Traub – 1 23/64" capacity, form cutoff
- 4 1/2" Lipe Automatic Loaders

## CNC Equipment Primary

---

- 4 Citizen L20 CNC Swiss Machines with Cav 12' loaders (2006,2011&2013) 3/4" diameter capacity
- 1 Citizen A20 CNC Swiss Machine with Edge 12' loader (2007)
- 2 Citizen L12 CNC Swiss Machine with Edge C312 loader (2014)
- 2 Miyano BNA-42dhy Multi-axis twin Spindle twin turret with 12' Edge Loaders (2011) 1-5/8" dia. capacity

## Secondary Equipment

---

- 6 Hardinge Hand Screw Machines – 1"
- 1 Hartford Thread Roller #5-40 to 3/8" knurling to 1/2" diameter
- 4 Snow Automatic Drill/Tap

## Additional Support Equipment

---

- 2 Toolroom surface grinders
- 1 Bridgeport Vertical Mill with Digital readout
- 1 Ingersoll Engine lathe with Digital readout (2011)

## Grinding Equipment

---

- 2 Cinco15 Cincinnati Milacron Centerless (1 Remanufactured in 2013)

## Quality Assurance

---

- APQP (Advanced Product Quality Planning)
- GAGEtrak version 6.7 gage control software
- Zeiss Rondcom high precision roundness measurement machine w/printable analysis reports (2011)
- Mitutoyo QM-Height 350 high precision height gage (2011)
- Mitutoyo PH3500 Optical Comparator with QM Data 200 computer (2011)
- Mitutoyo Surfptest SJ210 with stand (2012)
- Mitutoyo Surfptest SJ410 with fixture & stand surface measurement machine (2013)
- Johnson Gage Centrax runout/concentricity inspection gage (2014)
- Hardness Testers Plating Thickness Tester Digital Micrometers & Calipers High Precision Dial Indicators with stands