

## Capabilities & Equipment

### Full Service Tool Room

(7) Bridgeport EZ-Trak SX mills  
 • 2D CNC / manual

Amada Meister V3 CNC surface and form grinder  
 • 6" x 18" table  
 • 2 axes plus table axis  
 • 10 wheel management system

(12) Surface grinders  
 • Maximum table size: 16" x 32"

Moore Model G18 jig grinder

Aquamaster Conveyorized Parts Cleaner CB-1200E  
 • 12 x 12" capacity

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(5) Drill presses • Maximum radial arm length: 4'

### Part Cleaning

Aquamaster Conveyorized Parts Cleaner CB-1200E  
 • 12 x 12" capacity

Crystal Clean Heated Aqueous Parts Cleaner  
 • 24 x 24 x 4.5" capacity

Apex 2052M-DSSDc Deburring Machine  
 • Max Part Width: 52"

### Wire EDM

(2) Agiecut Progress VP3  
 • Maximum Travel: 19.68" (X) x 13.77" (Y) x 16.77" (Z)  
 • Maximum Work piece: 41.3" x 26.6" x 16.77" high  
 • Achievable tolerance: < .0001"

(2) Agiecut Progress VP2  
 • Maximum Travel: 13.77" (X) x 9.84" (Y) x 10.87" (Z)  
 • Maximum Work piece: 29.52" x 21.65" x 9.84" high  
 • Achievable tolerance: < .0001"

Sodick K1C hole drilling EDM  
 • Hole diameter range: .012" - .120"

• All wire EDMs cut fully submersed and feature automatic threading  
 • EDM room is climate controlled

### CAD / CAM Software

Solidworks  
 LogoPress 3  
 AutoCAD with Diemaker  
 FASTFORM  
 DRBLANK  
 GibbsCAM  
 Esprit

### Fabrication

(2) Trumpf 5030 Fiber Lasers - TruFlow 5000 watt laser  
 • Max sheet 60" x 120"  
 • Auto loading/unloading for unattended operation  
 • cuts 3x faster than Co2 in materials under 3/8" thick

Trumpf TruPunch 1000 punching machine  
 • Maximum punching force: 20 tons  
 • Maximum punching rate: 600 SPM  
 • Maximum sheet size: .250" x 48" x 120"

Safan 300-4100, High speed electric brake press  
 • Press capacity: 330 tons x 161" length capacity  
 • Auto sheet thickness measuring and 6-axis back gauging

Trumpf TruBend 5085 CNC press brake  
 • Press capacity: 85 tons x 87" bending length

Bystronic, Xpert 40 high speed brake  
 • Press capacity: 44 tons x 40" bending length  
 • 3X faster working speed than other hydraulic brakes

Bystronic, Xact Smart 160 high speed brake  
 • Press capacity: 160 tons x 120" bending length

9 Welding Bays - 2 Robotic Weld Cells  
 • Miller: MillerMatic, Invision and Dynasty MIG & TIG Welders  
 • OTC: P400L, P500L MIG Welders  
 • OTC P500L Robotic Welder  
 • IPG LightWELD 2000XR Laser Welder  
 • Stud & Spot Welders

Americor Plate Roller - 5' x 10 ga capacity  
 Marvel 380 Automatic Saw  
 Timesaver deburring - 36" wide capacity  
 (2) Haeger HP-6 hardware insertion press Auto-feeder  
 Haeger 824 OneTouch-5e 2 Bowl Pem Machine  
 Assembly & Testing stations  
 Overhead crane capacity 5 tons  
 Forklift capacity 10,000 lbs.

## Capabilities & Equipment

### Metal Stamping

200 ton Komatsu OBW gap frame press\*

- Bolster: 33" x 95" - SPM: 0 to 50
- Maximum stock: 18" x .187" thick

175 ton Bliss SG2 straight side press\*

- Bolster: 30" x 84" - SPM: 30 to 60

100 ton Minster Piece-Maker straight side press\*

- Bolster: 31" x 48" - SPM: 0 to 120
- Maximum stock: 12" wide x .130" thick

100 ton Minster Piece-Maker straight side press\*

- Bolster: 31" x 60" SPM: 0 to 250
- Maximum stock: 14" wide x .240" thick

100 ton Bliss\*

80 ton Minster OBI press

75 ton Bliss C2 single stroke gap frame press\*

60 ton Minster with 2" stroke, up to 400 SPM\*

30 ton Bruderer BSTA30 press\*

Greenerd HPB-15 and HPB-25 Hydraulic Presses  
Multiple air presses ranging 6-12 tons

\*All presses include press automation, die protection and automatic coil feed line

### Quality Assurance

Keyence Image Dimension Measuring System IM-7030

SmartScope Flash 200 video measuring machine

- Measuring range: 8" x 8" x 6"
- Accuracy to < .0001" (3.2 microns)

Brown & Sharpe FX7107 Global automatic CMM

- Measuring range: 25" x 39" x 25"

Brown & Sharpe Micro Excel 765 CMM

- Measuring range: 30" x 26" x 20"

Virtek Laser QC 1200

- Measuring range: 8" x 48" x 48"

Romer Arm Model 7540

- Measuring range: 13.1 feet

Hexagon's Global FX 7107 CMM

Hexagon Shop Floor 343 CMM

(3) Optical Comparators

Trimos Linear Height Gage

Mitutoyo LH600 Computerized Linear Height Gage 24"

Imada ZTS-550 Digital Force Gauge

### CNC Machining

Kitamura HX400iG/500 CNC Horizontal 4-Axis machining center

- 400mm Pallet
- Travel 24" (X) x 24" (Y) x 24" (Z)

OKK HM500S CNC Horizontal 4-Axis Machining Center

- Travel: 24.8" (X) x 24.41" (Y) x 27.95" (Z)
- 500mm Pallet

(2) Robo Drill D21LiA5

- Travel: 27.5" (X) x 15.7" (Y) x 13.00" (Z)
- 24,000 RPM Spindle
- 21 tool magazine

Brother S1000X1

- Travel: 39.4" (X) x 19.685" (Y) x 11.8" (Z)
- 21 tool magazine

OKK VM5 CNC Vertical Machining Centers

- Travel: 40" (X) x 20" (Y) x 20" (Z)
- 20 tool magazine, 50 Taper

(2) Hurco Vertical Machining Centers

- Travel up to 64" (X) x 34" (Y) x 30" (Z)

Haas VF2YT

- Travel: 30" (X) x 20" (Y) x 20" (Z)
- 40 tool magazine

Haas VF-5SS

- Travel: 50" (X) x 26" (Y) x 25" (Z)
- 50+1 tool capacity
- TR210, 5 axis trunnion

Trak2op

- Travel: 14" (X) x 12" (Y) x 17" (Z)
- 8 tool capacity

### CNC Turning

Eurotech B438 Rapido Sub-Spindle lathe with live tooling

- Dual turrets with Y-axis travel
- 1.50" Bar capacity

Hyundai LM1800TTSY CNC lathe with 2.6" bar feeder

- Sub-spindle lathe with live tooling and Y-axis travel
- Maximum length: 26.5"

(4) Samsung CNC Lathes

- Up to 3.00" bar feeder
- Live tooling