

**CNC Equipment****Vertical Turning Centers**

(1) Doosan Puma V8300 Turning Center, 32.7" turning capacity, 50 H.P. gear driven

**Horizontal Turning Centers**

(1) Mori Seiki SL-25 Turning Center, chucker machine, 17" turning capacity

(2) Daewoo Puma P400 Turning Center, 28" turning capacity, 40 H.P. gear driven

(1) Daewoo Puma 350 Turning Center, 22" turning capacity, 40 H.P. gear driven

(1) Daewoo Puma 230P Live Tooling Lathe, mill/drill/turning center with sub-spindle, max. turn dia. 11.4" dia., space saver feed bar

(2) Romi M20 Turning Center, up to 20" swing, 60" between centers

(1) Hardinge T51 Conquest Turning Center, sub-spindle, hydro bar feed to 2 1/2" dia., turning capacity to 17" dia.

(1) Hardinge T42 Conquest Turning Center, sub-spindle, hydro bar feed to 1 5/8" dia., turning capacity to 8" dia.

(1) Doosan Puma 2500LSY Turning Center with milling and "Y" axis, 30 H.P. main spindle, 10 H.P. sub-spindle, 7.5 H.P. on rotating tools, full 360 rotation on Main & sub spindles, 3" bar capacity, 13" max turning diameter

**Vertical Machining Centers**

(2) Mori Seiki MV-40M Vertical Machining Center, 22" x 16.1" x 18.1" machining envelope

(1) Mori Seiki MV-65 Vertical Machining Center, pallet system, 60" x 25" x 25" machining envelope

(1) Doosan MV-4020 Vertical Machining Center, pallet system, 50 taper, 25 H.P, 8,000 RPM, 40.2"x 20.1" x 24.5" machining envelope

(1) Doosan MV 6030/50 Vertical Machining Center, pallet system, 50 taper, 30 H.P, 8,000 RPM, 60" x 20" x 24" machining envelope

(1) Doosan Mynx 6500/50 Vertical Machining Center, pallet system, 50 taper, 30 H.P, 8,000 RPM, 50" x 26" x 24" machining envelope

(1) Haas VF5SS Vertical Machining Center, 30 H.P, 12,000 RPM, indexer, 50" x 26" x 25" machining envelope

(8) Sharp Model QMV-1, CNC/conventional, ACCU-RITE controls, 30" x 15.2" x 4" machining envelope

**Horizontal Machining Centers**

(1) Daewoo Horizontal Machining Center, 400mm pallets, 10,000 RPM spindle, 20" x 21" x 21" machining envelope, 1 deg indexing, 30 H.P.

(1) Mori Seiki NH5000 Horizontal Machining Center, 14,000 RPM spindle, 20" pallets, 1 deg. indexing on rotary pallets, 25 H.P., 24.8" x 23.6" x 26.4" machining envelope

**Wire EDM**

(1) Sodick Model AQ750LH, 29.5" x 19.7" table travel, max thickness 24", 3330 lb max, tapering to 45 deg

(1) Fanuc Robocut C600iA, 23.6" x 15.7" table travel, max thickness 16", 3550 lb max, tapering to 45 deg

(1) Fanuc Robocut 1IC, 21.7" x 14.6" table travel, max thickness 12", 3550 lb max, tapering to 45 deg, MicroFinish power supply

(1) Fanuc Robocut 0IC, 12.6" x 8.7" table travel, max thickness 10", 1100 lb max, tapering to 45 deg

(1) Fanuc Model O, 7.8" x 9.8" table travel, max thickness 6.15", 220 lb max, tapering to 20 deg

**Conventional EDM**

(1) EZ Spark P50 with 50amp solid state power supply

**Laser**

(1) Raycus 1500W fiber laser, maximum sheet size 120" x 60"

# EQUIPMENT LIST



## **Manual Machining Equipment**

### Lathes

- (1) Clausing Colchester with digital readouts
- (1) Nardini ND 1760E with digital readouts
- (1) Dong Yang 20" x 60" with digital readouts
- (1) Summit 16" x 60" manual lathe

### Milling

- (10) Bridgeport type milling machines, digital readouts, automatic feeds

### Surface Grinders

- (1) Okamoto Model ACCUGAR-124N, 24" x 12", automatic
- (1) Okamoto Model 612/14 LINEAR, 14" x 6", automatic
- (4) Sharp Model SG618-2A, 18" x 6", automatic
- (1) Covel Model C, 12" x 6"

### Honing

- (1) Sunnen MBB-1600 JIC, maximum diameter

### Drill Press

- (1) DoALL Model D-50100R, 12" column x 36" radial drill press
- (1) Powermatic Model 1200, 4" column x 12"

### Power Saw

- (2) Amada HA-250, automatic horizontal cut off band saw, 10" capacity with bar feed
- (1) DoALL Model 26-3, vertical band saw
- (1) DoALL Model 3613-0, vertical band saw
- (1) Johnson Model J, horizontal band saw
- (1) Scotchman Model 350LT, cut off saw

### Boring Mill

- (1) LUCAS 3" Boring mill 24" x 40" table

## EQUIPMENT LIST



### Stamping Presses

- (1) Komatsu, 220 ton, 9.8" stroke, 35" x 57" bed
- (1) McKay/Warco, 200 ton, 6" stroke, 42" x 72" bed
- (1) Aida, 176 ton, 7.8" stroke, 30" x 80" bed
- (1) Aida, 125 ton, 7.1 stroke, 26" x 74" bed
- (1) Platarg, 100 ton, 9 station transfer press, 5" feed
- (1) Bliss, 60 ton, 5" stroke, 22" x 34" bed
- (1) Minster, 60 ton, 4" stroke, 21" x 32" bed
- (2) Clearing, 45 ton, 3" stroke, 18" x 30" bed
- (1) Niagara, 45 ton, 2.5" stroke, 24" x 42" bed
- (1) Minster, 45 ton, 3" stroke, 14" x 20" bed
- (1) Bliss, 45 ton, 4" stroke, 14" x 18" bed
- (1) Rouselle, 40 ton, 4" stroke, 16" x 26" bed
- (1) Brown & Boggs, 40 ton, 6" stroke, 16" x 28" bed
- (1) Neff, 12 ton, hydraulic, 11" x 14.5" bed
- (3) Denison, 5 ton, 3" stroke, 11" x 24" bed

***\*All presses equipped with Wintriss or equivalent controls and digital roll feeds. Extensive de-coiling, straightening and coil handling equipment***

### Fabricating Equipment

- |             |  |
|-------------|--|
| Press Brake | (1) Dener Puma x2 130-ton x 118" x 1/2" max, full CNC control of back gage and shut height |
| Shear       | (1) Gatti power shear 48" x 1/8"   |
| Spot Welder | (1) Taylor Winfield EBA3-8-50 spot welder  |
| TIG/MIG     | Yes  |
| ARC         | Yes  |
| Acetylene   | Yes  |

### Miscellaneous

- |                    |   |
|--------------------|---|
| Material handling  | Extensive equipment including cranes and lift trucks up to 5 ton    |
| Heat Treating      | (1) Cress Model C122012D7920, Double Heat Treat and Annealing Ovens |
| Parts Washer/Dryer | Stoelting, conveyor, feeds  |
| Thread Rollers     | (5) Thread rollers, max 4" diameter                                 |

### Measuring Equipment

- |                 |   |
|-----------------|---|
| CMM             | (1) Zeiss Contra G2, 40" x 64" x 22" work envelope, Zeiss ROS motorized probe head and BAD based Calypso software |
|                 | (1) Mitutoyo B504 with QC 5000 software   |
| Comparators     | (1) Starrett HE400  |
|                 | (1) Keyence IM 8000 series vision system  |
|                 | (1) Kodak Model 14-24 with digital readout  |
| Profilometer    | (1) Mitutoyo SJ-210P  |
| Height Gage     | (1) Fowler Trimos, 0"-24", digital  |
| Force Gage      | (1) Imada DS2110  |
| Hardness Tester | (1) Rockwell Hardness Tester  |

***\*Full range of micrometers, gage blocks, gage pins, thread gages, height gages, surface plates and other checking instruments***

### Engineering

- |     |  |
|-----|--|
| CAD | Solidworks Premium 2019 (primary), AutoCAD (secondary), LogoPress Die Design v2019 |
|-----|--|