

EQUIPMENT LIST



Engineering

CAD	9 Seats Mastercam Design, 1 Seat AutoCAD, 4 seats SolidWorks 2010
CAM	8 Seats Mastercam/Mill(4)/Lathe(2)/Wire(2)
Remote Programming	D.N.C. Interface System
Plotter	HP Designjet 110plus "D" size plotter

CNC Equipment

Horizontal Turning 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 Mori Seiki SL-25 Turning Center, chucker machine, 17" turning capacity
- 1 Daewoo Puma 350 Turning Center, 22" turning capacity, 40 H.P. gear driven
- 2 Daewoo Puma P400 Turning Center, 28" turning capacity, 40 H.P. gear driven
- 2 Romi M20 Turning Center, up to 20" swing, 60" between centers
- 1 Daewoo Puma 230P Live Tooling Lathe, mill/drill/turning center with sub-spindle, max. turn dia. main spindle 11.4" dia., space saver feed bar
- 1 Doosan Puma 2500 LSY 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

- 1 Mori Seiki MV-40M Vertical Machining Center, pallet system, built in indexer, 22" x 16.1" x 18.1" machining envelope
- 1 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 Maho MH600 EL Vertical/Horizontal Machining Center, 23.6" x 14.4" x 17.7" machining envelope
- 8 Sharp Model QMV-1, CNC/conventional, ACU-RITE controls, 30" x 15.2" table travel, 4" quill travel
- 1 Doosan MV 4020/50 Vertical Milling Center, 50 taper, 25 H.P., 8,000 RPM, 40.2"x 20.1" x 24.5" machining envelope, midaco pallet system
- 1 Doosan MV 6030/50 Vertical Milling Center, 50 taper, 30 H.P., 8,000 RPM, 60" x 20" x 24" machining envelope, midaco pallet system
- 1 Doosan Mynx 6500/50 Vertical Milling Center, 50 taper, 30 H.P., 8000 RPM, 50" x 26" x 24" machining envelope, midaco pallet system

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 rotory pallets, 25 H.P., 24.8" x 23.6" x 26.4" machining envelope

Wire EDM

- Sodick AQ 750 LH - X axis 25.93", Y axis 19.68", Z axis 24", Tank size 40.76" x 38.31", Max workpiece weight 3307 lbs, auto threading
- 2 Fanuc Model O, 7.8" x 9.8" table travel, max thickness 5.9", 220 lb max. workpiece weight, complete independent 4-axis control, tapering to +/- 20 deg.
- 1 Hitachi Model H-cut 203, 12.5" x 9.8" table travel, max. thickness 6.3", 440 lb max. workpiece weight, complete independent 4-axis control, tapering to +/-20 deg.
- 1 Fanuc Robocut 11C, 21.7" x 14.6" table travel, max. thickness 12", 3550 lb max. workpiece weight, 45 deg. max. taper, 31" max. cutting speed, auto threading
- 1 Fanuc Robocut 01C, 12.6" x 8.7" table travel, max thickness 10", 1100 lb max. workpiece weight, 45 deg. max. taper, 31" max. cutting speed, auto threading

Laser

- 1 Photon Versa-Lase V500 CO2, 24" x 24" x 1/8"

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Manual Machines

Lathes

Clausing Colchester with Digital Readouts
Nardini ND 1760E with Digital Readouts
Dong Yang 20"x60 with Digital Readouts
Ta-shing manual Lathe
Summit 16" x 60" manual lathe

Milling Machines

1 Fil Model FU-120, horizontal/vertical milling machine, 10" x 24" x 24", readouts, automatic
10 Bridgeport type milling machines, readouts, automatic feed

Surface Grinders

1 Chevalier Model FSG-1628AD, 28" x 16", automatic
1 Okomoto Model ACCUGAR-124N, 24" x 12", automatic
1 Okomoto Model 6 12/14 LINEAR, 14" x 6"
1 Clausing Model 4020, 22" x 15", hydraulic
2 Sharp Model 618, 18" x 6"
1 Kent Model KGS-200
1 Covel, 12" x 6"
2 Sharp Model SG618-2A, 18" x 6", automatic

Cylindrical Grinders

1 Karstens, up to 8" dia. x 10" long

Rotary Grinders

1 Blanchard Model 11, 18" x 18"

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

EDM Conventional

1 Ingersoll Model 200B with 30 amp solid state power supply
1 EZ Spark P50

Boring Mill

LUCAS 3" Boring mill 24" x 40" table

EQUIPMENT LIST



Stamping Presses

1 Komatsu, 220 ton, 9.8" stroke, 35" x 57" bed	1 Niagara, 45 ton, 2.5" stroke, 24" x 42" bed
1 McKay/Warco, 200 ton, 6" stroke, 42" x 72" bed	1 Minster, 45 ton, 3" stroke, 14" x 20" bed
1 Aida, 176 ton, 7.8" stroke, 30" x 80" bed	1 Bliss, 45 ton, 4" stroke, 14" x 18" bed
1 Aida, 125 ton, 7.1 stroke, 26" x 74" bed	1 Rouselle, 40 ton, 4" stroke, 16" x 26" bed
1 Rouselle, 110 ton, 8" stroke, 24" x 39" bed	1 Brown & Boggs, 40 ton, 6" stroke, 16" x 28" bed
1 Bliss, 60 ton, 5" stroke, 22" x 34" bed	3 Denison, 5 ton, 3" stroke, up to 11" x 24" bed
1 Rouselle, 60 ton, 4" stroke, 14" x 65" bed	1 Neff, 12 ton, hydraulic, 11" x 14.5" bed
1 Minster, 60 ton, 4" stroke, 21" x 32" bed	1 Platarg, 100 ton, transfer, 9 station, 5" feed
2 Clearing, 45 ton, 3" stroke, 18" x 30" bed	

Special Note 1: All presses equipped with Wintress or equivalent "state of the art" controls. 2: Most presses are equipped with Digital Roll Feeds. 3: Extensive Decoiling, straightening and coil handling equipment

Fabricating Equipment

Press Brake	1-Amada 80Ton x 101" x 3/16" max at full length, full CNC control of back gage and shut height
Spot Welder	1-Taylor Winfield EBA3-8-50 spot welder
TIG/MIG	Both
ARC	Yes
Acetylene	Yes
Shear	1-Gatti Power Shear 48" X 1/8"

Measuring Equipment

Comparators	1 Gage Master Series 20 GM4 1 J&L Model PC14, 10X, 20X & 50X magnification 1 Kodak Model 14-24 with digital readout
Profilometer	1-Mitutoyo SJ-201P
Height Gage	Fowler Trimos, 0"-24", digital
Coordinate Measuring Machines	1-Mitutoyo B504 with QC 5000 software 1-Zeiss Contra G2 with 40" x 64" x 22" work envelope, Zeiss ROS motorized probe head and BAD based Calypso software.
Microscope	1-Titan Toolmakers Microscope
Hardness Tester	1-Rockwell Hardness Tester

Special Note: Full range of micrometers, gage blocks, gage pins, thread gages, height gages, surface plates and other checking instruments

Miscellaneous

Heat Treating	1 Cress Model C122012D7920, Double Heat Treat and Annealing Ovens
Honing	1-Sunnen MBB-1600 JIC Honing Machine with Substantial Tooling
Parts Washer/Dryer	Stoelting, conveyor feed
Thread Rollers	5 Thread rollers - up to 4" dia.
Custom Gluing Machine	Special for Breathing Canisters
Double 1/2 ton Crane System	
Single 1/2 ton Crane System	
(3) 1 ton Floor Mounted Jib Cranes	
(1) 1/2 ton Floor Mounted Jib Crane	
(1) 1/4 ton Floor Mounted Jib Crane	
One Ton Gantry Crane	
Flanders "Air Seal Fume Collector	
Worcester #0 Drill Grinder	
Pedestal Grinders	
Porter Cable Wet/Dry Belt Sander Type B68	
(3) Atlas Copco GA 18 Rotary Screw Compressors/ with Dryers	
(5) lift Trucks to 5500 lbs	
Caterpillar 226 B Bob-Cat	
Trion Dust Collector- Grinding Room	