



DESIGN AND INSPECTION

DESIGN EQUIPMENT

- 5 - Seats of Pro Engineer - Creo with Mold Design– Solid Modeling CAD Software
- 1 - Seat of SolidWorks- 2017 – Solid Modeling CAD Software
- 5 - Seats of Visi Version 21 – CAD/CAM System
- 4 - Seats of Master Cam-X– CAD/CAM System
- 1 - Hewlett-Packard DesignJet 500 Plotter
- 1 - Ricoh Engineering Copier

INSPECTION EQUIPMENT

- 1 - “Titan” Stereo Microscope with Fiberoptic Lighting
- 3 - “AEI” North American 10x to 20x Stereo Microscopes with Polarizing Lens and Fiberoptic Lighting
- 1 - “MITUTOYO” Toolmakers Microscope with Digital Head
- 1 - Rockwell Hardness Tester and a Traditional Assortment of Annually Certified Gage Blocks, Granite Surface Plates, Sine Bars, Etc.
- 1 - TF-510 "MITUTOYO" Toolmakers Microscope with Quadracheck 2000 Geometric Microprocessor/Digital Readout and 12" Sony High Resolution Monitor-“ MITUTOYO" MU-Checker Electronic Indicator
- 1 - "MITUTOYO" Digital Drop Indicator (with 2" Travel.
- 1 - Optical Comparator “Legacy” Epic 230A

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Complicated Molds Made Easy

MANUFACTURING EQUIPMENT

ELECTRICAL DISCHARGE EQUIPMENT

- 1 - "FANUC" Model 11A Wire E.D.M. with Auto Threader (Wire Diameter .004" – .012"); Travel Limits X=15.0" Y=11.0" Z=11.8" and U&V Axes Travel +/- 2.364; Feed rate 0-590 IPM
- 1 - "Fanuc" Model C600-12 Wire E.D.M with Auto Threader. axis travel X=23.6" Y=15.75" Z=12"; U&V AXES Travel 7.874" Wire Diameter .004" - .012"
- 1 - "DRILL MATE" E.D.M. Drill .015 Diameter to .060 Diameter, Travel Limits – X=13.75" Y=10.4" Z=9.5"
- 1 - "CHARMILLES"-ROBOFORM 22 C.N.C. E.D.M. With Programmable Movement and Cutting Ability in the X-Y-Z Axis (Which Has 20 Second Incremental Rotation); Travel Limits - X=11.8" Y=9.8" Z=9.8"; Tank Size 7.1" X 25.2" X 17.7" with 3R 16 Position Macro Tool Changer
- 1 - "CHARMILLES"-Roboform 2400 Ram E.D.M. with Programmable Movement, Cutting Ability in the X-Y-Z Axis Travel Limits – X=12.59" Y=8.66" Z=12.59"
- 1 - "CHARMILLES"-Roboform 350 Ram E.D.M. with Programmable Movement Travel Limits – X=12.59" Y=8.66" Z=12.59"
- 1 - 3R Workmaster II Robot connected to both Roboform 2400 & Roboform 350; 12 Pallet and 128 Electrode Capacity

GRINDING EQUIPMENT

- 1 - "HARIG" 6.0" x 12.0" Surface Grinders with .0001 Resolution Glass Scale Digital Readouts on the Cross Feeds
- 6 - "HARIG" 6.0" x 18.0" Surface Grinders with .0001 Resolution Heidenhain Glass Scale Digital Readout on the Cross Feed and Down Feed
- 4 - "MITSUI" MSG200MH 6.0 X 12.0 Surface Grinders with Glass Scale Readouts on Cross and Down feed
- 1 - "OKAMOTO" 20x60 ACC Auto Feed / Programable Wet Grinder
- 1 - WELDON MODEL 1632 CNC ID/OD Grinder-with C-Axis Out- of-Round Grinding and In-Process Gauging

MILLING EQUIPMENT

- 1 - "MORI SEIKI" SVD 503, High Speed Machining (Graphite) with 20,000 RPM Spindle, 30 Position Tool Changer, Renishaw Probing and Tool Pickup; Travels X=31.5" Y=20.1" Z=20.1"
- 1 - "3R" Workmaster II Dual Machine Feeding the Mori Seiki SVD 503 - with a Rotary Magazine and a Capacity of 200 Electrodes / 40 Tools.
- 1 - "MORI SEIKI" SV500 High Speed, Super Precision Machining Center with 6,000/25 HP Spindle, 30 Position 50 Taper Tool Changer (Tool-to-Tool Change Speed of 1 Second), Rapid Feed "1,260 IPM", Cutting Feed "630 IPM", 2,000 PSI Chip Blaster; Travels X=40.2" Y=20.1" Z=20.1
- 1 - "MORI SEIKI" MV-653/50, Machining Center with 6,000 RPM Spindle, 30 Position 50 Taper Tool Changer, Rapid Feed "945 IPM", Cutting Feed "393 IPM", 2,000 PSI Chip Blaster; Travels X=60.2" Y=26.0" Z=25.6"
- 1 - "BRIDGEPORT" Milling Machines- 13.0" x 36.0" Table Travel, with Glass Scale Digital Readouts
- 1 - MIKRON HSM 500 MOLDMASTER– 36 POSITION TOOL HOLDER
Travel Limits – X=19.685" Y=17.73" Z=13.79"
- 1 - "DMG Mori Seki" NMV3000DCG – 5 axis mill with AWC 34 pallet system; Travel X=19.7" Y=13.8" Z=20.1" ; B Axis +160 degrees / -180; C Axis 360 degrees; maximum work piece swing 13.7" diameter; Maximum Work piece height is 11.9"; 61 Tool Capacity; 32 Part Capacity

TURNING EQUIPMENT

- 1 - "MORI SEIKI" CNC Lathe SL-204, 4500RPM, 15 HP, 9" Turning Diameter
- 1 - "MORI SEIKI" CNC Lathe NL2500, 12" Turning Diameter, Live Tooling
- 1 - "Haas" ST- 30SSY Haas CNC Lathe with Y Axis; 16" x 23" (406 x 584 mm) max capacity, 31.75" (806 mm) swing, ± 2.00 " (± 50.8 mm) Y-axis travel, 30 hp (22.4 kw) vector drive, 4500 rpm, A2-6 spindle, 10" (254 mm) chuck, ± 24 -station hybrid turret (12 VDI/12 BOT), high-torque live tooling w/C axis
- 1 - "HAAS" CNC TOOLROOM LATHE; 16" X 30" (406 X 762 MM) MAX CAPACITY, 20" (508 MM) SWING, 12 HP (8.9 KW) VECTOR DRIVE, 200 RPM, A2-6 SPINDLE, INTUITIVE PROGRAMMING SYSTEM.

SAWING EQUIPMENT

- 1 - "DoALL" Tilt-Cut Vertical Band Saw with 1.0" Blade and 14" x 21" Capacity
- 1 - "ROLL-IN" Vertical Band Saw
- 1 - "DoALL" 330NC Horizontal Band Saw

MISCELLANEOUS SUPPORT EQUIPMENT

- 1 - "DoALL" 5' Radial Arm Drill Press
- 1 - "WESTHOFF" Sensitive Horizontal Drill Press (for graphite)
- 1 - "APEX" 16" Pedestal Disk Sander
- 1 - "HAMMOND" Pedestal Grinder
- 1 - "Trinco" SandBlast Cabinet Model 36/BP2
- 1 - "DAKE" 75 Ton Hydraulic Press
- 1 - 5 Ton P&H Overhead Bridge Crane
- 10 - Die Carts - 1/2 Ton - 1/2 Ton - 1 Ton - 2 Ton
- 1 - "Kaiser" Air Compressor SFC-15 – 15 HP
- 1 - "GARDNER-DENVER" Air Compressor - 15 H.P. (as a backup)
- A traditional assortment of parts washers, electro-acid etch labeler, etc.

FULLY EQUIPPED POLISHING ROOM

With D.M.E. ultra-sonic polishing tools, die profilers, mini-belt sanders, rotary hand tools, Schauer Speed Lathe, etc., capable of achieving a SPI/A-1/#1 Finish.

PRECISION GRINDING ACCESSORIES

- 2 - "DED-TRU" Centerless Grinder
- 1 - "VARI-PITCH" Thread Grinder
- 2 - "Brown & Sharpe" High Speed Head
- 3 - " Newbould " Indexing Fixture
- 1 - " Newbould" Angle Dresser
- 2 - "Harig" Grind All #1 Spin Fixtures
- 1 - "Harig" Grind All #2 Spin Fixture
- 2 - Indexing and Center Attachments
- 1 - 1:1 Form Tracer Wheel Dresser
- 5 - Magnifying Radius Type Dressers
- 2 - "Newbould" Flat Spin Jigs
- 1 - 10:1 Diaform Wheel Forming Attachment
- 1 - Boyar Schultz high speed head

MILLING ACCESSORIES

- 1 - U.V.T." - Heavy Duty Hinge Lock Angle Plate
- 1 - Deckel Cutter Grinder