**Equipment List**

**HORIZONTAL MILLING MACHINES**

1 - HS-4 CNC Horizontal Mill  
(3) Axis Programmable  
50 Taper Spindle 5000 RPM  
Table Size 40” x 146”  
38 Tool Changer  
Table Load Capacity 25,000 lbs.  
Glass Scales - X 150” – Y 66” Travel

1 - Olympia Horizontal CNC Boring Mill  
(4) Axis Programmable  
50 Taper Spindle 3000 RPM  
Table size 48” x 100”  
Table Load Capacity 33,000 lbs.  
Glass Scales - X 102” – Y 79” Travel

1 - EC-1600 Horizontal CNC Mill  
(3) Axis Programmable  
50 Taper Spindle 6000 RPM  
40 Tool Changer  
Table Load Capacity 10,000 lbs.  
Glass Scales - X 60” – Y 42” Travel

2 - EC-1600 Horizontal CNC Mill  
(4) Axis Programmable with Rotary Table  
50 Taper Spindle 6000 RPM  
40 Tool Changer  
Table Load Capacity 10,000 lbs.  
Glass Scales - X 60” – Y 42” Travel

1 - Kitamura Mycenter HX400iG - NEW 2020  
CNC Horizontal Machining Center  
(4) Axis Programmable  
Dual Pallet 15.75” x 15.75”  
150 Tool Changer  
15,000 RPM  
1,000 P.S.I. programmable coolant  
X 24” x Y 24” x Z 24” Travel

1 - Devlieg CNC Boring Mill  
(2) Axis Programmable  
50 Taper Spindle 1800 RPM  
Glass Scales - X 60” – Y 40” Travel

1 - Haas HS-IRP CNC  
(4) Axis Horizontal Mill  
Dual 16” x 16” Pallet  
24 Tool Changer  
X 60” – Y 30” Travel

1 - Haas-EC-400 CNC  
6 Pallet Pool  
Dual 20” x 20” Pallet  
70 Tool Changer  
X 20” - Y 20” Travel  
Probing Capability

1 - Tarus MBX 92-150 CNC Gun Drilling Machine  
w/ Second Spindle for Milling, Drilling & Tapping  
Min. Drilling Size: .1875” dia.  
Max. Drilling Size: 2.5” dia. Drilling Depth: 90”  
Table Size: 60” x 72”  
42” Magnetic Programmable Rotary Table  
Fully Enclosed
# Equipment List

## VERTICAL MILLING MACHINES

<table>
<thead>
<tr>
<th>Model/Make</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiron/Stama MC 331 Twin CNC</td>
<td>1</td>
<td>High Speed Vertical Machining Center Twin Spindle</td>
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<tr>
<td></td>
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<td>Dual 4th Axis Trunion Assemblies</td>
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<td>.9 Second Tool Change/42 Tools</td>
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<td>.75 G Acceleration</td>
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<td>X 31” – Y 15” Travel</td>
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<td>Chiron FZ12W CNC</td>
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<td>High Speed Vertical Machining Center</td>
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<td>X 21” – Y 15” Travel</td>
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<td>X 12” – Y 10” Travel</td>
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<td>Brother R650X1 CNC</td>
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<td>X 25.5” - Y 15.75” Travel</td>
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<td>X 19.88” - Y 19.88 Travel</td>
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<td>50 Taper</td>
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<td>4th, 5th Nikken Trunion assembly</td>
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<td>High Pressure Coolant (1000 psi)</td>
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<td>NTC CNC Machining Center</td>
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<td>Model CMC-300v</td>
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<td>16 Tool Changer</td>
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<td>X 20” – Y 12” Travel</td>
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<td>Haas MDC-500 CNC</td>
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<td>Dual Workpiece Changer</td>
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<td>X 24” - Y 16” Travel</td>
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<td>Probing Capability</td>
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<tr>
<td>LPM CNC Vertical Milling Machine</td>
<td>1</td>
<td>Prototrak VMX - 3 Axis Glass Scales</td>
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<td>X 31” – Y 18.5” Travel</td>
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<td>Haas UMC 750 CNC</td>
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<td>5 Axis Vertical Machining Center</td>
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<td>40+1 Tool Changer</td>
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<td>Quick Change Fixturing</td>
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<td>X 30” – Y 22” Travel</td>
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<td>Probing Capability</td>
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</tbody>
</table>
1 - Trak DPM5V Milling Machine
   Prototrac VM-CNC
   (3) Axis Controlled
   Glass Scales
   X 40” – Y 20” Travel

1 - Trak DPM5 Milling Machine
   Prototrac SM – CNC
   (3) Axis Controlled
   Glass Scales
   X 40” – Y 20” Travel

7 - Trak FHM7 Milling Machine
   Prototrac VM – CNC
   (3) Axis Controlled
   Glass Scales
   X 60” – Y 20” Travel

2 - Haas VF-4 CNC
   (3) Axis Vertical Machining Center
   4th Axis Rotary Indexer
   20 Tool Changer
   X 50" - Y 20" Travel

1 - Haas VF-3 CNC
   Super Speed Model
   (3) Axis Vertical Machining Center
   4th Axis Rotary Indexer
   20 Tool Changer
   X 50" - Y 20" Travel

2 - Alliant Heavy Duty Milling Machine
   48” Tables with Heavy Duty Head
   X 30” – Y 12” Travel

2 - Fadal 6030 CNC
   (3) Axis Vertical Machining Center
   4th Axis Rotary
   21 Tool Changer
   X 60” – Y 30” Travel
2 - Mori-Seiki Frontier II - CNC Lathe  
With MSC-521 Control  
16” Diameter Capacity X 16” Max. Length

1 - Mori-Seiki SL-15 - CNC Lathe  
10” Diameter Capacity X 20” Max. Length

1 - Okuma -L470 Captain - CNC Lathe  
16.50” Diameter Capacity X 49” Max. Length

2 - Okuma Simulturn LC40 - CNC Lathe  
Heavy Duty Twin Turret – 4th Axis  
12 Tools Upper Turret–8 Tools Lower Turret  
18” Diameter Capacity X 30” Max. Length

1 - Okuma Simulturn LC40 - CNC Lathe  
Heavy Duty Twin Turret – 4th Axis  
12 Tools Upper Turret–8 Tools Lower Turret  
18” Diameter Capacity X 30” Max. Length  
**Completely Re-built by Infinity Rebuild**  
(Okuma Authorized Rebuilder)

1 - Okuma Cadet LNC-8 - CNC Lathe  
10.24” Diameter Capacity  
X 23.23” Max Length

2 - Trak TRL 24605X - CNC Lathe  
Prototrak SX CNC Controller  
24” Diameter Capacity X 60” Max Length

2 - Trak TRL1840CSS - CNC Lathe  
(1) Prototrak LX3 Controller  
(1) Prototrak Controller  
18” Diameter Capacity X 40” Max. Length

2 – Okuma & Howa 2SP-25HG - CNC Lathe  
Twin Spindles  
Gantry Robot load/unload  
13.78” Diameter Capacity X 7.87” Max. Length  
Rebuilt 2019

1 - Toshiba TUE 150 - CNC Vertical Turning Lathe  
Table Diameter 57”  
Maximum Swing 78.7”  
Maximum Cutting Height 72.8”  
Maximum Load On Table 17,600 LBS  
Automatic Tool Changer  
12 Tool Changer

5 - Doosan Puma GT2100 - CNC Lathe  
15.35 Diameter Capacity  
X 22.12 Max Length  
12 Tool Changer  
Auto Door - Robot Ready

2 - Doosan Puma GT2100 - CNC Lathe  
15.35 Diameter Capacity  
X 22.12 Max Length  
12 Tool Changer  
Setup with Universal Robot Tending 2 lathes

1 - Webster-Bennet VTL  
Manual with Readouts  
72” Diameter

4 - Haas ST - 30 - CNC Lathe  
40 HP  
21” Diameter Capacity X 31.75” Max. Length

1 - Haas SL40 - CNC Lathe  
10 Tool Changer  
40” Diameter Capacity X 47” Max. Length

1 - Haas DS30SSY - CNC Mill/Turn  
Dual Spindle Hand Off Chuck  
Live Milling  
16” Diameter Capacity  
23” Max Length

1 - Sharpe #2680C - Lathe  
With .0005 (2) Axis Digital Readouts  
26” Diameter Capacity X 80” Max. Length  
35” Diameter Capacity in Gap X 12” Max. Length
### GRINDERS

3 - Okamoto Linear Surface Grinder
   Model 618B
   18” Magna-Lock Vari-Mag Chuck

1 - Okamoto 12” x 14” Surface Grinder
   Model PFG-612
   Magna-Lock Vari-Mag Chuck

1 - Jones & Shipman Model 1310
   I.D. - O.D. Grinder
   8” O.D. x 18” Length

1 - Parker Majestic O.D. Grinder
   12” O.D. x 24” Length

1 - Shigiya Type G-30B
   I.D.-O.D. Grinder (Hydraulic)
   12” O.D. x 28” Length

1 - Landis H819 O.D. Grinder
   Marposs Auto Sizer
   3” x 20” Wheel with Autodresser

1 - Blohm Simplex #5 Hydraulic Surface Grinder
   Vari-Mag Chuck Rebuilt with PLC Controller
   12” x 30” Capacity

1 - Chevalier Model FSG 1640AD
   Hydraulic Surface Grinder
   Vari-Mag Chuck
   16” x 40” Capacity

2 - Chevalier 6” x 18” Surface Grinder
   Walker Magnetic Chuck

1 - 84” Blanchard Rotary Surface Grinder
   Model 42-72-84
   Veri-mag Chuck
   84” Chuck Diameter
   86” Grinding Diameter
   42” Wheel Diameter
   24” Height Under Wheel
   Polytech Conveyor System With Tank

1 - Model 20 Blanchard Grinder
   36” Grinding Diameter
   Vari-Mag Chuck

1 - DED-Tru Centerless Grinding Machine
   Feed Through and End Feed Capabilities

### JIG GRINDERS

1 - G32 Moore Jig Grinder
   Bridge Style
   X 32” - Y 20”
   .00005 Digital Readouts

3 - Model 3 Moore Jig Grinder
   .00005 Digital Readouts
### Equipment List

**SAWS**

1 - HYD-Mech H-14A CNC Saw  
   Bundling Capability

1 - HYD-Mech H12 Automatic Cut-Off Saw  
   Model #H12-A  
   Bundling Capability

1 - Wilton Model 8020  
   Heavy Duty Vertical Band Saw  
   with Blade Welder

2 - Roll - In Band Saw

4 - Wilton Model 4200 Belt  
   And Disc Finishing Machine

1 - Jet Cold Saw Model JCS-3150  
   Ferrous or Non-Ferrous Material  
   12” Capacity

**BROACHING EQUIPMENT**

1 - Lapointe Horizontal Key Broach  
   30 Ton with 48” Travel

1 - Colonial Broach  
   Horizontal Spline Broach  
   20 Ton with 72” Travel

1 - Detroit Vertical Broach  
   3 Pull Heads  
   40 Ton with 72” Travel  
   Contained within a 15’ x 15’ x 10’ Concrete Pit

1 - American Horizontal Broach  
   20 Ton with 48” Travel

**WELDING EQUIPMENT**

2 - Miller Deltaweld 452 MIG Welder

1 - Miller Model 330 A/BP 1987 AC AD  
   Heli Arc Welding Machine  
   Steel & Aluminum Capable

1 - Model Millermatic #200 Wire Feed Welder  
   Steel or Aluminum

1 - Hobart Aluminum Wire Feed Welding Gun

1 - Model Miller CP-200 Wire Welder

2 - Model Miller Syncrowave 351 Welder

1 - Koike Aronson 1N (Full CNC Controlled)  
   1K – 1500G Coordinate Drive  
   Flame Shape Cutting Machine  
   Cutting Range 60” x 118” with Water Table  
   Off-line PC for programming

1 - Plasma Torch  
   Thermal Dynamics – Pak Master 100XL

4 - Complete Gas Welding Sets

1 - 4’ x 4’ Jig Table for Weldments

1 - 4’ x 12’ Jig Table  
   Cast Iron for Construction of Large Weldments  
   Complete with Bolt-On Clamping Capabilities

1 - Atlas Pipe Mate Duel Speed

2 - MBC BP-2 Welding Positioner/200 lb. Capacity

2 - Ace Smoke Eaters Model 73-601

1 - Ace Smoke Eater Model 73-200
Equipment List

INSPECTION EQUIPMENT

2 - Zeiss (Contura G2) CMM
  VAST XT Scanning Head
  12 Probe Change Rack
  Fully Programmable
  X 39” - Y 47” and X 39” - Y 63”
  Calypso Software

1 - Zeiss (Contura) CMM - NEW 2020
  VAST XTR Gold Probe Head
  5 Probe Change Rack
  Fully Programmable
  X 39” - Y 63”
  Calypso Software

1 - Zeiss (Spectrum) CMM
  6 Probe Change Rack
  Fully Programmable
  X 38” – Y 64”
  Calypso Software

1 - Zeiss (Eclipse) CMM
  5 Probe change rack
  Fully Programmable
  X 27” – Y 27”
  Calypso Software

1 - Brown & Sharpe Global CMM 555
  Renishaw PH10 T Motorized Probe Head
  Renishaw TP20 Touch Trigger Probe
  Calypso Software

1 - Brown & Sharpe Model 2000 CMM
  With Renishaw Multi-Position Tip Probe

1 - Fowler Trimos V Plus Electronic Height Gage
  (1) 24” (1) 40”

2 - Starrett Optical Comparator Model HB 400
  With Quardra Chek 2000 Display – 10x
  Magnification

2 - Mahr Perthometer XC20 & XC200
  Fully Programmable to check radii and angles
  High Precision

1 - Scherr Tumic Comparator
  (2) Axis
  Powered Protractor Ring w/ Readouts
  10x & 20x Magnification

  21 - 115x Magnification

1 - Faro Prime Articulating Arm
  8 Ft. Portable CMM
  Faro CAM2 Measuring Software

2 - Vision Engineering - Mantis Viewing System
  2x, 4x, 6x, 8x Magnification

1 - Vision Engineering - Mantis Elite
  Stereo Microscope Visual Inspection System
  2X-20X magnification

2 - Mitutoyo Tool Makers Microscopes
  Fiber Optics Light

5 - Mitutoyo Height Masters 12” with Extension Bases

1 - Mitutoyo Height Masters 24” with Extension Bases

7 - Mitutoyo Height Gages 18”

2 - Hawkeye Precision Borescope with One (1)
  Aqua Snake, Eye Video Camera

15 - 81 Piece A.A. Jansson/ Inspection Grade Jo-Blocks

3 - Brown & Sharpe Model 600
  Micro-Hite Gage with Printout

1 - Brown & Sharpe Model 900
  Micro-Hite Gage with Printout
Equipment List

**INSPECTION EQUIPMENT CONTINUED**

2 - Mitutoyo 211 Surf Test Surface Finish Analyzer
2 - Mitutoyo SJ-201 Surf Test Surface Finish Analyzer
1 - Wilson Rockwell Hardness Testers
1 - Starrett Rockwell Hardness Tester

2 - 48” x 72” Granite Surface Plates
3 – 48” x 72” Starret Crystal Pink Surface Plate
1 - 36” x 48” Starret Pink Surface Plates/ Inspection Grade
9 - 24” x 36” Granite Surface Plates/Inspection Grade
11 - 18” x 24” Granite Surface Plates/Inspection Grade

**ADDITIONAL EQUIPMENT**

1 - Stratasys Dimension 1200es 3D Printer
   ABSplus production-grade thermoplastic material
   10”W x 10”D x 12”H Build Envelope
   .010” or .013” layer thickness

1 - QIDI X-Max Desktop 3D Printer
   Prints: PLA, ABS, TPU, PETG, Nylon, PC, and Carbon Fiber
   11.8” x 9.8” x 11.8” Build Size
   100-500 Micron Layer Height
   New 2019

1 - Telesis ProStation laser workstation
   FQ-10 CDRH class I fiber
   full enclosure and filtration system

1 - Mitsubishi MV2400-S Wire EDM
   X 23.6” - Y 15.7” - Z 16.7”

1 - Mitsubishi MV1200-R Wire EDM
   X 15.7” - Y 11.8” - Z 8.7”
   New 2019

1 - Mitsubishi High Speed Small-Hole EDM Drill
   Model ED - 2000MR
   X 11.8” - Y 7.8” - Z 7.8”

1 - Eldorado Deep Hole Drilling Machine
   High Pressure Oil – 2000 PSI
   3/4” Diameter. x 48” long Knee Type
   Digital Readout On All 3 Axis

1 - Surftran – ThermoDeburr System
   C-250 Thermal Energy Machine
   6 / 6” Station Thermal Combustion Chamber

1 - Mobile Fixture Test Stand
   Programmable Hydraulics
   Custom Designed & Built

2 - Stationary Fixture Test Stand
   Programmable Hydraulics
   Custom Designed & Built

1 - 7 Tank Hot Black Oxide System
   Fully Ventilated and Insulated Tanks
   36” X 36” X 36”
   Dedicated Overhead Crane

1 – Zetalase Vereo Laser Marking System
   Fiber Solid State and Full Enclosure

1 - Hey No. 3 Facing and Centering Machine
   Maximum Diameter 6.25” X 46”
   Minimum Diameter 0.25” X 3”
   Adjustable Walking Beam Conveyor
   for Automatic Load/Unload

1 - 8 Tank Fully Ventilated Clear Anodize System
   24” x 24” x 24” Tanks
   Temperature Controlled
   Installed in 2019
ADDITIONAL EQUIPMENT CONTINUED

4 - Kaeser BSD50 Air Compressor
   50 HP Rotary Screw / Air Dryer

2 - Hydrovane Rotary Air Compressor
   50 Horsepower / Air Dryer

1 - Comp Air Rotary Air Compressor
   25 Horsepower / Air Dryer

1 - Cress Electric Heat Treat Furnace C122012
   Separate Draw Furnace

3 - CAT 5000 lb. Lift Truck

1 - Yale 5000 lb. Lift Truck

1 – Toyota 5000 lb. Lift Truck

1 - Mitsubishi Model #XT-AS
   1000 lb Battery Operated Lift Truck

1 - Wesco Broach Lift 1000 lbs. Capacity

2 - Cuda Hot Water Parts Washer
   With Rotary Table

1 - Sunnen Model MBB 1690
   Power Stroker Hone
   Complete Gaging and Accessories

1 - Vapor Honing Technologies Vapor Hone 3000
   Internal part rinse gun
   3 stage filtration system
   Internal workspace 50”W x 30”D x 35”H

8 - 3000 CFM Smoke Eaters
   Dayton 1995 Model

2 - Yuasa 12” Diameter Rotary Tables for Mills

1 - Troyke Model P-25
   25” Precision Power Operated Rotary Table
   For Boring Mills

3 - Darex Drill Sharpeners Model #SP 2500
   1” Diameter Capacity

1 - Cast Iron 4’ x 8’ Keyed Precision
   Work Table, Ground Flat & Parallel

2 - Super Spacers With Index Plates

5 - Sets Devlieg Angle Plates

2 - Twister Speed Model #LT-1B Lapping Machine

1 - Hydraulics Inc. – Arbor Press 5 Ton Press

1 - Heavy Duty Cutter Grinder

1 - Excello Precision Center Lap 54” Capacity

8 - Pallet Jacks 1500 Pounds

18 - Pedestal Floor Grinders

Rotary tables--dividing head--Hartford Super Spacer--Last Word Radius Dressers--High speed attachment for surface grinder--whirligigs--tapping heads--Harding Index Unit--etchers--demagnetizers--vises, lapping plates, etc.