

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 - 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

- 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

Equipment List

VERTICAL MILLING MACHINES

- 1 - Chiron/Stama MC 331 Twin CNC
High Speed Vertical Machining Center
Twin Spindle
Dual 4th Axis Trunion Assemblies
Dual Workpiece Changer
.9 Second Tool Change/42 Tools
.75 G Acceleration
X 31" – Y 15" Travel
- 2 - Chiron FZ12W CNC
High Speed Vertical Machining Center
Dual 4th Axis Trunion Assemblies
Dual Workpiece Changer
1.1 Second Tool Change/20 Tools
.5 G Acceleration
X 21" – Y 12" Travel
- 1 - Chiron DZ12K IWW CNC
High Speed Vertical Machining Center
Twin Spindle
Dual 4th Axis Trunion Assemblies
Dual Workpiece Changer
.9 Second Tool Change/64 Tools
1.5 G Acceleration
X 22" – Y 13" Travel
- 1 - Chiron FZ15W CNC
High Speed Vertical Machining Center
Dual 4th Axis Trunion Assemblies
Dual Workpiece Changer
.9 Second Tool Change/20 Tools
.75 G Acceleration
X 21" – Y 15" Travel
- 2 - Chiron FZ08W CNC
High Speed Vertical Machining Center
4th Axis Trunion Assembly
Dual Workpiece Changer
.9 Second Tool Changer / 12 Tools
1 G Acceleration
X 12" – Y 10" Travel
- 1 - Brother R650X1 CNC - **NEW 2019**
High Speed Vertical Machining Center
Dual 4th Axis Trunion Assemblies
Dual Workpiece Changer
.9 Second Tool Change/22 Tools
1 G Acceleration
X 25.5" - Y 15.75" Travel
- 1 - Mazak VC-500A CNC -**NEW 2019**
High Speed Vertical Machining Center
Dual Workpiece Changer
.9 Second Tool Change/30 Tools
1 G Acceleration
X 19.88" - Y 19.88 Travel
- 1 - Mori Seiki NV5000 CNC
Vertical Machining Center
50 Taper
4th, 5th Nikken Trunion assembly
High Pressure Coolant (1000 psi)
- 1 - NTC CNC Machining Center
Model CMC-300v
Dual Workpiece Changer
16 Tool Changer
X 20" – Y 12" Travel
- 1 - Haas MDC-500 CNC Machining Center
Dual Workpiece Changer
X 24" - Y 16" Travel
Probing Capability
- 1 - LPM CNC Vertical Milling Machine
Prototrak VMX - 3 Axis
Glass Scales
X 31" – Y 18.5" Travel
- 1 - Haas UMC 750 CNC
5 Axis Vertical Machining Center
40+1 Tool Changer
Quick Change Fixturing
X 30" – Y 22" Travel
Probing Capability

Equipment List

VERTICAL MILLING MACHINES CONTINUED

- 1 - Trak DPM5V Milling Machine
 - Prototrak VM-CNC
 - (3) Axis Controlled
 - Glass Scales
 - X 40" – Y 20" Travel

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

- 7 - Trak FHM7 Milling Machine
 - Prototrak 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

Equipment List

LATHES

- 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

Equipment List

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

EDM MACHINES

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

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

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

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
- 4 - Wilton Model 4200 Belt
And Disc Finishing Machine
- 2 - Roll - In Band Saw
- 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
- 1 - 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

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
- 1 - Micro-Vu Qubix Vision System, DCC & Manual
 - 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 - 48" x 72" Granite Surface Plates |
| 2 - Mitutoyo SJ-201 Surf Test Surface Finish Analyzer | 3 – 48" x 72" Starret Crystal Pink Surface Plate |
| 1 - Wilson Rockwell Hardness Testers | 1 - 36" x 48" Starret Pink Surface Plates/ Inspection Grade |
| 1 - Starrett Rockwell Hardness Tester | 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 - Surftran–Thermo Deburr System
C-250 Thermal Energy Machine
6 / 6" Station Thermal Combustion Chamber |
| 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 - Mobile Fixture Test Stand
Programmable Hydraulics
Custom Designed & Built |
| 1 - Telesis ProStation laser workstation
FQ-10 CDRH class I fiber
full enclosure and filtration system | 2 - Stationary Fixture Test Stand
Programmable Hydraulics
Custom Designed & Built |
| 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 - 7 Tank Hot Black Oxide System
Fully Ventilated and Insulated Tanks
36" X 36" X 36"
Dedicated Overhead Crane |
| 1 - 8 Tank Fully Ventilated Clear Anodize System
24" x 24" x 24" Tanks
Temperature Controlled
Installed in 2019 | 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 |

Equipment List

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 x30"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.