



Manufacturing Equipment

We are always willing to invest in the latest and most innovative machine tool technology based on the changing needs of our current and prospective customers. If you do not see equipment on our list that you feel would meet the needs of your project, please call us today to discuss. Our knowledge, experience, and long-standing business relationships give us the ability to find quick solutions to meet your project demands.

(2) Matsuura MAM72-35V 5 Axis Vertical Machining Center

32 Pallet X-Axis Travel 21.65Inch, Y-Axis Travel17.32inch, Z-Axis Travel 22.83inch, B-Axis Rotation Angle deg +65 ~ -125 C-Axis Rotation Angle deg 360, 530 & 50 tool magazine.

Matsuura LX-160 5 Axis Vertical Linear Machine

92 Pallet, 6.29Ø x 9.05H capacity, 46,000 RPM spindle, 19.68" x 9.84" x 11.81" travel, & 52 tools.

Matsuura MX330 5 Axis Vertical Milling Machine

10 Pallet, 12.99" Ø x 12.60" H Capacity, 15,000 RPM Spindle, 17.13" x 18.31" x 22.05" travel & 90 tools.

(2) YCM FX-380A 5 Axis Milling Centers

Fanuc 31iA-5 Control. 12,000 RPM spindle, 15,000 RPM full 5 axis contouring. 40 tools/60 tools. Renishaw work piece probe, tool touch off probe.

(6) Mazak HCN5000 Horizontal Milling Centers

(1) 50 Tool Magazine / (3) 120 Tool Magazine / (1) 160 Tool Magazine / (1) 240 Tool Magazine.

Matrix control. 500mm pallets, 2362IPM rapids, 18,000 RPM spindle. NC rotary table (360,000 positions). 120, 240 tool magazine. Maximum workplace height 39.37 pallet size 19.690, maximum table load 700kg (1543 lbs.). OMP60M work measuring system probe. 1000 PSI coolant.

(2) Mazak Horizontal HCN5000 Palletech High Rise System

(1) 1 Level Pallet Robot with 14 Stations / (1) 2 Level Pallet Robot with 44 Stations

Mori Seiki Dura Vertical 5080 Milling Center

20" X 30" Y 20" Z travel, 10,000 RPM spindle. 30 station tool changers. Renishaw probing system. 1000 PSI thru spindle coolant.

(3) YCM NSV-102A Milling Centers

40" X 20" Y 20" Z travel. 15,000 RPM spindles, 2400ipm rapids. Tsudakomo RNA200R high accuracy 4th axis rotaries. Renishaw work probes, 1000 PSI TSC

P&F Machining, Inc.

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YCM 1680A Milling Center

64" X, 30" Y 27" Z travel. 15,000 RPM. 30 station tool changers. Renishaw probing system. 1,000 PSI coolant 4th axis capable.

(2) Matsuura VX-1000 Vertical Mill

40.15" x / 24.01" y / 24.01" z /20,000 RPM Spindles, 60 tool magazines, Renishaw Probing System, 4th Axis Capability, 1000 PSI.

(2) Haas VF3 Super Speeds Milling Centers

40" X 20" Y 25" Z travel. 12,000 RPM spindles. 24 station tool changers. Renishaw probing system. 1000 PSI thru spindle coolant.

Haas VF2 Super Speed Milling Center

30" X 16" Y 20" Z travel. 12,000 RPM spindle. 24 station tool changers. Renishaw probing system. Thru spindle coolant. Simultaneous 4th axis capable of linear, arc and spiral milling.

Okuma Genos M460-V Milling Center

Spindle Speed 15,000, Rapid Traverse ipm X-Y: 1,575, Z: 1,262, 32 Tool magazine capacity, Max Machining volume 41.34 x 22.05 x 18.11 inches

(2) Traub TNL20 20mm Twin Turret Swiss Type Lathe

12ft FWB mini mag 20 bar loader, 11-Axis 50,000 RPM fluid driven spindles.

(4) Citizen-Cincom L20 X11 B-Axis Swiss Machine

12ft Cincom Magazine bar loader, 9-Axis 80,000 RPM Spindles.

(2) Citizen-Cincom L32 X11 B-Axis Swiss Machine

12ft Cincom Magazine Bar Loader, 9-Axis 80,000 RPM spindles, long part ejection.

Citizen-Cincom L12 X Swiss Machine

12ft Cincom Magazine Bar Loader, 8-Axis 80,000 RPM Spindles, Long part Unloader.

(7) Tsugami S206-II 20mm Swiss Machine

12 ft Edge Magazine Bar Loader, 8-Axis 80,000 RPM Spindles.

Mazak Hyper Quadrex 200MSY 9 axis Turning and Milling Center

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Matrix control. 2 ½" bar capacity, 34" between chucks, 4" Y travel on both turrets. 4,600 RPM. Twin 30 HP spindles. LNS Sprint 565 bar feeder 2 5/8" diameter X 12' long capacity. Custom M-code operated part unload conveyor system.

Mazak Hyper Quadrex 150MSY 9-Axis Turning & Milling Machine

Twin Spindle, Twin Turret, 6ft LNS Bar Loader, Capacity 12.6" Dia x 24.375 Long.

Mori Seiki ZT1500YB 8 Axis Turning and Milling Center with Fanuc R2000IC Robot Cell

MAPPS II Operating System. 2 3/8" bar capacity, 39.4" between spindles, 3.9" of Y- axis travel, 5,000 RPM main, 6,000 RPM sub. Twin 30 HP spindles. VDI quick change tooling. Renishaw probing system.

Mazak Super Quick-Turn 200MY Turning and Milling Center

PC-Fusion 640 Control. 8" chuck. 20 HP Main Spindle. 5,000 RPM. 5 HP rotary tool spindle motors. 12" maximum cut diameter X 21.30" maximum length. .001-degree minimum C-axis indexing increment. 3.94" Y- axis travel.

(2) Mori Seiki NL 2500 Turning and Milling Center

MAPPS II Operating System. 10" Chuck. 4,000 RPM. 25 HP. 16" maximum diameter. "Y" Axis with 7.5 HP live tooling. 30" between centers.

Nakamura SC 300-227 Turning Center with DC-2 Load & Go Robot Cell

Fanuc CNC Control. Max cutting diameter 13.78", maximum turning length 43.3. 12 position turrets. Twin spindle 3500 RPM. Renishaw probing system.

Mazak Quick Turn 250 Turning Center

Smooth G Control. 10" chuck. 3.58 spindle bore, 4000 RPM, 35 HP. Maximum turn diameter 16.25", maximum turn length 39.37". 213 PSI coolant.

(1) Okuma LB4000 EX-11-1500 Turning Center / (1) Okuma LB4000 EX II – My C1500

12" chuck. Big bore A2-11, 3,000 RPM, 50 HP, 4.41 spindle bore. Maximum turn diameter 18.90, Max turn length 59." 300 PSI coolant.

Mazak Nexus 300 Turning Center

PC-Fusion 640 Control. 30HP, 10" chuck, 16.50" maximum cutting diameter X 32" in length, 3" diameter thru spindle (1300 IPM Rapid).

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Mazak Nexus 200 Turning Center

PC-Fusion 640 Control. 8" chuck. 5,000 RPM. 30HP. 14.00" maximum cutting diameter X 20.100" length (1300 IPM Rapid).

Mazak Quick-Turn 30 Turning Center

T-Plus Control. 10" chuck. 30 HP. 2.76 thru hole 15.35" maximum swing X 38" maximum length, 19" swing is possible for lengths of 6" or less.

Mazak Quick-Turn 20 Turning Center

T-Plus Control. 8" chuck. 5,000 RPM. 20 HP. 2" thru hole, 12" maximum cutting diameter X 26." maximum length.

Hardinge Chucker

Manual threading head. Read out. Complete tooling.

Okamoto ACC16-32DX Surface Grinder

Marvel PA460HD Bandsaw

10 HP. 1 1/2 blade. 18" capacity

Cosen C 460NC Bandsaw

10 HP. 1 1/4 Blade. 18" capacity

Rob, Inc. Vertical Band Saw

(2) 5 Ton KoneCrane

Used for handling incoming material.

½ Ton Overhead JIB Cranes / (2) 500lbs / (4) 250lbs / (1) 200lbs / (6) 150lbs

Used to load material into the CNC Lathes, CNC Mills and CNC Cylindrical Grinders.

Four Stage Custom Parts Cleaning System

Includes a heated dual station 200-gallon cascade filtered clean tank, heated dual station 200-gallon cascade filtered rinse tank, heated single station spray rinse tank, heated dual station 200-gallon final rinse tank with rust inhibiting additive.

Inspection Equipment

Zeiss CT Metrotom 6 Scout Extremely High-Resolution CT Scanner

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3008 x 2512px, X-Ray Detector, 240mm Dia x 40mm Height Capacity.

Zeiss O-Inspect 543 Vision System

500mm x 400mm x 300mm Capacity, Tactile Zeiss Vast XXT Scanning, 12X Zeiss Zoom-Optic.

Sylvac Scan F60T Scanning System

Helix Tilting System, .2-60mm Dia x 300mm Length Capacity.

Zeiss Contura G2 10/16/6 CMM

Measuring range X = 1000mm, Y = 1600mm, Z = 600 mm

VASTxt Probe head. Calypso Software

(2) Zeiss Contura G2 7/10/6 CMM

Measuring range X = 700mm, Y = 1000mm, Z = 600 mm

VASTxt Probe head. Calypso Software, Rotary Table

Starrett HDU400-M3-CNC Video Measuring System

Zeiss DuraMax CMM

Measuring range X = 500mm, Y = 500mm, Z = 500 mm

VASTxt Probe head. Calypso Software

Micro Vu 1051 UC Automated Vision System

Touch probe TPK164, 1050mm x 1300mm x 160mm capacity.

ST Industries Video Scope

Measuring range X = 6-inch Y = 12-inch, Z = 12 inch

M3 Metrology Software with Video Detection Capability

Mitutoyo Laser Micrometer

LSM-512 Laser with LSM-6200 Display

43.72" Measurement Range

Deltronic DH214 Optical Comparator

Mitutoyo SJ201 Surface Profilometer

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(3) Fowler Trimos Digital Height Stand (1000, 700, & 600mm)

4 FT x 6 FT Grade A Trustone Inspection Plate

Precision Hand Tool Instruments

Micrometers up to 24"

Calipers up to 62"

Dial Bore Gages

Grove Gages

Library of Thread Gages

Library of Deltronic Class X Plug Gages

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