**USA Equipment Listing**

**AS9100, ISO 9001, FAA Repair 145 Certified**

**CNC Lathes:**

1. Honor Seiki VL-160CM, 60" Chuck, (Max turn dia = 78", Max Length 84", 1000psi)
2. Honor Seiki VL-160CM, 63" Chuck, (Max turn dia = 78", Max Length 60", 1000psi)
3. Okuma 2SP-V920EX, Twin 24” Chucks, (Max turn dia. = 36”, Max Length = 34”)
4. Okuma VTM 120YB, 32" Chuck, (Max turn dia = 47", Max Length 42.5", 1000psi)

(1) Okuma V100R M, 32" Chuck, (Max turn dia =40", Max Length 35”, 1000psi)

(2) Mori Seiki NL-3000MC, 15" Chuck, (4.1” bore, max dia = 17”, Btw Ctrs 49”)

(2) Mori Seiki NL-3000MY, 15" Chuck, (4.1” bore, max dia = 17”, Btw Ctrs 49”)

(1) Mori Seiki NLX-700MC, 12" Chuck, (4.1” bore, max dia = 17”, Btw Ctrs 28”)

(1) Mori Seiki NLX-700MY, 12" Chuck, (4.1” bore, max dia = 17”, Btw Ctrs 28”)

(2) Okuma LB4000EXM CNC Lathe, 15" Chuck, (4.1” bore, max dia = 17”, Btw Ctrs 84”)

(1) Okuma LB3000EX CNC Lathe, 10" Chuck, (3.1” bore, max dia = 16.4”, Btw Ctrs 40”)

(1) Okuma LU300 CNC Lathe, 10" Chuck, twin turret, live tooling (2.44” bore, max dia = 13.5”, Btw Ctrs 40”) Haas TL-3 CNC

1. MoriDMG CTX800 with 12’ bar feeder, 80 tools, 1000 psi coolant thru
2. Mori Seiki SL-303
3. Mori Seiki SL-250

(1) Mori Seiki SL-250BMC

(3) Yama Seiki GA3600

(1) Yama Seiki GA3600m

(1) Takasawa TC-4

(1) Amera Seiki T-310MC

(1) Viper VT-33B

(1) Femco HL-25

(1) Haas TL-3 Lathe, 12" Chuck (3.5” bore, max dia = 20”, Btw Ctrs 60”)

(1) Haas SL20 CNC Lathe w/Bar Feeder, 8" Chuck (2" bore, Max dia = 10.3", Btw Ctrs )

(1) Haas SL30 CNC Lathe w/Bar Feeder, 10" Chuck (3” bore, max dia = 17”, Btw Ctrs 34”)

(1) Haas ST30 CNC Lathe w/Bar Feeder, 10" Chuck (3” bore, max dia = 17”, Btw Ctrs 34”)

(1) Haas SL40 CNC Lathe w/Steady,45HP, 15" Chuck (4” bore, max dia = 30.00”, Btw Ctrs 51", 44" max cut)

(1) Haas SL40TB CNC Lathe w/Steady, 55HP, 18" Chuck (7” bore, max dia = 30.00”, Btw Ctrs 51", 44" max cut)

**5-Axis CNC Turning Center:**

 Okuma VTM 1200YB, 49" Chuck, (Max turn dia = 47", Max Length 42.5", 1000psi)

**CNC Horizontal Mill Flexible Machining Systems**

(1) Makino 93 pallet linear FMS System with

(4) Makino A61, 218 tool, 1000 psi coolant thru

(3) Makino A61nx, 218 tool, 1000 psi coolant thru

(1) Makino 108 pallet linear FMS System with

(4) Makino A51, 218 tool, 1000 psi coolant thru

(3) Makino A51nx, 218 tool, 1000 psi coolant thru

(1) Makino 108 pallet linear FMS System with

(6) Makino A51nx, 218 tool, 1000 psi coolant thru

**CNC Horizontal Machining Centers W/500 mm Table:**

(2) Enshu GE-480H

(1) Mitsubishi MH-500

(1) Makino A51 with 8 station pallet pool, 313 tools, 1000 psi coolant thru

(1) Matsuura ES450, 60 tool

(2) Matsuura MAM500, 60/120 tools, 350 psi coolant thru

(5) Matsuura MAM500, 120/240 tools, 350 psi coolant thru

**CNC Vertical Mills:**

(1) ACER CNC Knee Mill (30x14x4)

(2) Haas TM2 CNC Mill w/Renshaw Probe, 40 Taper, (40x16x16, 10 tool carousel)

(1) Haas VF-2SS CNC Vertical Mill w/Renshaw Probe, 40 Taper, (30x16x20, 24 tool vert. turret)

(1) Haas HS-4R HMC, 50 Taper, (150"x66"x60", 38 tool side turret, 1000psi)

**CNC Vertical Machining Centers W/4 Axis Capability & up to 30 X 60 Travel**

(9)  Matsuura MC-800V, 40 tool, 350 psi coolant thru

(4)  Matsuura MC-500, 30 tool

(1)   Matsuura RA-IIIG, 40 tool, 350 psi coolant thru

(3)  Matsuura RA-IVG, 40 tool, 350 psi coolant thru

(1) Mori Seiki SV-400

(2) Yama Seiki BM-1460

(1) Yama Seiki BM-1020

(1) Yama Seiki AV-1000

(2) Haas VF-6 CNC Vertical Mill w/Renshaw Probe, 50 Taper, (64x32x30 , 30 tool vert. turret, 1000psi)

(1) Haas VF-5

(1) Haas VF-4

(3) Haas VF-3 CNC Vertical Mill w/Renshaw Probe, 40 Taper, (40x20x25, 24 tool vert. turret)

1. Haas 3YT with gear drive

**5-Axis CNC Swiss Screw Machine:**

Tsugami BO326-II Lathe W/ Bar Feeder and Rear Eject, (Max Dia = 32mm, Btw Ctrs 12.5”)

Tsugami BO325-II Lathe W/Bar Feeder, (Max Dia = 32mm, Btw Ctrs 12.5”)

**4-Axis Rotary's:**

(2) Haas HRT310B Rotary Table #1 (max swing = 12.25”)

Haas HRT160 Rotary Table #3 (max swing = 9.5”)

**Assembly Department:**

(2) Enshu GE-480H

(1) Mitsubishi MH-500

(7) Hydraulic Presses up to 30 ton capacity)

(1) Pines bar and tube bender 1-1/4” capacity

(1) Westinghouse Induction Heater

(1) Graymills Automatic Parts Washer

(2) Hypneumate Crossdrill Machines

**Thermal Deburring:**

1. Extrudehone T350 thermal deburring TEM machine

**Washing:**

1. JenFab Lean Clean 360-1 rotary ultrasonic washer
2. Jayco ACM-650E ultrasonic submersion washer
3. Surftran OT 3 stage gantry load ultrasonic submersion washer

**Environmentally Controlled Inspection Equipment:**

1. Global Advantage CMM (47"x35"x31")
2. Cordax 1808 CMM (80"x20"x16")
3. Brown & Sharp CMM (36"x36"x20")

(1) Romer Absolute 7520 (x2) & 7540 (x1)

(3) Mitutoyo CMM’s – 1906; A910; A504

(1) Surface Tested

(1) Hardness Tester

(1) Comparator

**Broach:**

1. American Broach Vertical 36" Stroke

**Heat Treat Ovens:**

1. 12" x 11" x 6"
2. 18" x 23" x 19"

**Saws:**

1. Kasto Varispeed C15 circular saw 6” cut width, with 8 bar magazine and output sorting table
2. Kasto Win 3.3 bandsaw, 13” cut width, hydraulic clamping and auto advance
3. Amada HFA250W bandsaw, 13” cut width, hydraulic clamping and auto advance

(3) CNC Bundle Cut Saws

(2) Hydmech H-12

(1) HEM H105A-4 Automatic Production Saw (up to 14"rnds or 16" Flats)

(1) Horizontal (up to 12")

**Engraving**

1. Laser - Fiber Optic Micro Marker (4x4 marking area)
2. Impact - Telisis, Propin, & Technomark

**Phosphate Coating**

**Non Destructive Testing**

**Design & Programming Software:** Solidworks 2013

Esprit 2015

Autocad Software

Mastercam Software