

Delta Machining, Inc.
2361 Reum Road
Niles, MI 49120



Phone (269) 683-7775
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Equipment List

Lathes:

(1) Mazak Quick turn 35N 40HP

Mazatrol T32B Control, 24 position multi-tool turret, 12" chuck, 24" dia. swing, 3.150" hole through spindle

(2) Mazak Quick turn 30N 30HP

Mazatrol T Plus Control, 11" chuck, 16 position tool turret, 18" dia. swing, 4.000" hole through spindle

(1) Mazak M-5 35HP

Fanuc 6T Control, 15" chuck, 21" dia. swing, 3.50" hole through spindle

(1) Howa 25HP

Fanuc 5T Control, 12" chuck, 20" dia. swing, 3.25" hole through chuck

(1) Mazak Quick turn 20N 30HP

Mazatrol T Plus Control, 8" chuck, 16 tool turret, 16" dia. swing, 2.75" hole through spindle

(2) Mori Seki 20HP

Vasnac 2,000 G Control, 10" chuck, 20" dia. swing, 2.625" hole through spindle

(1) Vertical Lathe

55" high x 72" dia. Bullard

(1) Vertical Lathe

36" high x 42" dia. Bullard

CMM Inspection Equipment:

Zeiss Contura G-2

Calypso Software with Curve. Vast XT scanning head
Measurement Envelope- 1000/1600/600 (X,Y,Z)

Zeiss Prismo MASS

Calypso Software with Curve. Vast Gold scanning head
Measurement Envelope- 1200/1800/1000 (X,Y,Z)

Zeiss UMC 850

Calypso Software with Curve. HSS scanning head
Measurement Envelope- 850/1200/600 (X,Y,Z)

Zeiss Prismo MASS Super ACC

Calypso Software with Curve and Freeform
Measurement Envelope- 1200/2400/1000 (X,Y,Z)

FJ1006 MTI

300 series software

Measurement Envelope- 24" high x 24" wide x 40" long

Mitutoyo Crysta 9106

Renishaw PH10 Articulating probe, Calypso Software
Measurement Envelope- 900/1000/600 (X,Y,Z)

QC Calc

SPC Software linked to all CMMs

Full range of inspection gages, thread gages I.D. or O.D.,
bore gages, rings, micrometers, and air gages.

Engineering Capabilities:

Drawing & Modeling

AutoCAD

Inventor

Solidworks Professional

GibbsCAM

Printing Capabilities

Capable of scanning, copying & printing through
E+ documents.

File Type Capabilities

(Read & Write)

PDF, JPEG, DXF, IGES, SAT, STEP,
DWG, IPT, IDM, IAM

Professional engineering staff capable of casting
development, fixture design, and special projects
to stream-line production activity.

Welding Equipment:

(1) Miller Dimension 452 600 Amp

Tig, mig, stick, flux core (water cooled) 100%
Duty Cycle

(1) Miller Syncrowave 250 310 amp

Tig, stick (water cooled)
100% Duty Cycle

(1) Miller CP300 10E

Mig (air cooled)

100% Duty Cycle

(1) Hypertherm Powermax Burn 900

Plasma Cutting System max $\frac{1}{2}$ " thick cut

Welding/Materials

Steel, Stainless, Aluminum, Cast-Iron, Ductile
Iron, Stellite & Tool Steel

Grinding Equipment:

(2) Blanchard Grinders

100 HP, 60" table, 30" travel head to table

(1) Mattison Grinder

100 HP, 42" table, 36" travel head to table

(1) Mattison Grinder

60 HP, 42" table, 20" travel head to table

(1) Mitsui Grinder

20 HP surface (wet) grinder 16" wide x 28"
long variable magnetic chuck

(1) Heald O.D.& I.D. Grinder

Model# 271, 18" dia. x 36" long capacity

(1) Blanchard Grinder

100 HP, 48" table, 15" travel head to table

Lapping Equipment: Hone Machine

(2) Face Lap Machines

Crane #700 Lapmasters

24" tables, automatic timing lap cycles capable of holding
.000011 (2) lightbands on a 10" dia. on a sealing surface

(2) Hone Machines

Sunnen Hone & Standard Mandrel set and stones

Superior Hone model AM with standard mandrel set and stones

(1) Broach

American HDE-15-66, 15-ton, 72" stroke

General Equipment:

(11) Bridgeport Mills

With power through feed & digital readouts, 24" x 12" tables

(1) Proto-Track Bridgeport Mill

With Proto-Track 2 axis C-N-C system & glass readout scales

(1) Pratt & Whitney Jig Bore

Heidenhain glass seals & readouts

(.00001) 48" x 24" x 20" travel

(1) Kasto Production BandSaw 15hp

Auto barfeeder up to 14" dia. x 20' lengths bar capacity

(1) WF Wells Production BandSaw

Auto barfeeder up to 14" dia. x 20' lengths bar capacity

Material Handling Equipment:

(1) 15 ton capacity crane with 50' bridge, 210' rails

(1) 10 ton capacity crane with 50' bridge, 210' rails

(1) 5 ton capacity crane with 20' bridge, 90' rails

(1) 15,000 lb capacity fork lift

(1) 5,000 lb capacity fork lift

(3) 4,000 lb capacity fork lifts

(6) 2,000 lb capacity hand trucks

(16) 1,000 lb capacity jib crane and hoist

(4) 1,600 lb capacity jib crane and hoist

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Equipment List

Horizontal Machining Centers:

- (4) Mazak FH6800 CNC Horizontal FMS System**
 - Fusion 640 controls, Intelligent Mazatrol pallet management FMS
 - 120 tool magazines total with all (4) machining centers holding 480 tools
 - Superflow 2 (1000 psi thru spindle coolant)
 - 7,000 rpm spindles (big plus spindle)
 - 32 pallets with 4 load and unload stations
 - 35HP with 2-speed gearbox for maximum power
 - 2,100 feet per minute feed rate

(3) Mazak H650 CNC 30hp Horizontal FMS System

Mazatrol M Plus control, table load 3,000 lbs,
 21 station auto pallet pool system,
 machining envelope X -40", Y-31.5", Z-31"
 120 tool magazine with auto tool changer per machine
 Cat 50 holders, 35 - 7,000 rpm through spindle coolant

(1) H650 CNC Horizontal Machining Center 30 HP

Mazatrol M Plus control, table load 3,000 lbs,
 2 station auto pallet shuttle system,
 machining envelope X-40", Y-31.5", Z-31"
 120 tool magazine with auto tool changer
 Cat 50 holders, 35 - 7,000 rpm through spindle coolant

(3) H630 CNC Horizontal Machining Centers

4th Axis - 30 HP

Mazatrol M32 control, 6/2 pallet shuttle, pallet size 25"x25",
 table load 2,640 lbs
 machining envelope X-39.4" x Y-32" x Z-29.5"

(1) H25 CNC Horizontal Machining Center

3 Axis w/1 degree index table - 25 HP

M2 Mazatrol Control, 10 pallet shuttle, pallet size 32"x32", table
 load 3,300 lbs, 10-pallets at 33,000 lbs.
 machining envelope X-43.3", Y-42" , Z-29.5"
 120 station auto tool changer (Cat 50 Holders) Renishaw tool
 monitor system

(1) AmeraSeiki A50HB CNC

Horizontal Machining Center Full 4th Axis 35 HP
 Fanuc 18i-MB control, 2 pallet shuttle, pallet size 19.69" x
 19.69", machining envelope X-27.6", Y-25.6", Z-25.6"
 60 station auto tool changer (Cat 50 Holders) Renishaw tool
 monitor system

(2) Mazak HCN8800-II CNC Horiz. Machining Center

- Nexus controls, Intelligent Mazatrol pallet management FMS
 -57"x 57" part capacity at 4,850 lbs
 - 120 tool magazines total with automatic tool changer
 - Superflow 2 (1000 psi thru spindle coolant)
 - 7,000 rpm spindles (big plus spindle)
 - 2,200 feet per minute feed rate

(1) Mazak HCN6800-II CNC Horiz. Machining Center

- Nexus 2 controls
 - 120 tool magazines total with automatic tool changer
 - High Torque 8,000 RPM Spindle
 - Super Flow T8 High Pressure Coolant Unit
 - Renishaw OMP60M Optical Probe

Vertical Machining Centers:

- (2) Awea SP 3016 25HP CNC Vertical**
 Fanuc 18i control
 table load 11,023 lbs. machining envelope X-157" x Y-63"
 x Z-30"

120 tool auto changer (Cat 50 holders)

(2) Mazak AJV-35/60 Double Column Vertical CNC Machining Center

Mazatrol Cam M32 control, table load 5,500 lbs. table size
 29.52" x 68.5", machining envelope
 X- 59.05", Y-31.49", Z-20" 60/30 station auto tool changer
 (Cat 50 holders), tool monitor system, machine
 repeatability .00008

(1) Mazak V655 C-N-C 25HP Vertical CNC Machining Center

Mazatrol Cam M32 control, 2 pallet, table load 5,500 lbs.,
 machining envelope X-78.74", Y-25.59",
 Z-29.5", 80 station auto tool changer (Cat 50 holders)
 Renishaw tool monitor system

(1) Mazak V515 C-N-C 20HP Vertical CNC Machining Center

M-32 Mazatrol control, 2 pallet, table load 3,300 lbs.,
 machining envelope X-41.33", Y-25.59",
 Z-22.04", 40 station auto tool changer (Cat 50 holders)
 Renishaw tool monitor system

(1) Mazak VTC-20 C-N-C 20HP Vertical CNC Machining Center

Mazatrol M-PLUS control, machining envelope X-42", Y-
 24", Z-20", 24 station auto tool changer (Cat 40 holders)

(1) Mazak VTC-41 C-N-C 15HP Vertical CNC Machining Center

Mazatrol E1A control, 4th axis programmable rotary
 system, machining envelope X-22.04", Y-16.14",
 Z-20.07", 24 station auto tool changer (Cat 40 holders)

(1) Mazak VQC 20/40 C-N-C 15HP Vertical CNC Machining Center

Mazatrol M-2 control, machining envelope X-40",
 Y-16", Z-20", 30 station auto tool changer, (Cat 40
 holders)

Mill Turn Machining Centers:

(1) Mori Seiki NT5400-1800 Mill Turn C-N-C Machining Center

Fanuc 31i Control
 18" chuck, 36" maximum diameter, 78" maximum length
(1) Okuma Mac-Turn 550-W 7-Axis Mill Turn
 15" Chuck, 28.34" max diameter, 98.62" max length

Delta Machining, Inc. encompasses 77,000 square feet of
 climate controlled manufacturing space which allows our
 machining centers to produce cost effective, high precision
 product.