

## FACILITIES LIST

Updated March, 2019

### SUMMARY

**A CNC Machine Shop that specializes in short runs of large, complex precision machined parts**

- Privately Held Corporation - Established 1989
- 50+ Employees (Non-Union): Operate 2 shifts (20 hours/day, 6 days per week)
- Total of 50,000 square feet
- Emergency service available if you need parts machined in a crisis
- Diversified customer base with outstanding experience in serving many industries

### PROJECT MANAGEMENT

- Accept drawings and program files via E-mail (AutoCAD, .DXF, .IGES, .PDF, .STEP, .PRT, SLDPRT, .PRT, .IAM)
- One point of Contact to handle all your fabricating, machining, EDM and assembly needs
- A more professional alternative to machine and process your important parts

### QUALITY MANAGEMENT SYSTEM

- **QUALITY MANAGEMENT SYSTEM CERTIFIED TO ISO 9001: 2015 and AS9100: 2016**
- Procedures developed for: Document Control, Record Control, Management Review, Gage Calibration, Customer Satisfaction, Internal Audits, Inspection, Nonconforming Product, Corrective Action & Preventative Action.
- Climate controlled Metrology Lab
- Custom Dimensional Inspection Reports to suit your needs
- Uncontrolled QC Manual Available upon request
- Internal Gage Calibration system in place
- **ZEISS COORDINATE MEASURING MACHINE ACCURA II 2000/4200/1500**  
Year 2018 165" Long x 78" Wide x 59" Tall  
Open Bridge Design w/ Calypso Vast Navigator Software
- **MITUTOYO COORDINATE MEASURING MACHINE**  
Year 2002 Model # BRT-M710 40" Long x 28" Wide x 28" Tall  
IBM NetVista Computer system with GEOMeasure 3000 Software  
Renishaw MH8 / TP2 Touch Probe Kit
- **OPTICAL COMPARITOR / HEIGHT GAGE / FULL COMPLIMENT OF QC INSTRUMENTS AND STANDARDS**

### ASSEMBLY SUPPORT EQUIPMENT

- 1 - JRI Heated Parts Washing Machine, de-greaser
  - 1 - Steelman Electric Bake Oven, 450°F max., 65" x 65" x 65" for Interference fit / Shrink fits during assembly
  - 1 - Paint booth: 10 ft x 10 ft x 10 ft capacity
- Full compliment of assembly tooling, hydraulic equipment and handling devises

### MATERIAL HANDLING SYSTEMS

- 7 - 10 ton Overhead crane rail runways
- 18 - Jib Cranes: 1-5 tons capacity
- 1 - Forklift 12,000 lbs lifting capacity
- 3 - Forklift 5,000 lbs lifting capacity

### WELDING SUPPORT EQUIPMENT

- 1 - Miller Millermatic 185 Arc Welding Machine
- 1 - Miller Syncrowave 250 AC/DC Arc Welding Machine

## COMPUTERIZED MACHINE LIST

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### CNC HORIZONTAL MILLING CENTERS

<u>QTY</u>	<u>MACHINE</u>	<u>MODEL</u>	<u>YEAR</u>	<u>DESCRIPTION</u>
1	Toshiba Shibaura	BTD-13F.R22	2000	5" Spindle, Horizontal Boring Mill X axis = 120" Y axis = 90" Z axis = 63" W axis = 28" Full fifth axis with Rotary Index Table .001"
1	Toshiba Shibaura	BTD-110.R16	1998	4 ½" Spindle, Horizontal Boring Mill X axis = 80" Y axis = 60" Z axis = 60" W axis = 20" Full fifth axis with Rotary Index Table .001"
1	Mazak	Nexus 10800-II	2015	Two Pallet Table Changer - Horizontal Machining Center X axis = 66" Y axis = 55" Z axis = 60" Full fifth axis with Rotary Index Table .001
1	Mazak	Nexus 10800-II	2010	Two Pallet Table Changer - Horizontal Machining Center X axis = 66" Y axis = 55" Z axis = 60" Full fifth axis with Rotary Index Table .001
1	Mazak	Mazatech FH-880	2003	Two Pallet Table Changer - Horizontal Machining Center X axis = 50" Y axis = 43" Z axis = 40"
1	Mazak	Nexus HCN-6800	2008	Two Pallet Table Changer - Horizontal Machining Center X axis = 40" Y axis = 35" Z axis = 48" Full fifth axis with Rotary Index Table .001
1	Mazak	Mazatech H-630	1990	Two Pallet Table Changer - Horizontal Machining Center X axis = 40" Y axis = 32" Z axis = 30"
1	Mazak	Mazatech H-630	1990	Two Pallet Table Changer - Horizontal Machining Center X axis = 40" Y axis = 32" Z axis = 30"

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### CNC VERTICAL MILLING CENTERS

<u>QTY</u>	<u>MACHINE</u>	<u>MODEL</u>	<u>YEAR</u>	<u>DESCRIPTION</u>
1	Mighty Viper Bridge Mill	PMX-4127AG	2018	X axis = 157" Y axis = 82" Z axis = 43" tall Forth axis on Rotary Index Table .001"
1	Mazak	SV-25E	1994	X axis = 102" Y axis = 30" Z axis = 30" tall Forth axis on Rotary Index Table .001"
1	Mazak	Mazatech V-550	1989	X axis = 60" Y axis = 22" Z axis = 20" tall Forth axis on Rotary Index Table .001"
1	Mazak	VQC30/50A	1985	X axis = 40" Y axis = 30" Z axis = 28" tall Forth axis on Rotary Index Table .001"
1	Mazak	AJV-25/404	1989	X axis = 40" Y axis = 20" Z axis = 21" tall Forth axis on Rotary Index Table .001"
1	Mazak	VQC15/40	1987	X axis = 16" Y axis = 20" Z axis = 16" tall Forth axis on Rotary Index Table .001"

### CNC WIRE ELECTRICAL DISCHARGE MACHINE (EDM)

<u>QTY</u>	<u>MACHINE</u>	<u>MODEL</u>	<u>YEAR</u>	<u>DESCRIPTION</u>
1	Mitsubishi	FA30 V	2005	Submersible Large Capacity EDM Working Envelope: 29.5" long x 24" Wide x 20" Tall

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### CNC HORIZONTAL TURNING CENTERS

<u>QTY</u>	<u>MACHINE</u>	<u>MODEL</u>	<u>YEAR</u>	<u>DESCRIPTION</u>
1	Mazak	Slant Turn 800	2017	42" Maximum Diameter x 160" Between Centers 32" over the cross slide
1	Mazak	Powermaster N Chucker	2012	45" Maximum Diameter x 12" Z-Axis Travel 34" Maximum Diameter x 36" Z-Axis Travel
1	Mazak	Powermaster 1600 Chucker	1981	42" Maximum Diameter x 62" Z-Axis Travel 24" over the cross slide
1	Mazak	Powermaster PMN 3000U	1995	36" Maximum Diameter x 120" Between Centers 22" over the cross slide
1	Mazak	Quick turn Nexus 450M	2006	36" Maximum Diameter x 72" Between Centers Live tooling with milling & drilling capabilities 22" Diameter maximum shaft turning
1	Mazak	Quick turn 350	2019	22" Maximum Diameter x 60" Between Centers 11" over the cross slide
1	Mazak	M4-1500U	1989	22" Maximum Diameter x 60" Between Centers 11" over the cross slide
1	Mazak	Quickturn 15N Universal	1989	17" Maximum Diameter x 20" Long 10" Maximum Machining Diameter

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<u>QTY</u>	<u>MACHINE</u>	<u>MODEL</u>	<u>YEAR</u>	<u>DESCRIPTION</u>
1	Toshiba	TUE-200	2016	94" Maximum Swing Diameter x 60" Tall Travel 78" Table Diameter
1	Toshiba	TUE-150	2013	78" Maximum Swing Diameter x 60" Tall Travel 57" Table Diameter
1	Giddings & Lewis	VTL	Rebuilt 2009	84" Maximum Swing Diameter x 80" Tall Travel 72" Table Diameter