

# FABRICATION EQUIPMENT LIST AND CAPABILITIES

## **Tube & Structural Processing**

1- Mazak FabriGear 220 Fiber 4000 watt; 3/4" thru 6" square, 8 5/8" round outside dimensions, lengths up to 26 ft.

#### CAPACITY:

- Material types include:
  - -Tube, pipe, square, round, c-channel and angle
  - Mild steel: 1/2" wall
  - Stainless steel: 3/8" wall
- 6 axis head for bevel and weld prep
- 6 station automatic tapping up to ½-13 or M12
- Automatic load and unload
- 1- Hydraulic tube bender up to 2-1/2" O.D.
- 1- Dual belt tube polisher up to 3-1/2" O.D.

#### **Laser Cutting**

1 - Mitsubishi Fiber 6000 watt: 60" x 120" bed with automation tower

#### CAPACITY:

- Mild steel to 1" thick
- Aluminum to 1/2" thick
- Stainless to 5/8" thick with nitrogen clean cut

#### **Plate Cutting**

Rolling

1- OMax 80X 60,000 PSI, 72" x 144" bed **CAPACITY**:

#### • Up to 8" thick material

- 1- Davi Max 3022
- 1-3" diameter roller; capacity 16ga. x 50"
- 1-6" diameter roller; capacity 1/4" thick x 2' long

#### **Forming**

- 4- Hydraulic press brakes with European style precision tooling, hydraulic clamping, CNC controlled w/3D capability; 5-axis back gauge; auto crowning
  - 320-ton Bystronic Xpert x 13.4 ft; 29" of open height; dynamic sheet supports to assist lifting for large sheet and plate parts
  - 220-ton x 14' w/2' horn for conical forming
  - 150-ton Bystronic Xpert x 10.2 ft
  - 320-ton Bystronic Xpert x 14 ft x 33" open height
- 1 Electric Press Brake; Coastone C15 48 ton x 63"; 5-axis back gauge

## **Secondary Operations**

- 2-Variable speed drill press
- 2- Bridgeport mill 24" x 12" x 8"
- 1- Marvel 380A-PC60 fully automatic vertical tiltframe band saw with programmable NC control; Capacity: 15" x 20"
- 1 Marvel model S2GVP Spartan vertical band saw w/power feed
- 1- Flex Arm tapping station

#### **Automated Welding**

- 1 Orbimat 165 orbital welder ¼" thru 3" outside dimension
- 1-Weldine Automation seam welder 48" welding length, material thickness up to 7ga.
- 1- Steel Max straight line MIG welding automation

# FABRICATION EQUIPMENT LIST AND CAPABILITIES

# Welding

- 5-IP6 Lightweld 1500
- 12 Miller Max Star 400
- 6- Miller Dynasty 400
- 5- Miller Syncrowave 350LX amp TIG welders
- 11 Miller 350P amp MIG pulse machines
- 4- Fronius Synergic Pulse Multi Control (PCM) Mig
- 2- Pro-weld stud welder
- 2- Stanco 30 KVA spot welders with Entron controls
- 1- Acme 50 KVA spot welding machine
- 40 Weld tables up to 6' x 18'

# Stainless Steel Finishing/Polishing

- 12- Independent dust-controlled grinding & polishing booths, complete with dedicated pneumatic tools to provide polish up to #8 mirror finish
- 1 25' x 40' glass bead room with dual automated reclaim system virgin bead for stainless steel
- 1- Uni-hone glass bead unit
- 3- Apex 52" wide-belt sander
- 1- Ramco 36" wide-belt sander
- 1- Kuhlmeyer 8' ZBS twin-belt: stroke polisher
- 1-8' stroke polisher
- 1- Hammond Roto-finish, 7 cubic foot tumbler
- 3-Walter Surfox 202 Chem-Clean unit
- 1-Doucet Dual Belt 48"x 144" stroke sander

## **Material Handling**

Automated material handling for tanks and cylindrical weldments up to 4000 LBS capacity

#### Cranes

60' x 250' High Bay with (2) 5Ton Bridge Cranes with (1) 5Ton hoist

- (1) 10Ton Bridge Crane with (2) 5Ton hoists & remote pendant
- (6) 2 Ton Bridge Cranes with multiple 1 Ton hoists
- (5) 1 Ton Bridge Cranes with multiple 1/2 Ton hoists
- (3) 1/2 Ton Monorails with multiple 1/2 Ton hoists

## **Mechanical Assembly**

A wide range of value-added services are available including:

- Kitting Services the gathering of components and parts needed for the manufacture of a particular assembly or product, when used in a lean manufacturing environment, can reduce material handling and processing times and improve line side assembly.
- Subassembly
- Inventory Management

#### Inspection

Calipers

Pin Gauges

Thread Plug

**Height Gauges** 

Keyence WM-Series Wide-Area CMM Keyence XM5000-Portable Bench Top CMM

## **Programming**

ECI M1

SolidWorks

Driveworks

Solid Edge

Autodesk Inventor

Bystronics Bysoft

Sigmatek Sigmanest & Sigmatube

Mastercam

Updated 03/25



# MACHINING EQUIPMENT LIST AND CAPABILITIES

#### Mills

- 1- DMG Mori NH4000 DCG CNC Horizontal Mill 22" x 22" x 24.8"
- 3- DMG Mori Dura Vertical 5100 CNC Vertical Mill 40" x 20" x 20"
- 1- Okuma GENOS M560-V CNC Vertical Mill 41" x 21" x 19"
- 1- Haas VF9-40 CNC Vertical Mill 84" x 40" x 30"
- 1- Mazak VTC 300 CNC Vertical Mill 66" x 30" x 26"
- 1- Mazak VCN 570 CNC Vertical Mill 41" x 20" x 23"
- 1- Mazak VCN 510 CNC Vertical Mill 41" x 20" x 23"
- 1- Okuma MILLAC 65V CNC Vertical Mill 78" x 25" x 22"
- 1- Okuma MILLAC 5VA CNC Vertical Mill 41" x 25"x 22"

#### Lathes

- 1- DMG Mori ALX2000 CNC Lathe with Robotic Loading 10.2" x 3.9" x 81.7"
- 1- DMG Mori ALX2500 CNC Lathe with Robotic Loading and Bar Feeder System 10.2" x 3.9" x 81.7"
- 1- Mazak QuickTurn M350 MY CNC Lathe 15"-16.5" x 6" x 57"
- 1- Mazak QuickTurn 250 MY CNC Lathe 12" x 6" x 36"
- 1- Mazak QuickTurn Nexus 250 MSY-II CNC Lathe 12"-14" x 6" x 18"
- 1- Mazak QuickTurn 250 MY 60" CNC Lathe 12"-14" x 6" x 57"
- 2- Mazak QuickTurn 250 MY 40" CNC Lathe 9" x 4" x 43.13"
- 1- Mazak QuickTurn 250 II 20" CNC Lathe 8.75" No Y Axis x 20.25"
- 1- Mazak QuickTurn 100 CNC Lathe 7" NoY Axis x 6"

#### **Work Envelope**

	•
Lathe Work	Diameter up to 12" with Max Length 12"
	Length up to 40" with Max Diameter of 4"
Milling Work	Plate Dimensions up to 78" Long and 34" Wide
	Max ~84" x 40" bed size
	Weight not to exceed 600 pounds
Material Capabilities	300 Series (303, 304, and 316) and 400 Series Stainless Steel
	17-4 PH in A condition and 17-4 Heat Treated
	Aluminum 6061 with optional Anodizing
	Carbon steel
	Titanium
Volume Product Mix	Small and Medium runs with options for Blanket Orders
Other Capabilities	Welding, Polishing, Assembly, Plating

Updated 03/25