



EQUIPMENT AND CAPABILITY LIST

Updated 3/21

Tube & Structural Processing

1 - Mazak FabriGear 150 4000 watt; 3/4" thru 6" outside dimension, 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 1/2-13 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 5/8" thick
- Aluminum to 3/16" thick
- Stainless to 1/2" thick with nitrogen clean cut

Plate Cutting

1 - Flow Mach - 3 - Dynamic Cutting Head 60,000 PSI, 72" x 144" bed

CAPACITY:

- Up to 8" thick material

Rolling

1 - Bertsch hydraulic 4-roll NC machine, 6" dia. rolls; capacity - 7ga. x 72"

1 - 3" diameter roller; capacity 16ga. x 50"

Forming

- 3 - Hydraulic press brakes with European style precision tooling, hydraulic clamping, CNC controlled w/3D capability; 5-axis back gauge; auto crowning
- 350-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
- 1 - Electric Press Brake; Coastone C15 48 ton x 63"; 5-axis back gauge

Secondary Operations

- 2 - Variable speed drill press
- 1 - 6-spindle variable speed drill press
- 1 - Bridgeport mill 24" x 12" x 8"
- 1 - Marvel 380A-PC60 fully automatic vertical tilt-frame 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 1/4" 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

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Welding

- 6 - Miller Syncrowave 350LX amp TIG welders
- 6 - Miller Max Star 200 TIG inverter
- 5 - Lincoln Precision TIG 275 amp
- 1 - Miller Max Star 150 portable TIG inverter welder
- 11 - Miller 350P amp MIG pulse machines
- 1 - Miller Acu-pulse MIG 400 amp
- 3 - 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
- 2 - Steelmaster wide-belt sander w/digital readout, 53" capacity
- 1 - Ramco 36" wide-belt sander
- 1 - Kuhlmeier 8' ZBS twin-belt: stroke polisher
- 1 - 8' stroke polisher
- 1 - Hammond Roto-finish, 7 cubic foot tumbler
- 2 - Walter Surfox 202 Chem-Clean unit
- 1 - Deburring Machine. Apex 19" automated deburr finishing

Machining

- 1- Mazak VTC 300 3 axis CNC Mill with 48 tool magazine with Renishaw probe
 - 66.35" x 30" x 26"
- 1- Mazak VCN 570C 3 axis CNC Mill with 30 tool magazine with Renishaw probe
 - 41.34" x 20" x 23"
- 1- Mazak VCN 510 3 axis CNC Mill with 30 tool magazine with Renishaw probe
 - 41.34" x 20" x 23"
- 1- Mazak QTN 250MY CNC Lathe with 12 station live tooling and Y Axis
 - 3.58" dia x 14.75"
- 1- Mazak QTN 250 CNC Lathe with 12 station tooling
 - 3" dia x 15"
- 1- Mazak QTN 100 CNC Lathe with 12 station tooling
 - 2" dia x 12.125"

Material Handling

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

Cranes

- 60' x 250' High Bay with (2) 5 Ton Bridge Cranes with (1) 5 Ton hoist
- (1) 10 Ton Bridge Crane with (2) 5 Ton 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

Programming

- ECI M1
- Solidworks
- Driveworks
- Solid Edge
- Autodesk Inventor
- Bystronics Bysoft
- Sigmatek Sigmanest & Sigmatube



MACHINING EQUIPMENT LIST AND CAPABILITIES

The following equipment list is a summary of work centers added to ACE's machining capabilities. This is in addition to the two milling and three CNC lathes at our main location.

Brand	Model	Type
Mori Seiki	NH4000 DCG	CNC Horizontal Mill
Mori Seiki	Dura Vertical 5100	CNC Vertical Mill
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Mori Seiki	Dura Vertical 1035 ECO	CNC Vertical Mill
Okuma	GENOS M560-V	CNC Vertical Mill
Mazak	Quick Turn M350 MY	CNC Lathe
Mazak	Quick Turn Nexus 250 MY-II	CNC Lathe
Mazak	Quick Turn - QTN 250 MSY-II	CNC Lathe
Mazak	Quick Turn 15M Mark II	CNC Lathe
Mazak	Quick Turn QT CAMT2	CNC Lathe
Okuma	MILLAC 65V	CNC Vertical Mill
Okuma	MILLAC 4VA	CNC Vertical Mill
Okuma	MILLAC 5VA	CNC Vertical Mill
Okuma	MILLAC 3VA	CNC Vertical Mill
First	MCV-1500	CNC Vertical Mill

	Work Envelope
Lathe Work	Up to 12" diameter 57" Maximum length
Milling Work	Max length part 72" Max ~20" x 40" bed size
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 Clear or Black Anodizing
Volume Product Mix	Small and Medium runs with options for Blanket Orders