



**AZCO**  
INC.

FABRICATION DIVISION





# DIVISION OVERVIEW

AZCO has 71,000 square feet of enclosed shop space dedicated to carbon steel, stainless steel, chrome-moly, and exotic alloy pipe and metal fabrication.

These facilities, staffed by United Association of Plumbers and Steamfitters Local 400, and Sheet Metal Workers Local 18 members, serve AZCO's field construction needs, along with providing pipe and metal fabrication to engineering and construction firms throughout the country and internationally.

Our segregated shops ensure that special welding conditions are met for both ferrous and non-ferrous metals. Materials are inventoried by project and specifications, and controlled within our eleven acres of secured storage area. Small bore and large bore piping systems, in diameters ranging from ½" to 72", can be accommodated.

AZCO has three separate Quality Programs in place:

- ASME Section 1 - Certificates include "A", "S", "PP", Section VIII "U", National Board Certificate "R" renewed every three years.
- ASME - Non-Boiler external piping ASME B31.1, B31.3, B31.8, Structural Steel, etc.
- API Quality Program - Fabrication and installation of pipelines and related facilities.



Additionally, AZCO self-performs complete heat-treating services for fabricated pipe spools and welded assemblies, utilizing our own in-house furnace with a maximum temperature of 1,450 degrees Fahrenheit and a load capacity of 20 Tons.

The utilization of semi-automatic, submerged arc weld processes, high-capacity turntables, and weld positioners allow AZCO to efficiently fabricate project requirements.

Spool capacity ranges from 400 – 600 spools per week, depending on material type, pipe diameter, and wall thickness.

Our customers benefit from reduced cost, reduced risk, and schedule improvements.





# SPECIFICATIONS

Pipe Fabrication Facility – Shop 1  
2150 Holly Road, Neenah, WI 54956

## Floor Space

30,000 sq. ft.

## Cranes

- (3) – Five ton overhead crane
- (1) – Three ton overhead crane
- (3) – Two ton overhead crane
- (12) – One ton jib cranes
- (1) – Two ton jib cranes
- (3) – 1/4 ton jib cranes
- (1) – 1/2 ton jib crane

## Equipment

- (1) – SPC -1200 RB Automated Pipe Cutting Machine 2 Axis  
2 1/2" – 48" Diameter / .25" wall – 3" thickness
- (2) – Miller Plasma Arc Cutting Machines
- (20) – Miller Welding Machines
- Standard grinding and end-prepping equipment
- (13) – Welding Positioners Gen III
- (4) – Submerged Arc Weld Systems
- (1) – Furmanite HeatMaster
- (1) – Cooperheat and 10 Miller induction heating equipment
- (1) – EHS Hot Foil 50' x 12' x 12' Heat Treatment Furnace  
Furnace Load Capacity – 20 Tons  
Maximum Temperature – 1,450 Fahrenheit
- (3) – Generation V Positioner Turntables  
8,000 lb capacity, 115° hydraulic adjustable tilt – 2'11" to 8'  
360° Rotation clockwise / counter clockwise  
80,000 inch pounds torque  
Bi-directional foot controller with 40' cable  
Rotation torque of 100,000 inch pounds

- (3) – Generation IV Positioner Turntables  
3,000 lb capacity with 115° hydraulic adjustable tilt  
Programmable acceleration and deceleration  
Bi-directional foot controller with 40' cable  
.5 to 3.52 RPM infinitely variable rotation  
30,000 inch pounds torque

## Pre-Fabricated Materials

### Carbon Steel

All grades and types of E.R.W. and Seamless materials  
Standard weight through double extra-strong

### Chrome

P5, P9, P11, P22, and P91 materials  
Standard weight through min.—wall requirements

## Capacity

- (2) 10-hour shifts per day, (4) days a week—Monday through Thursday  
90,000 man-hours per year





# SPECIFICATIONS

Pipe Fabrication Facility – Shop 2  
2150 Holly Road, Neenah, WI 54956

## Floor Space

15,000 sq. feet

## Cranes

- (1) – 5 Ton overhead crane
- (3) – 2 Ton overhead cranes
- (10) – 1 Ton jib cranes

## Equipment

- (1) – Vernon MPM-4 Automated Plasma Pipe Cutting Machine 4 Axis  
2 ½" – 48" Diameter / .25" wall – 3" wall thickness
- (2) – George Fisher Orbital Pipe Cutters  
½" – 6" Diameter / .065" wall - .134" wall thickness
- (3) – Miller Plasma Arc Cutting Machines
- (11) – Miller Welding Machines
- (1) – HEM Saw VT100 LM60
- (2) – E.H. Wachs Hydraulic Pipe Bevelers
- (2) – Arc Machines, Inc. orbital weld machines
- (8) – Welding Positioners

## Pre Fabricated Materials

### Carbon Steel

All grades and types of E.R.W. and Seamless materials  
Standard weight through double extra-strong

### Chrome

P5, P9, P11, P22, and P91 materials  
Standard weight through min.—wall requirements

### Stainless Steel (Segregated Bay)

All grades and types  
Schedule 5 through Schedule 80, E.R.W. and Seamless

### Special Alloys

Hastelloy	Monel	Inconel
Duplex 2205	A254SMO	AL6XN

## Capacity

(2) 10-hour shifts per day, (4) days a week—Monday through Thursday  
70,000 man-hours per year





# SPECIFICATIONS

Metal Fabrication Facility  
2600 East Winslow Street,  
Appleton, WI 54911

## Floor Space

26,000 Sq. feet

## Storage

10,000 Sq. feet indoor storage

## Cranes

(2) – 2 Ton, twin hook, overhung bridge cranes

(11' 6" Under hook)

(6) – 1/2 Ton jib cranes

## Doors

(2) – 12' Wide x 12' clearance height

## Equipment:

### Welding

(12) – Miller welding machines

### Cutting

(1) – Automatic vertical high-speed production band saw  
HEM Model VT 120 HA-60

(1) – Horizontal band saw - Marvel Model Hercules S330/2

### Shearing

Hydraulic squaring shear (Accushear)

Maximum cutting width—10'

Slitting capability—12'

Shearing capacities—Mild steel such as: 1020, or  
A36 (1/2" thick)

Stainless Steel such as: A240 (3/8" thick)

Aluminum alloys such as: 1100 or 3003 (5/8" thick)

Ironworker structural shear (Scotchman65)

Shearing capacity—Plate: 3/4" thick x 20"

Angle iron: 6" x 6" x 1/2"

Punching: 1-1/2" diameter thru 1" thick plate- 16" throat depth

## Plasma Arc

Messer Model SM1000- Fabricator Computer Operated

Maximum burning capacity—2" thick plate

Table size—72" wide x 144" long

## Bending

Press brake (Accupress Model 725012)

- Maximum tonnage—250 tons
- Total overall die length—12' x 0"
- Length between housings—10 x 4"
- Throat depth from die centerline—10"

## Bending capacity

5/16" thick & lighter- 12' long

1/2" thick plate- 8' long

5/8" thick plate- 5' long

## Sheet/Plate Rolling

Digital operated pinch type roller (ROUND0 Size PS255/10)

Rated capacity—9/16" thick x 10' width

Minimum diameter rolled—14"

5' Power Roll - E.G. Model 1550/4

## Capacities

1/2" & lighter x 10' width x diameter >2'

5/8" plate x 8' width x diameter > 4'

3/4" plate x 4' width x diameter > 4'

## Tank Turning Rolls

Fuller (JFRD – 20)

Rated Capacity—6" – 14' diameter

Maximum Weight—30 tons

## Lightgauge Ductwork (16 GA & Under)

Pittsburgh Machine

Piplock Machine

Duct Break 10'

Hand Breaks





## IN-HOUSE PROJECT CONTROLS & TRACKING

**Phase I** - Convergence of over (40) individual databases covering all aspects of AZCO's fabrication operations including drafting, scheduling, material control, document control, stop work orders, Q.A./Q.C., weld procedures, turnover packages, etc. from Microsoft Access to (1) centralized database in FabKinect.

**Phase II** - Implementation of Phase I into day-to-day operations. Phase II created more automated spool tracking throughout drafting to shipment. Implementation of manual forms, batch operations, and more detailed data to expedite information from users. By the end of 2018 all QA inspections will be electronically tracked via the FabKinect system, allowing even more detailed look at the spools progression through the fabrication process. Phase II also includes incorporation of the generation of estimation's unit price tables into the system allowing for a turnkey solution from estimation to job for unit price jobs.

**Phase III** - Evaluate current drafting software to better compliment the FabKinect system. This will allow quick access to spool data and make data much more visible, earlier in the process, for planning and scheduling.

**Phase IV** - Fitters/Welders will be utilizing computer screens containing shop spool drawing, weld procedures, etc. Shops will have full RFID system in place, basically covering the ceiling of the shop with a grid system that monitors real time progress and movement throughout the throughout the shop from receiving, cutting, fitting, tack welding, weld-out, test and shipping, as well as yard laydown.