

SHOP PROFILE

GROSS MECHANICAL CONTRACTORS

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GM GROSS
MECHANICAL

FABRICATING FACILITY
ST. LOUIS, MISSOURI

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Plant Size

| TOTAL PLANT AREA – 2.6 ACRES | | |
|---|-------------|------------------|
| MAIN PLANT | | |
| BAY 1 Carbon Shop | 110' x 130' | 14,300 sf |
| BAY 2 Stainless Shop | 80' x 160' | 12,800 sf |
| BAY 3 Hangers, Steel, and NDE Shop Area | 40' x 225' | 9,000 sf |
| Indoors Covered Storage | | 11,500 sf |
| Office | | 4,500 sf |
| Secured Outdoors Storage | | 30,000 sf |
| TOTAL | | 82,100 sf |

Key Stats

| | |
|---------------------------------|---|
| Rail Service | n/a |
| Air Service | FedEx Air Freight |
| Truck Service | Yellow, Consolidated Freightways, Roadway, UPS |
| Production Control | Gross Mechanical tracks all spools by a proprietary method and by welders identification |
| Manufacturing Parameters | Shop capacity - 1500 spools per month based on single shift production schedule (additional shifts available if required) |

Welding

Welding is performed by the following methods:

| | | |
|----------------------|---------------------------|--|
| Automatic | Gas Tungsten Arc Orbital | |
| Semiautomatic | Flux Core (FC) | 6" – 42" (turning machine), < 42" in shop rollers |
| | Gas Metal Arc (GMAW) | 4" – 42" (turning machine), < 42" in shop rollers |
| | Submerged Arc (SAW) | 8" – 42" (turning machine), < 42" in shop rollers |
| Manual | Gas Tungsten Arc (GTAW) | |
| | Shielded Metal Arc (SMAW) | |

Preheat treatment can be performed using natural gas burner, combustion fire, or induction heating with ceramic pads with thermocouples and documentation.

Post weld heat treatment is performed using induction heating with ceramic pads with thermocouples and documentation. Subcontracting to nearby heat treatment furnace is also an option.

| WELD REJECTION RATE — @146 PRESIDENT STREET | | | |
|---|----------|-------|-------|
| | 2019 YTD | 2018 | 2017 |
| Total welds made | 2528 | 11398 | 8754 |
| Rejected RT/MT/PT | 18 | 76 | 91 |
| Rejected VT | 6 | 69 | 51 |
| Total rejected welds made | 24 | 145 | 142 |
| REJECTION RATE | 0.95% | 1.27% | 1.62% |

Full time CWI.

Code Fabrication

Gross Mechanical Contractors is certified to fabricate weldments under the following codes, specifications or standards:

| | | |
|-------------------|------------------|-------------------|
| ASME Section I | Power Boilers | S Stamp, PP Stamp |
| ASME Section VIII | Pressure Vessels | U Stamp |
| ANSI/NB-23 | Pressure Vessels | R Stamp |
| ANSI B31.1 | Power Piping | PP Stamp |
| ANSI B31.3 | Process Piping | |

The Hartford Steam Boiler Inspection and Insurance Company of Connecticut has been Gross Mechanical's National Board Inspection Agency since 1973 and is updated every 3 years.

As a member of the National Certified Pipe Welding Bureau, Gross Mechanical has access to over one hundred welding procedures.

| Gross Mechanical Contractors has welding operators qualified to weld in accordance with ASME Codes on: | | |
|--|-----------|----------|
| Carbon Steel | Inconel | AL6Xn |
| CrMo Steel | Hastelloy | Titanium |
| Stainless Steel | Zirconium | Aluminum |
| Nickel | Alloy 20 | |
| Monel | Magnesium | |

Gross Mechanical also has fiberglass reinforced piping (FRP) certifications.

General Provisions

| OVERHEAD CRANES | MAXIMUM WEIGHT CAPACITY |
|--|-------------------------|
| BAY 1 2 Cranes | 10 Tons |
| BAY 2 2 Cranes | 15 Tons |
| BAY 3 4 Cranes | 15 Tons |
| 10 Additional Jib Cranes throughout facility 13 turning machines for welding – with space to expand up to 25 turning machines | |

Steel and Pipe Hanger Fabrication

Steel of all shapes and sizes can be custom manufactured to client's needs.

Modular Skids

Pre-fabricated modular skids including steel framework, piping, valves, pumps, controls, insulation, etc. as required to meet client needs.

Hydro Testing

Hydro Testing is available for all pipe sizes to a maximum of 10,000 PSIG.

Non-Destructive Testing

Gross Mechanical uses 3rd party for all NDE and is capable of providing any NDE required by the client including but not limited to:

- Radiography using either 100 Curies Iridium 192 or Cobalt 60 (RT)
- Phased Array (PAUT)
- Magnetic Particle Testing - prod or yoke method (MT)
- Liquid Penetrant Testing (PT)
- Ultrasonic thickness gauging (UT)
- Delta Ferrite
- Brinell Hardness
- Positive Material Identification (PMI)

Gross Mechanical Shop Personnel Profile

30 YEARS

Two shop foremen with over 30 years combined employment at Gross Mechanical and over 50 years industry experience oversee all shop fabrication efforts.

400 YEARS

Our Fabrication Shop currently employees Union Pipefitters having greater than 400 cumulative years of experience.

20+ PIPEFITTERS

20+ Pipefitters have been with Gross Mechanical more than 10 years.