

Custom Fabrication

As a trusted manufacturing partner to the global nuclear energy sector, we deliver precision custom fabrication solutions for the most demanding applications. Our team specializes in custom solutions when parts are no longer available, from single replacements to fully engineered components for new builds.

Purpose-Built for Nuclear Applications

At our state-of-the-art manufacturing facility, we engineer and fabricate custom metal components for:

- New equipment manufacturing
- Obsolescence and legacy part replacement
- Safety-related nuclear applications
- High-performance, high-integrity service environments

Every component is fabricated to meet the exact requirements of the application, material specification, and code requirements.

Materials We Fabricate

We work with a wide range of nuclear-grade materials, including:

P1	Carbon Manganese Steels
P3	1/2 Molybdenum or 1/2 Chromium, 1/2 Molybdenum
P8	Austenitic Stainless Steels
P42	Nickel, Copper – (Monel 500)
P10H	Duplex and Super Duplex Stainless Steel
P34	Copper Nickel
P6	Martensitic Stainless Steels
P5A	2 1/4 Chromium, 1 Molybdenum
P41	High Nickel Content
P43	Nickel, Chromium, Iron – (Inconel)

Materials are selected to support demanding environments involving heat, pressure, corrosion, and long service life.



Advanced Welding Capabilities

Our in-house welding expertise and equipment allow us to perform complex fabrication and joining processes, including:

- Gas Metal Arc Welding (GMAW)
- Flux Cored Arc Welding (FCAW)
- Gas Tungsten Arc Welding (GTAW)
- Shielded Metal Arc Welding (SMAW)
- Torch Brazing (TB)

We also specialize in corrosion-resistant and wear-resistant overlays using alloys such as stainless steel, Inconel®, Stellite®, and others—tailored to the specific service environment.

Welding & Heat Treatment Equipment

Our fabrication shop is equipped with modern welding and heat-treatment technology, including:

- Multiple multi-process welding machines supporting MIG, TIG, flux core, and stick welding
- Portable weld calibration and testing equipment
- Induction heating systems for controlled preheat and post-weld heat treatment
- Heat-treating and rod ovens to support material integrity and code compliance

This equipment allows us to maintain tight process control and consistent quality throughout fabrication.



Custom Fabrication: Features & Benefits

Proven Nuclear Expertise

Decades of experience supporting safety-related and commercial nuclear applications

Obsolescence Solutions

Custom-engineered replacements for legacy and discontinued components

Material & Process Versatility

Broad range of nuclear-grade materials and advanced welding capabilities

Quality & Compliance Focused

Controlled processes, modern equipment, and ASME-accredited quality standards



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