



# Machine and Weld Shop Capabilities - Qualifications

## Machine and Weld Shop

● Welding Inspection

● Welding

● Specialized Fabrication

● Machining

### MSE Technology Applications, Inc. (MSE)

#### Machine and Weld Shops

**Machine Shop.** Testing and evaluating technologies often requires developing original components or repairing parts and equipment. MSE's facilities include a machine shop staffed by skilled and experienced craftsmen and supported by knowledgeable engineering staff. The shop includes lathes, mills, presses, a large radial drill, and a gun drill.

**Fabrication Shop.** A separate fabrication shop handles the larger and higher volume jobs for our customers such as higher production rate welding processes, plasma cutting, and larger scale fabrication projects. The welding bay can easily handle piping up through 14-inches in size and has procedures qualified for carbon steel, stainless steel, and exotic alloys.

Both the machine and weld shops are capable of producing specialized components and equipment.

#### Machine Shop Specifics

- Basic machine shop equipment and tooling
- Lathes, mills, presses, radial arm drill, horizontal mill, drill presses and a gun drill.

#### Weld Shop Specifics/Processes

- Shielded Metal Arc Welding (SMAW)
- Gas Metal Arc Welding (GMAW)
- Tungsten Arc Welding (GTIG)
- Oxyacetylene Welding (OAW)
- Torch Brazing (TB)

#### Weld Shop Qualified Procedures

- Aluminum Alloy ASTM B207, and B211 (6061 and 6063)
- Unalloyed Carbon Steel
- Unalloyed Carbon Steel (mild steel)
- Unalloyed Carbon Steel (with backing or equivalent)
- Carbon Steel to Austenitic Stainless Steel (Pipe)
- Carbon Steel to Austenitic

Stainless Steel (Structural)

- Copper Alloys
- Copper Alloys to Austenitic Stainless Steel
- Inconel 600 and 625
- Inconel to Austenitic Stainless Steel
- Chrome-Nickel Stainless Steel
- Stainless Steel to Stainless Steel
- Hastelloy
- RA253

#### Weld Inspection Program:

MSE has a Senior Certified Weld Inspector (SCWI) qualified to perform the following:

- Developing and Qualifying Weld Procedures,
- Qualifying Welder Operators,
- Performing Magnetic Particle Tests and Documentation,
- Performing Liquid Penetrate Testing and Documentation,
- Performing Visual Optical Testing and Documentation.



### MSE Technology Applications, Inc

*MSE: Providing 30+ years of experience and complete engineering services and solutions to government and commercial clients. We provide a wide spectrum of engineering services such as structural consulting, site surveys, hazards identification, soil and water analysis, risk assessment, and remedial design all within a safety first environment.*

- Established Quality Assurance program
- Fully certified analytical laboratory
- Professional Engineers (PEs)
- Project Management Professionals (PMPs).

*Our structural expertise includes skilled experts who use standard and high tech software.*

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MSE machining and welding capabilities

## MSE Machine and Weld Shop Capabilities

Providing engineering solutions for 30 years.

We find engineering solutions for our customers. MSE headquarters are in Butte, MT, with offices in Washington and Tennessee

[www.mse-ta.com](http://www.mse-ta.com)

