

# Aerospace Applications

## Mission critical components simply cannot fail

And we've built our business around welding and testing processes that essentially eliminate the chances of weld defects.

**Exotic Materials?** We weld aluminum, inconel, stainless steels, waspaloy, titanium, as well as difficult to weld combinations of materials.

**Complex Designs?** Our engineering staff have been working with customers for decades designing weld joints and efficient assembly processes.

**Harsh Environments?** Our expertise with hermetic sealing using precision CNC controlled lasers in a glove box controlled environment is unmatched in the industry.

**Tight Deliveries?** Our rapid quoting, prototyping, production and testing services mean that your parts won't be the cause of delays on launch day.

## Wide range of projects and parts

- F-35 Strike Fighter
- Hellfire Missile
- Javelin Missile

Anti-Backlash gears
Bobbin Housing Assemblies
Gas Bottle Weld Assemblies
Landing Gear Struts
Phase Shifters

- THAAD System
- Orion Project
- Trident Missile

Auxiliary Inlet Vane Assemblies Check Valve Assemblies Gears and Gear Train Assemblies Motor Brakes Pyro Valves

- ■UAV Drone
- ■Paveway Missile

Bellows Assemblies
Core & Rod Assemblies
Linear Actuators
Niobium Targets
Rocket Nozzles and Propellant Valves

## Quality set to standards

AS9100D, ISO 9001:2015, AMS-2680C/2681B, MIL-STD-1595A, AMS-STD-1595A, and AWS D17.1:2017, NADCAP, ITAR compliant

Full testing to MIL-I-45208A and MIL-45662A. Sectioning lab in-house, digital microscopy, complete documentation

### **Certified suppliers to**





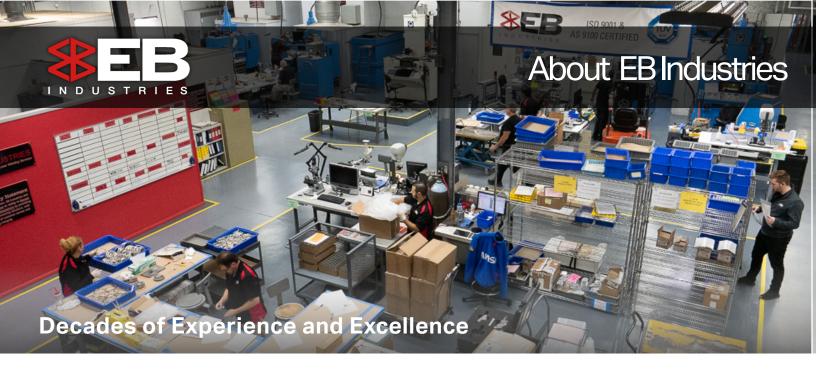








Nadcap WELDING



Founded in 1965 to provide electron beam welding to the aerospace industry

- 1984 Added laser welding capability
- 1994 Pioneered laser hermetic sealing techniques
- 2000 Adopted lean manufacturing methodology, revamped quality control and manufacturing process.
- 2013 on Continuing strategic investment in equipment, expanded workforce, additional shop space.
- 16,000 square-foot facility, custom designed for industry specific equipment

#### **Electron Beam Welding**

Power range up to 15 kilowatts

Chamber capacity up to 36"x36"x72"

Automated rapid vacuum cycling

CNC tables for semi to fully automated production

Custom designed computer controls of all weld parameters and provides data logging

#### **Laser Welding**

Power range from 25 to 4000 watts

Nd:YAG, CO2, Fiber and Disc lasers and Laserstar equipment available

2D and 3D automated and semi-automated laser welding and cutting

ESD and FOD safe environments

Glove box controlled environment welding stations

#### **Engineering and Quality Control**

Full CAD/CAM design, metallurgy lab

Full in-house machine shop for cutom tooling development

In-house sectioning lab for destructive testing

Digital and conventional visual inspection equipment, full documentation

Integrated quality and leak testing, mass spectrometer leak testing, pressure bombing, digital x-ray capabilities