



## Your Metal Tooling Solution for High Production

Janicki Industries offers the design, fabrication and testing of durable metal tooling. Depending on part production and cure pressure requirements, Janicki will design invar, steel or aluminum tooling to match your product's coefficient of thermal expansion.

In addition to our composite tooling options, Janicki offers an array of standard metal tooling products which can be quickly produced to meet your schedule.

Description	Typical Temp	Typical Cycles
Invar Lay-up Mold and Fixture	360°F	1000+
Steel Lay-up Mold and Fixture	350°F	1000+
Aluminum Lay-up Mold and Fixture	250°F	250





Nadcap AC7118 CERTIFIED ISO 9001:2008 CERTIFIED AS9100C CERTIFIED AWS D1.1, D1.2 and D17.1 CERTIFIED ASME Section VIII and IX CERTIFIED

Boeing Digital Product Definition Approved Supplier Boeing approved processor to D1-4426 requirements



#### **Vacuum and Mill Fixture Tooling**

- Extremely large-scale capacities
- Accuracy to .003 inches
- Real-time metrology for increased accuracy
- Highly skilled workforce
- Short turn-around projects



#### Engineering Design Capabilities

Janicki routinely performs the following services in-house for metal tooling:

- CATIA / Unigraphics NX
- Metrology
- Stress Analysis
- Finite Element Modeling
- Reverse Engineering
- SD Rapid Prototyping



# Facilities and Equipment for your Metal Tooling Projects

Janicki continues to invest in metal fabrication equipment, support personnel and facility upgrades to produce high quality metal tooling. Our large bays, overhead cranes, and 1,100 Ton forming press can handle your biggest projects. Our high-precision NC Mills can machine tight tolerance and complex surfaces. Combine these with our upgraded annealing furnace, metrology capabilities and experienced welders and you can see Janicki is a world-class metal tooling supplier.

### Equipment

- High-Tolerance Welding Tables - Up to 16' x 70'
- GTAW, GMAW, FCAW and SMAW Welding Machines
- Alpha Laser Cladding System
- (2) Large Waterjet Cutters
   Up to 14' x 42'
- 5 Axis Plasma Cutter



High Bays and 25 Ton Overhead Cranes

- ▶ 500 Ton Press Brake w/ 12' Bed
- 1,100 Ton Forming Press
  Forming to 3"
- (9) Custom Built 5-Axis Mills - Up to 100' x 20'
- Complete Machine Shop 4 & 5 Axis Mills and Lathes
- Tube and Pipe Pinch/Bend Machine
- Metrology Laser Trackers and Faro Arm
- Blast & Paint Booths—60'x16'x10'
- Annealing Furnace 24' x 72'
- Autoclave 50' Long x 12' Ø
- Cleanroom–9,300 ft<sup>2</sup>



Facilities: 381,000 ft<sup>2</sup> of Floor Space



Laser Welding



**Forming Press** 



Annealing Furnace

