Janicki Industries manufactures top-quality aerospace parts and prototypes for commercial and military programs, specializing in advanced composite materials and exotic metals. Janicki has developed components for leading aerospace companies around the world. Janicki is well known for large aerospace machining with carbon composites, aluminum, Invar and steel. Our years of tooling experience combined with our team of experts enable us to deliver custom parts specific to your requirements.

**Top Quality One-Stop Shop**

**Aerospace Parts**

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**Capabilities & Expertise**

- Advanced Composite Materials
- Autoclave 12’ × 50’
- Out-of-Autoclave for very large parts
- Large-Scale Capabilities, Facilities & Equipment
- Accurate, Complex Shapes
- 5-Axis NC Milling tolerance ± 0.003”
- Real-time metrology for increased part accuracy
- Design/Build firm for cost & schedule advantages
- Project Management discipline for real-time status
- Engineering Design & Analysis
- R&D Lab; Material Testing
- Pre-preg Lay-up
- Controlled Contamination Areas

**Part/Tool Integration**

Our design/build integration provides the following advantages:

- Shortest delivery time
- Accurate part-to-tool integration
- Quick turns on changes
- Fabrication & Assembly of components

**Let us deliver your parts.**
Proven Track Record

Parts | Materials | Processes

We are innovative, creative and persistent. Our goal is to provide exceptional and personalized customer service. We are committed to honesty and high ethical standards. Our customers are confident that their requirements and schedule demands will be met with quality parts that fit the budget.

MATERIALS
Janicki has delivered aerospace parts made of advanced composite materials for commercial, space, and military applications.
- Carbon fiber/epoxy
- Fiberglass/epoxy
- Kevlar/epoxy
- Aluminum, Invar, Steel
- Core (integrated or separate):
  - Rohacell
  - Polyurethane
  - Honeycomb (Fiberglass, Kevlar, Al.)
- BMI, Vinyl Ester, Phenolic Resins

Trim & Drill
Janicki has extensive trim and drill experience on both composite and metallic parts.
- Performed Drill and Trim on over 4,000 composite wing parts with 99% on time delivery and 99% zero-defect rate.

“Janicki routinely delivers our parts on-time with exceptional quality. They are like an extension of our own company where trust and integrity make a good partnership.”
Program Manager
NASA Langley

Wing Skins
Janicki has designed, fabricated and installed aircraft wing skins. Skins are made of epoxy carbon fiber pre-preg materials with foam-core sandwich laminate. Skins are cured in or out-of-autoclave.

Large Aerospace Flyaway Parts
- Complex machining
- Inspection of local alignments
- Machined hard-to-reach features
- Rate to meet requirements
- Positive feedback from customers
- Flying on airlines worldwide

Proprietary machining software combined with real-time health monitoring allow for certainty that parts will be machined within the tight tolerances of today’s high-performance aerospace world

Janicki Industries has automated these processes, eliminating human error, allowing for unparalleled precision and repeatability.
SAJ Panels - NASA
Janicki fabricated structural SAJ (Spacecraft Adapter Jettison) panels for the Orion Spacecraft. These surrounded the service module and flew on the first flight of Orion Exploration Flight Test 1, December 2014.

Transportation
Janicki has experience designing and implementing complicated, tolerance critical transportation plans. Shipping your large part is not a problem.

Orion FWD Bulkhead
Janicki Industries Utah Division machined the Orion Forward (FWD) Bulkhead for the Exploration Mission-1 vehicle. This Janicki part required 8 weeks of machining, creating a 246 pound part from a 5,100 pound plate of Aluminum. With immense schedule pressure and tolerances on many features being ± 0.002”, it was a tremendous achievement when Janicki was able to be the first supplier to successfully deliver a large pressure vessel component to the Orion Assembly Facility.

Mass Volume Isolator (MVI)
Janicki Industries fabricated both the tooling and the fly-away part for NASA. The MVI was designed by NASA Langley. It is a large diaphragm made of carbon composite and cured out-of-autoclave. It is 16.5 feet in diameter and weighs 340 lbs. This is the largest flight hardware ever built for NASA with carbon composites out-of-autoclave.

Stratolaunch Program
Janicki enabled a large airplane program with the fabrication of thousands of pounds of carbon composite flight hardware. The program is the largest airplane ever built and Janicki Industries has been a key supplier providing parts and tools. For most parts, Janicki also designed and produced the tooling. Many parts are carbon fiber epoxy, incorporating metallic and nomex core.

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Facilities Optimized for Aerospace Parts & Prototypes

Our newest facility is optimized for parts production. With over 380,000 sq. ft. of plant space, Janicki is equipped to build your largest and most complex project. Plants have multiple utility stations equipped with all the necessities: gas, air, electricity, high-speed network cables. Our newest dual 5-axis mills can fit parts up to 100’ long.

5-Axis CNC Milling
Janicki’s mills are unsurpassed in precision and scale with repeatable tolerance of ± 0.003” and envelope up to 100’ × 20’ × 8’. Our proprietary, CNC software uses custom volumetric error compensation algorithms that provide unprecedented accuracy.

Engineering
Engineering Services support fabrication of aerospace parts from one-off conceptual prototypes to serialized build-to-print flight hardware.
- Concurrently develop part & tooling
- Expert in optimization for manufacturability
- CATIA Composite Design workbench to analyze designs and create ply kits and laser projection files
- Rapidly incorporate revisions
- Manage configuration with SAP-PLM

Equipment
- 9 Large 5-Axis CNC Mills (100’ × 20’)
- Machine Shop (4 & 5-Axis Mills & Lathes)
- Oven (100’ × 24’ × 14’) w/ Automated Controls
- Weld Shop (Certified Welders)
- Waterjet & Plasma Cutter (14’ × 42’)
- Autoclave (12’ × 50’)
- Annealing Furnace (24’ × 72’)
- 25 Ton Overhead Cranes
- Grit Blasting & Paint Booth (60’ × 16’ × 10’)
- 1,100 Ton Forming Press
- 45’ Eastman Ply Cutter
- Gerber Ply Cutter

Controlled Contamination Area

Clean Room
Facilities include a 9,300 sq. ft. Clean Room with 16’ ceilings.
- Dedicated to Aero Parts Production
- Certified Technicians
- Access Controlled for Sensitive Projects

Meets requirements for:
- ISO Class 8 (Upgradeable to 5)
- BAC5317, BAC5578
- D012Z062-001

Sedro-Woolley, WA
117,000 ft²
325 Employees

Hamilton, WA
164,000 ft²
361 Employees

Layton, UT
100,000 ft²
60 Employees

12’ × 50’ Autoclave

5-Axis CNC Milling: Large Scale & Precise

Dedicated to Aero Parts Production
Certified Technicians
Access Controlled for Sensitive Projects

Meets requirements for:
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- BAC5317, BAC5578
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our quality promise
- Dedicated Continuous Improvement
- Deliver Quality Products
- Exceed Customers’ Requirements

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