Metal Bellows & Bellows Assemblies

- Metal bellows for multiple industries
- Vertically integrated manufacturing process for low-cost solutions
- 0.050" - 8" inner diameter capabilities
- Single, 2-ply, and 3-ply designs
- Capable of 0.005" - 0.050" wall thicknesses

Thin-Wall Tubing Solutions

- Customized seamed thin-wall tubing solutions
- Uniform wall thickness
- Up to 10' long tubes with in-house trimming for burr-free edges
- **Tube mill**: up to 0.020" wall thickness and 5" outer diameter
- **Shear & roll**: up to 0.035" wall thickness and 14" outer diameter

Precision Welding, Soldering & Brazing

- Thin metal joining capability
  - Welding thicknesses from 0.004” and up
  - Soldering & brazing
- Expertise in achieving precise tolerances
- Capability with specialty metals, including Hastelloy, Inconel, Monel & Titanium
- Fully & semi-automated processes
- Chamber welding

Precision Machining

- 35 multi-tasking CNC machining centers: 5-axis, turning & milling
- Highly knowledgeable machinists with over 600 years’ experience
- Expertise in achieving precise tolerances
- Knowledge in machining tough materials

Product Assemblies & Inventory Solutions

- Vendor-managed inventory stocking programs
- Light product assembly
- Private labeling & packaging
- Kitting & packaging options
- Long-term agreements
Quality Certifications & Commitment

Quality has always been a priority at Alloy Precision Technologies. Our customers know that providing quality products and services “most of the time” just isn’t good enough. They deserve and expect consistent and reliable products every time.

- CMM and automated optical scanning inspection methods
- Certified quality: AS9100 Rev D & ISO 9001
- Qualification capabilities & tools: APQP, FAI & PPAP
- NDT level 1, 2 & 3 inspectors on staff
- Various forms of product quality testing including:
  - Fluorescent penetrant inspections (FPI)
  - Helium leak testing (up to 1 x 10^9 cc / second)
  - Pressure testing
  - X-ray testing
  - Cycle fatigue testing
  - Spring rate testing

Engineering & Product Development

Our in-house team of engineering & design experts are capable of designing product solutions from the most basic to most complex applications. We continually invest in the tools for our world-class product development and manufacturing, including:

- SolidWorks 3D modeling
- CNC programming in GibbsCAM
- Analysis using design tools
- R & D lab testing
- Project management principles

Customer Focus

Our comprehensive “one-stop shop” approach for product concepts through manufacturing provides greater flexibility, more control over quality and lead times, and an overall easier process for you.

- We help with design and assemblies to meet your unique specifications
- We manufacture and assemble your components for turnkey solutions