

WE'RE **all**
about
PRECISION.



Alloy Bellows
& Precision Welding

Metal Bellows

precision

IS AT THE HEART OF

everything we do.

On-Time Delivery

In a business environment, timeliness is everything. At Alloy Bellows, on-time delivery is as important as the product itself. We pride ourselves on our ability to consistently offer flexible, responsive and reliable on-time delivery programs. Because Alloy Bellows is fully integrated, we save you time from running between multiple suppliers for

different steps in the manufacturing process. That means that you get your product faster, on time, and generally at a lower overall price. If safety stock programs are needed for next day shipment requirements, Alloy can deliver. Precision to Alloy carries into on-time delivery as well as design and manufacturing – resulting in total customer satisfaction.



Technical Superiority.

Alloy Bellows designs and manufactures custom engineered metal bellows and bellows assemblies for an array of industries, including aerospace, nuclear, biomedical, processing, petrochemical, power gen and semiconductor. Our in-house team of engineering experts are capable of designing bellows solutions from the most basic applications to the most complex. Alloy

Bellows continually invests in the tools necessary for world-class product development and manufacturing, including state-of-the-art, proprietary software for modeling, rapid prototyping, analysis and manufacturing.

Alloy Bellows is a vertically integrated manufacturing operation which means we are able to provide one-stop, low-cost, high-quality bellows solutions to the marketplace. By utilizing our full range of in-house capabilities, we are able to offer our customers bellows which are formed in one of three ways, depending on the application:

- ▶ Hydroformed Bellows: Best Technology for medium to large quantities of bellows
- ▶ Mechanically Formed Bellows: Minimum tooling costs make this the most cost-effective solution for smaller quantities
- ▶ Laser Edge Welded Bellows

World-Class Quality.

Quality is world-class at Alloy Bellows – in our products and our services. It's just part of our precision culture. In fact, Alloy is ISO9001:2000- and ASME Section IX-certified, and all Alloy welders are individually ASME-certified.

Alloy Bellows offers an array of in-house testing and inspection services, which is why our customers can rely on every product we ship. Our current services include:

- ▶ Cycle fatigue testing
- ▶ Spring rate testing
- ▶ Helium mass spectrometry (to 1×10^{-9} cc/second)
- ▶ Pressure testing
- ▶ Dye penetrant inspection
- ▶ Radiographic (X-ray) testing
- ▶ Dimensional visual inspection
- ▶ Microscopic visual inspection

We also have long-standing, established relationships with independent, outside laboratories in the event that additional services are required.

“One-Stop” Shop.

Alloy Bellows is your “one-stop” shop for everything related to bellows and bellows assemblies. We help with design. We manufacture the tubing. We machine the tooling and the flanges. And our bellows forming, welding, and assembly processes are state-of-the-art.

This comprehensive approach to manufacturing provides greater flexibility to you, more control over the quality and the lead times, and an easier process for you.

Worry-Free Customer Service.

Our focus on perfection continues with customer service – before and after the sale. We want you satisfied the first time, and every time, and we will work to keep you happy. We stand behind our products and our service. As a result, most customers who find us, stay with us for years.

Since 1935, Alloy Bellows & Precision Welding has been supplying the world with metal bellows, bellows assemblies, thin-wall seam-welded tubing, welding, soldering, brazing and nondestructive testing services. Our dedication to providing first-rate products and services on-time and on-budget has allowed us to become a leading supplier to companies, both large and small. Our unique capabilities, flexible manufacturing environment and, most importantly, our staff have allowed us to meet our customers' most critical demands for more than 70 years.



Alloy's Precision Metal Bellows Capabilities:



Hydroformed Bellows
5/8" – 3" ID
Single, 2- and 3-ply designs
Wall thicknesses of .005" to .024"



Mechanically Formed Bellows
1" – 8" ID
Single, 2- and 3-ply designs



Laser Edge Welded Bellows
.5" – 24" ID
Single ply; Flat and ripple plate design
Wall thicknesses of .004" to .024"

Materials availability:

- ▶ Stainless steel
- ▶ Inconel
- ▶ Monel
- ▶ Titanium
- ▶ Hastelloy
- ▶ Phosphor bronze
- ▶ Brass
- ▶ Copper
- ▶ Other "white" and "yellow" metals



Bellows ▶ Assemblies ▶ Tubing ▶ Welding/Soldering/Brazing ▶ Nondestructive Testing

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