

## About BellowsTech



BellowsTech, LLC is a premier US manufacturer of **edge welded bellows** and assemblies, encompassing a wide array of alloys and dimensional configurations. The flexibility of material, size as well as application expertise have led BellowsTech into industries including aerospace, medical, test, semiconductor, solar, and oil and gas.

BellowsTech metal bellows and assemblies are designed for high cycle life and low leak rates. Products are tested and verified throughout the process to ensure a quality product is delivered. With proprietary welding, in-house tooling and machining, and custom design solutions, BellowsTech can supply a completed assembly with the best price-to-performance ratio in the industry.

BellowsTech employs design engineers with experience in bellows and system technology. The sales support staff is responsive to customer inquiries and day-to-day operations.

## Contact BellowsTech



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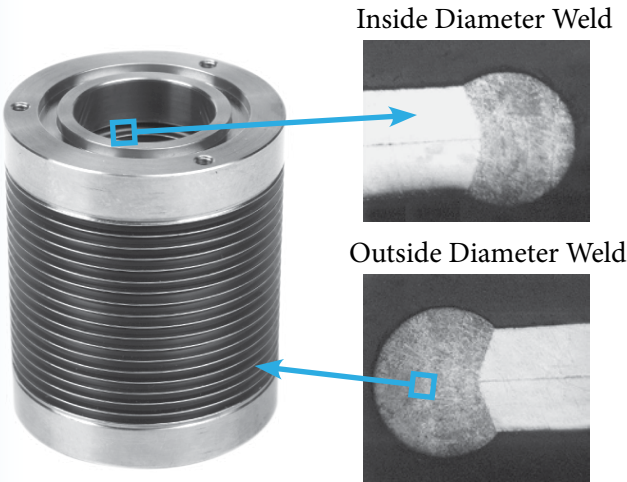
Visit [www.servometer.com](http://www.servometer.com) for information on electrodeposited nickel bellows, electroforms, electrical contacts, and couplings.



## Edge Welded Metal Bellows and Assemblies



*Experience the  
Next Generation in  
Edge Welded Bellows  
Manufacturing*



## Manufacturing Process

Simply stated, **edge welded bellows** are manufactured by welding stamped, metal diaphragms into a long, flexible assembly. Strips of metal in sheet form are hydraulically stamped into the shape of the diaphragm.

Once stamped, diaphragms are inspected for quality and cleaned. The cleaning preparation varies between manufacturers, but the main focus is to ensure that the material is free of any grease or dirt to ensure the welds are strong and leak-tight. The diaphragms need special handling after the process as well to ensure that the natural oils of skin do not come into contact with the diaphragms.

The diaphragms are positioned back-to-back (male to female) to pair the inside diameter holes. Once the inside diameters come into contact with each other, they are welded together. This process is continued in order to make the proper number of convolutions. The convolutions give the bellows assembly the flexibility and performance characteristics.

Once the inside diameter welds are completed, the convolutions can be prepared for outside diameter welding. End plates or flanges can be welded to the end of each side of the bellows assembly per customer requirements.

## Applications

Accumulators  
Actuators  
Exhaust Joints  
Expansion Joints  
Lifter Assemblies  
Mechanical Feedthroughs  
Mechanical Seals  
Vibration Dampeners  
Volume Compensators  
and more!

## Benefits

Flexibility and Spring Rate  
All Metal Construction  
Wide Operating Temperature Range  
Custom Capability

## Materials



### AM350

Temperature: -100 to 800°F

Advantage(s): Cost and low leak rate

### Stainless Steel - 316L, 304L, 347

Temperature: -420 up to 800°F

Advantage(s): Best Price to Performance ratio

### Inconel - 625, 718, X750

Temperature: -420 up to 1500°F

Advantage(s): Corrosion Resistance and high temperature capability

### Hastelloy 276C / Haynes 242

Temperature: -420 up to 1300°F

Advantage(s): Corrosion Resistance

### Titanium Grades 1 to 4

(ASTM-B265)

Temperature: -420 up to 800°F

Advantage(s): Lightweight and medical grade

*Experience the Next Generation in Edge Welded Bellows Manufacturing*