



## Inconel Bellows

### OVERVIEW

Inconel® is a nickel-based alloy with superior corrosion resistance and temperature performance to stainless steel. Inconel® Bellows using edge welded technology are designed for applications that require excellent corrosion resistance properties, such as valve or down-hole tool applications that are exposed to hydrogen sulfide.

The excellent high temperature survivability and custom design of BellowsTech Inconel bellows make them a cost-effective solution for assemblies requiring a flexible connection that can withstand temperatures greater than 1000°F, with Alloy 625 offering the highest standard temperature rating.

With the flexibility to customize, BellowsTech can manufacture and weld custom fittings, flanges, and weld rings to its Inconel bellows to make customer installations easy and seamless. A variety of diaphragm options and thicknesses as well as the ability to manufacture multi-ply bellows construction increases the temperature and strength capabilities while maintaining most of its stroke length. BellowsTech works with customers to choose the right alloy based on the customer's requirements.

\*INCONEL® is a registered trademark of Special Metals Corporation.



### TYPICAL INDUSTRIES

Oil and Gas

High Temperature Exhaust

Test Equipment

### BENEFITS

Excellent Corrosion Resistance

High Temperature Capability

High Strength

### SPECIFICATIONS

<b>Material</b>	Alloy 600 (Inconel 600), Alloy 625 (Inconel 625)+ or Alloy 718 (Inconel 718)+
<b>Thickness</b>	0.004" and up every .001"
<b>Standard Leak Rate</b>	<1x10 <sup>-5</sup> std CC He/sec
<b>Size Ranges:</b>	
Outside Diameter	0.358" (9.0932mm) to 22.205" (564mm)*
Inside Diameter	0.198" (5.029mm) to 19.921" (505.99mm)*
<b>Shapes</b>	Round; Non-Round Avail. Contact factory
<b>Length</b>	Up to 96" (244 cm)

### Why Choose Edge Welded Bellows?

Of the three major metal bellows technologies, edge welded metal bellows have the highest stroke length, reaching 90% of its free length. This flexibility allows for increased expansion and contraction of the bellows. Edge welded bellows can be exposed to extreme temperatures and media. Both the inside and outside of the bellows can be exposed liquids and gases. Edge welded metal bellows also have a high cycle life to produce repeatable results and round or square shapes.