

## **Common Bellows Materials**

The selection of bellows material is one of the most important factors to consider in designing an expansion joint and is determined through knowledge of the system process and media. Responsibility for selecting the bellows materials is that of the system process designer or the end-user.

Some of the factors which influence the selection process are as follows:

## **Factors**

**Corrosion Properties** 

- Process media
- Surrounding environment
- Internal cleaning agents

**Mechanical Properties** 

- High temperature service
- Cryogenic service
- Operating stresses

**Manufacturing Properties** 

- Forming and cold working capabilities
- Cost and material availability

It's important for our designers/engineers to have access to all the details surrounding the bellows application before a material is selected.









## **Common Bellows Materials**

MATERIAL DESIGNATION	
ASME	ASTM
SA240-304 Stainless	A240-304 Stainless
SA240-304L Stainless	A240-304L Stainless
SA240-316 Stainless	A240-316 Stainless
SA240-316L Stainless	A240-316L Stainless
SA240-317 Stainless	A240-317 Stainless
SA240-317L Stainless	A240-317L Stainless
SA240-321 Stainless	A240-321 Stainless
SA240-904L Stainless	A240-904L Stainless
SB127-Alloy 400	B127-Alloy 400
SB162-Alloy 200	B162-Alloy 200
SB162-Alloy 201	B162-Alloy 201
SB168-Alloy 600	B168-Alloy 600
SB433-Alloy 625 LCF	B433-Alloy 625 LCF
SB409-Alloy 800	B409-Alloy 800
SB409-Alloy 800 H	B409-Alloy 800 H
SB424-Alloy 825	B424-Alloy 825

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