

Expansion Joints made from

ALLOY 59 VS. PTFE

In the chemical industry PTFE Expansion Joints and Metallic Expansion Joints coated with PTFE are both widely used. To a large extent however, Expansion Joints made from Alloy 59 represent a far more superior solution, technically as well as financially.

Why choose Alloy 59 over PTFE?

Alloy 59 is a high alloy stainless steel material, with a high mechanical strength and excellent corrosion resistance, which also possesses superior resistance to chloride pitting and stress corrosion cracking. Alloy 59 is widely used in Expansion Joints installed in pipelines where the media is acidic or has complex media composition. As the use of PTFE is restricted in terms of sizes, temperature range, pressure range, flexibility of delivery and generally only available from a limited number of suppliers, Alloy 59 adds significant advantages.

Benefits of selecting Alloy 59 instead of PTFE

- No limitations on size (diameter) and shape
- More resistant to abrasive media
- Allows high level of movements
- Minimizes the need for an external cover
- Alloy 59 is more resistant to acids at elevated pressure and/or temperatures
- Expansion Joints in Alloy 59 can be designed for higher pressure – up to 150 barg (the design and the pressure may require reinforcement rings, but Belman can advise on this)
- Expansion Joints in Alloy 59 can be designed for higher temperatures up to +950°C
- Shorter delivery times
- Less expensive than PTFE and PTFE-coated solutions

Who could benefit from using Alloy 59 Expansion Joints instead of PTFE?

All pipelines where the media is acidic and in industries such as:

- Chemical industry
- Acid plants
- Plants in the mining industry
- And many more

Would you like to know more?

Belman's Expansion Joint experts are ready to help you:

E: belman@belman.com

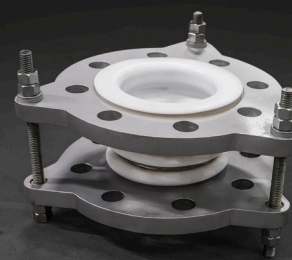
T: +45 7515 5999



Alloy 59 Expansion Joint



PTFE-coated Expansion Joint



PTFE Expansion Joint