

India's

Leading manufacturer

& Supplier of

- Expansion joints
- Bellows assemblies
- Flexible & thermal compensators
- High-frequency decouplers.



APEX BELLOWS LLP

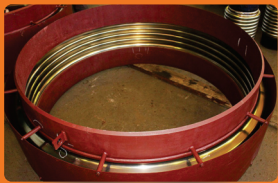
**“Excellence
IN MOTION,
RELIABILITY IN EVERY JOINT”**



About

Apex Bellows LLP

Apex Bellows is began its functioning in the year 2022 as a manufacturer, supplier and exporter of a commendable and wide range of Water Pipeline Products of MS Bellows manufacturer in Gujarat. We Offer you Single Expansion joint, Universal expansion joint, hinged expansion joint, gimbal expansion joint, pressure balance expansion joint, rectangular single expansion joints and dismantling joint. Owing to the finest raw materials and advanced machinery used in manufacturing these products, they have a sturdy construct, superior lifespan and high resistance to corrosion. For the purpose of maintaining the quality, we abide by all the industrial guidelines and norms. Further, the offered range is offered range priced at the best rate possible, has a high demand.



Infrastructure

Spread over a wide area of land, our infrastructure is carefully divided into several units to ensure that all the on-going procedures are carried out in the most streamlined and standardized manner. Our infrastructure is well-equipped with different machinery required for carrying out large scale production.

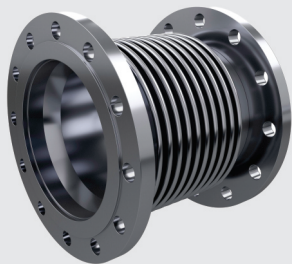
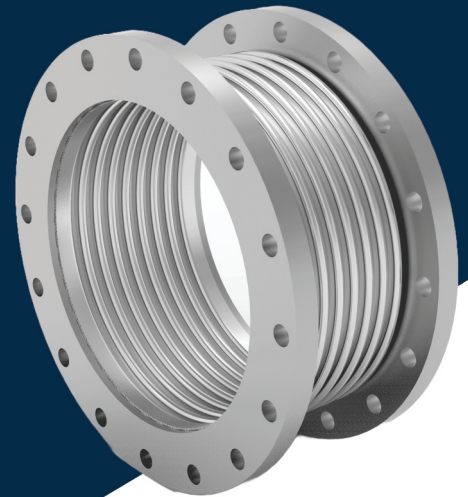
Customer Satisfaction

Being a quality focused and oriented organization, the premium quality of the offered pipes and tubes are never compromised at our end. Due to total management procedures carry out at different stages of production, we provide our patrons with the unmatched tubes and pipes at cost effective prices.

Backed and supported by a team of hard working professionals, we have been able to meet the precise needs of our patrons in most efficient manner. To enhance and polish their skills as well as upgrade them with latest happening in this domain, we provide our patrons with regular training sessions.

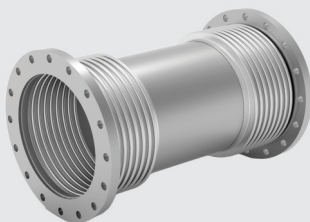
Single Expansion Joint

A single expansion joint (SEJ) is the simplest type of metallic expansion joint, featuring one bellows element, primarily designed to absorb axial (straight-line) movement in piping and duct systems caused by thermal expansion or contraction, reducing stress and preventing failure; while cost-effective and compact, it requires specific anchoring and guiding but can also handle small amounts of lateral/angular movement and vibration, making it vital for HVAC, power, and industrial applications.



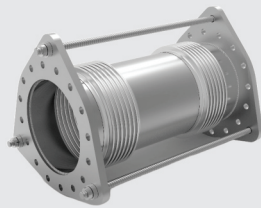
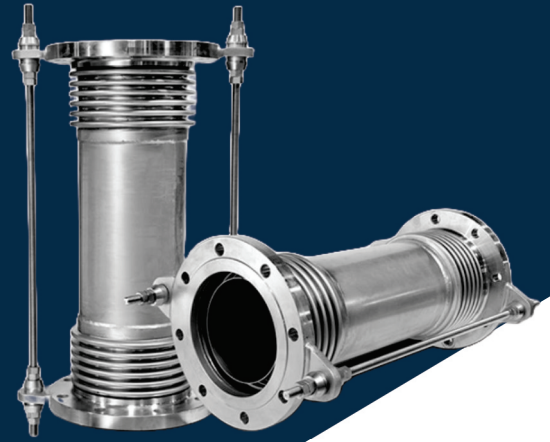
Universal Expansion joint

A single expansion joint is the simplest type of metallic expansion joint, featuring one bellows element, primarily designed to absorb axial (straight-line) movement in piping and duct systems caused by thermal expansion or contraction, reducing stress and preventing failure; while cost-effective and compact, it requires specific anchoring and guiding but can also handle small amounts of lateral/angular movement and vibration, making it vital for HVAC, power, and industrial applications.



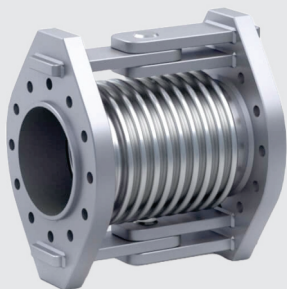
Tied Expansion Bellows

A tied expansion joint is a specialized pipe component with tie rods that allow it to absorb lateral movement (sideways shift) in piping systems, while the rods themselves restrain pressure thrust, preventing axial (push/pull) movement and protecting connected equipment from excessive loads, making it ideal for high-pressure, high-temperature industrial applications like power plants and refineries. Tied expansion joints are designed to have a fixed overall length. The tie rods are attached in a way that eliminates axial movement and forces the ends of the EJ to remain parallel at all times. This configuration allows for only two degrees of freedom, lateral in two axes.



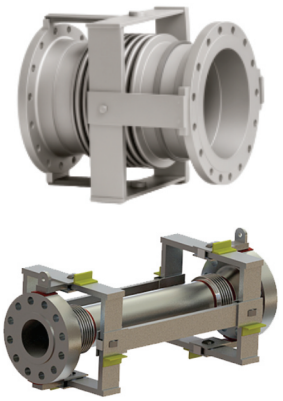
Hinged Expansion Joint

When a Our Apex Hinged Expansion Joint is used, movement is limited to angulation in one plane. Hinged Assemblies are normally used in sets of two or three to absorb large amounts of expansion in high pressure piping systems. Only low spring forces are transmitted to the equipment. The hinge hardware is designed to carry the pressure thrust of the system. Slotted Hinged, Expansion Joints are a variant of the standard Hinged Expansion Joints that allow axial and angular movement. Be careful! Once Slotted Hinge is introduced torison in the piping system is still resisted but the hinge no longer carries pressure thrust.



Gimbal bellows

The gimbal restraint is designed to absorb system pressure thrust and torsional twist while allowing angulation in any plane. Gimbal Assemblies, When used in pairs or with a single Hinged unit , have the advantage of absorbing movements in multi-planer piping systems. When used in pairs or with a single hinged unit, these assemblies excel in absorbing movements in multi-planar piping systems, akin to an automobile's universal drive shaft.



Pressure balanced expansion joint

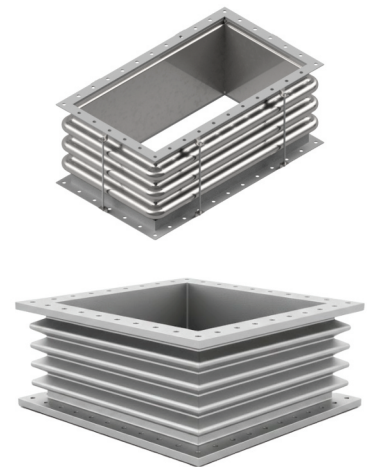
A pressure balanced expansion joint absorbs pipe movement (axial, lateral, angular) while neutralizing the internal pressure thrust, preventing it from loading sensitive equipment like turbines or pumps, and eliminating the need for heavy main anchors by using an opposing bellows system to create an equal and opposite force. It's crucial for high-pressure systems or tight spaces where large anchors are impractical, allowing for thermal expansion without damaging equipment or structures, often incorporating elbows or "T" shapes to manage directional changes.



Rectangular Expansion Joints

Rectangular Single Expansion Joints are custom-engineered metal bellows for large, rectangular duct systems (like in power plants, steel mills) to absorb thermal expansion, vibration, and minor movements (axial, lateral) in high-temp/pressure air/gas flows, featuring single bellows, specific corner designs (miter, camera), and often flow liners, designed to absorb movement while needing external anchors to handle pressure thrust.

Square and Rectangular Bellows: Any size with any shape and corner Rectangular Bellows especially used in low pressure ducting to absorb thermal expansion of duct and vibration from equipment. Rectangular Expansion Joint have a single, miter, camera and rounded corner design to absorb axial and lateral movement due to thermal expansion of system.



Dismantling Joint

A dismantling expansion joint is a specialized pipeline fitting that creates a removable section, allowing for easy installation, maintenance, or replacement of equipment like valves, pumps, or meters without major pipe cutting or disruption, using telescoping sleeves or bellows with tie rods for axial adjustment and support, significantly reducing downtime and labor in industrial piping systems. Dismantling joints play a critical decisive role in the design and layout of valves and pipelines. They come in handy during the installation and removal of pipe valves and sections. As the joints provide longitudinal adjustment, the precise insertion of a valve into the desired pipe section is made possible.





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