

Hinged Expansion Joint

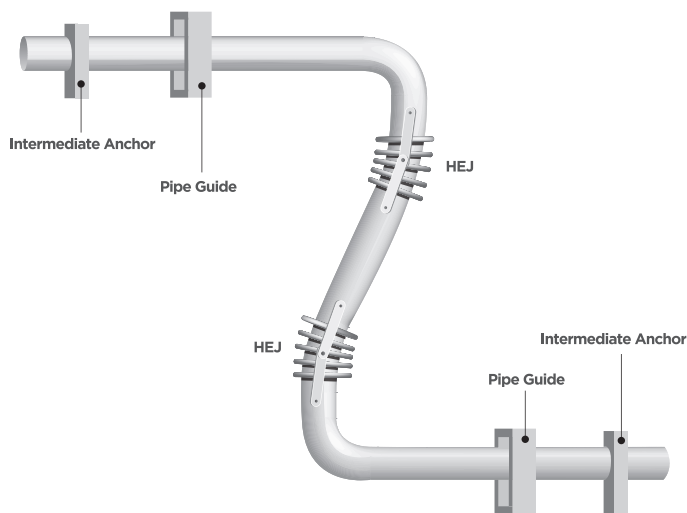
Hinged expansion joint is designed to permit angular rotation in one plane only by the use of a pair of pins through hinge plates attached to the expansion joint ends. The hinge and hinge pin is designed to restrain the pressure thrust loads and other external loads such as dead weight and wind. Slotted hinges assembly can also be provided to allow some amount of axial deflection. These slotted hinge types will not resist pressure thrust forces, and anchoring must be provided. If the full axial restraint of the hinged type is desired, the piping designer should understand that there is no allowance in the expansion joint for any axial travel, including none for any installation misalignment

Features

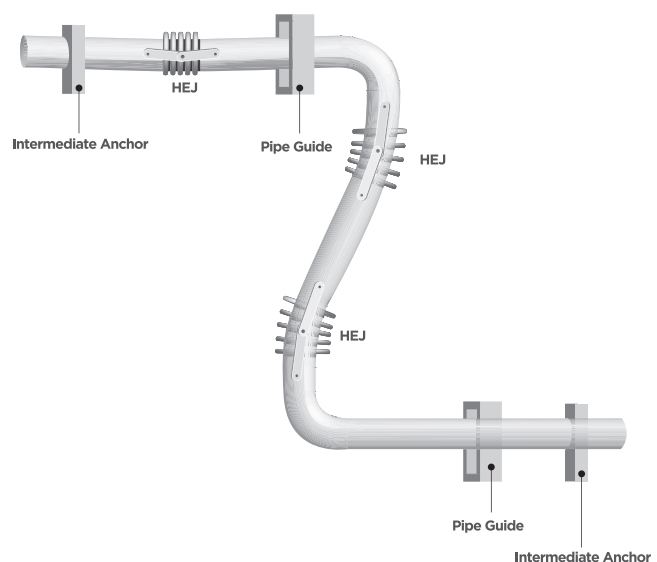
- Permits angular rotation in one plane.
- Eliminates pressure thrust forces
- No main anchors required
- Transmits loads, so low forces on the pipe anchors
- Prevents torsion or twisting of the expansion joint.
- Can also absorb axial deflection, if designed.
- Internal flow liners for eliminating velocity problem
- Anchors only required to absorb spring forces



Hinged expansion joints can be fitted with either pipe ends or flanges and are used in sets of two or three to function properly



Two Hinge System



Three Hinged Expansion Joint

Double Hinged Expansion Joint

Double hinged expansion joint consist of a two bellows with two pairs of hinges. This type of expansion joint is used to accommodate large amount of lateral deflection in one plane. By providing a special arrangement of hinge box, the universal hinge expansion joint can also accommodate angular movement and lateral deflection in more than one plane.