UIP
INTERNATIONAL

EXPANSION JOINTS

WHERE QUALITY IS THE STANDARD

EXPANSION JOINTS

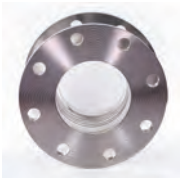
Expansion joints provide relief from stresses caused by thermal expansion and contraction in pipelines. Movement is always experienced in piping systems due to varying ambient temperatures, differences in temperature of materials handled, and differences in composition. Expansion joints absorb this movement and mitigate the risk of buckling or pulling apart.

▪ Spool Type Style 1000: for pressure, vacuum, and greater movement
Tapered spool-type expansion joints are used to connect flanges with different diameters, whether parallel or offset, with initial misalignment less than 0.12". Tapered joints can be made filled arch, sleeve ends, without arch; with special tube materials; with larger arch; with straight section on smaller end of joint to assure clearance of bolts on eccentric type joints and on joints with considerable taper. Both concentric and eccentric shapes are available in a variety of sizes. As with the regular expansion joints, when piping is not anchored, control units must be used to prevent over-elongation of the joints.

▪ Single Sphere Style 800: precision molded of neoprene and tire cord. These units require less force to move than conventional joints, allowing maximum deflection, elongation, and compression. The design is stronger than other configurations because of the spherical shape. The smooth flow arch reduces turbulence and allows quiet flow without sediment build-up.

▪ PTFE lined rubber expansion joints combine the features of FEP/PTFE for chemical resistance, anti-stick properties, thermal stability, and resistance to age cracking. These joints are designed for noise and vibration dampening, flexibility, and high-pressure ratings. Temperature ratings to 400°F available. Sizes of 1" to 48" in standard face-to-face dimensions or special lengths.

▪ PTFE lined metal joints combine the properties of metal and PTFE into an advanced and versatile expansion joint. This joint will absorb pipe movement and stress, isolate mechanical vibration, reduce system noise and protect against surge forces. Unlike ordinary solid PTFE or elastomeric expansion joints, should up-set conditions exceeding 500°F occur, this joint will maintain its pressure carrying capacity up to 1200°F, adequate time for system shut-down and replacement.



▪ Metal Bellows are custom-engineered single- and dual-bellows made from 18-8 stainless steel alloy 321 as well as special alloys including Monel, Inconel, and Hastelloy. Options include PTFE-lined, universally-tied, in-line pressure-balanced, externally-pressurized, Gimbal, and hinged, among other configurations. They can be designed to operate up to 300 psi and with temperatures up to 1,500° F in sizes from 2" up to 144".

▪ Flexible metal hoses are designed as general, all-purpose hoses for conveying liquids and gases. They are available in stainless steel types 304, 321, and 316/316L or series B-bronze.