Flexible Expansion Joints

Protect Water and Wastewater Pipelines

Features and Applications:
- Protection against shear caused by subsidence or seismic forces
- Simultaneous deflection and axial movement
- For use on water, wastewater and industrial pipelines
- Up to 20° deflection per ball
- Fusion Bonded Epoxy of all interior “wetted” parts
- Coal Tar Epoxy exterior coating
- Constructed of ASTM A536 Ductile Iron
- Pressure Tested at factory prior to shipment

For more information refer to FLEX-TEND brochure at www.ebaa.com

Sizes Range From 3 inch to 48 inch

Preserve Tank Connections and other structural elements from strain induced by earth movement due to subsidence and seismic forces.

www.ebaa.com

Tel: (254) 629-1731
Fax: (254) 629-8931
(800) 433-1716 within US and Canada
**RIGID AND VULNERABLE**

“Numerous studies have been conducted on the response and survivability of liquid reservoirs subject to seismic shaking. Failure of a storage structure, due to the incompetence of a rigid connection, is the most common mode of failure in almost every account. In many cases, the tank connection is made with flanged cast grey iron fittings, which are bolted to other flanged appurtenances and flanged to pipe leading underground. This type of system allows no freedom of motion. During seismic shaking, one or more of the flanges or fittings is almost certain to fail.

A second mode of failure commonly observed is joint separation of unrestrained repair type couplings and flange coupling adapters. Restraint of all joints is necessary under conditions of seismic strain.

Sudden ground motion, due to earthquakes, is arguably the most extreme test of these structures and their related underground piping. While no system or structure is without some degree of exposure to the risk of damage, it is prudent to provide a means of isolating the motion of the tank shell and the piping...”

Excerpt from
“EBAA Connections” Bulletin FT 2

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**AN ENGINEERED SOLUTION**

“In the mid 1980’s, EBAA Iron recognized the need for a flexible connecting system and began producing the Flex-Tend flexible expansion joint. The Flex-Tend system was designed from the start with earthquakes in mind. Tank connections are protected through the use of this product.

The Flex-Tend system, typically used for tank connections, consists of two ball and socket joints separated by an integral expansion joint. This configuration allows movement in any direction as well as the required expansion. The details of its design and other attributes are covered in the “Connections” bulletin FT-1 as well as the product brochure...”

Excerpt from
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