

Expansion Joint Failure Due To Incorrect Dimensions

Application:

Fuel transport / distribution pipe line used in a Petro-Chemical production facility.

Problem:

During a physical maintenance review of the expansion joints in the facility, the plant discovered an installed expansion joint with tears in the rubber flange cover, exposing the fabric reinforcement. The plant was concerned that the Expansion Joint could fail during operation, resulting in a potentially catastrophic accident or extended downtime.



Solution:

A local Partner sent pictures and measurements of the installed Expansion Joint to our Engineers for review. We determined the pipe flanges had a lateral offset, and the Expansion Joint installed was stretched beyond the rated extension during installation. Our Engineers and Sales Team worked closely with the plant and distributor to get accurate measurements for the replacement Expansion Joint. We added three-quarters of an inch to the face to face and built in a seven-eighths offset to the Expansion Joint. The plant was very concerned about the Expansion Joints condition deteriorating further and opted to have us expedite the replacement joint. The replacement was installed within six business days with little downtime experienced by the plant.
