HOLZ Rubber Company, Inc.

Application Data Sheet

Application:

Power plants use chemicals to produce steam, regulate temperature and, to keep the system free of corrosion. These chemical lines are running throughout each plant, and they typically have expansion joints installed to compensate for vibration and thermal fluctuations.

Problem:

A distributor was concerned the cover (outer layer) of some of their expansion joints were delaminating. A Holz technical representative traveled to the plant with our distributor to troubleshoot. During the inspection, he found that the expansion joints had a layer of caustic on them from a leaking pipe overhead. The expansion joints did not have a cover that was chemically resistant; the joint was delaminating and cracking.

Solution:

Holz's engineering team made recommendations to help the customer fix this problem and to prevent it in the future. First, we recommended that the leak above be fixed before new expansion joints are installed. Second, we provided the new expansion joints with a Butyl cover that would protect the joints if they were ever exposed to the caustic chemical again. When expansion joints are part of any application, it is essential to consider the environment outside the joint as well as what will be flowing through it. Environmental factors such as chemical attack, UV, and abrasion by fasteners or other equipment should part of the design.