



Application Data Sheet

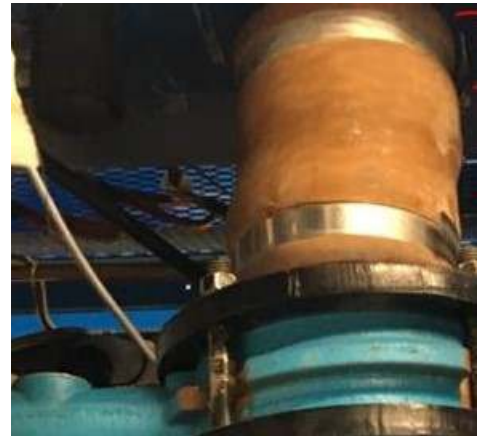
Engineered Fabric Reinforced Sleeve Combats Vacuum

Application:

Commercial Rapid Cooling Cold Air Circulation Process Piping

Problem:

A Commercial Ice and Rapid Cooling Company contacted one of our Distributors due to a worn expansion joint sleeve installed in a cold air piping system. Constant vacuum and cold temperatures were adversely affecting the performance of the sleeve and the entire system. The sleeve was being sucked into the media stream, causing cracks to form in the body, and the material of the sleeve was brittle due to the extreme cold temperatures.



Solution:

Our Engineering Team reviewed the current Sleeve along with the piping system requirements. We determined the existing Sleeve was a non reinforced rubber tube. The constant system vacuum was pulling on the tube from the inside, causing a system restriction. Due to the body of the joint being sucked in, the rubber was stressed, creating cracks inside the Sleeve. Our Engineers specified a 430 style No Arch Sleeve Expansion Joint constructed with EPDM rubber and fabric polyester reinforcement rated for full Vacuum. The strengthening in the Expansion Joint will keep the Sleeve's structural integrity intact while the EPDM rubber is not adversely affected by the cold temperatures of the environment.
