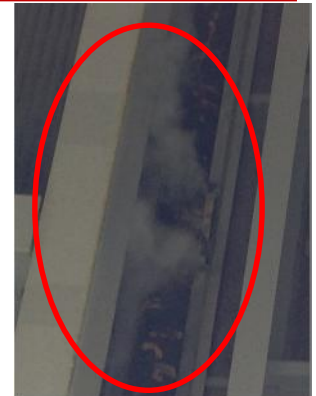


Absorber Inlet Expansion Joint

Application:

The Absorber Inlet Expansion Joint used in the Wet Flue Gas Scrubbing process.

Wet scrubbing is the process in which a lime slurry is sprayed into the flue gas stream to remove sulfuric acid and fly ash.



Problem:

The Expansion Joint connecting the ductwork to the Absorber was leaking due to the backsplash during operation. The media, an acidic lime slurry, was eating its way through the ductwork, Expansion Joint, and metal frame, causing leaks to form. The acidic slurry was spewing through the damaged ducting and Expansion Joint and dripping to the ground creating a hazardous environment.



Solution:

Holz Engineers reviewed the existing ductwork and expansion joint design with the help of a local distributor. We determined that the ductwork could be extended during the review, moving the Expansion Joint further away from the spray during operation. We designed a 952 Arch Style Flanged Flue Duct Expansion Joint capable of handling extreme movements in short Face to Face lengths made of Viton to resist any future acid attack. The new design incorporated formed angle retaining bars to support any potential acid build-up and a flow liner to protect further the Expansion Joint body and drilled flanges from any acid attack.