

## Design Changes Increase Service Life

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### **Application:**

A high velocity duct carrying dry powder.

### **Problem:**

A fertilizer manufacturer had an expansion joint that started to leak one month after installation. Plant personnel observed media leaking through parts of the joints body, especially near the corners of the flanges.



### **Solution:**

A Holz Distributor that works with the fertilizer plant contacted us for suggestions of how to prevent the leaks and to increase the service life. There were two significant problems with the current design. First, the expansion joint frames did not include fasteners near the corners, causing the leaks along the edge of the flange. Second, the abrasive material was wearing the tube of the joint, causing it to fail quickly. After identifying the two issues, Holz Engineers designed a new flange configuration to eliminate leaking at the corners and proposed the addition of a flow liner to protect it from the abrasive material. Holz provided drawings and data to support the changes, and the customer decided to proceed with the new design. Due to the changes, the customer has reported a much longer service life and reliability in this application.