Know-How*in Action*

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ABRASION CONTROL ON STEEL BENT ELBOW PIPES WITH BELZONA

CUSTOMER
Mill, South Carolina

APPLICATION DATE
September 2011

APPLICATION SITUATION
Support base of steel bent elbow pipes in a bag house exhaust room of a steel manufacturing facility.

PROBLEM
Original steel pipes are built with a 2"x4" steel base that supports the bottom of the bent steel pipe. Heavy abrasion discharge from dust and mill operation particles penetrate the cylindrical steel wall surface and erode the base requiring pipe replacement or extensive welding.

PRODUCTS
Belzona 1391 (Ceramic HT)

SUBSTRATE
Steel

APPLICATION METHOD
Base 2" x 4" x 8' in length had to have a portal hole drilled in order to pour the material and allow it to fill the cavity of the base. Belzona two part material was mixed and poured to fill spaces. Prior to full cure, the portal holes were filled with a screw that was additionally sealed by the Belzona 1391.

BELZONA FACTS
The customer had not previously coated or filled the metal base of these bent elbow pipes. Consequently, it eroded from high pressure dust and mill exudate discharged from the cylindrical pipe and abrading it's way through the pipe and the base. This required an expensive pipe replacement every 18 months. Three years later, this pipe is still in service offering cost and maintenance savings for the customer.

PICTURES
1. Steel bent discharge pipe in operation
2. Bent dust discharge pipe pre-drilled hole portal
3. Bent dust discharge pipe filled with Belzona 1391
4. Bent discharge pipe plugged prior to cure of 1391

1.

2.

3.

4.

ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

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