

Going *back* to metal expansion joints in the hot air pulverizer ducting

August 2009 – A coal fired power plant on the east coast had a coal duct explosion that ripped through their fabric expansion joint and continued to burn when exposed to the atmosphere.



Original metal box-fold expansion joint lagged with insulation

The utility had replaced their 25 year old original hot air pulverizer metal expansion joints in favor of a less expensive fabric joint.



Coal dust igniting through tears in the fabric expansion joint

Although fabric expansion joints are common in other ducting systems, coal dust explosions in the pulverizer ducting happen more than they should – especially in horizontal ducts. The designs of the original metal expansion joints were robust and held up well under such harsh conditions.

Due to their inability to handle high temperatures, the fabric belts cannot be lagged over which further increases the exposure of personnel to hot gases if ruptured.

The utility quickly decided to go back to the metal expansion joint design that had served them well for many years.



The box-fold style is bullet-proof and time tested

Oakridge Bellows supplied an exact duplicate of the original box-fold bellows. This style, with its deep convolution design, is both highly flexible and rugged.

There are several styles of OEM pulverizer duct expansion joints successfully operating in coal plants throughout North America - Oakridge Bellows can provide duplicate parts for each style that will provide years of trouble free service.