

GREENSHIELD
TECHNOLOGY
REPORT

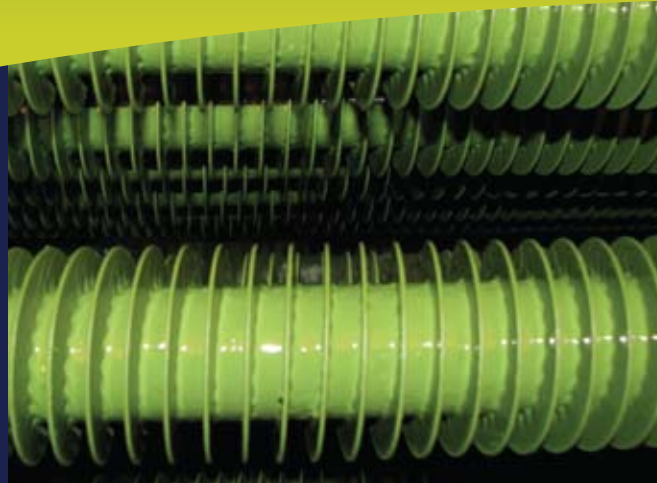
TechReport



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In this issue we investigate
**Finned Economizer
Tubes**

The Plant

Tampella designed circulating fluidized bed boiler (CFB) located in Pennsylvania. The plant burns 625 tons of waste coal (gob or clum) per day and injects 150 tons of limestone per day.

The Challenge

Waste coal and limestone are extremely abrasive. The intense sweeping action in a CFB unit contributes to these harsh conditions. The economizer bundles are difficult to perform NDT to determine the wall thickness of the finned tubes. The finned tubes had been replaced due to the extremely abrasive conditions found at this circulating fluidized-bed boiler (CFB).

The Solution

Furnace Mineral Products Inc. built a prototype of the economizer so that we could fabricate blast and application methods and equipment specific to this economizer. FMP attended the spring 2008 outage and applied our Green Shield Ceramic Coating. We applied our Green Shield to a thickness of 8 mils.

The Result

There was a loss of approximately 1 mil of Green Shield during the first year in service. All of the ceramic was intact. There were no tube failures.

One Year Later...

