



PROBLEM SOLVED™ PAPER

SOLUTION: Cougar® Thumper Series Timed Impactor

INDUSTRY: Coal Fired Power

LOCATION: Wyandotte Municipal Power Plant
Wyandotte, Michigan



Installed below the grate of the grizzly, the Cougar® Thumper Series Timed Impactor delivers powerful blows to keep material moving.



To improve flow and overcome bottlenecks, a Cougar® Thumper Series Timed Impactor will supply up to 60 powerful impacts per minute.

PROBLEM

The plant's mixture of coal and shredded tires (TDF) hangs up on the feed hopper grizzly. The plant has removed several of the grizzly bars, creating a larger opening but material still hangs up. This bottleneck forces plant personnel to push the fuel mixture over the pit, and then get out of the loader to poke the pile through the grizzly with a shovel.

SOLUTION

To improve material flow, a Cougar® Thumper Series Timed Impactor from Martin Engineering was installed to cover half of the grizzly's four sections. Controlled by a pneumatic timer, the Cougar® Thumper Series Timed Impactor delivers powerful "sledgehammer" blows to stimulate material flow and prevent bottlenecks.

RESULTS

When the plant is moving fuel, the operator turns on the air supply to the Cougar® Thumper Series Timed Impactor. The device operates at a rate of 30 to 40 impacts per minute. With the Cougar® Thumper Series Timed Impactor operating, there is continuous material flow, with no shoveling required. The operator can stay in the loader, to get the fuel moved more efficiently.



With the Cougar® Thumper Series Timed Impactor installed, material flows freely into the feed hopper at Wyandotte Municipal Power.