ATRITA® PULVERIZER UPGRADES



ATRITA® DYNARING™ CLASSIFIER

Riley Power Inc., a Babcock Power Inc.® company, designs, manufactures and services equipment for the power generation and industrial markets worldwide.

With a goal to increase plant efficiency for our clients, we are continuously developing ways to improve the design of our products. The innovation of the DynaRing $^{\text{TM}}$ Classifier, which replaces the existing rejector ring assembly design on currently installed Atrita $^{\text{R}}$ Pulverizers, increases overall efficiency and extends the service life of the Atrita. The DynaRing $^{\text{TM}}$ Classifier establishes a labyrinth seal with an aerodynamic seal feature to prevent coarse coal particles from "leaking" through the seal gap. In addition, the rejector arms of the DynaRing $^{\text{TM}}$ classifier are redesigned to improve classification capability by enhancing the centrifugal field in the grinding section.

Long wear life, and sustained coal fineness come with the installation of the DynaRing[™] Classifier. Contact Riley Power today to make this upgrade on your Atrita[®] Pulverizer.



BENEFITS

- Dynamic seal designed to improve top size control
 - Field testing has demonstrated an improvement in coal fineness of 10 percentage points passing through 200 mesh and over 1 percentage point improvement passing through 50 mesh
- Designed for easier installation and adjustment
 - Eliminates old rejector arm clearance setting problems during outages; decreases down time
 - Installed in only a few hours
- Longer wear life
 - Critical wear areas are designed with materials exhibiting excellent wear resistance
- Coal fineness deterioration is significantly reduced as the air/coal ratio increases when firing PRB coal
 - Improves mill drying performance without de-rating coal fineness
- Patent application pending



PROVEN RESULTS

COAL FINENESS AND POWER CONSUMPTION COMPARISON

A new DynaRing[™] Classifier was installed on an Atrita[®] Pulverizer for field-testing at a Northeast power plant. This plant has four Riley Power Inc. Atrita[®] 550D Pulverizers installed. Each pulverizer has a standard design capacity of 16 TPH with the originally supplied 450 hp motor. Over the past several years, the mills for this plant have been upgraded by including additional grinding pegs and clips in the mill to provide 20 TPH flow. The DynaRing[™] Classifier was installed in Mill C of this electric provider. During a period of several days, coal fineness samples were collected and analyzed.

RESULTS

- A 10 percentage point improvement in coal particles passing through a 200 mesh screen
- Over 1 percentage point improvement passing through a 50 mesh screen
- Improved coal fineness level has been maintained since the installation
- Calculated LOI (Loss On Ignition) for this application would be decreased by nearly 7 percent with overall boiler efficiency increased by nearly 1 percent
- Expected payback time for this power station would be less than 3 months





SAFETY³ PEOPLE. POWER. PROJECTS.

We're giving safety the third degree.

Babcock Power Inc. and its subsidiaries place the safety, health and security of our people at the core of our company values. Our team is our most valuable resource, generating solutions everyday to deliver safe, clean, reliable energy globally. With a keen focus on safety, Babcock Power Inc. conducts business in a manner that protects our people, our customers and the environment. From innovation to generation, we are proud of our award-winning safety record and are committed to operating with integrity and excellence.

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