



Design Update Bulletin

Combustion Systems

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On-line Coal Flow Distribution Control

ADJUSTABLE RIFFLE DISTRIBUTORS

(Patent Applied)

Foster Wheeler's adjustable riffle design provides positive on-line coal flow distribution control without adding system resistance.



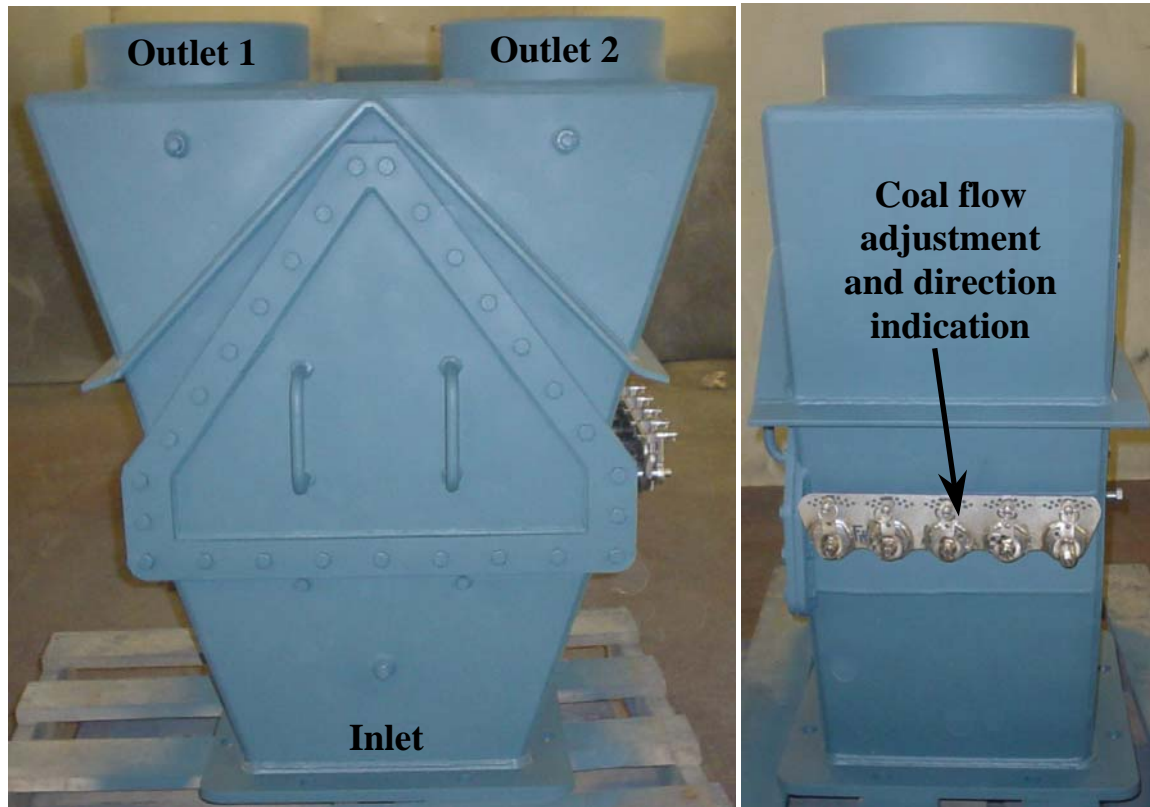
The Foster Wheeler design is compatible with common industry riffle distributors and can usually be installed without coal pipe modifications.

Benefits

- Coal flow distribution control can help achieve:
 - more even boiler gas and metal temperature profiles
 - lower NOx and CO emissions
 - lower unburned carbon in flyash
 - more efficient combustion
 - less burner coking and coal pipe fires
- Helps correct inadequate coal transport conditions
- Helps reduce coal pipe erosion
- Allows balancing of coal flow with minimal affect on primary airflow.
- Can be installed with minimal pulverizer downtime.
- Coal flow balancing results can be seen immediately when used in combination with Foster Wheeler's ECT Real Time Coal Flow Measurement System
- Automated control available



It has long been known that balancing coal and airflow lowers emissions, improves combustion efficiency and improves overall boiler operation. The Foster Wheeler adjustable riffle distributor allows on-line biasing of coal flow between coal pipes without taking the associated pulverizer system out of service. The adjustable riffle design distributes coal from a single inlet to either two or three outlet pipes depending on the arrangement.



Foster Wheeler Adjustable Riffle Distributor
(Patent Applied)

The Foster Wheeler adjustable riffle design is available for Foster Wheeler ball tube mills, Riley ball tube and Atrida mills as well as CE Raymond exhauster mills.

Adjustable riffle distributors can be applied independently or used in combination with Foster Wheeler's ECT on-line, real time coal-flow measurement system. Automated control options are also available.

For additional information, please contact your local Foster Wheeler North America Corporation service center office. You can also call us at 908-713-2260, fax us at 908-713-2285 or even email us at http://www.fwc.com/pow_services/parts

The information presented above is continually updated. Please contact your local Foster Wheeler office for specific details.

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