

Conforma Clad™ for Coal Riffles

- **Superior Weight-to-Erosion Resistance Ratio**

It would take an inch of chrome carbide weld overlay or three inches of plain carbon steel to equal the erosion resistance provided by 1/16" (1,5mm) of Kennametal cladding.

- **Balanced Combustion**

Extending the service life of fine-cut riffles equips boiler engineers with a better tool. This achieves a balanced combustion within their boiler furnaces, along with reduced NOx emissions.

- **Protect the Entire Riffle**

Kennametal can protect the leading edges, working surfaces, and sides.

- **Proven Results**

Kennametal's premium technology has been used in coal-fired power plants for more than 20 years, extending the life of burners, gas fans, boiler tubes, thermowells, ash conveyance equipment, pitot tubes, pulverizer components, and other plant equipment.



Reduced unplanned downtime and significantly extend the life of coarse and fine-cut coal riffles!

Technology

Riffles are subjected to severe wear conditions as they have a constant, high velocity coal stream impinging and sliding on the riffle surfaces. Most often, the coal stream is concentrated in a “rope” to further contribute to the erosive effect of the coal flow. The purpose of the riffles is to more evenly distribute the fuel/air ratio to the individual coal pipes from each mill.

Kennametal’s unique tungsten carbide cladding applied to fine cut riffles provides both maintenance and operations/performance personnel the dual benefit of extended service life and improved combustion and boiler performance via improved fuel/air balance. This approach is extremely cost advantageous over less proven burner balancing methods and is an approach to consider for any such exhauster mill application where OFA (over fire air) and/or LNB (low NOx burner) retrofits are being considered.

Custom Solutions

Kennametal will work closely with you to develop a wear solution for your riffles. In addition, our brazed tungsten carbide wear protection can be applied to a variety of industrial components that are affected by abrasion, corrosion and erosion. Our team of application and material engineers is available to evaluate your application and recommend a cost effective solution today.

Specifications

Cladding Specifications	
Substrates	Cladding can be applied to most carbon steels, stainless steels, and alloy steels.
Temperature	Continuous operation at temperatures up to 1900 °F (1038 °C) with nominal performance impact. Able to withstand transients in excess of 2000 °F.
Chemical Resistance	Compatible with chemicals commonly found in coal and fly ash, including hydrochloric acid, hydrogen fluoride, and sulfuric acid.

For questions, request for quotations, or to place an order, please contact our Power Generation Application Engineering team at +1 888 289 4590 (toll free) or +1 812 948 2118.

We need the following information to process your quotation:

- Component drawing or the actual component, along with dimensions (length, width, height, O.D., I.D.).
- Substrate or material type. If a casting is involved, please provide material composition.
- Type (abrasive, corrosive, erosive) and location of wear.
- Current wear protection.
- Explanation of the application, including operating conditions (temperature, pressure, chemical resistance, flow rates, etc.).
- Material requirements (hardness, surface finish, tensile strength).
- Quantity required, including annual unit volumes.

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FOR FURTHER INFORMATION

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