APPLICATION BULLETIN



Conforma Clad[™] for Boiler Tubes

Erosion Protection in Sootblower Lanes

- Eliminates need for tube shields.
- Tungsten Carbide composite conforms to complex profiles.
- Proprietary process ensures consistent thickness and density.

Extended Predictable Life in Fluidized Beds

- Linear wear offers predictable life extrapolation.
- Minimal dilution ratio, true metallurgical bond.
- Hot erosion protection 10X INCONEL[®] 622, 11X 312SS weld overlay.

Up to 24 ft Lengths Available

- Meets the requirements of the ASME Boiler and Pressure Vessel Code (S Stamp).
- Inventory programs available.
- Pendants, U-bends, complex shapes clad

Lasts 10x longer versus traditional wear solutions.





APPLICATION BULLETIN

Technology

Kennametal can help you reduce the risk of boiler tube leaks by protecting your replacement boiler tube segments from severe wear. Our cladding withstands the extremes of thermal shock, erosion, abrasion, corrosion, and impact — and because our application process creates a true metallurgical bond, it is not subject to chipping and spalling.

Custom Boiler Tube Solutions

Kennametal will work closely with you to develop a wear solution for your boiler tubes. 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.



Boiler Tube Cladding Specifications

Cladding Specifications	
Substrates	Cladding can be applied to most carbon and low alloy steels (SA210, SA213, T11, T12, T22, etc.).
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, 0.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.

Kennametal Inc. 501 Park East Boulevard New Albany, IN 47150 USA Tel: +1 812 948 2118 Fax: +1 812 944 3254

FOR FURTHER INFORMATION

+1 888 289 4590 or +1 812 948 2118

www.kennametal.com