

Conforma Clad™ for Burner Components

- **Increased Productivity**

Extended burner component life results in fewer equipment shutdowns and component changes, lengthening run-times between maintenance windows.

- **Enhanced Burner Performance**

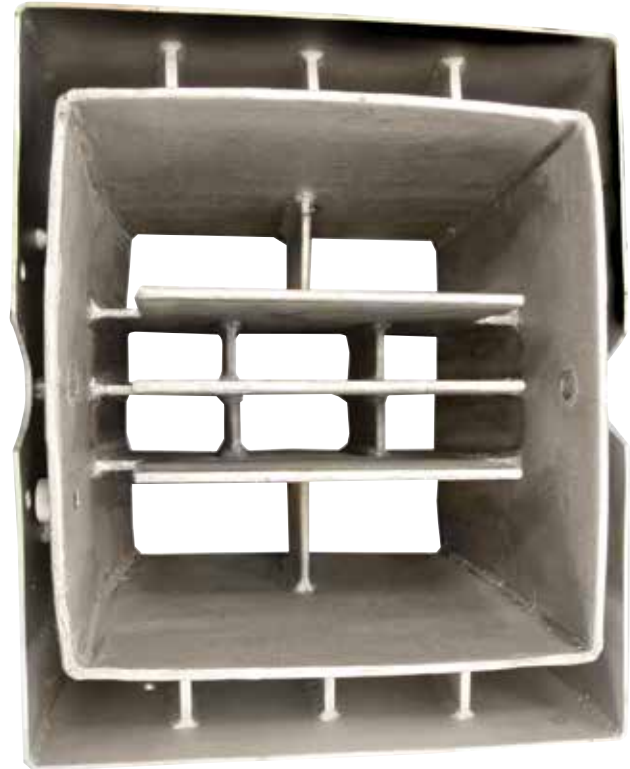
Decreased burner component wear leads to better NOx performance, leaving you with more credits for sale.

- **Superior Erosion Resistance**

1/16" (1,5mm) of Kennametal's wear protection performs 15x better against erosive wear than an equivalent layer of typical overlays and 50x better than plain carbon steel. And it is up to 25x more erosion resistant than high-temperature stainless steels.

- **Proven Results**

Kennametal's premium technology has been used in coal-fired power plants for more than 15 years, extending the life of burners, gas fans, boiler tubes, thermowells, ash conveyance equipment, pitot tubes, pulverizer components, and other plant equipment.



Lengthen run-times and reduce maintenance costs by up to 3x.

Kennametal is a leading provider of severe wear solutions for applications involving extreme abrasion, corrosion, impact and erosion. Our proprietary infiltration brazed tungsten carbide cladding is metallurgically bonded to burner components. Kennametal's cloth delivery system enables densely-packed tungsten carbide to be uniformly applied to complex geometries, providing a protective barrier that wears at a uniform and predictable rate.

Kennametal burner components last longer and sustain maximum performance levels by maintaining critical component geometries for extended run times. The proven reliability of Kennametal components has made us an industry standard.



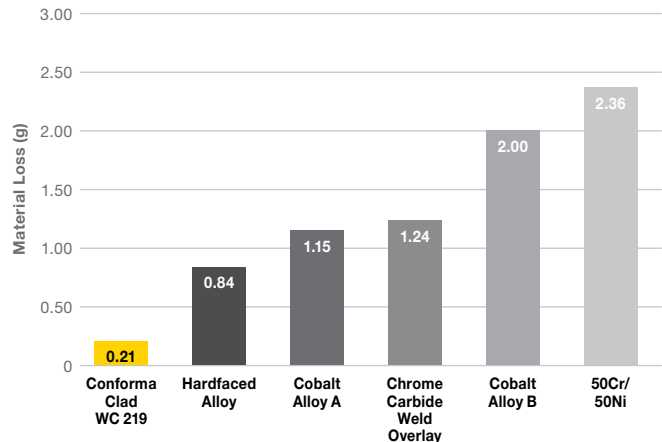
Erosion Resistance

Riley Power conducted laboratory testing, following ASTM G73 standards, on low swirl coal spreaders to determine the best erosion protection from fine-grit black beauty coal slag. Testing was conducted at a 90° impingement angle with a particle velocity of 240 ft/sec for 30 minutes.

Kennametal's WC 219 cladding provided top wear protection while retaining critical component geometries. Kennametal increased Riley Power's low swirl coal spreader life from 1–2 years to 3–4 years.

Babcock Power, CCV-DAZ Development Project

EROSION TEST (ASTM G73)



UP TO 10X BETTER
Erosion Resistance versus Cobalt Alloys

Performance Data

Kennametal protects low NOx burner components at coal-fired power plants throughout the country, including Wisconsin Electric, Valley Station's CCV® burner spreaders. Coal spreaders are essential components in distributing pulverized coal to the burner flame and are designed to enhance combustion by controlling the flame length and minimizing NOx and Unburned Carbon (UBC). In order to maintain critical geometries and coal distribution patterns, the coal spreader vanes are protected with Kennametal's tungsten carbide cladding. The Valley Station plant's burner components experience increased erosion rates because of high burner velocities (approximately 87 ft/sec) and the coal's high silica and alumina content.

Wisconsin Electric tripled the service life of their Riloy® 74 (50Cr/50Ni with Cb) spreaders by applying .040" of Kennametal tungsten carbide cladding to the spreader's leading edges.

Low Swirl Coal Spreader



Wisconsin Electric tripled the service life of their Controlled Combustion Venturi® burner components with Kennametal.

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