



APPLICATION BULLETIN

Conforma Clad™ Solutions for Petrochemical Applications

Pumps

Extend the life of your components in high-temperature erosive, abrasive, and heavy catalyst mediums.

- FCC bottoms
- Hot oil
- Clarifier
- Catalyst-entrained medium
- Casings
- Impellers
- Back plates
- Wear sleeves



Thermowells

Prolong life in erosive and abrasive environments. Our formulas work best when catalyst or small particle erosion limits other solutions.

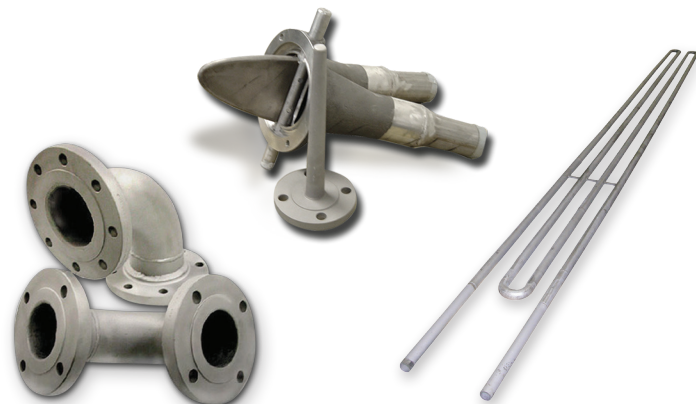
- Distillation
- FCC
- Fluidized bed
- LC finers and more



Conveyance and Tubes

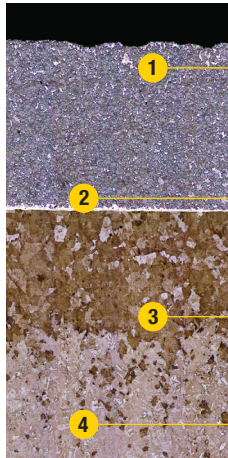
Protect your valves, piping, and tubes in high-wear erosive or abrasive environments.

- Get up to 5x more life
- Safeguard pendants, u-bends, and complex shapes
- High coefficient of heat transfer
- Excellent ability to withstand severe thermal shock
- Linear wear offers predictable life extrapolation



www.conformaclad.com

Cladding Photomicrograph



CLADDING

Dense tungsten carbide loading with uniform carbide distribution. High wear resistance with predictable wear rates and continuous operation up to 1900° F. **No interconnected porosity.** Superior corrosion and impact resistance.

BOND LINE

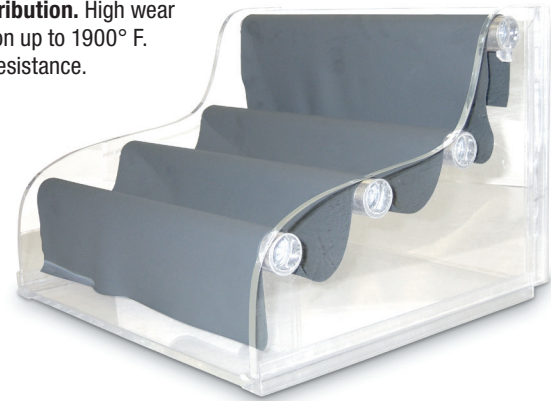
True metallurgical bond (>70,000 psi) with high interparticle bond strength. Provides unsurpassed strength and prevents chipping, flaking, and check-cracking.

DIFFUSION ZONE

Minimal dilution. Substrate retains uniform properties in diffusion zone.

SUBSTRATE

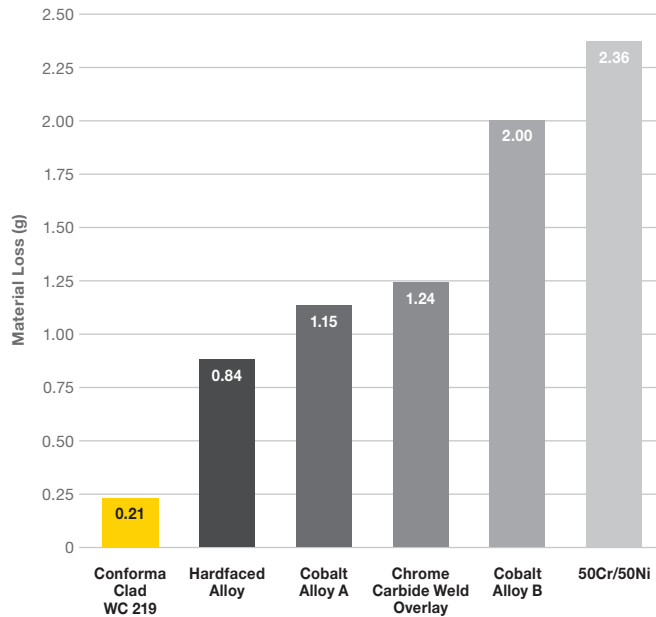
Heat treatable. After cladding process to restore substrate's mechanical properties.



Performance Data

EROSION TEST

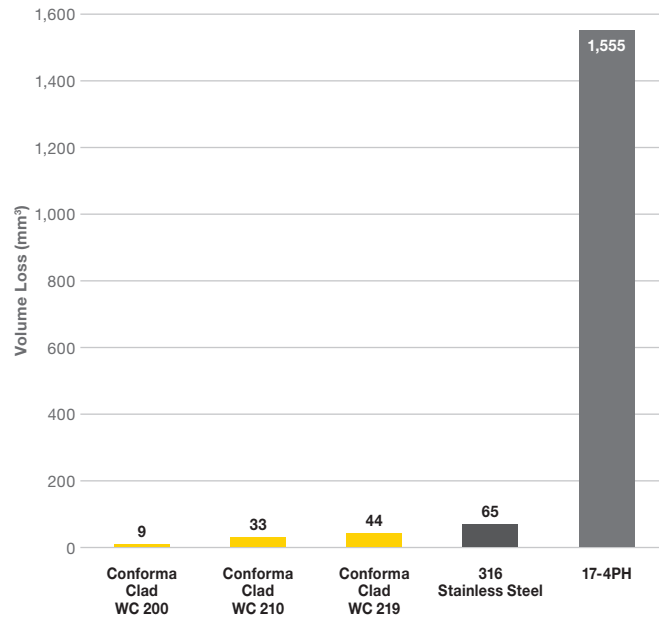
90° Impingement Angle, 240 ft/sec (30-minute test)



UP TO 10X BETTER
Erosion Resistance versus Cobalt Alloys

CORROSION TEST (ASTM G31)

1% Sulfuric Acid at 212° F (100° C)



UP TO 7X BETTER
Corrosion Resistance versus Stainless Steel

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FOR FURTHER INFORMATION

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