## **Technology Bulletin**

# Conforma Clad X2<sup>™</sup> Dual Protection for Severe Corrosion & Abrasion

X2 cladding uses twin layers of Stellite<sup>™</sup> and tungsten carbide, realizing the benefits of both materials. This dual-protection system is designed to protect critical components that are exposed to severe erosion/abrasion and corrosive fluids at the same time.

## True metallurgical bond between all layers:

 Provides unsurpassed strength, preventing chipping, flaking, and spalling.

#### X2 cladding can be applied to:

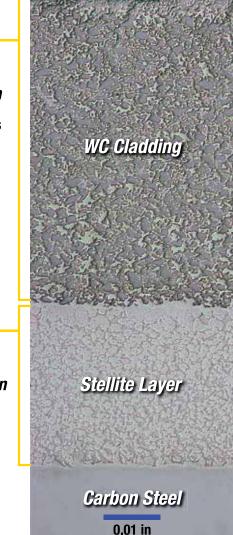
- Complex geometries and challenging shapes.
- Nearly all steel/stainless steel components.

## **Top Layer Tungsten Carbide** Superior Abrasion Protection

The tungsten carbide top layer offers the same wear protection on which Conforma Clad<sup>™</sup> built its reputation.

## **Bottom Layer Stellite**<sup>TM</sup> Superior Corrosion Protection

The Stellite bottom layer eliminates any access of corrosive fluids to the base material.





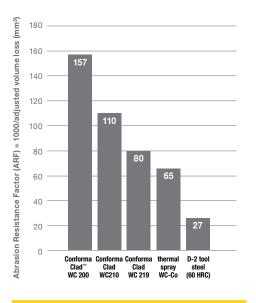


### **Top Layer**

Abrasion/Erosion Protection

- Range of tungsten carbide grades available to suit your environment.
- A "pure" cladding with consistent wear properties from surface to bond line. The predictable, linear wear rate can be used to forecast component life.
- Metallurgical bond no flaking or spalling.
- Significant performance advantage over competing wear materials.

#### **Dry Sand Abrasion Test (ASTM G65)**

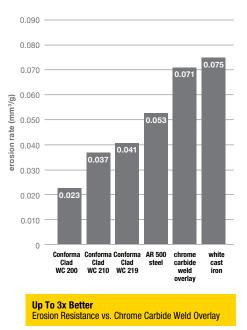


Up To 2.4x Better

Abrasion Resistance vs. Thermal Spray

Erosion Test (ASTM G76)

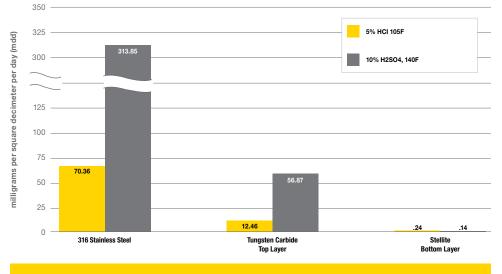
45° Impingement Angle, 83 m/s, Alumina <63 micron



### **Bottom Layer**

**Corrosion Protection** 

- Cobalt based Stellite<sup>™</sup> alloy has been successfully used for decades to solve challenging industrial wear and corrosion problems.
- As the original maker of Stellite alloys, we are now able to incorporate the proven corrosion resistance benefits of this material in our claddings.
- The Stellite layer encapsulates the base material, forming a protective barrier against corrosive fluids.





#### **CONTACT US**

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#### **Corrosion Rate in Aqueous Acid Solution**