

X8000™ Encapsulated Screws

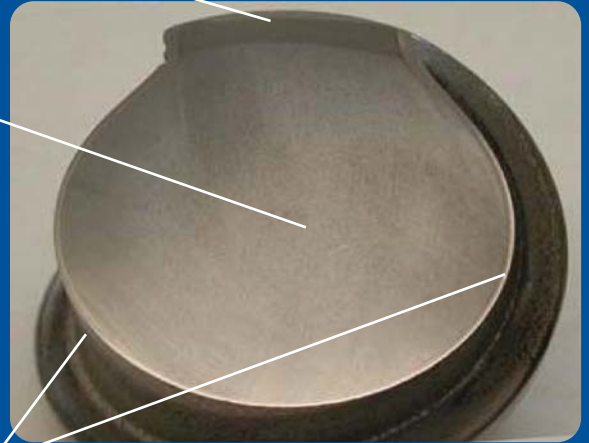
Application Method:

X8000™ is a thermal spray coating. To eliminate risk of delaminating, a second process fuses the nickel/tungsten carbide alloy. This allows for 100% metallurgical bonding to the screw base material. The typical bond strength is 280 megapascals. This exceeds non-fused, mechanical bonds of 70 MPa which is common among all our global competitor's carbide coating.

X830 Hardfacing

Base Material

X8000™ Carbide Coating



Tungsten carbide particles- extremely hard, abrasion resistant



Nickel based Alloy with Tungsten Carbide

- Thickness: 0.4 mm (0.020")
- Hardness of Tungsten Carbides: 1350-2100 HV
- Maximum Processing Temperature: 800°F (425°C)



Standard Surface Finish: (60 Ra)



Polished Surface Finish: (16-32 Ra)

X8000™ is a thermal spray coating applied to the screw. This material complements Xaloy's high abrasive resistant X830 overlay and is well suited for processing highly filled or corrosive resins. It can be applied for the full flight length or only on isolated areas of the screw that are more susceptible to wear.

Benefits

- Tungsten carbide cladding – improved wear and superior corrosion resistance
- Metallurgical bond – no chipping or delamination issues associated with HVOF carbide coatings
- Complete Xaloy Wear System – for the ultimate in wear protection:
 - X8000™ carbide cladding on the screw root surfaces
 - X830 carbide hardfacing on screw flight OD's
 - X800® patented carbide barrel lining
- Rebuilt Screws – X8000™ is repairable and can be applied to your rebuilt screws greater than 50mm diameter



▲ Typical poor adhesion and chipping of competitive carbide coatings
Xaloy's X8000™ has a metallurgical bond exhibiting no chipping ▼



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XALOY
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