



Tubesheet & waterbox cladding

- ✓ *Corrosion and erosion protection*
- ✓ *For tube end plates and water boxes*
- ✓ *Global applicator network*
- ✓ *Factory & field application*

Blygold Cerafill & Ceratec – Water cooled condenser protection

Blygold has developed pioneering coatings specifically for HVAC corrosion protection. From the very beginning Blygold has always focused on corrosion protection for heat exchangers. Different types of corrosion but also erosion rapidly affects metals and the efficiency of the total HVAC equipment.

Blygold protects tube sheets and water boxes from leakages and prevents early replacements. The dissimilar metals of the tubes and sheet can react strongly with each other under influence of salts and other electrolytes. This galvanic reaction between the two metals is prevented by means of a smooth and chemically resistant coating. Erosion of the surfaces is prevented by applying a hard ceramic filled cladding. The special pretreatment ensures perfect adhesion, smooth surfaces, prevents pressure drop and guarantees an extra protection at critical areas. Blasting is low in dust, and the coating free of VOC, which makes the treatment suitable for both factory and site application. The coatings can also be used for reconstruction of severely corroded baffle plates, this prevents capacity loss.

WITH BLYGOLD CERAFILL & CERATEC



WITHOUT BLYGOLD CERAFILL & CERATEC



Special products

Blygold Cerafill & Ceratec: VOC free, ceramic reinforced two-component epoxy coatings especially developed for the protection of water-cooled condensers. Cerafill & Ceratec stand apart from the rest. They have excellent chemical, mechanical and erosion resistance. Pretreatment typically consists of low-in-dust-blasting, to prevent nuisance especially at on-site applications. Blygold Cerafill & Ceratec offer excellent protection with negligible effect on the flow properties of the unit.

- ✓ Ceramic reinforced
- ✓ 5.000 hours salt spray test
- ✓ 2-component
- ✓ Strong erosion resistance
- ✓ 100% solid content

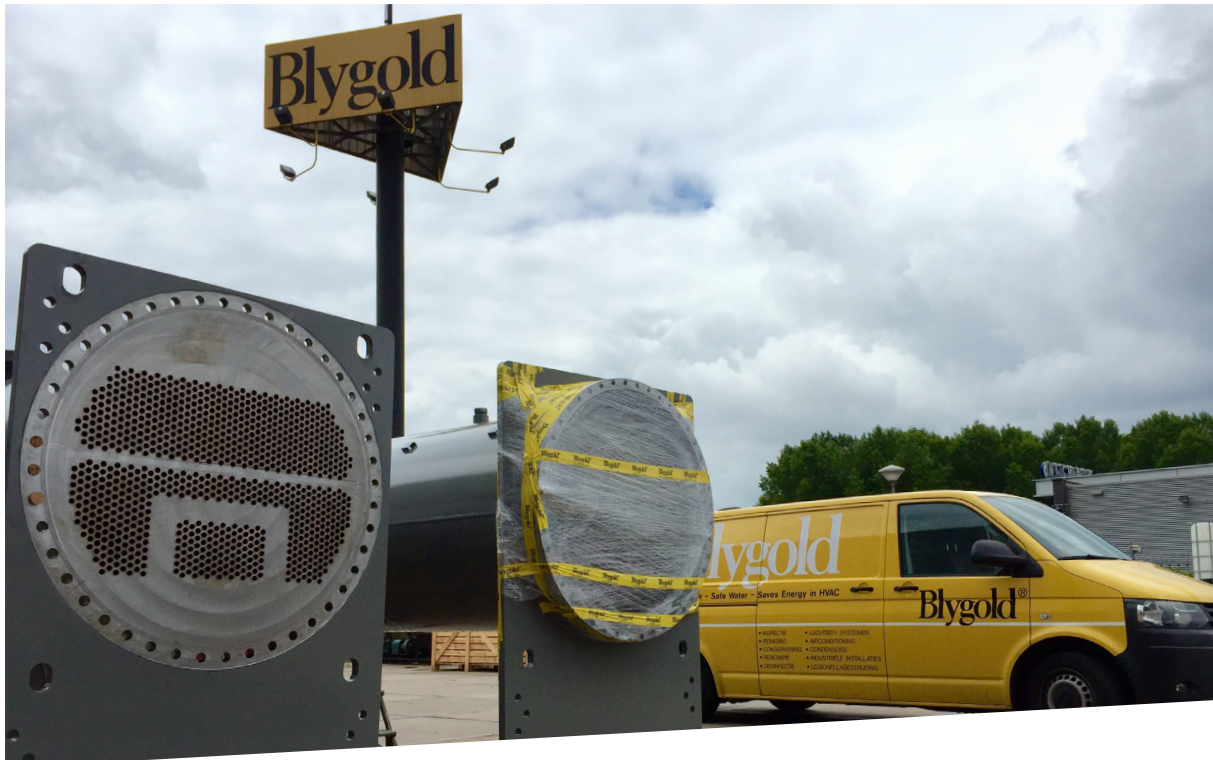
WORKING PROCEDURE

1. Draining water, dismantling boxes.
2. Insert plugs to prevent blasting damage and coating in tubes.
3. Surface preparation: blasting. Creating surface roughness for optimal adhesion of protective coating.
4. Verification blasting result and salt contamination test.
5. Coating application: Blygold Ceratec. Applied in 2 layers to enable visual quality and layer thickness control.
6. Dry layer thickness verification and pinhole detection.
7. Removal of plugs & tube entry honing.
8. Remounting water boxes. Seal renewal, bolt lubrication, controlled bolt tightening.



TECHNICAL INFORMATION

Volume capacity:	446cc/kg (27in3/kg)
Compressive Strength: ASTM D695:	960kg/cm ² (13,650psi)
Tensile Shear Adhesion (mild steel): ASTM D1002 :	202kg/cm ² (2875psi)
Flexural Strength: ASTM D790:	635kg/cm ² (9000psi)
Hardness (Rockwell R): ASTM D785:	100
Corrosion Resistance: ASTM B117:	5000 hours
Erosion resistance : ASTM D4060:	55 mg/1000 cycles CS17 & 1000gr load





BLYGOLD INTERNATIONAL

Blygold is an innovative and forward-thinking company offering unique and sustainable high-quality protection against corrosion. With over 40 years experience, we have the know-how and state-of-the-art products and techniques to solve any corrosion problem. Our multitude of success stories says it all.

Application protocols

Because of the specific geometry of water-cooled condensers, the quality of the application process is just as important as the applied product. Blygold has developed specific application protocols for various sorts of heat exchangers, including water-cooled condensers.

Global network

To ensure our products are applied according to these protocols, Blygold works with trained and certified applicators only. Our global network of qualified Blygold applicators can offer local support in over 60 countries around the world.



Quality

- ✓ Over 40 years of experience
- ✓ Unique application techniques
- ✓ Unrivalled test results
- ✓ All trained & qualified applicators
- ✓ ISO 9001 Certified



Innovation

- ✓ Revolutionary R&D
- ✓ Inhouse laboratory
- ✓ Deep understanding of the market
- ✓ Global awareness of customer needs
- ✓ Problem solving mentality



Sustainability

- ✓ Lifetime extension
- ✓ Energy saving & Eco Friendly
- ✓ Life Cycle Cost reduction
- ✓ Maintenance friendly
- ✓ Corporate Social Responsibility

Blygold[®]
CORROSION PROTECTION

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