



## **PoluAl High Temp**

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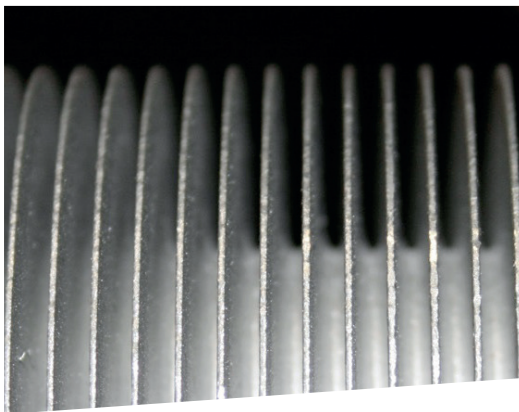
- ✓ *Prevents corrosion*
- ✓ *Up to 550 °C*
- ✓ *Heat conductive*

## Prevents corrosion at temperatures up to 550 °C (1022 °F)

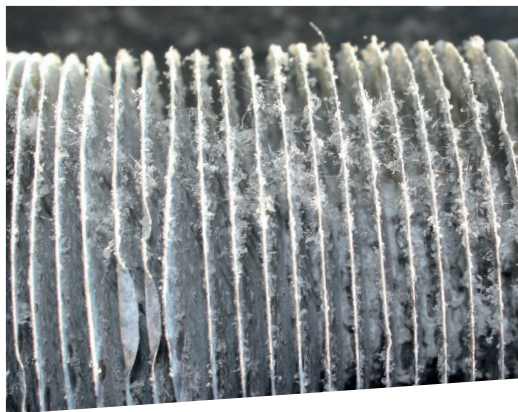
Heat exchangers that are used for heat regeneration in exhaust gasses are exposed to extreme corrosive conditions. The high temperatures, condensation and airborne chemical substances make the condition for the metals of a heat exchanger severe. Sulphur and nitrogen and chlorides are the main compounds responsible for the initiation and acceleration of corrosion.

Stainless steel is often used to cope with these conditions but this does result in much lower heat exchange capacity. Engineers often prefer to work with stainless steel tubes with aluminium fins to prevent leakages with still high heat transfer capacity. These aluminium fins need protection to cope with the harsh conditions. Protective coatings have to meet complex requirements like heat conductivity, heat and chemical resistance.

### WITH BLYGOLD POLUAL HIGH TEMP



### WITHOUT BLYGOLD POLUAL HIGH TEMP



#### Special coating

Blygold PoluAl High Temp is a heat conducting, corrosion prohibitive coating that is able to protect metals from rapid deterioration in extreme conditions and to withstand temperatures up to 550 °C (1022 °F). Blygold PoluAl High Temp will prevent capacity loss and premature deterioration of the heat exchanger. The coating can be applied to steel, aluminium, zinc and stainless steel (with special treatment).

- ✓ High chemical resistance
- ✓ Up to 550 °C (1022 °F)
- ✓ Triples the life time
- ✓ Negligible pressure drop
- ✓ Heat conductive



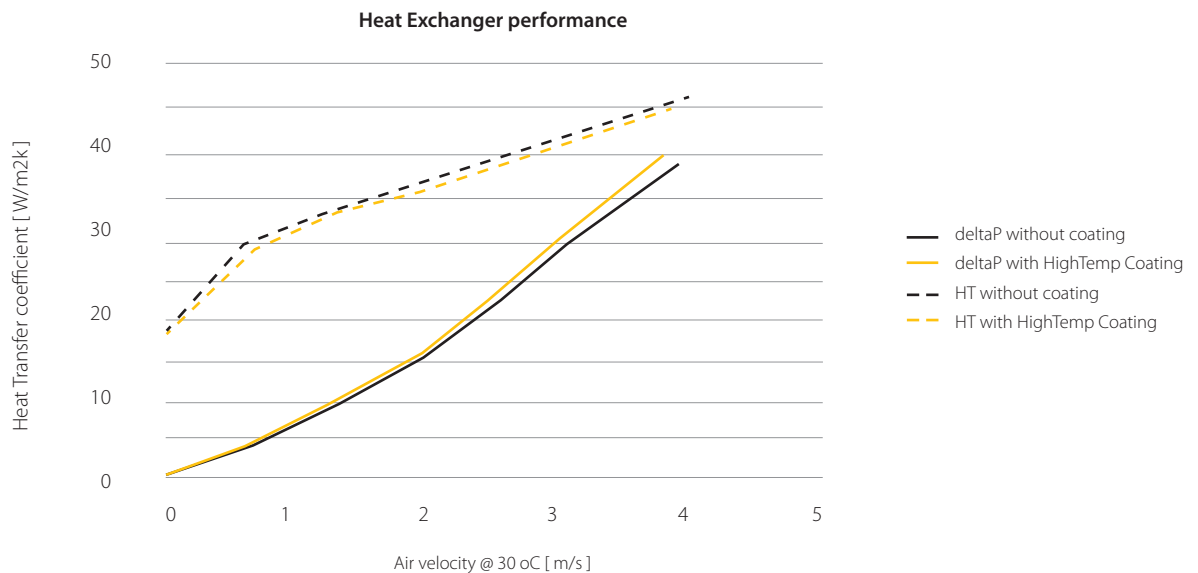
**Special application**

Blygold applies coatings to different types of heat exchangers. Finned tube heat exchangers are often the first choice in power plants, offshore rigs and heavy industries. This type of finned tube bundles are known for the high quality but sometimes need extra protection in corrosive environments to seal of the vulnerable metals from corrosive elements in high temperature applications special procedures must be used to get 100 % coverage with PoluAl High Temp. In addition to the Round Tube Plate Fin heat exchangers treatment protocols Blygold also developed special application procedures and coatings for these spiral tubes bundles.



**TECHNICAL INFORMATION**

<b>Treatment:</b>	Blygold PoluAl High Temp
<b>Coating type:</b>	Aluminum pigmented Siloxane
<b>Color:</b>	Silver
<b>Pretreatment:</b>	Blygold Passivation Treatment
<b>Temperature Range (dry):</b>	0 to 550 °C (32° to 1022 °F)
<b>Substrates:</b>	(Stainless) steel, aluminum and zinc
<b>ASTM B117:</b>	1.500 hours (Neutral salt spray test)
<b>ASTM B-287:</b>	1.500 hours (acid-salt spray test)
<b>Kesternich (2.0 ltr SO2):</b>	24 cycles
<b>Layer Thickness:</b>	50 µm (2 mil)
<b>Pressure Drop:</b>	0-5% (depending on fin geometry)
<b>Thermal Resistance:</b>	0-3% (depending on fin geometry)
<b>Application:</b>	Qualified Blygold Applicator
<b>UV Resistance:</b>	Excellent
<b>Adhesion (cross hatch):</b>	0 (European) 5b (USA)
<b>Applications:</b>	Heat exchanging surfaces in high temperatures
<b>Chemical Resistance:</b>	Excellent





**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 heat exchangers, the quality of the application process is just as important as the applied product. Blygold has developed specific application protocols for heat exchangers of all different dimensions, geometries and materials.

#### **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



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