



# **Blygold Corrosion protection**

Blygold coatings provide a long lasting corrosion protection for air cooled heat exchangers. They seal off the heat exchanger from the environment, without affecting heat transfer and pressure drop. The heat conductive pigmentation in the coating is oriented in such a way that it creates a very high chemical resistance at a low layer thickness.

The system can be applied in the factory as well as on-site. Our specialized products, combined with our unique application procedures, make Blygold the best available option to prevent airconditioning failure and unnecessary energy consumption. Our wide range of products and services offer solutions for all types of air cooled heat exchangers.

#### Designed for the job!

Ever since Blygold was founded in 1976, our core business focused specifically on corrosion protection on heat exchangers. This makes us unique, and it's the reason why still today Blygold is global market leader in this industry. Our own R&D department is constantly testing and improving our range of products and services and this mentality makes Blygold the benchmark application in our industry Blygold products are always specifically designed for their purpose. Blygold PoluAl coatings ares designed to offer maximum corrosion protection without affecting the efficiency of the heat exchanger

# A good product is just half the job, the application is just as important!



#### **Blygold PoluAl XT(-MB)**

An aluminium pigmented polyurethane coating developed for the protection of air-cooled heat exchangers. The product meets all the necessary requirements for the coating of condensers (XT) and coolers (XT-MB). PoluAl XT stands apart from the rest. It has an excellent chemical and UV resistance. It offers flexibility, excellent adhesion with negligible effect on the heat transfer. Plus it can be applied in a very thin layer, to prevent pressure drop.



#### Blygold PoluAl MC

This product is developed to protect the vulnarable Microchannel coils against corrosion, without affecting it unique qualities and specifications. The product is flexible, uv resistant and has practically no effect on the pressuredrop. Improved water release properties prevent the fin openings from being blocked by water, and a sunlight reflective pigmentation prevents lower efficiency of the coils due to heating up by sunlight.



#### **Blygold PoluAl High Temp**

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. Applied by qualified Blygold applicators, this protection system will ensure energy recovery and optimal performance

## The application

Blygold coatings provide a remarkable long lasting and resilient corrosion protection for Air cooled Heat exchangers. They finely seal off the heat exchanger from the environment, without affecting heat transfer and pressure drop. The system can efficiently be applied in the factory as well as on-site. Our specialized elite products and unique application procedures make Blygold the best choice to prevent air conditioning failure and unnecessary energy consumption due to corrosion.

This product, in combination with our unique application techniques ensures full coverage of the heat exchanger. It ensures the best corrosion protection possible. It does so flawlessly without affecting the efficiency of the heat exchanger.



Treatment	PoluAl XT(-MB)	PoluAl MC	PoluAl High Temp
Coating type	Aluminium pigmented polyurethane	Reflective pigmented polyurethane	Aluminium pigmented siloxane
Color	Champagne	Bright silver	Silver
Pretreatment	Degreasing	Degrease and passivation	Degreasing
Temperature range (dry)	-20°C to 150°C	-20°C to 150°C	0°C to 550°C
Substrates	Aluminum, copper and steel	Aluminium	Aluminium and steel
Salt spray test	11.000+ hours (B117)	6.000+ hours (SWAAT)	11.000+ hours (B117)
Acid salt spray test	4.000+ hours	4.000+ hours (G85-A1)	3.000+ hours (G85-A1)
Kesternich (2.0 ltr SO2)	80 cycles	80 cycles	80 cycles
Dry layer thickness	25 -30 μm (1 mil)	25 -30 μm (1 mil)	50 μm (2 mil)
Pressure drop increase (depending on coil type)	0 -15 %	5 - 20 %	0-9%
Thermal resistance increase (depending on coil type)	0-3 %	0-3 %	0-3 %
Application	Qualified Blygold Applicator	Qualified Blygold Applicator	Qualified Blygold Applicator
UV resistance	Very good	Excellent	Excellent
Adhesion (cross hatch)	0 (European) 5b (USA)	0 (European) 5b (USA)	0 (European) 5b (USA)
Chemical resistance	High	High	Very high
HX water drainage	NA	+30% compared to untreated coils	NA
Electrochemical impedance	NA	6,78 E + 07 Ω*cm2	NA
Micro-organism resistance	Log 4 reduction (only XT-MB)	NA	NA



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.





- ✓ 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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