



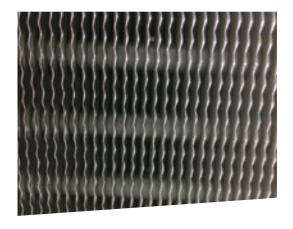
# **Blygold PoluAl XT-MB - Corrosion & Microbe resistant HX**

Heat exchangers used to cool down an airstream or room are often exposed to corrosive environments and microbiological growth. The condensation on the fins and the airborne pollution create the perfect conditions for corrosion and micro biological growth .

Both phenomena, corrosion and microbiological growth, will reinforce each other. Corrosion will create rough surfaces that increases the adhesion of pollution and microbes. Organisms will only grow if they are able to stick to a surface. Microbes, once settled on a surface, are able to create a very corrosive local microclimate that will affect the material they grow on.

The growth of bacteria and mould on chilled water or evaporator coils creates hygienic and smell issues. The typical smell of air-conditioning, also called dirty sock syndrome is, in fact, caused by the presence of these organisms.

### WITH POLUAL XT-MB



# WITHOUT POLUAL XT-MB



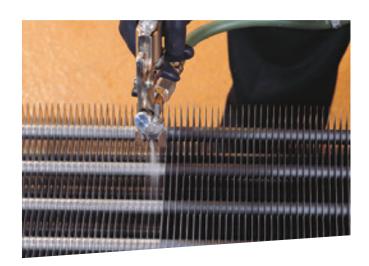
### **Special Coating**

Blygold PoluAl XT-MB is a corrosion protective coating for cooling coils and evaporators. The coating shields vulnerable metals from aggressive environments. The aluminum content in the coating provides the necessary heat conductivity to make sure that coated heat exchangers have an optimal cooling capacity. Special additives ensure the applied coating film is bacteria and fungi resistant. After treating evaporators or cooling coils these articles should be considered "treated articles" and labeled as such. The efficiency of the coating to resist bacteria and fungal growth has been tested and is available upon request.

- ✓ Corrosion resistant
- ✓ Micro organism resistant
- ✓ Heat conductive
- ✓ Non hydrophobic
- ✓ Non hydrophilic
- ✓ 11000 h salt spray test
- ✓ Nano free
- ✓ Treated article

### **Special application**

A good coating will only perform when applied in a high quality process. Coating heat exchangers requires specialists that are able to apply the coating on every piece of bare metal present in a heat exchanger. Blygold uses proprietary spray techniques that can only be practiced by certified applicators . These qualified applicators are required to make sure a corrosion and micro-organism resistant heat exchanger is created . This is preferably done in a conditioned Blygold workshop but is, under restricted circumstances, also possible on-site .



### **TECHNICAL INFORMATION**

Coating type:

Colour:

Pre-treatment:

Temperature Range (dry):

Substrates: ASTM B117: ASTM G85 A1: Layer Thickness:

Bacteria resistance JIS Z 2801:

Fungi resistance Din EN ISO 846 method B:

Pressure Drop: Thermal Resistance: Application:

UV Resistance:

Adhesion (cross hatch):

Applications:

**Chemical Resistance:** 

Aluminium pigmented Polyurethane

Champagne

Degreasing with Coil Clean AP -20 to 150°C (-4 to 302°F)

Aluminium, Copper, Galvanized steel 4000+ hours (neutral-salt spray test

4000+ hours (acid-salt spray test)

25-30 μm (1 mil)

2010: log reduction 4.3

Strong fungi static effect

0-5 % (depending on fin geometry) 0-3 % (depending on fin geometry)

Qualified Blygold Applicator

Excellent

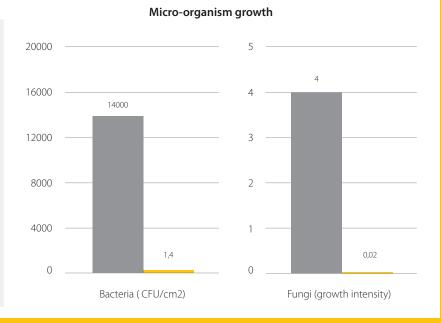
0 (European) 5b (USA)

Chilled water and evaporator Heat Exchanger coils

Excellent (as per resistance list)

A good coating will only perform when applied in a high quality process

# Micro-organism growth: Without PoluAL XT-MB Bacteria (CFU/cm2) 14000 Fungi (growth intensity) 4 With PoluAL XT-MB Bacteria (CFU/cm2) 1,4 Fungi (growth intensity) 0,0 Without PoluAL XT-MB With PoluAL XT-MB





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.





**Innovation** 



Sustainability

# Quality

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

- ✓ Revolutionary R&D
- ✓ Inhouse laboratory
- ✓ Thorough understanding of the market
- ✓ Global awareness of customer needs
- ✓ Problem solving mentality
- ✓ Lifetime extension
- ✓ Energy saving & Eco Friendly
- ✓ Life Cycle Cost reduction
- ✓ Maintenance friendly
- ✓ Corporate Social Responsibility

