# **AQUA AERO COIL COATING**







Since 2008, Aqua Aero (AA) manufactures high-quality coatings that comply with the actual quality and environmental requirements for the HVAC&R industry.

We design and support coating processes that can be implemented in an OEM plant, applied in any coating workshop or in the field. We have the interest to work together with A-level OEM's and service partners that have the interest to add value to their equipment both on quality as well as the environment.

Our Coil Coating gives a lifetime corrosion protection to full aluminum microchannel coils (MCHE) and round tube plate fins (RTPF) coils (both Cu and Alu fins). All Aqua Aero Coil Coating has passed the most important HVAC&R accelerated tests like salt spray and flexibility. Corrosion resistance reaches 15.000 hours by ASTM B117 and 3.120 hours by ASTM G85 Annex 3 (SWAAT-test).

The coating can be supplied with antimicrobial, hydrophilic or hydrophobic properties. We have also developed an excellent water based Coil Coating Clear that can be applied to both MCHE & RTPF coils without a primer. Since the coating is water based, it can be applied at any site without ESH restrictions by international law and regulations, such as AQMD in California.







## **AA APPLICATION PROCEDURES**

Aqua Aero Coil Coating can be applied by spraying, flowing or dipping. Without any odor, our coil coating can be applied inside any facility and/or any other field application.

## **SPRAY COATING**

Aqua Aero Coil Coating can be applied by spray for RTPF coils up to 3-4 rows and MCHE coils with maximum coverage. This can be applied by all common spray techniques.

## FLOW COATING

Aqua Aero has developed a flow coating application that secures 100% penetration for RTPF coils without any dimension or number of rows limitations. This technique compares as to dipping, but no dipping tanks are required.

Major benefits to flow coat instead of dipping

- Minimum coating investment compared to dipping.
- 50% less labor time than dipping

### **TECHNICAL SPECIFICATION COMPARISON**

	AQUA AERO Coil Coating 25 µm 1 mil	HERESITE P-413 C 75µm 3 mil	MODINE INSITU 30 µm 1,2 mil	BLYGOLD POLUAL XT 50 µm 2 mil	Ecoat Extra Epoxy layer
ASTM B117	15.000 hours	6.000 hours	> 5.000 hours	11.000 hours	6.000 hours
ASTM G85 Annex 5	3.000 hours	N/A	N/A	N/A	N/A
ASTM G85 Annex 3 (SWAAT)	3.120 hours	1.000 hours	N/A	N/A	3 120
Kesternich SFW 2,0 S	40 cycles	N/A	N/A	80 cycles	N/A
Cycle Exchange ISO 20340	1.000 hours	N/A	N/A	N/A	1.000 hours
Taber Abraser	1.000 cycles	1.000 cycles	N/A	N/A	N/A
Flexibility ISO 1519	Passed	N/A	N/A	N/A	N/A
Humidity ASTM 2247	2.000 hours	2.000 hours	500 hours min	N/A	1.000 hours
Adhesion D3359	G0/5B	5B	5B	5B	5B
Pencil Hardness	НВ	5-6H	HB-F	N/A	2B
Impact LBS 100 / sq inch ASTM D2794	100 lb/sqft	Passed	N/A	N/A	160 lb/sqft
Seawater Immersion 110 hours	Passed	Passed	500 hours	N/A	N/A
Mandrel Bend: 1/8 inch ASTM D522	Passed	Passed ¼ inch	Passed	N/A	Passed
Heat Resistance 360°C 4 hours / -42°C 9 days	Passed	Passed 360°C	N/A	N/A	Passed 160°
UV Resistance ISO 16474	1.000 hours	Not standard, topcoat needed	500 hours	"Excellent" (no test report)	500 hours
VOC Content	< 35 g/l	270 g/l	117 g/l	> 400 g/l	Top coat 270 g/l
Capacity Test Coating	Negligible (BRE test report)	N/A	< 1% (no test report)	N/A	N/A

All accelerated test reports are available, including other required technical information.