

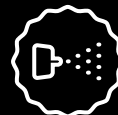


Aqua Aero

Setting the Future Standards for HVAC&R Coatings



**100%
green
footprint**



**20k
salt
spray**



**100%
pure
quality**

Aqua Aero Coating Solutions for HVAC&R

Since 2008, Aqua Aero (AA) has been manufacturing and applying high-quality coatings that comply the current quality, health, and environmental standards for the HVAC&R industry.

Our Mission is to develop, manufacture, distribute and apply waterbased zero emission HVAC&R coatings that fully comply to the future zero and circular global standards.

PRODUCTS

AA Coil Coatings

Developed for heat exchangers, RTPF & MCHE coils. Well documented and tested.

AA Coil Coating is a coating system that gives a life time corrosion protection to full aluminum micro channel coils and round tube plate fin coils (copper and alu fins). The coating can be applied by spraying, flowing or dipping. Without any odor or poisonous off gas, AA Coil Coating can be applied to coils inside any facility and or any other field application site.

AA Coil Coating has passed the most important HVAC&R accelerated tests like salt spray and flexibility. Corrosion resistance reaches 20.000 hours in ASTM B117, +5.000 hours in ASTM G85 (SWAAT), and meets the C5 standards by ISO12944. AA Coil Coating can be supplied with antimicrobial, hydrophilic or hydrophobic properties. 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 Coil Coating can now be supplied as "FACTORY COATING" as an alternative to ECOAT. Low Cost, Better Quality Specs, and Short Lead Times.



AA Multi Coat

Extreme chemical resistance for long-term protection of powder-coated, galvanized, copper, and steel substrates.

AA Multi Coat is a high chemical and corrosion-resistant coating designed for HVAC&R components and casings. It provides corrosion protection in extreme exposure conditions. The standard AA Multi Coat is applied to pretreated (primer-painted or powder-coated) HVAC&R components such as panels and casings, piping and headers, and metal frames. A Direct To Metal option is available based on the same chemical formula. AA Multi Coat preserves its gloss rate, even after prolonged salt spray exposure.

AA Multi Coat is specifically developed for HVAC&R equipment that operates in environments with high temperatures, acid rain, marine conditions, oil rigs, wastewater plants, desalination plants, and chemical processing industries. AA Multi Coat offers an optimal combination of product quality and application efficiency.

PAN Coating

Designed for drain pans and water boxes to promote a hygienic, anti-corrosive surface.

This is a self-leveling corrosion protection layer for drain pans and water collectors in HVAC&R equipment that corrode and contaminate easily. AA PAN Coating is resistant against severe exposure conditions and is flexible enough to cope with the contraction and expansion of metal in extreme environments. AA PAN Coating is a competitive alternative to stainless steel and prevents contamination from fungi and mold.

This coating has antimicrobial properties that inhibit the early deterioration of the coatings. The micro biocides are registered for use in coatings to prevent the growth of microbes, fungi, mold, and algae on the coating surface. This prevents the early deterioration of the coating and extends the lifetime of the installation. AA PAN Coating is also ASTM E84-17, UL 723 (Class A), and NFPA 255 approved.

"We have applied Aqua Aero coatings to thousands of coils and unit exteriors for all our customers, which have been exposed to off shore and refinery conditions. [...] I strongly recommend Aqua Aero as they have been an excellent partner in the corrosion industry."

Barry Loder

CEO and President, Shield Air Solutions Inc.

AQUA AERO APPLICATION PROCEDURES

Aqua Aero has developed a flow coating application that ensures 100% penetration. This technique is comparable to dipping but does not require tanks.

Major benefits of flow coating over dipping include:

- 50% less spraying time required.
- No coil dimension limitations as with dipping.
- Minimum coating investment compared to dipping.

Aqua Aero coatings can be applied without ESH complication inside an OEM Plant, before installation or even years after installation. By this way Aqua Aero supports a life time nominal performance of HVAC&R equipment.

For new Aqua Aero partners:

- Warranty conditions can be tailor made to the requirements of the customers, for instance, 10 year warranty conditions.
- On-location staff training provided by Aqua Aero with and Operational and Quality Manual.



"The customer that demands the highest level of corrosion protection as well as meeting the environmental standards required by most organisations today, needs to look no further than Bluchem Coil Treatment BluGuard™. [...] Since 2014 we are happy to announce that we apply the anti-corrosion coating products from Aqua Aero in the Netherlands."

Kevin Raath

President and Co-owner Bluchem

Aqua Aero partner with private label product name

COMPARED TO COMPETITION

| | Aqua Aero High-Tier 50-75 µm 2-3 mil | Aqua Aero Mid-Tier 30 µm 1,2 mil | Modine Insitu up to 30 µm 1,2 mil | Blygold Polual XT 25 µm 1 mil | E-Coat 50 µm incl top layer |
|---|--|--|---|---|---------------------------------------|
| Neutral SST ASTM B117 | 20.000 hrs | 15.000 hrs | > 15.000 hrs | 11.000 hrs | 15.000 hrs |
| ASTM G85 Annex 3 (SWAAT) | + 5.000 hrs | > 3.956 hrs | 2.400 hrs | — | > 3.000 hrs |
| Ozone Cycle Exchange ISO 20340 | > 1.000 hrs | > 1.000 hrs | — | — | 4.200 hrs |
| Taber Abraser ASTM D4060 | > 500 cycles | > 500 cycles | — | — | — |
| Temperature Ranges | -40°C to 250°C (-40°F to 482°F) | -40°C to 250°C (-40°F to 482°F) | 20 - 150°C (68°F to 302°F) | — | 40 - 163°C (104°F to 325.4°F) |
| Adhesion D3359 to Alu & Cu | G0/5B | G0/5B | 5B | 5B | 5B |
| Pencil Hardness | HB | HB | HB | — | 2H |
| FDA Compliant (21 CFR 175.300) | ✔ | ✔ | — | — | — |
| Sulphuric H₂S Test | ✔ | ✔ | — | — | — |
| Flexibility Test ISO 1519 | ✔ | ✔ | ✔ | — | — |
| Impact lbs 100/sq inch ASTM D2794 | ✔ | ✔ | Pass 160# | — | 160 lb/sqft |
| Immersion D870-92 1.000 hours | ✔ | ✔ | 1.000 hrs | ✔ | ✔ |
| Flamespread and Smoke Index ASTM E84 | ✔ | ✔ | — | — | — |
| Antimicrobial ISO 22196-7 | ✔ | ✔ | — | — | — |
| UV A, C Resistance ISO-16474 | 1.000 hrs | 1.000 hrs | 1.000 hrs D4587 2.000 hrs G155 | "Excellent" (no test report) | 500 hrs |
| VOC Content | 30 g/l (4.01 oz/gal) | 0 - 30 g/l (0-4.01 oz/gal) | 39 g/l (5.21 oz/gall) | > 400 g/l (> 53.41 oz/gal) | Topcoat 270 g/l (36.05 oz/gal) |
| Capacity Test Coating | Negligible (BRE test report) | — | < 1% (no test report) | 0 - 3% | < 1% |

All information has been distracted from TDS published on the internet Jan 2025.

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