



ElectroFin®
Corrosion-resistant Coil Coatings

LUVATA
Partnerships beyond metals





Faced with the forces of nature,
Luvata ElectroFin® is simply the best

Nowadays the sight of air conditioning units on the outside of buildings is increasingly commonplace. In fact, it's not unusual to see buildings with dozens of units in place, and they can represent a significant investment to the building owner. With a very specific job to do and uniquely situated, exposed to the worst extremes of weather and pollution, these units need to be looked after if they are to function well over the long term.

At Luvata we are well known for developing and producing copper products and business solutions to help our customers improve their operations and increase the financial efficiency of their business. When we acquired ElectroFin® in 2007, coil coatings became part of our business, and they fit perfectly with our business model and our vision.

One company, two solutions, multiple locations

No better protection

ElectroFin® has been the preferred supplier of coil coatings to HVAC OEMs for many years now. We firmly believe there is no better protection for HVAC equipment than our e-coat product, and we also supply a field-based coating, Luvata Insitu®, which offers the best in spray-on protection. Evidence shows that field-based coatings are a growth market, as they provide a quick and convenient way of protecting equipment when immersion coating is not a possibility.

Tough but kind

The world today is a more challenging stage for business than it has ever been. Increasingly, our customers ask us to help them to be more environmentally friendly. Meeting the challenge to be greener requires the very best of technology – it needs us to adapt to a more discerning world. Creating cleaner end products and cleaner operating processes is a challenge that we relish. All our coil coatings are water-based, which makes them kinder to the environment.

In Luvata's four-and-a-half centuries of history we have amassed an impressive legacy of pioneering technology, of forging long-lasting relationships and of unmatched experience in rolling and metallurgy. Now, we are delighted to be extending our experience and knowledge to coil coatings, and helping OEMs, building owners and others to protect their HVAC assets.



Water treatment facility – a contributor to pollution-based corrosion



Rooftop-mounted air conditioning units



Industrial coolers

Factory-applied ElectroFin® E-coat Solution

The best possible protection for coils comes from electrocoating. The process involves full immersion of the coil so that the coating can be deposited with the aid of electricity. There is no better way to ensure a full and uniform coating.

ElectroFin® E-coat was designed to provide corrosion resistance for fin and tube heat exchangers in coastal marine environments. It can cope with the harshest conditions and is recognized by the HVAC/R industry as the leading technology in corrosion-resistance coatings.

It is the preferred choice for every major OEM, and is proven to extend the life of HVAC equipment significantly.



Spray-applied Luvata Insitu® Solution

Electrocoating is not always a practical solution. Time, distance and cost can all be contributing factors for the decision to use a field-based spray-on coating instead.

Luvata Insitu® is a post-manufacturing coil and cabinet coating application. It is applied at our own facilities or remotely, by Luvata-employed technicians. Insitu uses ES² (Embedded Stainless Steel Pigments) technology. It has excellent resistance to moisture, corrosion, UV, chemicals and high temperatures and we believe, gives the best protection you can get outside of electrocoating.



Case study – combating formicary corrosion

In coastal regions, an increasingly common reason for indoor coil failures is formicary corrosion. Homes have become more airtight to comply with strict energy codes, causing the build-up of air contaminants released by construction materials. Contaminated airflow coupled with a highly humid environment can initiate the onset of this sort of corrosion. In 2006, as a result of formicary corrosion, a major HVAC/R equipment manufacturer had to install replacement A-coils. The previous, unprotected coil had failed in just eighteen months. The new coils, which are protected by Luvata's factory applied ElectroFin® E-coat, are still in service today.

Case study – huge cost savings

Our customer's building had four rooftop air handlers that represented 10 tons of cooling each. Coil cleaning and Luvata Insitu® spray-applied coating helped the owner save \$65 per year per ton of air conditioning. Which meant that we helped the building owner to save over \$4,600 in utility costs in the first year alone.

Luvata ElectroFin® – making a difference

Luvata is one of the world's foremost producers of products and technology solutions, not just in copper, but other non-ferrous metals too. As well as everything from battery wire and superconductors to roofing copper, one of our most successful areas of expertise is providing heat transfer products and solutions – including corrosion-resistant coil coatings.

The recognized product brands of ElectroFin®, Heatcraft, ECO and Coiltech all fall under the Heat Transfer Solutions division of the united Luvata Group.

Luvata has over sixty years of experience in the design and manufacture of heat exchangers for a wide variety of applications and the Heat Transfer Solutions division of Luvata is the partner of choice for the biggest operators in the HVAC/R market worldwide. We are proud of our market-leading position in heat transfer solutions but we don't take it for granted – it is the result of many years spent building long-term relationships, which have evolved into solid partnerships today. As a result, we have grown an understanding of our customers' end products and the specific demands of the marketplace.

As the marketplace has changed, so have we. Demand for products and solutions that reduce material costs, improve operating

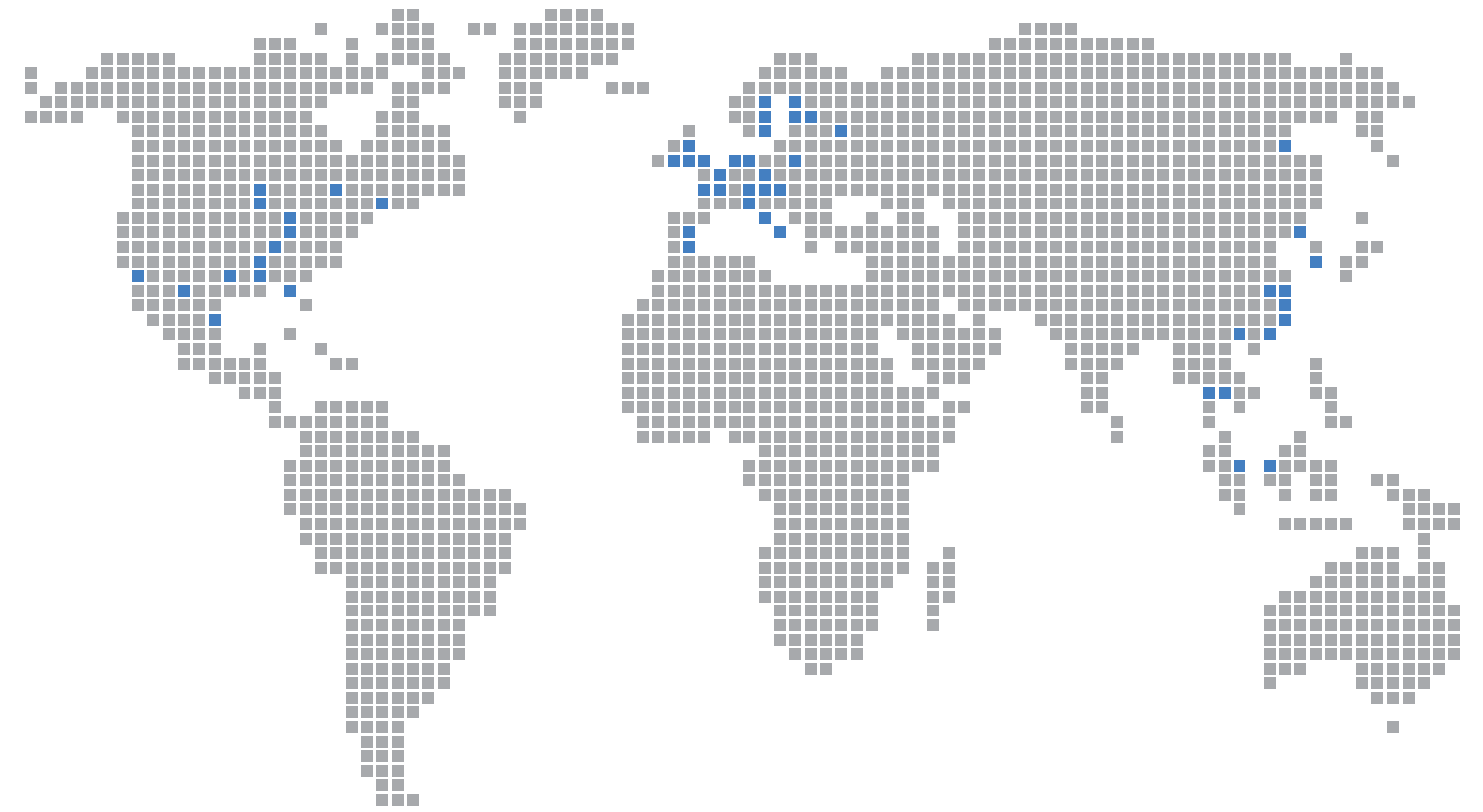
efficiency and are environmentally friendly are now part of everything we do. The recent introduction of Luvata Insitu® is just one example that demonstrates we don't just supply products – we deliver solutions. Those solutions help our customers with their manufacturing or supply needs: they help to improve their end products, streamline their operations and increase the financial efficiency of their business. These three results represent Luvata's pledge of 'Partnerships Beyond Metals'.

We believe that what we do really does make a difference to the world around us. Our heat transfer products and solutions have paved the way for advances in heating and cooling that have genuinely enhanced people's lives. At Luvata, we plan to carry-on this tradition.

Dennis Appel
Vice President – Head of NA Operations
Heat Transfer Solutions Division, Luvata

Luvata around the world

18 countries
36 production facilities
7,500 employees



The Luvata Way

Luvata's passion for results and open-mindedness is available in about 7,500 places around the world - the hearts of our people. 'Luvata' means 'to promise' and that's what every one of us lives up to. For more information on rolled products or any other aspect of Luvata, visit www.luvata.com.



About Luvata

Luvata is a world leader in metal fabrication, component manufacturing and related engineering and design services. We are committed to partnering with our customers to help them increase their competitiveness. Our products and services enable our customers to improve operational efficiency, improve products and reduce tied-up capital. Because we focus on our customers' results and are unfailingly reliable, we are the partner on which our customers base their future development.