

Corrosion Protection for Shipping Containers

Oerlikon Metco's thermal spray surface solutions protect shipping containers from corrosion for up to 25 years. Transport companies benefit through reduced liability, lower container maintenance and replacement costs, and reduced depreciation. The use of Oerlikon Metco coating application equipment and materials ensures that shipping containers can be coated easily and economically.

Corrosion and Shipping Containers

Shipping containers are exposed to various corrosive elements such as airborne salt and industrial pollutants, rain and saltwater. Transport damage during loading onto and unloading off trucks, train beds and ships breaches the paint coating which further contributes to corrosion. The result is shortened container life and high costs for container repair or replacement.

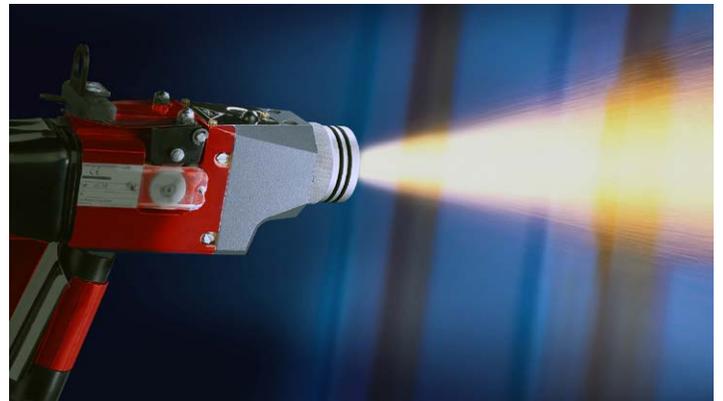
Paint is inadequate to protect the containers against such harsh conditions.

The Benefits of Our Coating Solution

- Reduced liability as a result of damage to container contents
- Longer container life as a result of better corrosion control
- Reduced costs by extending the time between container maintenance intervals
- Reduced depreciation costs
- Containers maintain a clean appearance longer with no surface rust
- Our sacrificial corrosion coatings galvanically protect steel surfaces, even if the coating is damaged
- Long-lasting protection of 15 to 25 years, depending on the environment
- Coatings are easily applied with no need to disassemble the container
- An overcoat of paint can be applied immediately after the corrosion coating with no loss of corrosion protection



Corrosion caused by weather and exposure



The application of a thermal spray corrosion coating protects shipping containers and reduces cost of container ownership



Damage from loading and unloading accelerates container corrosion

Corrosion Protection Through Thermal Spraying

We provide thermal spray equipment and materials that are used to economically protect shipping containers against corrosion. Easily applied zinc, zinc-aluminum or aluminum coatings significantly extend container service life with a sacrificial corrosion barrier that provides long-lasting protection on steel surfaces.

The coating is applied using electric arc wire technology without the use of gases — only compressed air and electricity are needed. With an average coating thickness of 100 µm, approximately 1 kg of material per m² of surface area is required to provide corrosion protection for 15 to 25 years, depending on environmental factors.

Our corrosion coatings are an excellent base for overcoat application of most paints and organic finishes, and they can be applied immediately after the thermal spray coating. Unlike hot dip galvanizing, thermal spray does not leave a “greasy” surface.

About Oerlikon Metco

Oerlikon Metco enhances surfaces with coating solutions and equipment. Customers benefit from a uniquely broad range of surface technologies, coating solutions, equipment, materials, services, and specialized machining services and components. The innovative solutions improve performance and increase efficiency and reliability. Oerlikon Metco serves industries such as power generation, aviation, automotive, and other specialized markets.



Coating a container with a zinc-aluminum coating



Our corrosion coatings are well-suited for marine environments