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PRESS RELEASE



Start Right for Best Results on Your Next Direct to Metal (DTM) Coating Project

Workers often paint metal not only to make it look nice but also to protect it from oxygen, moisture, and salts that can cause it to rust or corrode. Unfortunately, paint jobs that do not get off to the right start are little better than having no protective coating at all. To avoid wasted metal painting efforts, Cortec® stresses the importance of good surface prep and coatings selection according to the following guidelines.



Good Surface Prep for Painting Metals



Good surface prep is critical to adhesion. Paint will not adhere well to surfaces that are rusty or dirty, and if the paint peels, protection will be lost. Fortunately, there are a variety of ways to remove rust: sandblasting, grinding, blasting, or using a Cortec® rust remover such as [VpCI®-423](#) (a USDA Certified Biobased Product that clings to vertical surfaces). Once the rust is removed, the surface should be rinsed to remove any remaining dirt, debris, or corrosion products. Power-washing

the surface with an alkaline cleaner from the VpCI[®]-41x series further helps with flash rust prevention on freshly exposed metal surfaces and neutralizes those that have been cleaned with acids. If no water has pooled, the surface can typically be painted over without further rinsing.



In many cases, it makes more sense to passivate a rusty surface with a good coat of [CorrVerter[®] Rust Converter Primer](#) than to sandblast or use another method of rust removal. This is done by removing loose rust with a wire brush and then applying CorrVerter[®] directly over any remaining tight rust. A special combination of chelating agents and a high solids waterborne latex with extremely low water vapor permeability converts the surface rust into a hydrophobic passive layer and resists re-

rusting. CorrVerter[®] should be allowed to dry for at least 12 hours before a topcoat is applied. It can be painted over with either a water-based or solvent-based coating.

Tips to Choose the Right Coatings for Metal

In addition to good surface prep, choosing the right coating system (e.g., primer and topcoat) can mean the difference between achieving long-term protection or premature failure. Several important considerations should be made in the process.

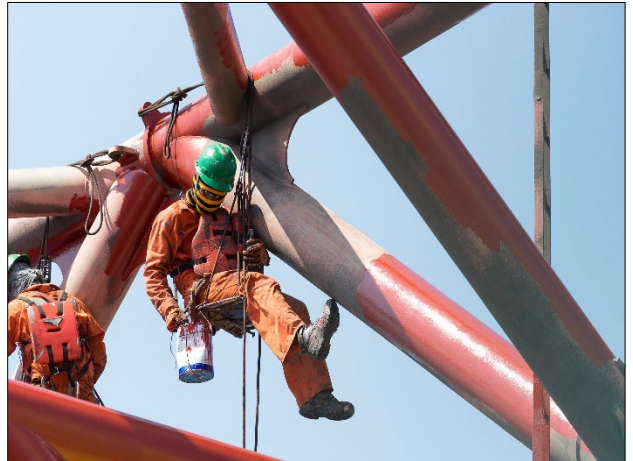
- 1) **Consider company specifications.** Some large equipment manufacturers have specific requirements on how many hours their coatings must last in salt spray or humidity testing, or how much the color can fade over time. If the paint does not meet these requirements, it may not provide the appropriate level of protection.
- 2) **Consider the surrounding environment.** For example, a metal part stored inside a warehouse may be protected indefinitely with one coat of a water-based, 1K Cortec[®] Coating. On the other hand, structural steel exposed to extremely aggressive coastal conditions with high humidity and blowing sand (e.g., northern Brazil) may need a three-coat system with two coats of primer and a 2K, high-UV resistant 2K topcoat such as VpCI[®]-384 in order to withstand the harsh environment.
- 3) **Consider the application requirements.** While 2K coatings typically offer a durability advantage, they require extra labor and also have a limited pot-life before they must be thrown away. Even worse, it is easier to make application errors when using a two-part system. If workers mix the wrong amounts or completely forget to add Part B to Part A, the coating will not function properly and may need to

be removed and replaced. The project owner should therefore decide whether it makes more sense to go for 2K durability advantages or the convenience and simplicity of a 1K system.

Choose Good, Better, or Best

Since so many different factors (not to mention budgets) figure into coatings selection, Cortec® is adept at recommending “good, better, and best” Cortec® Coating system options. This allows users to choose the paints that make the most sense for their specific project needs and preferences. Some popular 1K and 2K Cortec® Coatings that frequently come up in recommendations include the following:

- Primers
 - [VpCI®-396 Moisture Cure Urethane Primer](#) (1K primer)
 - [VpCI®-395 Water-Based Epoxy Primer](#) (2K primer)
- Topcoats
 - [EcoShield® VpCI®-386 Water Based Acrylic](#) (1K topcoat)
 - [VpCI®-384 Solvent Based Urethane Topcoat](#) (2K topcoat)



Cortec® experts are here to help, so do not hesitate to [contact us with your surface prep and coating selection questions for best results!](#)

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