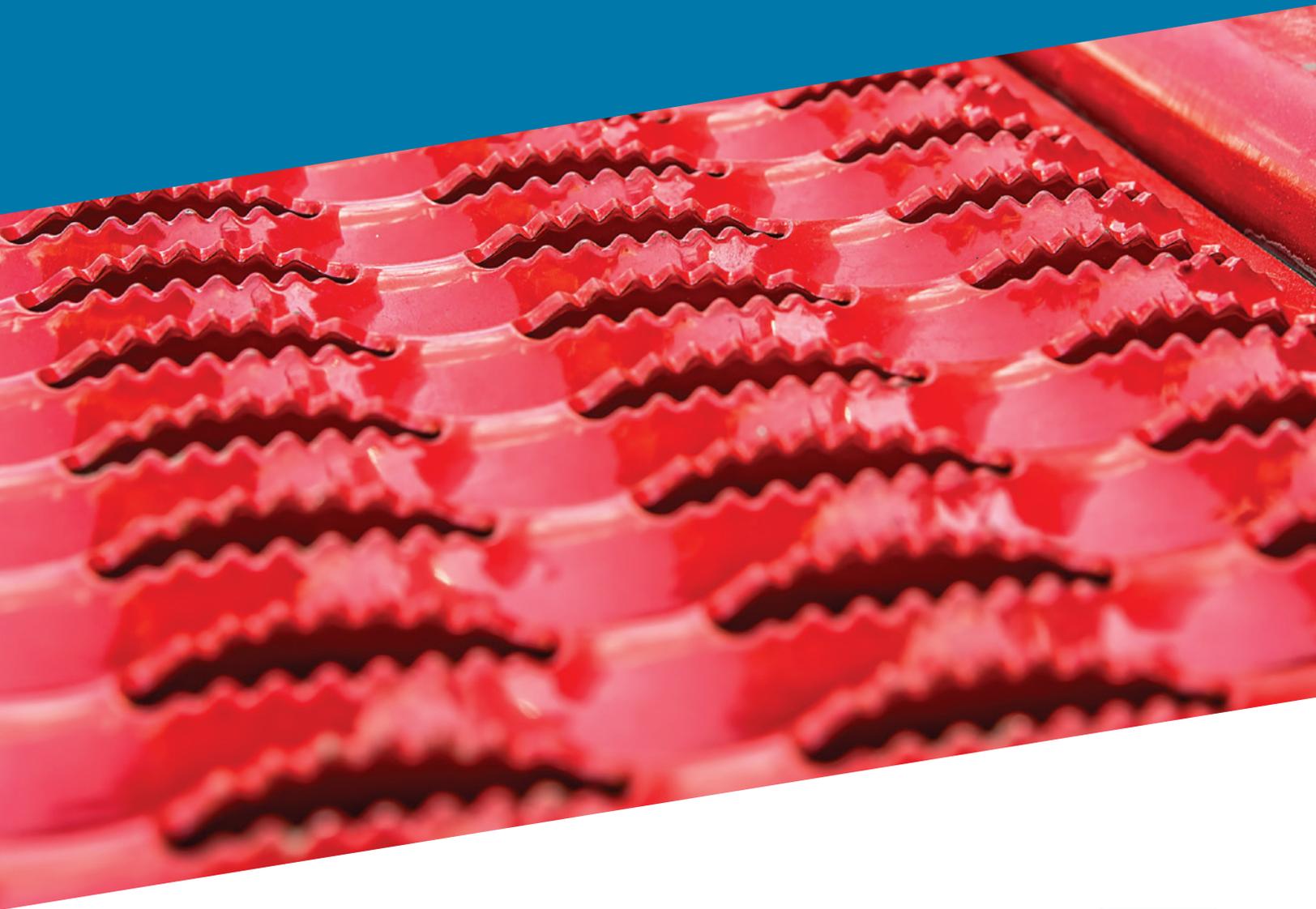


PPG ENVIROCRON™ EXTREME PROTECTION EDGE

Extreme corrosion protection in one-coat powder
with superior sharp edge coverage





Protects edges with just one coat

PPG Envirocron Extreme Protection Edge is an advanced powder coating system that delivers superior protection in extreme environments – even for sharp edges, louvers, blades, mesh and other vulnerable, hard-to-cover features. And it does it in one coat, not two ... saving time, money and labor.

A valuable competitive edge for your business

By eliminating the primer booth and oven, *PPG Envirocron Extreme Protection Edge* provides energy and material savings. However, this exceptional edge protection goes beyond the convenience and savings that come with a one-coat application. It also has increased longevity in the field and first-pass transfer efficiency so less powder is needed, delivering savings in the long run.

- Saves capital investment in equipment and space
- Saves time and labor



Improved edge coverage and protection for longer product life in one coat

PPG Envirocron Extreme Protection Edge advantages versus Conventional DTM Powder

	PPG Extreme Protection Edge DTM Platform	Conventional Powder DTM Offering	
Warranty Claim Costs			Edge corrosion performance far superior to conventional DTM powder, reducing field claims and increasing refurbishment lifecycle and resale value.
Extends Product Life Cycle			Edge coverage of 20+ microns of powder provides corrosion performance far superior to conventional DTM powder.
Enhances Part Appearance			Signs of no edge coverage can include dark lines, off-color areas or metal peeking through. By covering the edges with powder, parts are more uniform in color and appearance.
Higher Transfer Efficiency – Powder Utilization			Higher first-pass transfer efficiency and increased edge protection at standard powder film thicknesses reduce total powder usage.
Reduces Labor			Reduces manpower needed for touch-up.
Eliminates the need for Edge Blasting or Edge Rounding			No capital expense needed for edge rounding or blasting equipment; no manpower needed to process.
Improves Worker Safety			Edge coverage of 20+ microns – edges that are not sharp are safer to handle off the production line and through packaging, shipping and assembly.

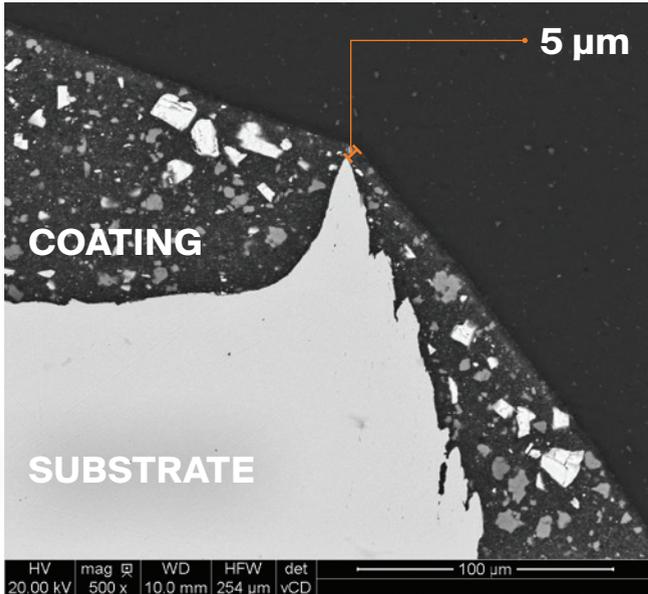
PPG Envirocron Extreme Protection Edge advantages versus 2-Coat System (Primer + Topcoat)

	PPG Extreme Protection Edge DTM Platform	Conventional 2-Coat Powder Offering	
Avoids expense to improve edge performance via a 2-coat system (primer + topcoat)			Eliminates the cost of spray booth, maintenance and utilities.
Primer Cost Avoidance			Eliminates the cost for primer material.
Reduces Waste			Eliminates primer waste disposal costs.
Energy Savings			Eliminates need for primer booth and oven, offering cost savings.
Reduces Labor			Reduces manpower needed for primer application, primer booth clean up and powder touch up.
Eliminates the need for Edge Blasting or Edge Rounding			Eliminates capital expense needed for edge rounding or blasting equipment; eliminates manpower needed to process.
Enhances Part Appearance			Signs of no edge coverage can include dark lines, off-color areas or metal peeking through. By covering the edges with powder, parts are more uniform in color and appearance.
Higher Transfer Efficiency – Powder Utilization			Higher first-pass transfer efficiency and increased edge protection at standard powder film thicknesses reduce total powder usage.
Improves Worker Safety			Minimum powder coverage on sharp edges of 20+ microns – edges that are no longer sharp are safer to handle off the production line and through packaging, shipping and assembly.

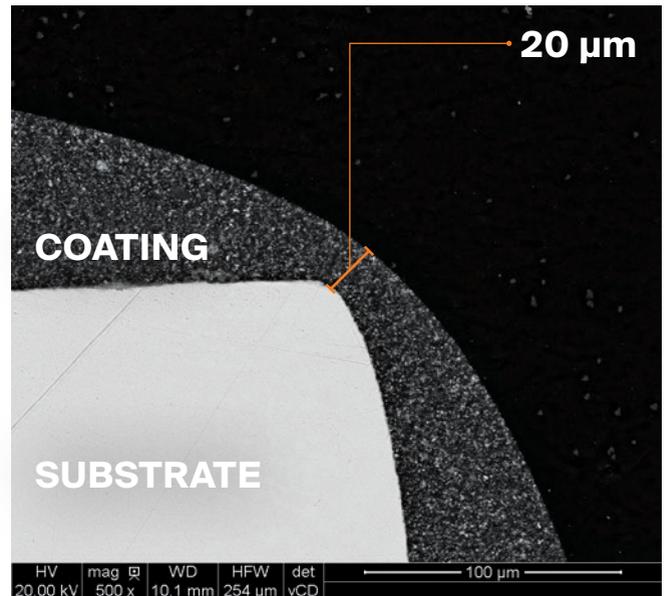
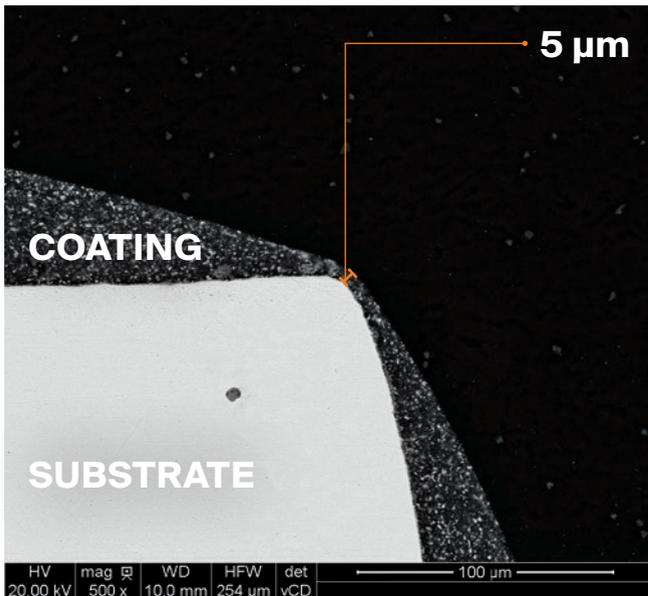
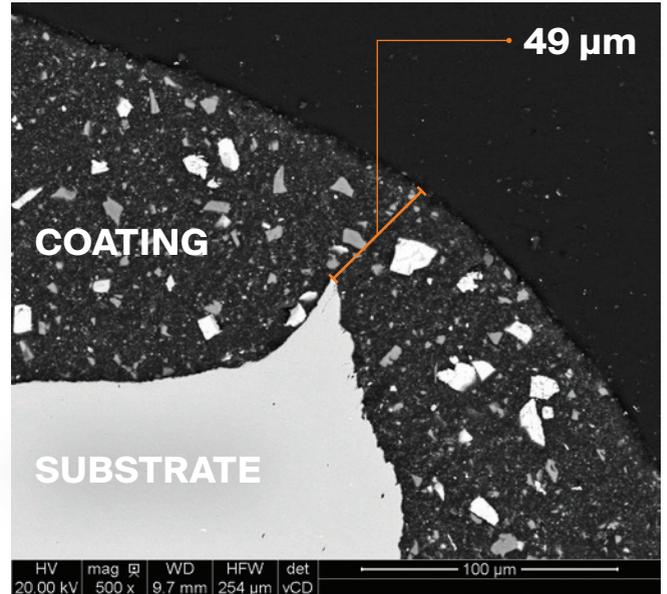
Proof it protects in one coat

Images show the superior edge protection provided by *PPG Envirocron Extreme Protection Edge* as compared to conventional DTM powder. These SEM (scanning electron microscope) cross-sectional images show a significant increase in film build on the edges.

Conventional DTM Powder



PPG Envirocron Extreme Protection Edge

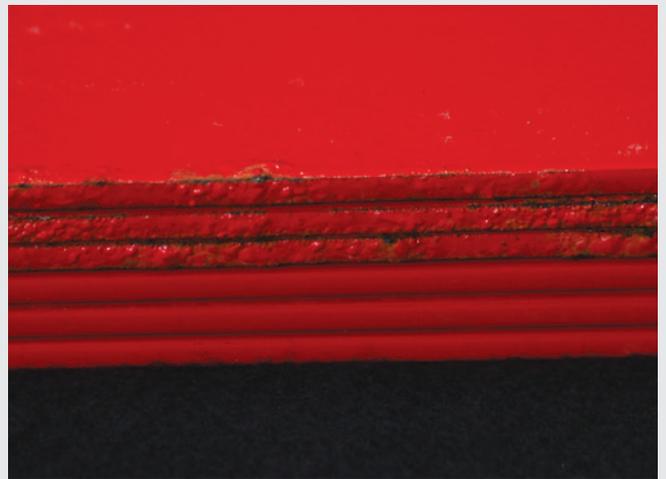


Technical Properties

Property	Test Method	Value
Color	—	Multiple
Gloss	ASTM D-523-94	50 - 95 @ 60°
Adhesion	ASTM D-3359-97	100% (5B Pass)
Hardness	ASTM D-3363-92	H Pencil (Eagle)
Impact Resistance	ASTM D-2794-93	120 In.-lbs. Direct 80 In.-lbs. Reverse
Conical Mandrel	ASTM D-522-93	1/8" Mandrel - No Cracking
Salt Spray	ASTM B-117-97	1000 Hrs. Pass <1/8" Scribe Creep - No Blisters Minimal corrosion on sharp edges
Humidity	ASTM D-2247-99	1000 Hrs. Pass <1/16" Scribe Creep - No Blisters



40 Cycles of Cyclic Corrosion Testing



This image of laser-cut edges highlights the edge corrosion performance of a standard DTM powder coating (top 3 panels) versus PPG's High Edge DTM powder (bottom 3 panels) after 40 cycles of cyclic corrosion testing as per SAE J2334.

The edge against conventional powder coating systems

- 20+ micron edge coverage for superior corrosion protection
- Eliminates the labor, energy and disposal costs of primer
- Lower cost per square foot of painted metal
- Eliminates the need for edge rounding or blasting
- Higher first-pass transfer efficiency and reduced total powder usage
- Color consistency across the part, especially on edges
- Increased worker safety with no sharp edges to handle



This image of laser-cut edges highlights the edge corrosion performance of a standard DTM powder coating (3 panels on the right) versus PPG's High Edge powder (3 panels on the left) after 40 cycles of cyclic corrosion testing as per SAE J2334.



Frequently Asked Questions

What is PPG Envirocron Extreme Protection Edge?

PPG Envirocron Extreme Protection Edge powder coatings provide extreme corrosion protection in one coat. This unique technology is specially formulated to cover sharp edges created during metal fabrication, offering superior corrosion protection over standard one-coat, and equal to two-coat powder systems. This one-coat edge solution translates to significant cost savings in material, labor, utilities and time. In addition to long-term performance, PPG Envirocron Extreme Protection Edge powder coatings offer outstanding transfer efficiency and ease of application.

What technology/chemistry is the product?

PPG Envirocron Extreme Protection Edge powder coatings are a new addition to PPG's world-class polyester powder coatings, providing a combination of superior physical and chemical resistance properties and excellent outdoor weathering properties. Available in TGIC and HAA/Primid.

In what applications should this product be used?

On any painted metal part that is exposed to outdoor elements and whose asset life is compromised by edge corrosion.

Does this product really protect sharp and laser-cut edges from corrosion?

Yes. This innovative, patent-pending powder technology is formulated for increased film build on sharp edges and provides increased edge corrosion protection.

Can this be applied manually or is an automatic system needed?

This product can be applied in both manual and automatic powder coating systems.

Will this system require a modification to existing manufacturing plants?

This product will run on your existing powder coating line with no additional equipment necessary. PPG technical service representatives are available to help optimize your application process.

What colors are available?

PPG has state-of-the-art color-matching capabilities and can create a custom color match based on your specifications. We offer an extensive selection of pigments, including micas and metallics.

Is the product reclaimable?

Yes, it is a fully reclaimable powder.

Why should I care about edge corrosion?

For many reasons, including product longevity, enhanced brand image, reduction in warranty claims due to corrosion and improved resale value.



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