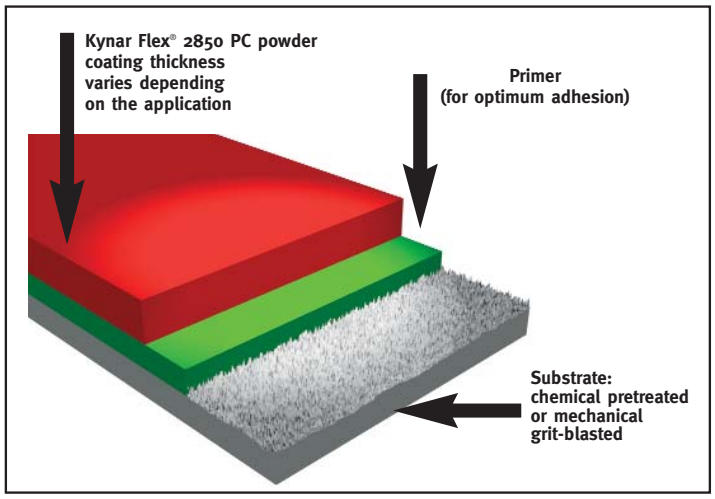
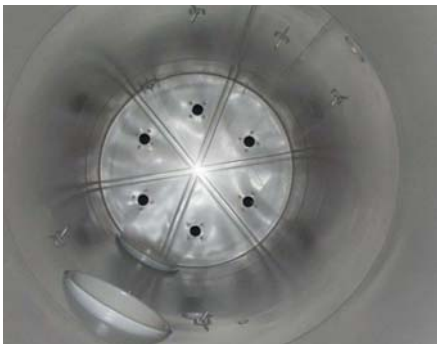
KYNAR FLEX® 2850 PC

POWDER COATING INFORMATION



The Kynar Flex® 2850 Powder Coating System is a two layer coating system that ensures optimum protection to the metal substrate.



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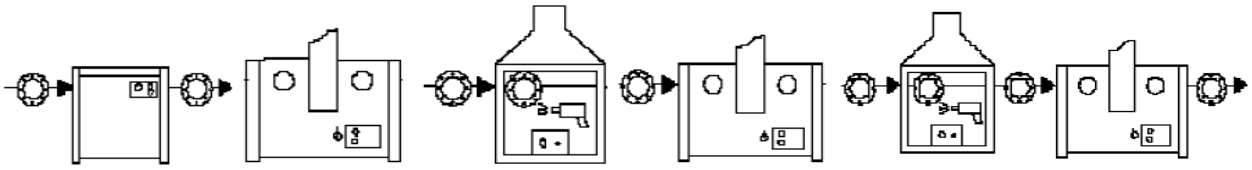
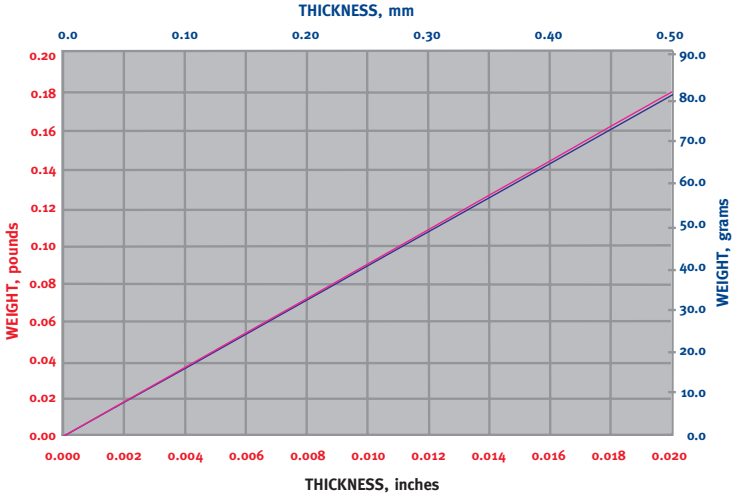
KYNAR FLEX® 2850 PC Powder Coating Process





KYNAR FLEX® 2850 POWDER COATING
Coating Thickness vs. KYNAR® resin weight per Square Foot

Note: For thickness greater than shown in the above chart the values are multiples, i.e. for 0.060 inches (10 X 0.006) weight = 0.54 lbs. (10 X 0.054).

ARKEMA

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KYNAR FLEX® 2850 PC POWDER COATING PROCEDURE

1. Pretreatment
Surface preparation for application of KYNAR FLEX® 2850 primer and topcoat is critical to successful adhesion. All volatiles, dirt, grit and other contaminates must be removed from the surface to be coated. Blasting to remove scale, oxides, etc. and to provide an anchor pattern for the coating is recommended. The KYNAR FLEX® 2850 powder primer is suitable for steel, stainless steel, aluminum and other common metallic substrates that withstand the 260°C (500°F) oven temperature.

Note: Closed pockets within the part to be coated should be vented to prevent possible pressure buildup during baking.

2. Preheat
Preheat the metal substrate in a clean oven until the entire part has reached 260°C (500°F). One and a half to two hours is usually adequate depending on the mass of the part and oven capabilities.

3. Primer coat
Remove the part from the oven and apply the KYNAR FLEX® 2850 primer to the hot part in very light passes. **Do not apply an excessive amount of primer.** Each light pass will deposit about 25µm to 40µm (1 to 1.6 mils) thickness; three or four light passes will achieve the desired thickness. Each light pass should be applied in a direction perpendicular to the previous pass to provide the optimum uniformity of the coating. Total primer build up should be approximately 100µm to 150µm (4 to 8 mils) thick. Excessive primer is not recommended, and may make it difficult to obtain a smooth surface.

4. Fusion
Return KYNAR FLEX® 2850 primed part to a 250°C (480°F) oven for 20 to 25 minutes. This time is measured after the substrate has reached the 250°C (480°F) temperature. When proper flow-out is obtained, the KYNAR FLEX® 2850 primer surface appears wet.

Note: These flow-out times are for coating a 3mm (1/8 inch) thick steel substrate. Modification of flow-out times may be required for parts of different thickness. Proper flow-out has been achieved when the coating surface appears wet. Excessive flow-out time or excessive coating thickness may cause the coating to sag.

5. Topcoat
Remove the part from the oven, rotate the part 90° to prevent sagging and apply the KYNAR FLEX® 2850 PC powder topcoat to the hot part. Apply 3-4 **light** passes of KYNAR FLEX® 2850 PC topcoat. Each light pass will deposit about 25µm to 40µm (1 to 1.6 mils) thickness. Each light pass should be applied in a direction perpendicular to the previous pass to provide the optimum uniformity of the coating. Heavier topcoats may be applied after the surface appears smooth. Do not exceed 175µm to 250µm (7 to 10 mils) per coat. Excessive deposition of topcoat will result in the powder falling off the part and/or bubbles in the coating.

6. Fusion
Return the part to the 250°C (480°F) oven for flow-out.

Note: The coating may appear rough or pitted as the first topcoats are applied. To obtain a smooth surface, apply thin coats of KYNAR FLEX® 2850 PC topcoat until the surface appears smooth. This should occur by the third application of the KYNAR FLEX® 2850 PC topcoat. Heavier coats of KYNAR FLEX® 2850 PC topcoat can be applied after the smooth surface is obtained. Excessive thickness of powder will result in air entrapment within the finished coating.

7. Build-up
Repeat the application of the KYNAR FLEX® 2850 PC topcoat and oven flow-out, steps 4 and 5, until the desired coating thickness is obtained. It is important to rotate the part 90° to prevent sagging and return the part to the 250°C (480°F) oven for flow-out for each successive coat. Improved gloss and smoothness can be obtained by allowing the part to remain in the oven longer during the final flow-out cycle. This time should not exceed 45 minutes at the same temperature. The part must be rotated for each coat to prevent sagging or dripping.

Storage Requirements:
KYNAR FLEX® 2850 primer has a shelf life of approximately 12 months. Rotate inventory often using oldest material first. Maximum recommended storage temperature for short term exposure should not exceed 120°F. Maximum recommended long-term storage should not exceed 80°F.

KYNAR FLEX® 2850 PC topcoat has no shelf life restrictions when stored in normal conditions.

Keep packages closed when not in use to avoid contamination of the powder.

See MSDS for Health & Safety Considerations

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