



GLOBAL POLYESTER



Product Bulletin

Modified Polyester Coil Coating
Tech Bulletin: 02-100B

System Overview

- Globally Available
- Excellent Economic Supply
- Stocking and Quick Match Programs Available
- U.S. WARRANTY Coverage and Support
- Custom Designed Systems for Rainware & Building Products
- Long Term International Commercial and Industrial experience

The GPX Global Polyester coil coating system manufactured and distributed globally by Continental Coatings Inc. and Yung Chi Paint and Varnish Manufacturing Company Ltd., is a **Modified Polyester** coil coating system engineered for interior and exterior applications that require long lasting performance and excellent economics. The **GPX** system can be applied single coat or as a two coat system depending on end use requirements and application specifics. The **GPX** system is formulated with a proprietary polyester resin polymer, which is economical, U.V. and weather resistant, and has primer like adhesion performance. **GPX** may be applied singlecoat or over the Universal **PU-11 High Molecular Weight Urethane Primer or PU-30 High-build Urethane primer systems** for extreme environment and long service life product applications.

Application Parameters

The GPX Global Polyester system is designed for trouble free high line speed coil coating line application and has been run worldwide under a very wide range of application parameters and substrate conditions. Standard topcoat DFT is .50 -.70 mils, however, custom low film and low temperature cure systems are available. **GPX** was formulated to provide very good stain, scratch, mar and scuff resistance, and is flexible enough for most tough fabrication applications.

Commercial Uses

The GPX system can be formulated in standard, medium, textured, and low gloss / low sheen finishes and supplied in a very wide range of colors and effects. This economic coating does carry a limited exterior warranty when required and can be applied to a variety of adequately cleaned and treated metal substrates including: Hot Dipped Galvanized, ZnAl, Galfan, ZAM, Aluminum, and Stainless Steels. **GPX** is formulated with an excellent balance of flexibility and hardness but can be custom modified for specific applications that require unique or special physical property performance. **GPX** system is ideal for many general interior and exterior applications like rain gutter and downspout, shade and shelter, Liner Panel, commercial doors, and various white goods including sign blank and lighting.



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Regular Modified Polyester Coil Coating System

APPLICATION		
SPECIFICATIONS	TEST	RESULT
Application Method		Reverse Roll Coat
Primer		PU11 HMW PU, PU30 High Build PU
Substrate		Aluminum, HDG, Galvalume, ZAM
Pretreatment	Standard clean and treat	Chrome, Zinc Phosphate, or approved non-chrome
ASTM D 4138	Dry Film Thickness	Top coat: 0.5 to 0.7 mils Primer: 0.0 to 0.3 mils Total system: 0.5 to 1.0 mils
ASTM D 4212	Viscosity (No. 4 Zahn cup)	25 to 35 seconds
ASTM D 1475	Weight Per Gallon	9.0 to 12.0 Pounds Per Gallon
ASTM D 2697	Solids Per Volume	50 to 55%
ASTM D 2369	Solids Per Weight	60 to 75%
Reducing Thinner	Reducing Solvent	Aromatic
ASTM D 3960	VOC (Theoretical)	3.0 to 4.0 Pounds Per Gallon
Clean-up Solvent		Aromatic/Ketone
Coating Mileage		1069 to 1357 Sq. Ft. / Gallon
Peak Metal Temperature		435 F to 450 F
TECHNICAL DATA		
SPECIFICATIONS	TEST	RESULT
ASTM D 523	Specular Gloss at 60	6 to 85
ASTM D 3363	Pencil Hardness	H TO 3H
ASTM D 4145	T-Bend	1T to 4T with no loss of adhesion
ASTM D 5402	Solvent Resistance (MEK Rubs)	100 +
ASTM D 3359	Cross Hatch Adhesion	No loss of adhesion
ASTM D 2794	Reverse Impact	Galvalume or HDG: 3x metal thickness inch-pounds, no loss of adhesion Aluminum: 1.5x metal thickness inch-pounds, no loss of adhesion
ASTM B 117	Salt Spray Resistance 1,000 hrs. Salt Spray Resistance 2,000 hrs.	Galvalume or HDG: Creep from scribe < 1/8 inch (3mm), none or few #8 blisters Aluminum: Creep from scribe < Creep from scribe < 1/8 inch (3mm), few #8 blisters
ASTM D 2244 ASTM D 4214	South Florida Exposure	Color: No more than 5 (E) Hunter units at 90 vertical angle and 7 (E) units non vertical Chalk: Rating no less than 8 at 90 angle and 6 at non vertical angle Film Integrity: 5 + years, no blisters, peeling or cracking
ASTM D 870	Water Immersion 100 F 168 hrs.	No field blisters with minimal color change
ASTM D 1308	Chemical Resistance (15 mins.)	No significant color change (color dependent)
ASTM E 84	Flame Spread Classification	Class I or A
ASTM D 968	Abrasion Resistance	Total Sand = 35 +/- 5 liters (Dft dependent)

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