



Spartacus Thermal Spray Equipment

SPARTACUS is a Thermal Spray hot powder coat system requiring No curing, with No residual overspray which Ensures Fast turnarounds & an easily Repairable maintenance free system.



Technical Data Sheet

PolyX®

GENERAL DESCRIPTION

PolyX® has been specifically designed to provide a long lasting, tough coating for exterior applications to mild steel, galvanized steel and aluminum. It is based on an alloy of acid modified polyolefins. Therefore it is halogen free and the combustion fumes are low in smoke and have a very low toxicity index. PolyX® is resistant to stress cracking, adverse weather conditions, detergents, salt spray and typical airborne pollutants. The coating maintains excellent adhesion to the metal substrate without the need for a separate primer. The material also provides a good degree of electrical insulation, abrasion and impact resistance. PolyX® is normally applied by the fluidized bed process, but it can also be applied by flock-spray or flame spray techniques. The flame spray method uses extremely high temperatures and therefore care should be taken to avoid degradation of the powder during application.

Recommended Coating Thickness		300-750 µ
Appearance		Smooth/Glossy
Gloss	ISO 2813	70
Impact Strength	Gardner (drop weight) ISO 6272 Direct 23°C (3mm plate) Indirect 0°C (3mm plate)	2.7 Joules 18.0 Joules
	Gardner (drop weight) ISO 6272 Direct 23°C (0.7mm plate) Indirect 0°C (0.7mm plate)	> 27 Joules > 27 Joules
Abrasion	Taber ASTM D4060/84 H18, 500g load, 1000 cycles	60 mg weight loss
Salt Spray	ISO 7253 Steel - Scribed - Unscribed Aluminum - Scribed - Unscribed	Results after 1000 hours Loss of adhesion less than 10mm from scribe. Under film corrosion 2-3mm No loss of adhesion No loss of adhesion No loss of adhesion
Chemical Resistance*	- Dilute Acids 60°C - Dilute Alkali 60°C - Salts (except peroxides) 60°C - Solvents 23°C	Good Good Good Poor
Adhesion	PSL, TM 19	A-1
Weathering	QUV ASTM G53-77 Florida 45° facing South	2000 hrs - No significant change in color or loss of gloss. 3 years - No significant change in color or loss of gloss.
Safe Working Temperature		60°C max

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Thermal Spray Solutions, Inc.

11 Enterprise Court * Sewell, NJ 08080 | Phone: 856-589-2500 * Fax: 856-218-8306