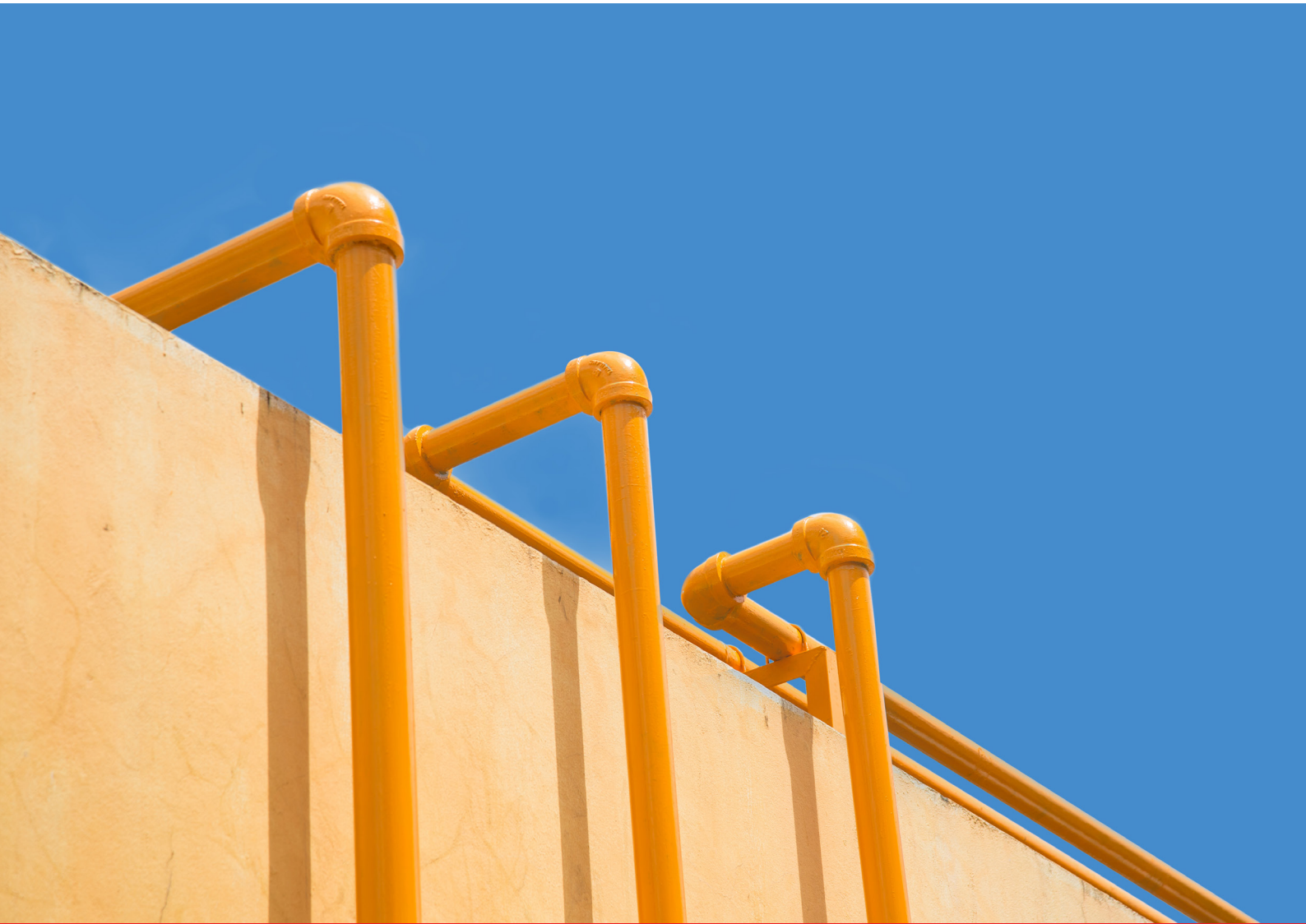


FUNCTIONAL



The functional market is targeted at very specific applications where not only is the coating functional in nature, but also that the parts being coated themselves are actually functional in their usage.

We formulate to offer a full range of vibrant colors, and custom and color-matching capabilities for instant identification for emergency, power, healthcare, electrical systems and other solutions. Our coatings are fit for a wide variety of tube and pipe dimensions, and can be applied using various techniques such as spray, dip or brush.





AG-KOTE™

FEATURED SOLUTIONS

THERMOSET POWDER COATINGS

AG-KOTE™

AG-KOTE™ is a polyester-based coating formulated to be cured at temperatures as low as 160°C. It promotes energy savings and higher productivity without sacrificing the quality and properties of the coating.

- Low temperature curing promotes energy savings and higher productivity when painting large objects.
- Possibility to coat thin and thick material at the same time without colour and effect differences.
- Excellent UV, chemical, and corrosion resistance.
- Can be formulated with most Protech Group coatings.

THERMOSET POWDER COATINGS

EF-SERIES™

EF-SERIES™ is a fusion bonded epoxy coating that was specifically formulated to provide maximum corrosion resistance in the most demanding conditions. It is available in single, dual, and multi-layer systems.

- Superior corrosion and chemical resistance.
- Low porosity and fast curing time.
- Can be used as a single layer or as the primer in a dual layer or in a multilayer system.
- Compliant with many construction and engineering standards worldwide
- Can be formulated with some Protech Group



EF-SERIES™

FEATURED SOLUTIONS

THERMOPLASTIC COATINGS

WATERARMOR™

WATERARMOR™ is formulated with functionalized polyethylene copolymer that is controlled, tested and certified for marine or water infrastructure. It can be applied by fluidized bed, electrostatic spray, flame spray, or extrusion.

- Impermeable barrier for increase durability.
- Unique one layer, primer-less coating.
- Chemical, corrosion, and abrasion resistance.
- Little to no maintenance for reduced costs.
- Certified by the National Sanitation Foundation (NSF).
- Repairable coating for extended product life.
- Can replace several layers of conventional protective coating.

SPECIALTY MATERIALS

PLASTISOL

PLASTISOL is a liquid dispersion of PVC resin in plasticizer. It is formulated based upon processing parameters, end-use applications, and desired product specifications. By utilizing an extensive group of raw material additives, PLASTISOL is an incredibly versatile polymer choice.

- Can be custom formulated for a wide variety of market applications and processing methods.
- Optimized for applications include dip coating, dip molding, rotational molding, slush molding, hot melts, inks, textile coatings, and adhesives.
- Performs as a protective, functional, and decorative coating for a variety of end products with many available resistance properties.
- Formulated without solvents and low in Volatile



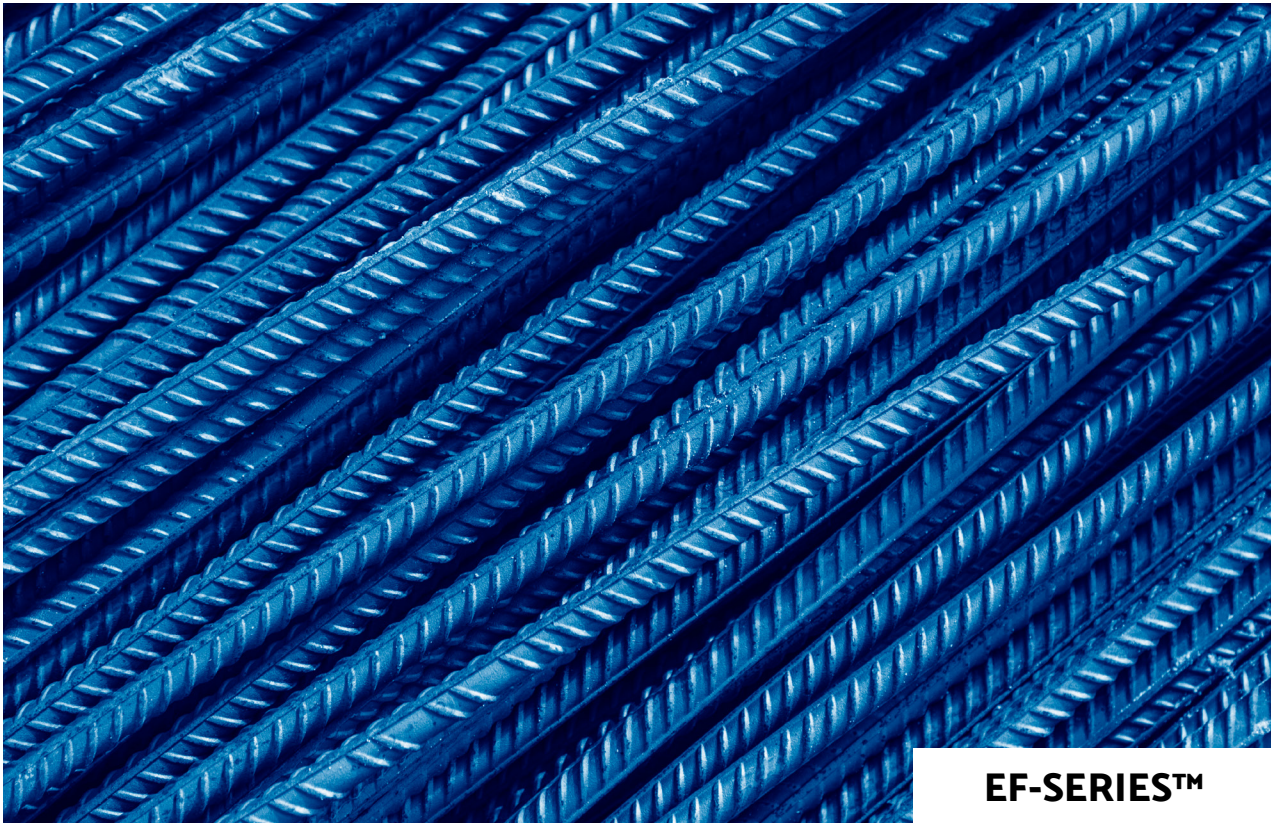
WATERARMOR™

APPLICATION MATRIX

	ELECTRONICS	ELECTRICAL INSULATION	VALVES & FITTINGS	REBAR	PIPELINES
THERMOSET POWDER COATINGS					
AG-KOTE™	✓	✓	✓	✓	✓
AUTO-COAT™	✓	✓	✗	✗	✗
CURVECOAT™	✓	✓	✗	✓	✗
E-BOND™	✓	✓	✓	✗	✗
EF-SERIES™	✓	✓	✓	✓	✓
STERILCOAT®	✓	✗	✓	✗	✗
VELVACOAT	✓	✗	✗	✗	✗
Z-SERIES™	✓	✓	✓	✗	✓
THERMOPLASTIC COATINGS					
DURAVIN™	✗	✓	✗	✗	✗
POLYARMOR®	✗	✓	✗	✗	✗
WATERARMOR™	✗	✗	✓	✗	✓
SPECIALTY MATERIALS					
PLASTISOL	✗	✓	✗	✓	✗
NATLEX	✓	✗	✗	✗	✗

PROVEN PERFORMANCE

We are constantly striving to improve by researching new chemistry to solve whatever challenges our customers present to us. If our current product lines do not suit your exact requirements, we have the ability to custom engineer one that will. Through development, we always deliver the right mix.



EF-SERIES™

THERMOSET POWDER COATINGS

Thermoset powder coatings, such as SOL-AR™, X-GRAF®, and Z-SERIES™ are developed and manufactured state-of-the-art chemistries that comply with the latest environmental and operational regulations.

PRE-TRAITEMENT	For steel and Aluminum–Phosphating or Zirconium or other suitable surface treatment
APPLICATION CONDITIONS	Electrostatic powder spray 40 to 100 kv
FILM THICKNESS	For normal usage 2.0 to 4.0 mils (Color and finish type related)
HARDNESS	HB to 4H (Formulation related)
SPECIFIC GRAVITY	1.2 to 1.75 (Color related)
COVERAGE	160 to 110 ft ² / lbs / mil at 100% efficiency (Color related)
BAKING SCHEDULE	METAL TEMPERATURE (Formulation Related) 8-10 minutes at 280°F (138°C) Super low temperature cure 8-10 minutes at 320°F (160°C) Low temperature cure 2-6 Minutes at 400 (205°C) Fast Cure 7 minutes at 400°F (205°C) Regular cure 8+ minutes at 400F (205°C) Slow cure

PROVEN PERFORMANCE

THERMOPLASTIC COATINGS

Thermoplastic coatings, such as WATERARMOR™, can be formulated to be compliant with certain guidelines.

TYPE	METHOD	RESULT
Tensile Strength	ASTM D638	3496 psi (24 MPa)
Elongation	ASTM D638	414 %
Vicat Softening Point	ASTM D1525	162 °F (72 °C)
Impact, Direct/Reserve (inch lbs)	ASTM D2794	160/160
Impact Resistance	ASTM G14 - 04	<77 in.lb. if tup weight 3.2 lb.
Taber Abrasion	ASTM D4060	28 mg loss, CS10 wheel & 61 mg loss, CS17 wheel
Adhesion	ASTM D4541	>2000 psi (13.78 MPa)
Cathodic Disbondment	ASTM G95-07	5 mm Average Radial Disbondment
Flexibility	ASTM D522	1/8 in (3.2 mm), no cracks (>32%) (Conical Mandrel)
Salt Spray	ASTM B117	>2000 hrs. No significant undercut or creep
Q-Panel UltraViolet (QUV)	ASTM G53	>2000 hrs, No significant change in color or gloss.
High Irradiance Xenon-Arc	JIS K 5600-7-7:2008	>1000 hrs, No significant change in color or gloss.
Humidity Resistance	ASTM D2247	No blistering or loss of gloss after 1000 hours.
Volatile organic compounds (VOCs)		ZERO

SPECIALTY MATERIALS

Specialty Materials, such as PLASTISOL, can be tested on demand for various properties:

- Tensile
- Tear
- Elongation
- Density
- Gelation Temperature
- Flame Retardancy
- Fineness of Grind
- Gloss
- Viscosity
- Dielectric Strength
- Hardness
- Bond Strength
- Heat Ageing
- Phthalates

ASK AN EXPERT

Our coating experts can help you streamline the process, saving you time and money by providing the right coating advice for your product or project.



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