

HD-KOTE

THERMOSET POWDER COATINGS

HD-KOTE is a polyester-based one-coat powder system engineered for superior corrosion and UV resistance. Its compatibility with standard pretreatment enhances production efficiency and lowers costs. HD-KOTE can be formulated with improved hardness (.IH) to add toughness and reduce the impact of wear, friction, scratches, etc. Coated products will require less packaging and will better resist damage during assembly, transport, or usage.



OVERVIEW

Heavy-Duty, One-Coat Thermoset Powder Coatings.

HD-KOTE.IH coatings undergo rigorous testing. One such test is the Taber Abrasion Test (ASTM D4060), which measures material hardness. After 2,000 cycles with 1,000g weights, PE54 shows a weight loss of 130mg, while PE54.IH loses only 39mg, a remarkable 60% reduction in wear,

thanks to the enhanced hardness of the HD-KOTE.IH coating. Another test, the salt spray test for corrosion resistance (ASTM B117), demonstrates noticeable improvement over standard polyester coatings with 2500hrs reported over B-1000 treated test panels.

MAIN FEATURES

- **Coverage** - Improved edge coverage over standard polyester coatings.
- **Formulations** - Available in Z-Series Super Durable formulations.
- **Finish Variety** – Offered in various finishes, including matte, high gloss, textured, and ultra-smooth, to meet aesthetic and functional requirements.
- **Custom Colors** – Can be formulated in any RAL color, including metallics, offering broad design flexibility.
- **Performance Grades** – Industrial-grade, architectural-grade, normal durable, and super durable coatings to meet different application requirements.
- **Low-Temperature Cure** – LB-SERIES technology allows curing at 160°C, enhancing energy efficiency while preserving coating performance.

TYPICAL APPLICATIONS

- **ACE Equipment:** Tractors, bulldozers, excavators, stone crushers
- **HVAC Systems:** Heat pumps, air conditioning units, ventilation housings
- **Infrastructure & Structural Steel:** Bridges, support beams, guardrails, lighting poles
- **Industrial Machinery & Equipment:** Compressors, pumps, generators, enclosures
- **Transportation Equipment:** Trailers, railway components, truck chassis parts
- **Retail & Commercial Fixtures:** Shopping carts, shelving units, point-of-sale displays
- **Public & Urban Furniture:** Benches, fences, waste bins, lamp posts
- **Oil, Gas & Offshore:** Pipes, tanks, risers, subsea structures



OUR SOLUTIONS

We provide high-performance, heavy-duty thermoset powder coatings engineered for maximum protection in harsh environments. These coatings offer superior durability, impact resistance, and corrosion protection—ideal for demanding applications in ACE machinery, industrial equipment, infrastructure, and other critical environments.

TECHNICAL PROPERTIES

Essential technical details are outlined below. Full Technical Data Sheet (TDS) available upon request.

PRE-TREATMENT	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 4.0 to 7.0 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)
CORROSION RESISTANCE	2500 hrs reported over B-1000 treated test panels (ASTM B117)
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



FORMULATING THE RIGHT MIX.

Since 1976, the Protech Group has been developing and manufacturing coatings, paints, and specialty materials. Through quality and innovation, we formulate the right mix to protect and enhance what matters most to our customers. Protech Group products are manufactured in more than 20 sites worldwide. We serve our customers in countless markets and industries, including construction, infrastructure, transportation, consumer goods, and healthcare.



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