

Superior Corrosion *Protection for Reinforcing Steel*

CAREFULLY SELECTED PARTICLES



BPCOAT ID SHIELD

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BPCOAT ID SHIELD Series

Superior Corrosion Protection for Reinforcing Steel

Superior Protection **Stronger Reinforcement!**

As BPC Kimya, we are committed to creating value through the durability, enhanced performance and sustainability of our products. To this end, we undertake extensive research and development and product development activities through new projects.

As BPC Kimya, we recognise that reinforced concrete structures and infrastructure projects require high-performance protection systems to maintain their strength over many years. The BPCOAT ID Shield Series is an advanced-performance powder coating solution based on fusion-bonded epoxy (FBE) technology, developed to protect reinforcing steel against corrosion and reduce the risk of structural damage that may occur over time.

Our FBE technology forms a long-lasting protective barrier on the reinforcing steel surface while maintaining the bond performance between steel and concrete, providing an efficient solution that helps extend the service life of structures.



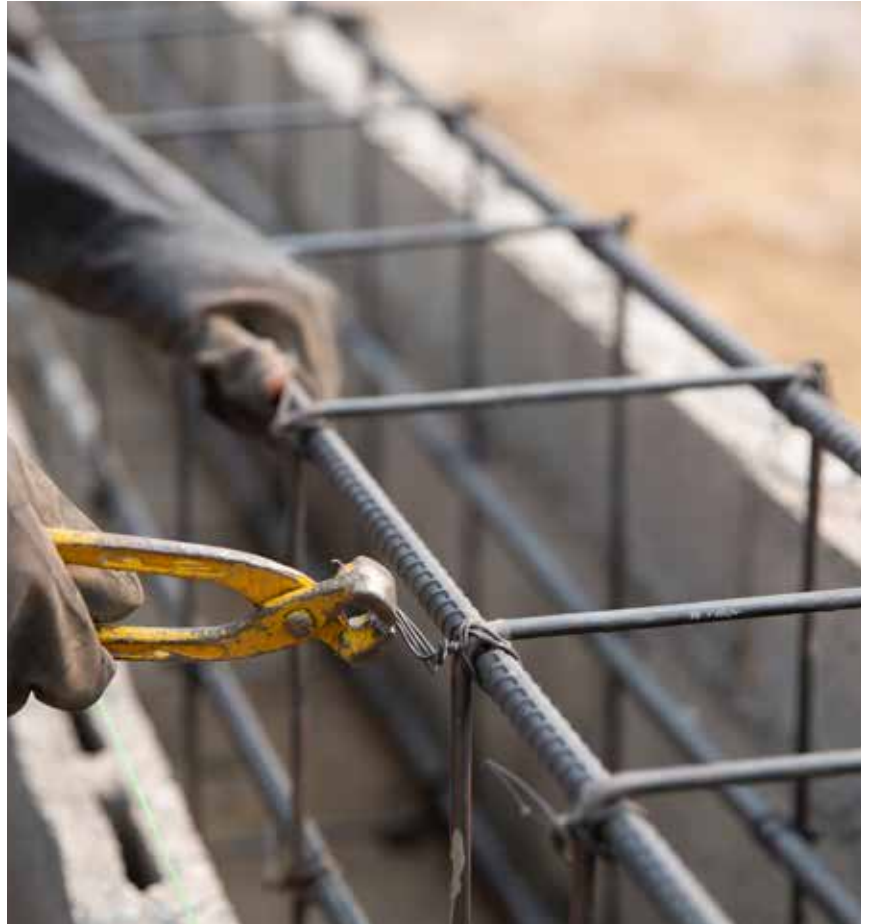
Safe Service for Years to Come!

Corrosion of reinforcing steel poses a significant risk to reinforced concrete structures, particularly in marine atmospheres and regions exposed to high humidity, chlorides and de-icing salts. As corrosion products formed on the steel surface occupy a greater volume than the base metal, they generate internal stresses within the concrete and may cause cracking over time.

This process can adversely affect not only the visual integrity of a structure, but also its strength and service life, increasing maintenance and repair costs.

BPCOAT ID Shield Series, reduces the risk of corrosion by forming a durable protective barrier on reinforcing steel and helps ensure the long-term safe use of reinforced concrete structures

BPCOAT ID Shield Series, has been tested in accordance with standard of **ASTM A775** and developed to meet high performance requirements.



Developed in line with our environmentally friendly approach, our powder coatings technology minimises volatile organic compound (VOC) emissions thanks to its solvent-free formulation. Excess powder that can be recovered during production and application processes can be reused, reducing waste and enabling more efficient use.

In addition, BPCOAT ID Shield products are lead-free and support the approach to sustainable coatings technologies.



Technical Properties

- **Corrosion resistance:** Forms a protective barrier against moisture, chloride ions, and environmental effects.
- **High adhesion:** Provides strong adhesion to the steel substrate, helping maintain coating integrity.
- **Mechanical resistance:** Designed to withstand mechanical stresses that may occur during the transportation, handling, and bending of reinforcing steel.
- **Flexibility:** Supports coating integrity under deformation through bending performance evaluated in accordance with ASTM A775.
- **Electrical insulation:** The epoxy-based coating structure limits contact between the steel surface and the electrolytic environment.
- **Uniform coating:** Forms a continuous protective layer on the reinforcing steel surface under appropriate surface preparation and application conditions.
- **Solvent-free technology:** An environmentally friendly coating alternative with low VOC emissions.



Areas of Application

- Bridges and viaducts: Reinforced concrete elements exposed to traffic loads, atmospheric conditions, and de-icing salts.
- Marine structures and port facilities: Piers, quays, and coastal structures subject to significant seawater and chloride exposure.
- Highways and infrastructure projects: Reinforcing steel used in roads, tunnels, and transportation infrastructure.
- Industrial facilities: Reinforced concrete structural elements operating in humid and corrosive environments.
- Water structures: Water storage tanks, treatment facilities, canals, and reinforced concrete systems in contact with water.
- Underground structures: Foundation systems, retaining walls, and underground reinforced concrete applications.



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