



Protector of Taiwan's Fastener Value

Electrocoating Pioneer

Globally-known PPG is an industry-leading coatings provider. They have shaped the industry's cutting-edge R&D technology and provide complete offerings to serve clients in the construction, manufacturing, auto and consumer product markets. Headquartered in Pittsburgh, USA, PPG has a footprint in more than 70 countries around the world.

In 1976, PPG was ahead of the curve when it successfully developed an electrocoating technology using cathodic epoxy electrocoat to replace the anodic ecoat technology and introduced it in the automotive industry. In 2001, PPG introduced a product standard using this technology specifically for the fastener industry. Today this technology is widely used in the construction fastener, automotive and industrial markets.

In 2006, PPG entered Taiwan as its first stronghold in Asia. They established PPG AllTech Engineered Finishes in Kaohsiung to bring electrocoating technology to Taiwan's fastener market and supplement value into Taiwan's industrial and automotive fastener products. PPG AllTech now plays a key role in stabilizing the quality of Taiwan's fastener supply chain.



Reappearance in Fastener Taiwan 2024

Connecting Taiwan and the World with Electrocoating Business Opportunities

Serving Taiwanese clients for many years, PPG sees Fastener Taiwan as an important fastener show to interact with Taiwanese clients. The clients also bring their overseas partners to the show to discuss needs and market trends with PPG. Fastener Taiwan is the go-to show for PPG to exhibit.

In an exclusive interview, PPG revealed to Fastener World that it specifically targets clients of customized small screws and construction screws at this show because PPG utilizes a different and unique processing method called electrocoating. Electrocoat is deposited uniformly to lay an even film build on all areas of the screw, including recess walls and thread crests. This is the key feature for maintaining highly loyal clients in Taiwan. "We are best at coating customized small screws and construction screws, because these screws have many variations of shape and can best take advantage of our coating service. We can perfectly handle other types of fastener products as well. We can provide the best surface protection and help your products maximize performance," said PPG.

PPG's electrocoating technology has four characteristics that stand out in the industry.

- 1. Corrosion and Acid Resistant, Doubled Product Life:** Typical salt spray tests (ASTM B117) show increased corrosion resistance up to more than 2,000 hours. Acid resistance up to 30 cycles in an acid rain test. Passed Nordic NORDTEST-method NT MAT 003 C4 and ASTM G85 Annex-5 500 cycles tests.
- 2. Precise, No Recess Fill, No Thread Galling:** The cathodic epoxy electrocoating technology produces paint particles that adhere and evenly deposit on the surface of fasteners through electrophoresis. A consistent film is formed and evenly covers the gaps and corners of the fastener. Film build can be precisely controlled to prevent recess fill and thread galling.
- 3. No Hydrogen Embrittlement, Meeting Specified Torque Requirement:** PPG's Electropolysal™ III coating uses a thin film of phosphate as a primer to release hydrogen ions from pores of the surface to prevent hydrogen embrittlement. Torque modification is also added so that fasteners can meet the torque requirements of automotive and construction customers.

- 4. Chromium-free & Eco-friendly Technology:** PPG meets all the ever changing quality and environmental requirements throughout the world today.

Looking to Open up the Big European Market in the Future

PPG has found in recent years customer fastener inventory levels are starting to burn off after the pandemic, so the number of rush orders has increased, affecting the order acceptance and profit margin of Taiwan's fastener industry. PPG has pivoted and improved our efficiencies. As such, PPG has remained strong as the industry's demand for fastener electrocoating remains high. "From a global perspective, we also observed that the highest overseas demand for electrocoating is mainly from the US, while the demand and understanding of electrocoating in Europe is relatively low. Therefore, in the next five years, we will steadily tap into Europe and increase the local demand. In addition, we can work with Taiwanese companies to provide comprehensive consultation and electrocoating for all overseas clients. We can also provide on-site services at Fastener Taiwan or even at clients' factories. Our technology is fully compliant with RoHS, and we hope for you to protect and beautify the world using our services!" ■

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