

Features Specialist Coatings for Electrical Applications

Dielectric coating solutions are engineered for precision and durability, helping our EV customers meet stringent performance and safety standards. With a commitment to innovation and environmental responsibility, we deliver dielectric coatings tailored to withstand extreme conditions, ensuring optimal insulation and reliability across a range of demanding applications.

They are pivotal in shielding battery pack components, cooling plates, and adjacent parts from electrical arcing and leakages, particularly in high-voltage environments. By effectively mitigating these issues, our dielectric powder coating solutions not only enhance battery efficiency but also ensure the safety of EV operation.



Superior Thermal & Electrical Properties



Dielectric coatings play a crucial role in protecting battery pack components and surrounding parts from electrical arcing and leakage, particularly as electric vehicles move toward increasingly high-voltage architectures. Our dielectric powder coating solutions are designed to provide electrical insulation, enhance overall battery efficiency and support the safe operation of EVs by reducing risks such as current leakage, thermal runaway.

As voltages rise, battery housings must deliver exceptional dielectric strength. To meet these demands, we work closely with powder suppliers and application manufacturers to develop coating methods tailored to customer requirements for electrical insulation and fire protection in BEVs.

These coatings, applied as single or multi-layer systems, significantly boost component durability and insulation performance. To ensure full compliance, every coated part undergoes rigorous end-of-line testing, including hi-pot electrical resistance and surface energy assessments, providing customers with confidence in coating integrity and long-term reliability.