



e-Steel™ - ensuring excellence

5-Year Warranty

Understanding the e-Steel™ Difference

Customers today demand higher quality and durability from the products they buy. Not only do they expect these products to perform well, but they want the finish to look good and resist corrosion for a much longer period of time. The 18 stage e-Steel™ finishing process offered by Thomas Steele is designed to do just that. The end result is a smooth, durable finish which allows site furnishings to look great and withstand high levels of corrosion from salt, chemicals, humidity, scratching, and impact, far surpassing conventional paint top coats.

At Thomas Steele, we undercoat our site furnishings using a state of the art e-coating with an epoxy resin water based paint for a process that produces a highly durable coating. When coupled with our electrostatically applied polyester topcoat, e-Steel™ will withstand a highly corrosive environment for the ultimate levels of protection and performance. This is why Thomas Steele can offer an **unsurpassed industry-leading five year warranty.**

The E-Coating Process

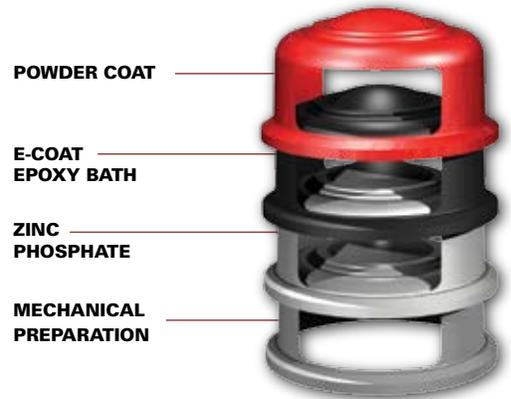
E-coating is a method of using electrical current to deposit organic paint on a metal surface. It is based on the fundamental physics principle that opposites attract. The metal parts are charged with a direct current and then immersed in a bath that has oppositely charged epoxy paint particles in it. E-coating allows every corner, crack, and crevice to have a continuous even coating over the entire surface of the part. E-coating is a wet paint process used on many products because of its unique ability to resist chipping, scratching, rusting, and the like. The electrocoat paint covers and protects the entire part of the product so that even corners, edges, and recessed areas are completely protected. This is important because areas of site furnishings that are not properly protected in the first place are the parts most susceptible to rust and corrosion.

E-coating is used on many products you own! In fact, today, approximately 99% of all new cars manufactured are e-coated then top coated with the color of choice. Epoxy e-coatings define the global benchmark in demanding environments where corrosion resistance must be maximized.

Environmental awareness is another reason to e-coat. The e-Steel™ process is environmentally friendly because it produces little or no HAPs (hazardous air pollutants), ultra-low VOCs (volatile organic compounds), and is OSHA and EPA compliant as well. E-coat systems recycle, too! Virtually all unused paint is recovered and put back into the system.

The e-Steel™ process also offers extremely high repeatability of results and is a natural fit for steel parts of all shapes, sizes, gauges, and grades due to an inherent property electrocoating offers called "throwpower." This is the ability to throw paint into recessed areas leading to a total 100% part coverage.

e-Steel™ Metal Finishing



Zinc Phosphate Bath



E-Coating Bath

Powder Coating

Powder coating is an advanced method of applying a decorative and protective finish to a wide range of materials and products that are used by both industries and consumers. The result is a uniform, durable, high-quality, and attractive finish. Powder is a dry coating. Instead of being dissolved or suspended in a liquid medium, such as a solvent or water, powder is applied in a granular form. This material is finer than ground pepper but is coarser than flour, and is applied directly to the surface to be coated.

The application process involves applying a charge to the dry powder particles and spraying them onto an oppositely charged part. The powder, once attracted to the part, is then held on the surface until it is melted and cured into a smooth coating film in the bake oven. The spray process then takes place inside a booth designed to contain the oversprayed powder and makes it possible to collect the overspray and ultimately recycle it for reuse. After the powder is applied to the part, the part then passes through an oven and cures, melting into a smooth film on the surface of the part.



Powder Coating

The End Result – e-Steele™ for Excellence!

For for the ultimate performance and surface protection that can withstand years of service, the answer is the combination of e-Steele™ and powder coating. The very nature of the e-coat process gives way to many benefits for a powder topcoat. e-Steele™ uniformly coats every crevice and crack and has the cosmetic advantage of no drips, runs, or other common coating defects. The marriage of e-coating followed by powder coating provides a final product that has outstanding corrosion resistance with a top quality finish that will withstand the harshest of environments. In addition to providing a classic combination of quality and performance, e-coating followed by powder coating performs in a world of increasing environmental regulations and reflects the ever-growing awareness that this technology is also protective of the world in which we live. For the ultimate levels of protection and performance backed by our **unsurpassed industry-leading five year warranty**, choose e-Steele™ for excellence!

