Keep Corrosion Off!

Our pretreating and e-coating process provides the industry's best corrosion resistance

Applied to every new spring brake we produce, our state-of-the-art 8 step pretreating and e-coating process provides substantially more corrosion protection than conventional coating applications. TSE's e-coating provides an industry best salt spray protection compared to other brake chambers. By adding an epoxy powder coating, we improve salt spray resistance to create the ultimate protection for your brakes against corrosion, heat, and abrasion.

Corrosion Resistance – There's NO Comparison

Photos below show a TSE UltraLife spring brake and the leading competitor after 504 hours of salt spray testing. As the condition of the chambers and internal components indicate, there's NO comparison in corrosion resistance.

STEP 1

8-Stage Pretreatment

Each part of the brake is cleaned to remove all dirt and oils. Parts are etched and processed with a zinc phosphate layer to secure a bond between the metal substrate and the e-coat paint to improve adherence. Finally, parts are sealed with chrome, which neutralizes the surface and seals in the zinc phosphate, reducing the number of potential corrosion sites.

STEP 2

E-Coating Process

After pretreatment, parts are immersed into 5,000 gallons of electrically charged black epoxy coating, which is immediately followed by a three-stage post rinse. Through this process a quality film is uniformly adhered to the surface and then baked on the chamber.

STEP 3

Epoxy Powder Coating

To complete our corrosion protection, spring brakes enter TSE's new automated spray booth where eight electrostatic guns quickly and completely cover each part with epoxy powder coating. This dry finishing process electrostatically charges and sprays particles of pigments and resin onto the metal. The coating is then baked to finalize the process.

TSE Brakes • 2310 Industrial Drive S.W. Cullman, AL 35055