superior metal finishing

Maximum Protection

Through a program of continual improvement and ongoing testing, Maglin has developed a superior metal finishing system. Site furnishings endure continual physical contact and are exposed to a multitude of environmental conditions. In the event of abuse and surface penetration, Maglin protective coating minimizes the potential spread of corrosion, even in the harshest ocean-side environments.

Electrocoat (e-coat)

The twelve-stage immersion electrocoat process from Maglin, provides primary corrosion prevention for steel components and superior adhesion of powdercoating to recessed areas and edges.

E-coating leverages an electrical charge to apply a uniform protective coating to metal fabricated products. Developed originally for the automotive industry, e-coating provides superior coverage, adhesion and corrosion resistance for metal parts and surfaces.

• The principle of e-coat is that materials with opposite electrical charges attract.

The e-coat system applies a DC charge to metal parts immersed in a bath consisting of 80-90% deionized water and 10-20% paint solids.

• The electric current attracts the solids, coating all surfaces and joints. Once the coating reaches 0.65-0.85 mil film thickness it insulates the components, reducing the coating application until there is a uniform layer of protection. Resin in the paint solids assists adhesion while providing corrosion protection, durability and toughness. As the parts exit the bath, they are rinsed to maintain efficiency and aesthetic design.

• The e-coating is baked onto the surface of the steel for fusion bonding followed by heat curing to form a hard, durable film. The bake oven crosslinks and cures paint film to ensure maximum performance properties and superior corrosion protection.

Maglin e-coat uses lead-free paint and chrome-free sealers in a closed system, significantly reducing hazardous emissions. E-coating contains minimal VOCs (Volatile Organic Compounds), very low HAPs (Hazardous Air Pollutants) and produces minimal solid waste.

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The E-Coat Process

1 pretreat

- Cleaner
- Water Rinse
- Water Rinse
- Conditioner Rinse
- Zinc Phosphate Bath
- Water Rinse
- Non-Chrome Sealer
- Deionized Water Rinse

2 electrocoat

- Electrocoat Dip Tank

3 post rinse

- Permeate Rinse
- Permeate Rinse

All superfluous coating materials are recovered and reutilized within an environmentally controlled system

4 oven cure

- Bake Oven

Powdercoat

Powdercoating applied too thinly erodes quickly and when applied too thick, it causes cracking and peeling. Maglin powder is applied in accordance with manufacturer specifications to obtain optimal thickness to maximize surface protection from abrasive, chemical and climatic conditions.

The Maglin powdercoat process involves multiple steps, including: cleaners; rinses; electrostatic powder application; and oven baking to ensure optimal surface adherence and protection. All Maglin colors are designed specifically for outdoor use with high UV resistance and protection from impact and corrosion.

Superior adhesion of powder paints minimize waste. Unused or over-sprayed powder is recovered in a closed system.

Powdercoat - Anti-Graffiti

Our Anti-Graffiti coating can be used to produce a surface finish resilient to nearly all types of graffiti and is our best option for resisting permanent graffiti damage.

This permanent protection system has been designed to withstand numerous cleanings. Spray paint can typically be removed without a trace, though a slight reduction in glossiness is possible. Inscriptions applied with marking pens will disappear almost completely.

See our care and maintenance guide for detailed instructions on removing graffiti.

Questions?

The Maglin customer service team will be pleased to assist you. Call 1 800 716 5506 or email support@maglin.com