

HERR INDUSTRIAL

DESIGN ▼ FABRICATION ▼ INSTALLATION ▼ START-UP

Reliability. Affordability. Value.
Why great companies choose HERR.

- ▶ Turnkey Paint Finishing Systems
- ▶ Powder, E-Coat, Liquid
- ▶ Equipment Components
- ▶ System Relocation, Retrofits
- ▶ Service & Maintenance
- ▶ Spare Parts



The modified e-coat line at Kohler's manufacturing facility for generator and electrical control parts.

Electrocoat System Reduces Rework, Paint Usage, and VOC Emissions

KOHLER, WI – Kohler Power Systems provides a durable finish on the generators and electrical controls they produce because their products are subject to a variety of harsh outdoor elements. The existing e-coat line that provides Kohler's corrosion-resistant primer was aging and required upgrading or replacement to improve the finish quality.

Robert Pilzak, Project Engineer for Kohler Power Systems, weighed several options, such as powder and liquid spray applications, before selecting a two-coat e-coat process, making modifications to the existing e-coat line. This solution allowed Kohler to maintain their high quality of coating while still adhering to VOC regulations, all with less investment and less labor then converting to a powder or liquid application.

The greatest operational cost savings was from labor. Dipping both the primer and topcoat eliminated the load and unload

labor. Additional savings were gained from a significantly better transfer efficiency (95% with dip vs. 45% with spray) and lower cost per gallon of paint. "HERR was chosen because of its experience in finishing systems and its ability to provide the necessary competencies. During the quoting process, HERR was helpful in exploring possibilities that could increase the return on investment."



The old liquid spray booth that was used to apply the topcoat was removed and three new tanks were added to provide the second e-coat stage. The new tanks would be used for applying the primer and the old e-coat tank converted to a topcoat tank.

A new top load cure oven was also added. The existing programmable hoist was replaced with four new hoists controlled with state-of-the-art PLC controls. The hoist system was integrated with the existing power & free conveyor. ■

KOHLER

SYSTEM COMPONENTS

The following equipment was incorporated into the design of the Electrocoat System. The cycle time is 7 minutes and the part size is 10'-6" wide x 6' high x 3' long :

- ▶ Cathodic Epoxy Primer E-Coat Tank; vertical dip style
- ▶ Two (2) Stainless Steel Epoxy Primer Post Rinse Immersion Tanks
- ▶ Epoxy Primer E-Coat Cure Oven; 400°F
- ▶ Stainless Steel R/O Water Quench Cool Down Immersion Tank
- ▶ Cathodic Acrylic Topcoat Tank; vertical dip style
- ▶ Acrylic Topcoat Post Rinse Tank
- ▶ Direct-Fired, Convection type Acrylic Topcoat E-Coat Dehydration Oven; 250°F
- ▶ Acrylic Topcoat E-Coat Cure Oven
- ▶ Cool Down Station
- ▶ 4 Programmable Hoists
- ▶ PLC Controls
- ▶ Waste Paint Treatment System

S
O
L
U
T
I
O
N
S