



POWDER Coating Systems

If you are planning a new or expanded powder, ecoat/powder topcoat or powder blank line finishing system, the most critical decision you have to make is **WHO** you are going to work with. Make sure you choose **KOCH!**

George Koch Sons has led the industry in pioneering efforts since 1969, when we became the first company to manufacture a powder finishing system. Since then, we have long served as world leaders in advancing powder coating technologies and expanding their use, with many patented/industry firsts.

We offer the option of powder blank line finishing. This involves applying powder coating at high production rates on blanks prior to forming.

BENEFITS OF POWDER COATING

- Uniform film builds
- High level of automation
- Low operating costs
- Low floor space requirements
- High production rates

KOCH CAPABILITIES

DESIGN

We have the largest, most experienced engineering team in the industry. Our engineers have many years' experience in designing, managing and installing systems worldwide for all kinds of applications.

INSTALLATION

We are the finishing system installation and service experts. KOCH service professionals provide everything, including installation supervision, training, system evaluation, adjustment and preventative maintenance. We work not only solve, but prevent future problems, doing everything it takes to protect your investment.

FABRICATION

You can count on us to provide quality manufacturing. Our ISO 9001:2015 Certification ensures quality techniques in every aspect of production and in every team member.

AFTER-SALES SERVICE & SUPPORT

Upon achievement of a successful start-up, we provide your staff with detailed training necessary to keep your finishing system operating at its peak. We are a major supplier of replacement and spare parts for all automated finishing systems. We are ready to assist you in getting your system up-and-running at its maximum performance level with minimum downtime.



For more Info or to Request a Quote, contact KOCH Sales:

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KOCH POWDER COAT SYSTEM DESIGN

OVERALL DESIGN

- Tank material and housing options include: mild steel, stainless steel and FRP
- Composite material is engineered to withstand continuous exposure to acid and alkaline-based chemicals
- Heat source options include oil/gas fired burner tubes, steam plate coils, and plate and frame heat exchanger with steam or hot water
- Optional bottom entry design to reduce air make-up and stage 1 heating requirements
- Flexible tooling and modular design concepts allow the washer to accommodate almost any product size
- Washers are manufactured with non-skid or grated flooring
- FRP tank lids for ease of opening and elimination of corrosion
- Washer provides adequate drain lengths between stages to minimize carry-over contamination

PUMPS

- Tank pump options: mild steel and stainless steel
- Top vertically mounted high-quality pumps result in no leakage
- Break-away pump design allows you to easily remove a section of the pipe, if maintenance problems should occur
- Pump intake pipes are sized to eliminate pump cavitation
- All pump screens are stainless steel; double screens of the same size for ease of maintenance and replacement
- Pump discharge pressure is based on 10 year old pipe to maintain adequate pressure

PIPING

- Tank piping options: PVC, CPVC, stainless or mild steel
- Gaskets tightly seal all piping penetrations throughout the housing
- Top feed riser spray piping manifolds with removable end caps through silhouettes for ease of maintenance
- High-quality KOCH nozzles are clip-on and adjustable

FRP WASHER FEATURES

- Smooth interior
- Sloped, translucent roof
- Continuous grating
- High insulation factor
- Break-away silhouette & conveyor guard designs
- 5 year warranty
- Washer design is free of bolted and welded seams
- Durable non-corrosive construction
- Rugged powder coated exterior door hardware
- Attractive appearance
- Low coefficient of linear expansion
- Advanced, ergonomic design
- Proven technology

KOCH ENVIRONMENTAL ROOMS

- Dehumidification includes reheat coils for better relative humidity control
- Rooms are insulated, reducing operating costs
- Climate controlled clean rooms allow for better air distribution
- Rooms are equipped with personnel access doors, viewing windows and storage space
- Rooms include equipment roll-up doors
- An average lighting of 50 foot candles is provided throughout the EV room
- Optional central vacuum system for EV rooms and powder

DRYING & CURING

DRY-OFF OVENS

- Aluminized ductwork and panels eliminate rust and minimize dirt
- Floor mounted PFO dry-off oven reduces heat loss, eliminating the need for costly air seals
- KOCH's exclusive PFO technology efficiently and thoroughly dries parts with low temperature and high air volume turnover

CURE OVENS

KOCH Oven Panels

- All aluminized interior and exterior insulated oven panels for corrosion and dirt control
- Oven panels are roll formed to maintain tolerance for expansion or contraction of panel
- Explosion relief panels are designed to meet insurance underwriter codes

KOCH Overall Design

- Oven heating options include High Velocity Convection, IR, High Velocity/IR, and Black Wall Radiant
- Bottom entry and exit design creates a natural heat seal (for all ovens operating above 250°F); reducing operating costs and eliminating the need for an air seal
- Gas or electric IR ovens are designed for rapid, uniform curing that provides a fast temperature ramp up
- Proper thermal head and supply air distribution duct design for even temperature control
- Floor mounted heater unit with doors for easier access
- All interior corners include flashing with tadpole gasketing to seal oven interior
- All structural steel and conveyor rails include expansion joints for expansion and construction of oven
- Fast ramp up raises the temperature of the parts being cured to polymerize the coating quickly
- Wash down floor feature saves valuable time and resources
- Floor mounted PFO dry-off oven reduces heat loss, eliminating the need for costly air seals

KOCH OVEN OPTIONS

- Optional high temperature recirculation filters with heater units
- Optional infrared increases the temperature in the zone to preheat parts
- Optional independent temperature zones allow for a controlled range of temperatures
- Optional overhead, side, or floor duct design depending on requirements