George Koch Sons has installed 700+ Curtain Coaters in the past 40 years. The two types of coaters can be classified into the following categories:

1. **KOCH Pressure Head Curtain Coater:**
   Provides precise control of the coating application onto flat or nearly flat substrates of all types. The system is ideal for solvent- or water-borne coatings, adhesives and UV coatings at ambient or elevated temperatures.

2. **KOCH Hot Wax Pressure Head Curtain Coater:**
   The George Koch Sons Hot Wax Curtain Coater is well known for delivering high-speed dependable performance, while maintaining a controlled film deposit on processing sheets.
KOCH Corrugated Cooler/Dryer

The KOCH Corrugated Cooler/Dryer removes 100% of heat from a corrugated stack in 3-4 minutes, without air conditioning equipment! KOCH’s exclusive forced air cooling system offers corrugated converters important ways to improve both product and process.

**Product is improved because:**
Printing is more even, more vivid. Moisture in the paper forms a barrier which complicates ink transfer from the printing blanket: the KOCH system minimizes this problem.

Curtain coat wax application is more consistent and requires less material, because wax doesn’t penetrate a cooled surface.

White and colored liners are brighter, and discoloration minimized. The KOCH dryer maximizes the color and vibrancy for quality packaging!

Warpage is reduced by more rapid removal of heat and moisture With excess moisture removed, corrugated does not deteriorate nor does it freeze in the winter months during shipping.

**Your production process will benefit as well:**
Drying time is reduced from 8-12 hours to just a few minutes, so turnaround time is dramatically reduced.
Storage space can be freed for more productive use.
Material handling can be simplified; often, equipment can be retired, or reassigned to other uses.
Production tracking is simplified.
George Koch Sons high velocity convection ovens are the most popular and versatile technique in thermal processing. They are ideal for processes requiring lower temperatures, cross-linking or a threshold surface temperature. George Koch Sons convection ovens offer flexibility, safe operation, low maintenance, and energy efficiency.
KOCH High Velocity/Infrared Oven

High-Velocity/Infrared ovens offer the best of both technologies for applications demanding evaporative processing and fast ramp-up of surface temperature. Warm air is passed over the coating surface to remove VOCs or moisture, without disrupting the coating. As evaporation is completed, IR elements rapidly raise the surface temperature to polymerize the coating.
KOCH Inline Dip Treatment System

The Koch Inline Dip Treatment and Drying System consists of a manual load station with "infeed" conveyor, a dip tank system with external reservoir and recirculation pump and filter, a high-pressure top and bottom blowoff system, a transfer conveyor section and flash tunnel, a high-velocity top and bottom drying system, and a manual unload station with "outfeed" conveyor. The Koch Inline Dip Treatment and Drying System offers great production flexibility by simultaneously accommodating multiple lengths of product up to 14'-0" long or more.

The KOCH Top and Bottom, High-Velocity Drying System utilizes the latest technology developed for rapid removal of solvents and water from conventional wood preservatives and treatment materials. KOCH Dryers produce large amounts of heated, recirculated air, moving at high-velocity to remove solvents or water. This large volume of high-velocity, heated air "evaporates" the solvent or water without putting unnecessary heat into the substrate.
KOCH Spare Parts

During the course of your project installation, George Koch Sons professionals will work with you to establish an inventory of replacement or “spare” parts appropriate for your specific equipment, process and duty cycle. You will find that the initial cost of obtaining an appropriate inventory of spare parts is an excellent investment to minimize unplanned future interruptions to production. George Koch Sons has immediate access to an extensive inventory of replacement parts for ALL industrial finishing equipment. We are your full service provider for all replacement parts. Contact Customer Service today.
Environmental Rooms

George Koch Sons is a recognized industry leader in powder finishing systems throughout the world. The process of applying powder to a product is detrimental to the appearance of the finished product. Our Environmental Rooms are well equipped to be able to produce a high quality coated product. George Koch Sons Environmental Room Advantages:

Dehumidification includes reheat coils for better relative humidity control.

KOCH-Carrier HVAC humidity control equipment under one “parent company”

Rooms are insulated, reducing operating costs.

Climate controlled clean rooms allow for better air distribution.

Rooms are equipped with personnel access doors.

An average lighting of 50 foot candles is provided throughout the environmental room.

Optional central vacuum system for environmental rooms and powder booths.

Optional acoustical drop ceiling or insulated roof panels.
George Koch Sons Environmental Room Advantages:

Dehumidification includes reheat coils for better relative humidity control.

KOCH-Carrier HVAC humidity control equipment under one “parent company”

Rooms are insulated, reducing operating costs.

Climate controlled clean rooms allow for better air distribution.

Rooms are equipped with personnel access doors.

An average lighting of 50 foot candles is provided throughout the environmental room.

Optional central vacuum system for environmental rooms and powder booths.

Optional acoustical drop ceiling or insulated roof panels.
KOCH Specialty Products

Spray Booths

George Koch Sons high efficiency SPRAY BOOTHs have evolved through years of design, testing and customer use. They provide a clean, quiet environment for paint application. The George Koch Sons patented eliminator exceeds automotive industry standards.

George Koch Sons offers three design options to meet your needs:

Water Wash Spray Booth at Floor Level To minimize conveyor elevation changes and decrease equipment height, George Koch Sons' water wash booth can be installed at floor level. We place the booth tank with a pit, which allows the operator to work at the factory floor level.

Recirculating Air System Capital and operating costs associated with air make-up and abatement are substantially reduced by minimizing exhaust air volume. The patented design shown recirculates process air through the booth. LEL monitors the air stream to ensure safe operating conditions.

Totally Enclosed Spray Booth For a cleaner, more controlled environment, we can totally enclose the side-draft spray booth with the addition of a supply plenum. Supply air is fed by a direct-coupled air make-up unit or by booth supply fans utilizing building air. Air is evenly distributed and filtered.
KOCH Specialty Products

**Designed To Your Requirements**

We offer a variety of spray booths engineered to your specific requirements. Do you need an elevated system? A dry filter or water wash side draft system? Are space limitations critical? Is it important to minimize exhaust air volume? What automation level is required? Our skilled engineers will work with you to achieve conformance to your exact emission and operating specifications. Our advanced computer-aided design (CAD) systems streamline the design process and maximize your ability to control and modify the end product.

*No other spray booth system manufacturer can provide the design freedom, flexibility and fast response of George Koch Sons.*

**Sludge Separation**

Paint sludge separation systems save users thousands of dollars in waste disposal expense. George Koch Sons developed the High-Efficiency Spray Booth with multiple options for sludge separation: skimming devices, settling systems, centrifugal separators and more. The method you choose depends on the type and volume of paint used, type of coagulant, space limitations, and other factors. Recirculated water returns by gravity to a common, remotely located retention pit. A hydrocyclone separator pump separates the detackified paint particles and deposits the removed sludge in a bag filter for disposal.

Regardless of whether your needs are for complex manufacturing operations or simpler maintenance and lab applications, allow a trained George Koch Sons representative help provide the best solution to your needs.
KOCH Specialty Products

Wastewater Treatment Systems – Overview

George Koch Sons is a recognized leader in the engineering and manufacturing of advanced finishing systems and auxiliary equipment. George Koch Sons offers expert assistance in managing wastewater generated from all finishing sources.

Waste Reduction Strategies

George Koch Sons meets the toughest challenges in wastewater treatment by combining engineering innovation with field-proven answers.

An effective waste reduction strategy takes into consideration many factors, including:

- Initial fixture design to achieve minimal drag-out and lowest chemical usage
- Nozzle positioning for optimum rinsing and minimal overspray
- Inter-zone drainage for reduced contamination and overflow
- Counterflow rinsing for maximum efficiency, lowest practical water use
- Optimizing rinse efficiencies through cycle management, nozzle pressure adjustment and other factors
- Closed-loop D.I. Rinsing
- Aqueous cleaner recovery
- Oil separation to preserve cleaner life
- Chemical feed requirement
- Chrome reduction and precipitation
- Sludge handling alternatives
- Operating costs
- Capital investment