



DRY FILTER CONTINUOUS COATER

Compact, integrated system for coating pipe and tube.



The Nordson dry filter continuous coater delivers consistent, high-quality finishes with rapid return on your investment.

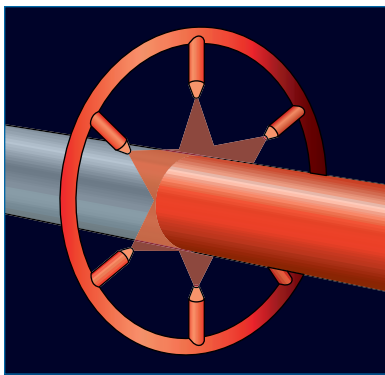
Now you can coat pipe and tube at extremely high line speeds. With the Nordson continuous coater you get all the benefits of a totally automated system plus the clean operation of a self-contained spray system. And a system that's economical to operate because oversprayed coating material is recovered and reused.

A compact, integrated finishing system, the Nordson continuous coater requires minimal floor space and adapts easily to in-line production methods. High volumes of pipe and tube are easily coated.

Best of all, a Nordson continuous coater often pays for itself in a year or less through coating material savings alone.

The Nordson continuous coater consists of a heated airless spray system connected to a custom designed spray cabinet through which a product is conveyed. Spray nozzles inside the cabinet are positioned to provide uniform coverage of the product as it passes through the coater. Oversprayed material not deposited on the product is recovered in the coater cabinet and returned to be resprayed.

Continuous coater operation.



The Nordson continuous coater provides a controlled, uniform deposition of coating material over product surfaces. The product enters the coater via a conveyor system. Inside the coater cabinet, spray nozzles are positioned to apply coating material at line speeds of 25 to 1,000 feet (7.6 to 305 meters) per minute, depending on the application.

Coating material that is not applied to the product falls to the bottom of the continuous coater where it is collected in a sump. The material passes through a strainer, then a pump returns the material to the main paint supply. The continuous coater cabinet includes dry filter exhaust zones created by entrance and exit booth filters with stack filters near the product entry and exit ports to minimize the escape of paint particles from the cabinet. Uniform spraying and capture of overspray reduce VOC emissions and ensure minimal contamination around the paint area so housekeeping costs and downtime are reduced.

Accommodates varying production requirements.

Products that can be painted in a Nordson dry filter continuous coater include pipe $\frac{1}{2}$ to 26 inches and tube $\frac{3}{8}$ to 26 inches.

Applies many coating materials.

A wide range of coating materials are compatible with Nordson continuous coaters – primarily those which dry by evaporation and/or oxidation and redissolve in their own solvents.

Working closely with material suppliers, Nordson pre-tests all coating materials to determine compatibility prior to design and application at its liquid engineering and customer test facility for your assurance of a successful coating operation.

Custom engineering.

The Nordson continuous coater is custom designed and engineered for each application. A special engineering team closely monitors each continuous coater from initial design right through to construction testing and shipment.

Installation, start-up and service.

Nordson representatives provide specialized technical assistance during installation and start-up to ensure the Nordson continuous coater operates according to customer requirements. Customer personnel are thoroughly trained in operating, maintenance and safety procedures. Nordson sales and service centers located throughout the world maintain inventories of spare parts, and factory-trained personnel are available for technical assistance and service.

System Components

Pumping and control unit

The hydraulic control station contains the fluid circuitry of the Nordson continuous coater. It siphons coating material from the supply source to a high pressure airless PermaFlo™ pump, where fluid pressures from 300 to 2500 psi (21 to 170 kg/cm²) are developed. Exiting the pump, the coating material flows through paint heaters where viscosity is reduced and temperature stabilized for optimum atomization and paint deposition. The paint is then filtered and transferred to the spray nozzles in the continuous coater cabinet.



Automatic viscosity control paint tank

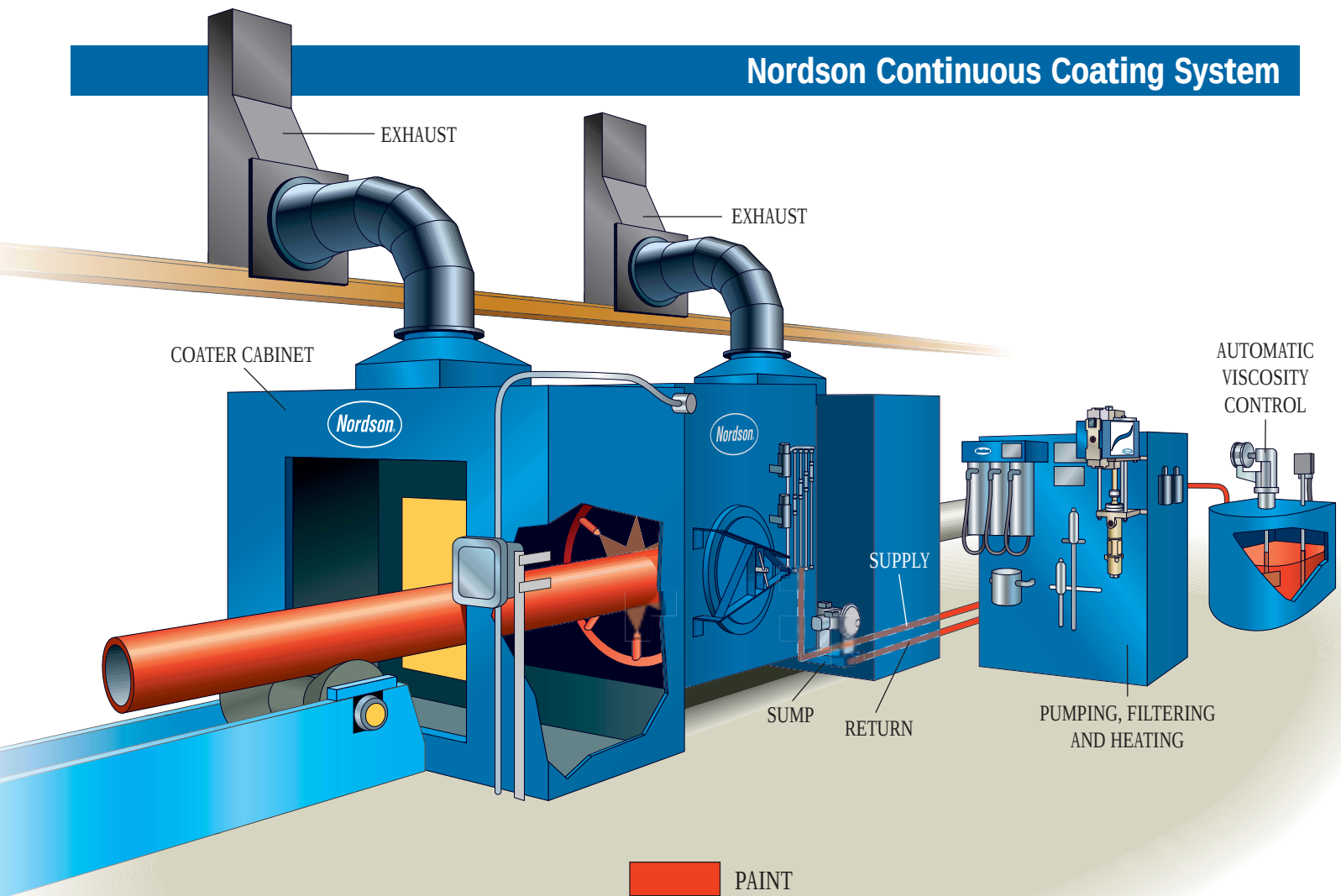


The automatic viscosity control (AVC) is a device used to automatically monitor and control coating material viscosity. The AVC and paint recycling capability help the continuous coater provide a consistent, high-quality sprayed finish and high material utilization. The paint tank holds 200 gallons of coating material conditioned for spray.

Dry exhaust system

The continuous coater cabinet includes an integral dry filter exhaust system utilizing standard size disposable filter media. When connected to the customer supplied exhaust fan and ducting, the system creates a draft at the entry and exit port of the cabinet to prevent the escape of material fumes and particles.

Nordson Continuous Coating System



PermaFlo™ Pumps



PermaFlo™ Series pumps* are designed and constructed to meet a wide range of pressure and volume requirements when pumping today's more abrasive, higher solids coatings.

Plungers and housings feature a patented ScoreGuard™ wear-resistant coating that provides superior performance and toughness over other coatings used in wear applications.

The heavy-duty design features and construction facilitate maintenance and minimize associated costs. The quick-disconnect feature between the air motor and hydraulic section, and adjustable upper packings assure easy access to the end-user for longer service life and less downtime.

PermaFlo™ pumps have no mechanical shift linkage to wear out and fail, and are designed for easy access to the solvent chamber area to ease routine maintenance. Plus, the external side-mounted air valve design facilitates easy access for installation/maintenance.



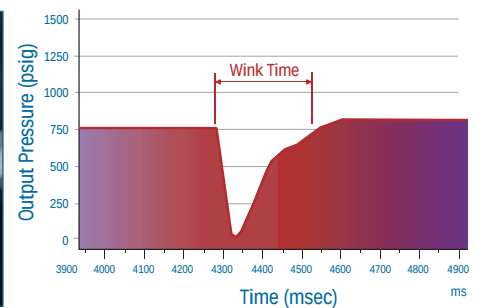
Quick-disconnect

Pump Wink Comparison.

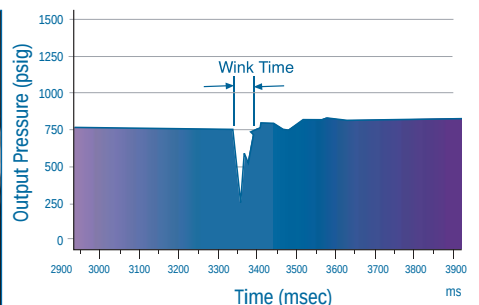
Tests performed using water and Nordson A7A airless guns and proprietary Cross-Cut nozzles.



Pattern collapse with traditional technology



Pattern collapse with PermaFlo™ 830 pump



* Patent applied for



The Nordson ScoreGuard™ Advantage



Twice as hard as conventional hard chrome plating, ScoreGuard coating has excellent corrosion resistance and is warranted** to provide maximum pump life for superior durability and operating performance.

Plunger Coating Comparison.

Test results show the ScoreGuard coated plunger polished to mirror-like finish after 24x the cycles of conventional hard-chrome-plating.



Actual Photo: Conventional



Actual Photo: ScoreGuard™

Chrome Plating vs. ScoreGuard Coating.

In the process to achieve high hardness values with conventional hard chrome plating, several inherent traits like microcracking, high internal stresses and surface imperfections, limit its service life. This can lead to plunger material that more easily scores and eventually results in upper packing leakage and shorter wear life.

Nordson's patented ScoreGuard™ hard-coating process used on plungers and housings eliminates these concerns and significantly improves wear life. The high hardness, low coefficient of friction and low residual stress levels of the coating combine to resist abrasive wear and galling. This results in superior performance and toughness over other coatings used in wear applications.

** Two-year warranty

Typical Coating Materials Used With Continuous Coaters

- Acrylics (clear and pigmented)
- Alkyds (clear and pigmented)
- Asphaltums
- Oil-based paints
- Oleoresinous varnishes
- Pipe varnishes
- Vinyl coatings
- Waterborne primers
- Waterborne top coats
- UV curables

Features and benefits of the Nordson continuous coater.

- Fast return on investment.
- Custom-designed cabinet to accommodate wide variety of part size and configurations.
- High-quality sprayed finish.
- Material savings through greater paint utilization.
- Repeatable film thickness and coating coverage.
- Adaptable to in-line production and widely varying line speeds.
- Reduced labor costs through automatic operation.
- Clean operation minimizes maintenance and housekeeping costs.
- Reliable and simple operation minimizes downtime.

Is a Nordson continuous coater right for you?

The dollars-and-cents value of the benefits of a Nordson continuous coater depends on the products you are coating and the volume of your work. A Nordson sales representative, backed by an experienced engineering team, will help you explore the adaptability of a Nordson continuous coater to your manufacturing operation.

For more information on how the continuous coater can help you get all the benefits of a total automation system plus the clean operation of a self-contained spray system call **800.955.9563**. Outside the United States, contact your nearest Nordson sales representative or call your Nordson regional office listed on the back cover.



This CD can be used in a standard CD ROM drive.

Technology, Expertise and Service For All Your Application Requirements

As the Best in Class™ supplier of high-quality products with unmatched standards of service excellence, Nordson Liquid Systems is dedicated to providing customer satisfaction through design and engineering of state-of-the-art material application equipment. As highly skilled professionals, we have the technical expertise, resources and commitment to support the requirements of your project every step of the way.

- Innovative application technology designed for reliable performance and maximum uptime.
- An experienced project management team dedicated to solving your specific application questions or equipment problems.
- Expert installation specialists for timely, effective system integration.
- Expertise in application development and system design to meet your specific production requirements.
- Equipment demonstrations on customer specific parts to test system performance prior to the sale to assure success and satisfaction.
- Formal and hands-on training at Nordson or at your facility.
- Factory direct service – 24/7/365 to respond quickly to your requests.



- Preventive maintenance packages for ongoing support.
- Technical assistance hotline for immediate response.
- Replacement parts in stock to meet normal or emergency situations.
- ISO certification of Nordson facilities and operations attests to excellence in our systems and enhances our ability to provide superior quality products and services to our customers.
- In-house technical representatives provide easy access to the most up-to-date information available on spray application equipment and systems.
- A team of dedicated professionals in our Customer Support Center provide instant spare parts pricing and availability, easy order entry and inquiry, and warranty returns assistance.

Production-proven Nordson technology in your everyday manufacturing operations, delivers the high-performance products your customers demand. With high-performance results of improved quality, reduced costs and increased productivity.

At Nordson, we are committed to the highest standard of excellence in our products, people and services for your complete satisfaction.

Nordson reserves the right to make design changes to products to improve their function. These changes may occur between printings.

For more information, talk with your Nordson representative or contact your Nordson regional headquarters office.

United States

Amherst, Ohio
Telephone: 800.955.9563
Facsimile: 440.985.1536
Web: www.nordson.com/liquid
E-mail: liquidmarketing@nordson.com

Canada

Markham, Ontario
Telephone: 800.463.3200
905.475.6730
Facsimile: 905.475.8821
Web: www.nordson.ca

Europe

Erkrath, Germany
Telephone: 49.211.9205.0
Facsimile: 49.211.254658
E-mail: info@de.nordson.com

Japan

Tokyo, Japan
Telephone: 81.3.5762.2700
Facsimile: 81.3.5762.2701
Web: www.nordson.co.jp
E-mail: papa.dm@de.nordson.co.jp

Asia/Australia/Latin America

Amherst, Ohio
24-hour message service: 440.985.4797
E-mail: Intcustomerservice@nordson.com

www.nordson.com

