Dry Filter
Continuous Coater

Compact, Integrated System for Coating Pipe and Tubing

Performance by design
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.

**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.

**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.

**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/cm$^2$) 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.
**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 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.

**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
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.

Why choose Nordson

In highly competitive manufacturing markets, productivity is vital and performance is essential. That’s why we apply both to everything we do, whether it’s our products, expertise or outstanding customer service. We’ll always be there to help maintain the new standards you’ve set, with expert service and support delivered through our teams working across the globe.

This unique Nordson approach helps you reach new levels of production, while working more accurately, efficiently and competitively than ever. Precisely why manufacturers who demand quality, can rely on Nordson.

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Performance by design