

Spray Application Technologies for Drum Manufacturing and Reconditioning



*Best in Class Technology for
High-Performance Results*

A Better Way to Spray.



More precise. More efficient. More savings across your coating line.

Systems that deliver consistent coating quality and proper film build efficiently and cost effectively are critical in the manufacture and reconditioning of steel drums. That's why it's important to choose the right technology to meet your demanding coating challenges. And keep your production line rolling. The

right technology can make a big difference in your coating operation – with precise coverage without masking, less material use, a cleaner operation, and reduced operating costs.

No matter the size of your operation, Nordson offers a complete line of airless spray systems specifically for drum manufacturers and reconditioners. Our systems include proprietary spray nozzles; durable, production-proven spray guns; high-performance pumps; airless spray nozzles; heaters; high-pressure filters and more. And all are designed to deliver consistent quality and reliable performance to keep you on top in today's competitive market.

Eliminate masking with precise materials application

Precise materials application eliminates the need for masks when banding in different colors. That's an advantage Nordson systems provide. Our airless spray technology makes for precise coating in a cleaner coating operation with less maintenance – and a lot more material savings.



The benefits of hot airless "soft spray" technology

Hot airless "soft spray" technology relies on precise temperature control and continuous filtering and circulation of the paint to lower and maintain coating viscosity. Coating materials constantly circulate throughout the system to ensure optimum paint temperature and viscosity are continually maintained.

That means conventional solvent-based coatings, high-solids coatings and water-reducible finishes can be atomized at relatively low hydraulic pressures for a softer, more controllable spray. The result is a more uniform, higher-solids film application. Plus, a cleaner, more efficient operation with less waste and less maintenance.

"Soft spray" technology also greatly decreases or eliminates nozzle plugging for less downtime.

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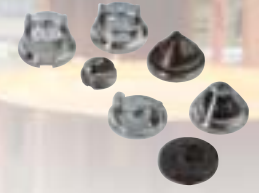


The right technology to meet any steel drum production requirement.

Airless Nozzles

Proprietary Nordson Drum Head™ nozzles provide even coverage on heads and extra coverage in the chime and bung shadow areas. They are designed to provide excellent atomization at a lower fluid pressure for a soft spray with less material use and bounce back.

Tungsten-carbide nozzles are available for solvent-based coatings; nickel-carbide nozzles, for many water-based coatings. Drum Head nozzles produce a unique spray pattern shape to coat drum ends more efficiently than conventional airless nozzles, and to accommodate the demanding requirements of lower-cost drum systems.



Spray Guns

The compact, high-cycle, pneumatically triggered, stainless steel A7A spray gun delivers fast response time without spitting, saving you paint with every drum. Production-proven, it produces fine atomization and a soft, controllable spray with a variety of coatings, for excellent finish quality with minimal overspray.

Quick, clean color changes are easy with the dual-chamber A7A gun because two colors can be circulated through the dual fluid body at the same time. Or, one side can hold coating material while the other side holds solvent or water.



Pumps

Heavy-duty PermaFlo™ Series pumps feature patented ScoreGuard™ wear-resistant coating on the plungers and housing that provides superior performance and toughness over other coatings used in wear applications. ScoreGuard coating is warranted* to provide maximum pump life for improved durability and operating performance.

An air motor and well-guided pressure and siphon ball checks produce substantially less pressure pulsation (pump wink) to uniform film build. A quick-disconnect feature between the air motor and hydraulic section, and adjustable upper packings assure easy user access for long life and less downtime.



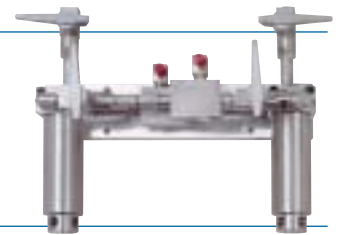
Fluid Heater

Nordson hot airless "soft spray" systems use the single-passage, high-pressure model NH-4 fluid heater for precise temperature control. The addition of our NH-4 fluid heaters reduces the viscosity of coating materials without adding solvent. The electrically operated, explosion-proof heater has an adjustable thermostat to make temperature setting easy.



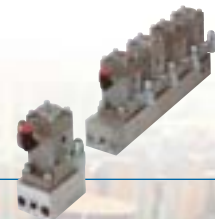
Secondary Heating System

For low-ambient temperature areas, Nordson explosion-proof secondary heating systems provide consistent coating temperatures throughout coating hoses and spray guns.



High-Pressure Filters

Stainless steel, high-pressure fluid filters prevent nozzle clogging by continuously filtering paint through dual or step filters for high production reliability. A wide range of filter screens is available to accommodate changing production situations and to protect airless nozzles. Dual fluid filters feature check valves that permit cleaning of one side of the filter while the other side remains operational.



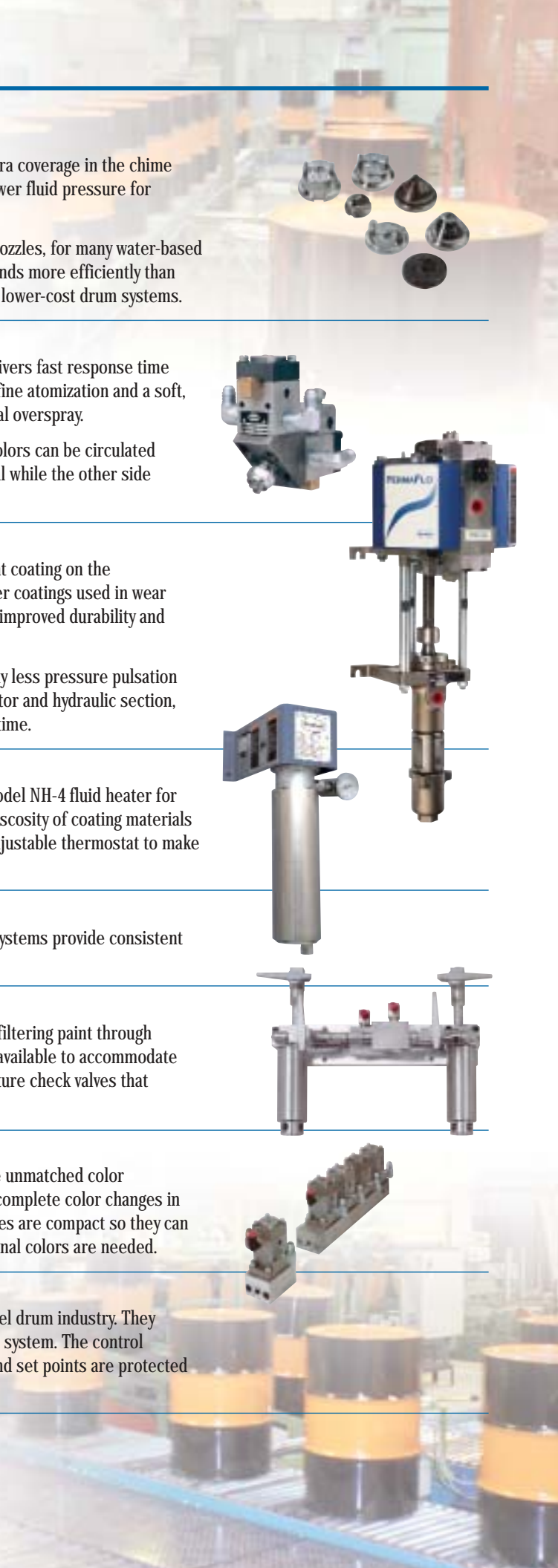
Automatic Color Changers

Color- and solvent-specific valves in the Nordson automatic color changers provide unmatched color flexibility. Air valves to toggle with the solvent valves mean fast, reliable and more complete color changes in both circulating and non-circulating systems. The PLC-controlled color-change valves are compact so they can be mounted directly on the manifold and more valves can easily be added if additional colors are needed.

Drum Controls

Accurate and simple-to-use PLC control systems are specially designed for the steel drum industry. They provide all painting functions for single-color drums through a timer-based control system. The control systems permit easy and fast changes in timing and sequence. Pre-programming and set points are protected with battery back up.

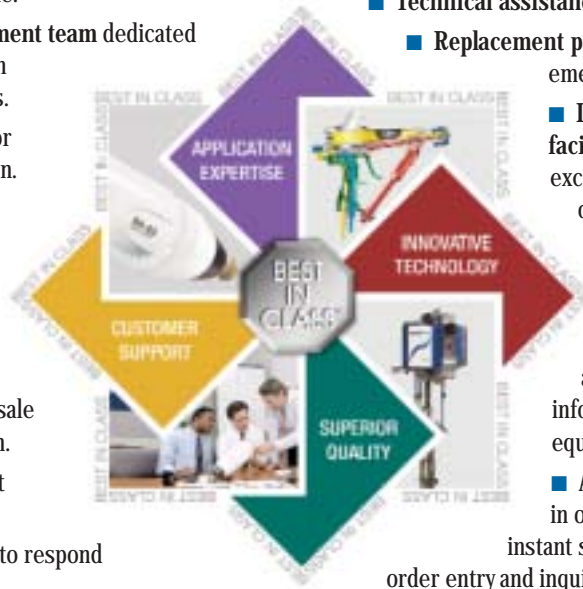
*Two-year warranty



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.

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