

Web Coating and Laminating Systems

Advanced coating and laminating technologies for paper, textiles, film, nonwovens and other wide web materials.



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Nordson combines over 50 years of hot melt adhesive and thermoplastic experience with the latest paper, textile, film and foil processing technology to meet the needs of the web coating and converting markets. Nordson® hot melt coaters, coating stands and systems provide an environmentally friendly way to reduce costs and improve product quality. The configurable Nordson® melt and metering units allow various types of hot melt adhesives, sealants, lotions, surfactants and other materials to be processed.

Whether full surface or stripe slot nozzle applications, screen printer or spray applications, or applications with engraved rollers, Nordson® coaters provide the optimum solution for web coating and laminating. They are suitable for coating and laminating various materials such as paper, film, foil, foam, textiles, nonwoven fabrics, carpets, and numerous other substrates.

Coaters and coating stands



CL 2000 hot melt lab coaters are widely used in the research and development laboratories of some of the world's most renowned adhesive and raw material manufacturers. Small applications as well as larger volume production trials can be processed at coating widths up to 180 mm (7 in.).



The CT 4400 series coaters were developed for applications requiring a coating width up to 350 mm (14 in.). The cantilevered design makes it an economical "one-man machine".



The CT 5500 series coaters were developed for applications requiring a coating width of 400 to 800 mm (16 to 32 in.). Like the CT 4400 coaters, the CT 5500 coaters incorporate a compact design. The dual-frame roll mounting and distinct, functional design make the CT 5500 series one of the most flexible units of its kind.

The **CT 6000** series coaters were developed for applications requiring web coating widths up to 4000 mm (157 in.). The modular design of the winding and unwinding equipment and of the coating stand enables the unit to be combined with UV-curing systems or a combination of separate laminating and winding stations. The advantage of this large coating unit is not only its distinctive design but also its ability to be customized to meet the customer's individual application requirements.



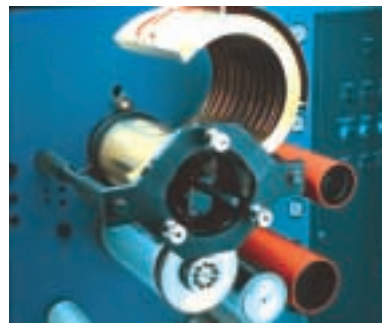
A Nordson specialty, the customized **SB 1000** coating stands are designed for applications with widths up to 4000 mm (157 in.) and can be easily integrated into existing production lines. They can be combined with any coating process, including slot nozzle, screen printing, spray applicator, flexo/gravure roller or UV curing.



The **NT 1000** series coating stands are designed for easy integration into existing production lines, e.g. in-line coating applications before the printing/pressing process. NT 1000 modules are available for coating widths of 200 to 800 mm (8 to 32 in.).



Nordson's extensive experience in the manufacture of screen printers has helped make the **CP 3000** generation screen printer an alternative to other hot melt adhesive coating methods. The CP 3000 screen printers can apply hot melt adhesive in varying sizes, patterns and pictures. The screens, which are custom-made for each application pattern, are economical and can be changed in minutes.



Hot melt application systems



With the **MX 3400** and **MX 4400** series as well as the **PS** series, Nordson offers customers the largest selection of metering/melting units with melt rates of 1 to 1000 kg/hr (2 to 2200 lbs/hr) and up to eight separately-controlled metering pumps per unit. Dual melt zones provide progressive melting and maintain the integrity of the hot melt adhesives.

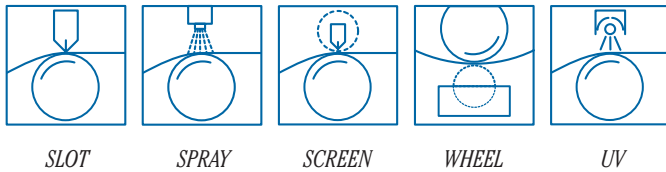


BM drum melters are used for processing hot melt adhesives and sealants from 20- and 200-liter (5- and 55-gallon) drums. Depending on the application and material being processed, the customer can choose from high performance units with hydraulic drives; standard units with gear-, piston-, or auger pumps; or simple drum presses without a pump.



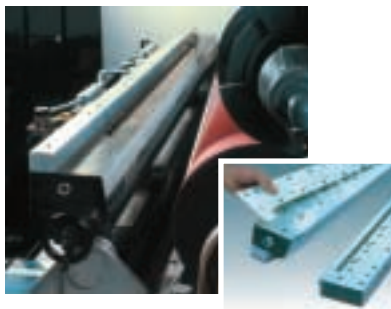
XP extruders were developed for processing high-performance, high-viscosity hot melt adhesives and thermoplastics. Extruders of varying sizes with melt rates of 2 to 250 kg/hr (4 to 550 lbs/hr) meet the highest demands regarding precision application by adjusting pressure, torque and motor speed as well as configurations of metering pumps and application heads.

Nordson hot melt application technologies



Coating heads for contact and non-contact applications

Nordson® coating heads, flexo and gravure applicators are made of precision-crafted, ground steel, and are extremely reliable. The application temperature is electronically controlled and the heads may be divided into multiple heated sections depending on the coating width.



The **BC 31 / BC 35** heads are designed for continuous precision coating. They include 100 percent in-line filtration using a high-volume filter cartridge. The standard coating width is up to 3500 mm (138 in.). Using shim plates in the BC 31, the width and pattern of the adhesive can be modified. The BC 35 coating width can be adjusted up to 350 mm (14 in.) per side within minutes.

Replacement shim plates in thicknesses of 0.3 to 1 mm are available for the BC 31.



The **BC 40** coating head is designed for continuous applications with standard coating widths up to 3500 mm (138 in.). The “Rotating Bar” produces a streak-free coating. Special Teflon® profiles can be used to alter the application width.



The **BC 60** coating head is suitable for continuous and intermittent precision coating in standard coating widths up to 3500 mm (138 in.). By inserting various shim plates, the application width and pattern can be changed. Heads with replaceable wear lips are intended for applications requiring small amounts of adhesive at high line speeds. The air manifold and heated body are normally isolated, allowing continuous operation at temperatures up to 210°C (410°F).



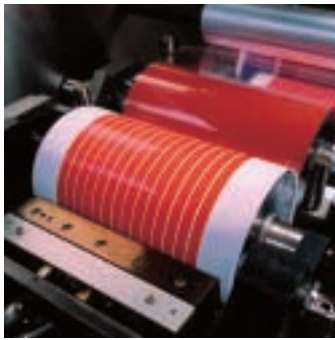
The **BC 62 Porous Coat®** system delivers breathable coating at extremely low application weight tolerances for widths up to 4000 mm (157 in.). Coating weights from 0.8 g/m² to 50 g/m² can be easily achieved by changing the pump speed. By shutting off individual control modules, adjustments in application width can be made without affecting coating weight.



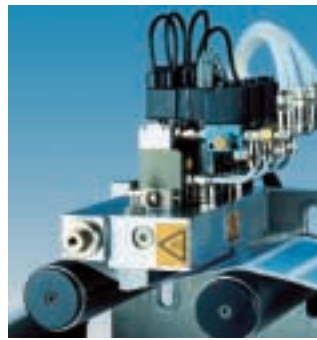
The **BC 70** coating head is suitable for full-surface, non-contact coating in widths up to 2500 mm (98 in.). Depending on the hot melt adhesive’s viscosity, coating weights vary from 2 to 100 g/m². The BC 70 is divided into multiple feeding and heating sections and produces a closed film. The hot melt adhesive is delivered via a GP 200 heated gear pump metering system.

Teflon® is a registered trademark of E.I. DuPont de Nemours and Company.





While the **EP 45** coating head is suitable for continuous and intermittent applications, the **EP 51** is designed for continuous precision coating. Both heads include a 100 percent in-line filter with a high-volume filter cartridge. The replaceable mouthpieces are available in standard application widths up to 500 mm (20 in.), and up to 1000 mm (39 in.) by special request. By inserting various shim plates, the application width and pattern can be changed as needed. Replaceable nozzle tips are also available.



The series **EP 11** and **EP 12** coating heads were developed for intermittent coating applications and deliver outstanding cutoff performance even at high speeds. A wide range of configurations allows the heads to be custom-tailored to meet specific application needs. High application quality can even be achieved with low web tension or when web routings are not ideal. The control modules with “snuff back” technology ensure precise adhesive cutoff without contamination between patterns. Excellent pattern repeatability is possible due to proven Nordson differential-piston technology.



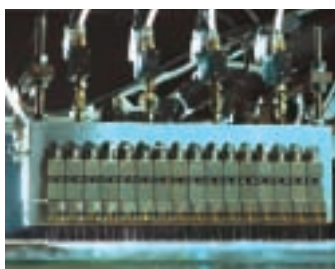
Spray application heads for non-contact applications



The **EP 26SD** and **EP 34S / SD** spray heads mix the hot melt adhesive and spray air inside the spray nozzle so external factors cannot negatively affect the spray pattern. The **EP 26SD** spray head is especially versatile; its integrated air heater and easily-controlled, double-air system enable spiral and atomized spray applications of 45 to 200 mm (2 to 8 in.) in width. The **EP 34S** is a compact spray head with bolt-on modules. An **EP 34 T**-version with multiple modules can be used for spray application widths up to 2500 mm (98 in.).



The **Control Coat®** system allows hot melt adhesive to be precisely applied without contacting the substrate, providing excellent sharpness in continuous or intermittent applications. This system produces highly dense patterns for maximum bond strength, open patterns when absorbency is important, or extremely thin patterns to eliminate distortion on heat-sensitive substrates.



The peak performing **Summit™** applicator delivers precise control of adhesive pattern width, fiber size and density for increased bond strength and pattern flexibility. Summit applicators deliver add-on weights as low as 1 g/m² at 300 meters per minute. Combinations of full and partial dies enable the customization of applications. The Summit applicator delivers edge control while minimizing overspray.

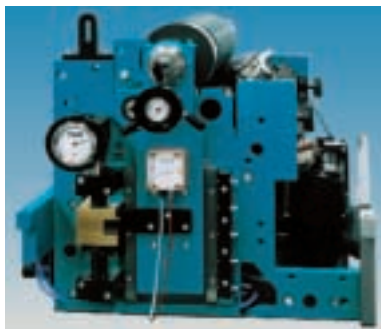
The Nordson® non-contact DF head is suitable for spray applications in widths up to 5000 mm (200 in.) and ideal for applications of open patterns with a softness of hand. The DF head is available in both pressure-fed and metered configurations. The precise metering head configuration provides the capability of applying add-on weights as low as 0.05 g/m².



Gravure/Flexo application systems

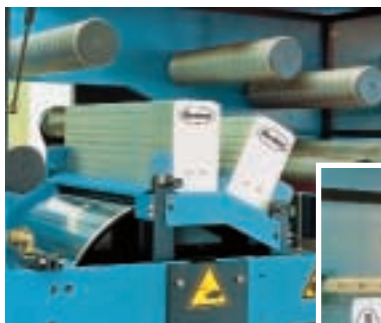


The RA 80 gravure applicators are available in different versions and widths suitable for various applications. The adhesive can be applied from the top, the bottom, or the side. The surface of the gravure cylinder is manufactured to meet the individual pattern and engraving requirements of the customer. The applicator's adhesive level is constantly monitored.



The Flex-O-Coat® system is suitable for the application of a wide range of patterns. It consists of a special hot melt application roll, a heated transfer roll, and a nip roll. The system combines precise adhesive placement and web handling into a single module that easily retrofits into most roll-fed printing presses and web handling equipment.

UV drying systems



Nordson UV drying systems are supplied with medium pressure mercury arc lamps, each fitted in water-cooled, anodized aluminum reflectors and contained in fully shielded and shuttered lamp housings. The nominal lamp rating is 240 w/cm (600 w/in.) depending on the length of the UV lamp. The complete UV drying system is controlled via a SpecTronic™ color touch screen module.



Nordson optimizes your productivity with total system solutions.



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Nordson Corporation is the world's leading producer of precision dispensing equipment. Nordson systems apply adhesives, sealants and coatings to a broad range of consumer and industrial products during manufacturing operations, helping customers meet quality, productivity and environmental targets. The company also manufactures technology-based systems for curing and surface treatment processes. Headquartered in Westlake, Ohio, Nordson has direct operations in 31 countries and 4,250 employees worldwide.

Wherever industry applies decorative and functional finishes, seals packages, and assembles consumer and industrial goods, Nordson is there. Application engineers, technicians, manufacturing specialists, marketing professionals and technical service experts work with customers to improve quality, productivity, and efficiency in manufacturing operations around the world. Local people who understand their country's customs and business practices staff Nordson international operations.

By developing comprehensive solutions to meet customers' needs - including software and related technologies to integrate our equipment and systems with their operations – Nordson consistently helps customers increase quality, productivity, and efficiency that lead to a quick return on their investments.



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