

Flow Coat Primer System

Automated film coating delivers accurate, uniform and repeatable primer application to body flanges and glass.



Features and Benefits

- **Excellent edge definition without overspray** is achieved because the primer material is not atomized. Masking and rework are virtually eliminated.
- **Variable pattern width** is available with a wide range of nozzles to meet specific application requirements.
- **Compact, lightweight applicator tool** is easy to install and service.
- **Material flow and application verification** assures application of primer.
- **Recirculation feature and nitrogen blanket** help prevent material degradation.

The Nordson® Flow Coat primer system robotically applies material in a controlled, uniform film, rather than an atomized spray. The material is dispensed as a ribbon-like coating, virtually eliminating masking and the rework associated with atomized spray application methods.

The Flow Coat process provides excellent pattern definition and placement while achieving film thicknesses up to 8 mils in a single pass. Speeds of up to 1200 mm per second are easily achieved, dramatically reducing cycle times.

The Flow Coat system applies primer in a nonatomized film pattern. In body flange applications, the Flow Coat system delivers precise and uniform application with minimal dripping. This allows manufacturers to reduce material consumption dramatically compared to manual application methods. Operator exposure to hazardous solvent vapors is also minimized.



Patented Dispensing Technology

The Flow Coat system applies the primer to the substrate prior to the atomization point of the film. Material is directed under low pressure through a patented nozzle which produces a film pattern with edge definition of ± 1 mm. A variety of nozzles are available to meet application specific pattern widths.



The Flow Coat System applies primer in a non-atomized film pattern

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Dispensing System

The Flow Coat dispensing system is field-proven and durable enough to withstand demanding automotive production environments. A double-acting diaphragm pump delivers an uninterrupted flow of material to the dispensing module. The same pump provides continuous recirculation of the primer through the system to prevent sedimentation.

In-line filters help prevent material clogs in the dispense module. A flush dispensing feature routes solvent / flush material through the applicator tool to prevent the build-up of cured primer in the nozzle which typically results from periods of inactivity and exposure to air.

The system is available with a nitrogen blanket or desiccated air to prevent degradation of the primer caused by moisture in the ambient air.

Detection

Fiber optic sensors monitor the primer film pattern at the purge station to verify material flow before and after each dispense cycle, helping to assure application of primer during each cycle. A level sensor is used to monitor the primer level at the pump station, for continuous, uninterrupted application.



System Controller

The Flow Coat system controller provides operators and plant personnel with a user-friendly interface. The controller offers complete system diagnostics including primer material level, filter pressure faults and a material flow indicator. An in-line heater maintains material temperature to provide consistent viscosity and a stable film pattern.

Technical Specifications

Diaphragm Pump		
Maximum Air Inlet Pressure		55.2 in. 30.3 in. 32.5 in. 450 lbs.
Maximum Outlet Pressure		120 psi (8 bar)
Maximum Flow Rate		0 to 35 gpm
Maximum Fluid Pressure		60 PSI
Pattern Width		Variable, up to 19 mm
Edge Tolerance		+/- 1 mm
Material Viscosities		Less than 100 cps
Film Build		up to 8.0 mils in a single pass

Applicator Tool		
Dimensions:	Height	6 in. (15 cm)
	Width	5 in. (13 cm)
	Depth	2 in. (5 cm)
	Weight	2 lbs, 14 oz (1.3 kg)
Air Pressure		Minimum 80 psi

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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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