# MEG<sup>®</sup> Inside-Stripe Applicator

### Compact electric spray gun for three-piece can inside stripe with ultra high-speed response enabling fast operation and high accuracy.



Using Nordson's flow coat style nozzles, the MEG I-S assures accurate and precise seam coverage at the required film thickness with virtually no overspray.

#### **Features and Benefits**

- Extremely fast for use on high-speed welders.
- Fast response time for accuracy and consistency to minimize stripe variations.
- Cool operation minimizes film build-up inside the gun.
- No internal metal-to-metal friction for less wear, longer service life and cooler operation.
- Compact size for use with various-sized cans as small as 52mm diameter.
- Precise film deposition with the applicator along with flow coat nozzle provide a uniform stripe with superior accuracy, repeatability and control.
- Modular design permits easy on-line replacement to speed maintenance.
- Adjustable nozzle holder for online spray adjustment.
- Circulating manifold with 4-mm tube fittings.
- Solvent-resistant EPR O-rings.

The Nordson MEG<sup>®</sup> compact electric gun provides high-speed precise interior striping of three-piece welded containers. It is designed to coat the welded-seam of three-piece cans at rates of over 1000 cans per minute and can be used with cans as small as 52 mm.

The applicator is designed for fast, easy maintenance and repair, to minimize downtime and enhance productivity. A wide range of spray nozzles is available to meet various application needs for film thickness and stripe width.

#### Fast Response Time, Reliable Operation

Consistent, repeatable fast open and close times provide faster operating speeds and gives consistent, reliable application of coating.

The MEG inside-stripe (I-S) applicator has few internal friction points, contributing to a faster response time, and reducing wear and heat generation in the gun. The coil and armature assembly is specially designed to create less heat than other electric guns for reliable operation and longer wear of the parts. The overall cooler operation of the gun reduces film build-up inside the gun and minimizes valve sticking.

#### **Precise Coating Control**

Using Nordson's flow coat style nozzles, the MEG I-S assures accurate and precise seam coverage at the required film thickness with virtually no overspray. The MEG I-S applicator allows the nozzle to be positioned in close proximity to the inside seam of small diameter cans so coating material can be applied in a continuous film rather than an atomized spray. The flow coat application provides precise control of stripe width, film thickness and weight, and also eliminates bounceback and overspray for a cleaner operation.



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#### Ease of Maintenance and Repair

The ball and seat assembly is designed to minimize wear, which greatly extends the product life of the gun. When repairs are needed, the gun module can be replaced online for minimal downtime. The gun body has been designed for easier maintenance, and the seat holder has an indexing ability so the seat can be rotated to promote uniform wear on the contact points of the coil face. Altogether the gun contains few moving parts to simplify rebuilding and minimize replacement-part inventories.

The MEG I-S gun is also compatible with the Nordson iTrax® System. Using a remote transducer manifold this system can be installed with the gun or added later. The iTrax system monitors the flow of coating material through the nozzle and automatically alerts the user to changes in flow caused by plugged nozzles or fluid leaking. Use of the iTrax system option with the MEG I-S applicator offers enhanced product performance and quality of the can coating operation to minimize rejects and optimize production quality at high manufacturing speeds.



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#### The NC-1 Driver

Operation of the MEG I-S applicator is controlled by a driver that provides a current-controlled signal to the gun. To speed gun response time, the NC-1 driver delivers a higher turn-on current pulse for three milliseconds, followed by a lower holding current for the duration of the period. This minimizes the amount of energy stored in the gun and results in a fast turn-off time. The gun drive signal is precise and consistent and requires no adjustments.

The NC-1 driver operates at speeds above 3,000 cycles per minute, and is available in single and dual channel modes.



With traditional three-piece cans with waterborne lacquers, the MEG I-S gun coupled with the driver opens in less than 2 milliseconds - 2.5 times faster than standard guns; it closes in less than 2 milliseconds - 4 times faster than the industry average.

### **MEG I-S Operating Parameters**

Dimensions	Height: 1.5 in (38 mm) Width: 9.85 in (250 mm)
Weight	1.6 lbs (0.75 kg)
Minimum Can Size	52 mm diameter
Coating Type	Waterbased or solvent-based can lacquers
РН	6.5 to 8.5
Viscosity	15 to 40 sec., with Zahn 2 cup at 70° F (21° C)
Fluid Temperature	60°C (140°F) maximum
Fluid Pressure	500 psi (34.5 bar) maximum
Nozzle Flow Rate	0.015-0.2 gpm (0.001-0.013 l/sec)
Electrical Requirements	48 VDC, 3 amps for 3 msec and 1 amp holding (use MEG driver)

#### **NC-1 Driver Specifications**

Power Requirements	24 Vdc +4/-2 @ 2.5 plus external loads
Pulse Driver Output (for spray gun)	Maximum Current: 4 Amps Maximum Voltage: 48 Vdc
Fixed Voltage Output (for CleanSpray gun)	Maximum Current: 1.5 Amps Maximum Voltage: 24 Vdc
Inputs (jumper configurable for sinking or sourcing)	Lacquer spray trigger input CleanSpray trigger input Alarm re-set input
Physical	Height: 10.375 in (274 mm) Width: 2.0 in (51 mm) Depth: 8.2 in (208 mm) Weight: 3.0 lbs (1.36 kg)
Environmental Operating Conditions	Max. Ambient Temperature: 104 °F (40 °C)
Driver/Gun Response Time	Turn-on time: 1.2 milliseconds Turn-off time: 1.8 milliseconds
Enclosure: Depth Width Height	8.6 in (218 mm) 5.8 in (147 mm) 2.5 in (62.8 mm)

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