## Ink-Dot I.D. System

# Spray-machine identification system for container coating operations.



#### **Features and Benefits**

- Marks each can as it enters the spray machine immediately identifying which spray machine coats each can.
- Enamel-rater and metal exposure tests can be performed on production cans eliminating the need to stop production to run test cans.
- Enhanced reservoir design eliminates sludge and offers a visual indicator to view ink levels.
- Modular spray gun allows replacement of the valve module for fast, cost-effective maintenance.
- **Spray gun's ball-and-seat design** provides long life and positive shut-off.
- Fast, accurate operation accommodates high line speeds.

#### **System Components**

Major components of the Nordson Ink-Dot I.D. system include a modular electric spray gun, proximity sensor, timing system and ink reservoir.

The Ink-Dot gun is mounted on the can infeed chute of the spray machine. The proximity sensor allows the gun to fire only when a can is located in front of the Ink-Dot gun.

The modular electric Ink-Dot gun is designed for fast maintenance and reliable operation. The valve module can be easily replaced without removing the manifold from the spray machine. Every minute counts with today's high speed container coating lines. When a spray machine is coating improperly, you can produce 300 or more reject cans per minute. Cans with unacceptable metal exposure must be recoated or scrapped. And production must be stopped to identify which spray machine is producing the rejects.

The Nordson Ink-Dot identification system is designed to improve process monitoring by quickly identifying malfunctioning spray machines on the coating line. The system applies a small, inconspicuous dot of ink on the bottom of each can as it enters the spray machine. A different ink color is used for each machine on the line, so you can immediately identify the source of unacceptable coatings.

With the Ink-Dot system, you no longer need to shut down all machines on the line to determine which machine is producing the defect. Faster identification of the malfunctioning spray machine improves productivity, reduces labor requirements and saves coating material by reducing resprays.

The modular Ink-Dot gun allows replacement of the valve module without removing the manifold from the spray machine. Plus, you can perform enamel-rater and metal exposure tests on actual production cans. You do not have to take time to run test cans through the system. Production cans also give you a more accurate indication of film builds than intermittent running of test cans. The procedure is faster and more efficient, so testing can be performed more often without increasing labor requirements.

The Ink-Dot I.D. system can be used for two- and three-piece container operations, and for aluminum and steel cans. It can

also be used with thermosensitive inks as a process status indicator, and at filling plants with colored inks to identify products prior to labeling.



### Ink-Dot I.D. System

#### Ink-Dot I.D. System Controls

The Ink-Dot I.D. system controller can be configured to trigger one to two guns, three to four guns, or five to six guns. The controller supplies power to the system's inductive proximity sensor. The sensor then signals the driver to transmit a preset delay duration to the appropriate gun.

The Ink-Dot system controller features an enhanced Series II driver to regulate gun operation. The Series II driver includes several timing features (not available on the original driver module) to increase control over dot size and placement, including:



- Adjustable dot duration offers added flexibility in dot size.
- Adjustable delay provides more accurate dot placement.
- **Double dot option** allows two dots to be placed on one can for easier line differentiation.
- Extended masking time reduces unwanted double dots.
- The Series II driver is standard on new Ink-Dot I.D. systems.
- Allows easy retrofit into the existing controller enclosure.

#### **Enhanced Reservoir Manifold Assembly**

Today's Ink-Dot I.D. system is equipped with an enhanced reservoir assembly that reduces the mess often associated with ink storage. The new assembly designeliminates sludge build-up on the reservoir. In addition, visual indication of the ink level makes replenishing the system fast and easy. The assembly fits standard size ink bottles, but a conversion kit is available for fitting smaller bottles.



#### **Specifications**

| E-201 Dispensing Module         |  |
|---------------------------------|--|
| Input Voltage                   | 100-240 VAC  |
| Input Trigger                   | 12-24 VDC signal   |
| Controller Output               | Controlled DC signal to gun coil(s) at 1.4 x input voltage |
| Internal Power<br>Supply Output | 24 volts DC, 1.2 amps                                      |





A different color dot is applied by each spray machine for immediate identification of the malfunctioning spray machine.



Dots produced with ultraviolet inks are virtually invisible under normal lighting (left) but easily seen under ultraviolet light (right).

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#### 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.

#### **Nordson Industrial Coating Systems**

100 Nordson Drive Amherst, OH 44001 USA Phone: +1.440.985.4000 www.nordson.com/ics



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