Ejector Gun for Droplet Dispensing

Precision-metered dispensing system provides accurate, repeatable application of high viscosity materials to automobile panels.

Features and Benefits

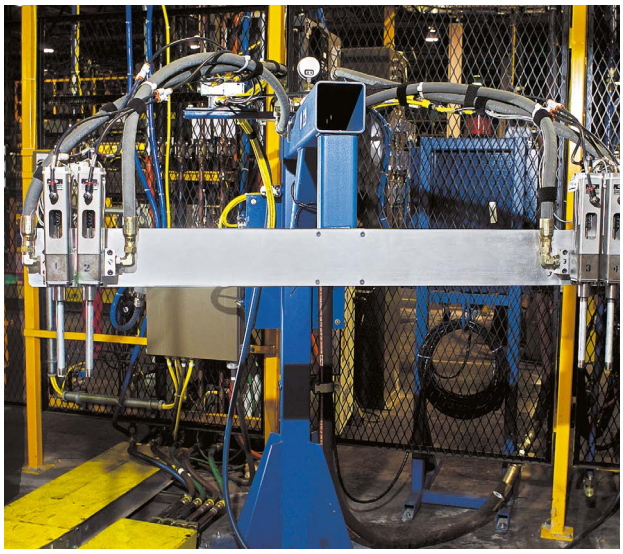
- **Pre-determined, fixed shot volumes allow for repeatability within .1cc.**
- **Modular design permits easy maintenance.**
- **Shot sizes are easily adjusted within the operating range of 2.5 to 7.5 ccs.**
- **Magnetic proximity switches sense fully-dispensed and fully-loaded conditions.**
- **Material is isolated from air supply, reducing maintenance and downtime.**
- **Three nozzle types are available to meet specific application requirements.**
- **Optional temperature conditioning maintains uniform material temperature throughout the distribution system.**

The Nordson ejector gun for droplet dispensing is designed to provide fast, accurate application of adhesive and mastic materials to automobile panels. The ejector gun automatically applies adhesive droplets ranging in size from 2.5 to 7.5 cubic centimeters (ccs) on hoods, doors and decklids for anti-flutter bracket attachment.

The ejector gun is precision metered to provide accuracy and repeatability within .1 cc. The gun is ideal for dispensing high viscosity materials including mastics and heat-cure epoxies. The modular design of the ejector gun permits easy maintenance and allows flexibility for changing assembly line configurations.

System Operation

Typically, the ejector gun works in conjunction with two 55-gallon pumps with automatic changeover, which feeds a distribution manifold designed for multiple-gun dispensing. Magnetic switches are used to monitor the location of the dispense piston, verifying the gun's dispense and reload functions. Faults can be generated if the gun does not refill or dispense.



Magnetic proximity switches within the gun sense fully-dispensed and fully-loaded conditions. Switch actuation failure signifies a fault condition, indicating that the dispense shuttle did not reach either a filled or dispensed stop. In this case, an alarm can be activated to warn of a faulty dispense shot or gun malfunction.

The ejector gun can be configured with a variety of nozzles to meet specific application requirements.

Nordson material temperature conditioning may be used to maintain uniform material temperature throughout the distribution system. By maintaining material temperature, material viscosity changes can be minimized for optimal material flow.

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Ejector Gun for Droplet Dispensing

Accurate, Repeatable Performance

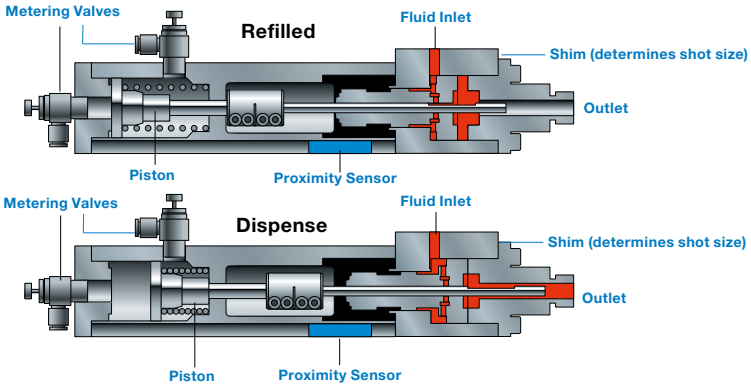
The ejector gun provides a precision-metered system for accurate, reliable dispensing with each cycle. A pre-determined, fixed shot volume is determined prior to dispensing, so that the same amount of material is applied each time. As a result, the system offers high repeatability between drops, typically within .1 cc.

Shot sizes can be easily adjusted within the operating range of 2.5 to 7.5 ccs.

Flexible Nozzle Configurations

The Nordson ejector gun can be configured with one of three nozzle types to meet specific application requirements.

- **Flexible Nozzle:** Easily adjusts to meet varying height specifications.
- **Rigid Tube:** Provides maximum accuracy while maintaining height adjustability.
- **Tapered Nozzle:** A shorter nozzle tube is ideal for single-drop, one-gun configurations.



Techincal Specifications

Dimensions (with fittings)	**Height** 1.75 in. (4.5 cm) **Width** 2.8 in. (7.1 cm) **Depth** 10.5 in. (26.6 cm) **Weight** 5 lbs (2.27 kg) (without manifold)
Dimensions (with fittings)	**Height** 1.75 in. (4.5 cm) **Width** 1.75 in. (4.5 cm) **Depth** 10.5 in. (26.6 cm) **Weight** 5 lbs (2.27 kg) (without manifold)
Minimum Mounting Space	1.8 inches center to center (4.6 cm)
Shot Size	2.5 to 7.5 ccs
Minimum Cycle Time	5 seconds (1.5 seconds dispense, 3.5 seconds reload)
Compressed Air Requirement	60 – 120 psi (4.2 – 8.4 kg/cm^2)
Actuation	Air open, air closed w/spring assist. Metering valves adjust actuation speeds.
Electrical Requirements	**Supply Voltage** 10 – 30 VDC **Operational Current** 200mA
Operating Temperature Range	35Þ – 140ÞF (1.67Þ – 60ÞC)
Fluid Orifice	1/4 NPT or Std. 0.6 inch OD nozzle w 3/8 inch NPS nut
Minimum Material Viscosity	50,000 centipoise
Operating Pressure Range	750 – 3,500 psi (52.7 – 246 kg/cm^2) (proportional to fluid viscosity)
Maximum Operating Pressure	5,000 psi (352 kg/cm^2)

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.

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