Vulcan Jet™ Dispensing Systems

Fast, efficient and clean adhesive jetting for electronics assembly

Vulcan Jet series dispensing systems provide an advanced, intelligent dispensing solution with piezo-based jetting technology. Jetting discrete dots of adhesive that can be overlapped does not require adjustment to the height of the substrate, allowing for precise dispensing into grooves and other challenging geometries.

Available in 30 mL size, the applicators feature a modular, easy-to-clean design with dual heating zones designed to prolong adhesive life. A separate nozzle heater provides precise fluid temperature control for optimum dispensing. When combined with the Unity tabletop automation system, overall accuracy and functionality of the Vulcan Jet applicators are enhanced with vision guidance, linear encoded motion and easy-touch dispensing software to optimize the process and motion control.

The system’s easy-to-use 7” touchscreen controller interface offers flow monitoring capabilities, which alert users when adhesive drops below a pre-determined threshold. The controller also allows operators to monitor applicator temperatures and overall system status directly from the home screen.

Features
- Non-contact dispensing applies adhesive accurately at high speeds at a maximum 6 mm distance to the substrate
- Capable of continuous cycles at 330 Hz for ultra-high speed dispensing
- Smaller mass and advanced design allow applicators to heat up rapidly utilizing a 24V connection
- Automatic pressure compensation adjusts for changes in adhesive viscosity, keeping dot dispensing consistent over time
- Adhesive level monitoring
- Temperature standby/set back
- Cap safety technology provides cap integrity and stability during times of high internal pressure
- Accommodates a wide range of hot melt materials, including polyurethane (PUR)

Benefits
- Protects operators from incidental touch
- Highly consistent, accurate dispensing decreases the amount of rejected products and improves productivity
- Modular design and robust, long-life parts reduce equipment maintenance and overall downtime
- After nozzle change, our one-button stroke adjustment allows for consistent dispensing
- Variable interfaces allow for quick connection to parent machines
- Discrete I/O
- Virtual network control
- Removable cartridges allow for quick changeover and start-up, maximizing production times

Nordson
Specifications

Weight: 1.85 kg (4 lb)
Cabinet size: 10 in x 7.5 in x 8 in (254 mm x 191 mm x 203 mm)
Maximum fluid pressure: 3.45 bar (50 psi)
Heater output (setpoint range): 7.8° C to 190° C (100° F to 374° F)
Continuous cycle rate: 100Hz to 333Hz
Ambient temperature range: 0° C to 45° C (32° F to 113° F)

Electrical Specifications

Input AC: 100-240 VAC, 1 phase, 50/60 Hz, 2.0 amps
Output AC: 24VDC, 6.25 amps
Internal voltages: 150 VDC, 24 VDC, 3.3 VDC, 1.2 VDC
Nozzle heater wattage: 30 watts
Cartridge heater wattage: 43 watts
Nozzle and cartridge temperature sensing: 120 ohm nickel or RTD

Available Options

- Pre-warmers
- Variety of Unity tabletop automation systems
- Unity HiTemp™ disposable syringe barrels for PUR and other high temperature materials available from Nordson EFD, call 1-800-556-3484 for more information

Shown on a Unity 4XP robot