



Non-Contact Fluid Dispensing with PS-8200 Jetting Valve

By Brian Stumm

Jetting Valve Technology Superior to Needle Dispensing

Compared to traditional needle dispensing technology, jetting valve technology is the most effective method for quick and accurate fluid dispensing. Injection technology has many advantages, it provides a combination of high-speed, high quality and low cost production for fluid dispensing processes. Instead of putting focus on getting the application done, jet dispense technology focuses on performance, providing applications like underfill, potting and encapsulation with more precision than ever before.

Improved Fluid Dispensing Speed and Accuracy

Non-contact jetting valves offer a significant advantage over traditional needle dispense valves. Jetting Valve Dispenser precision reaches to 200µm with dot diameter or line width as small as 250µm and volumetric dispensing down to .0036µl. Minimum space between lines is 180µm and maximum fluid dispense speed is 200 dots/second.

Fluid Dispense Jetting Technology

Fluid Dispense Jetting Valves “fly” over the circuit assembly or substrate and shoot a precisely controlled volume of material in dots, lines and patterns. Jetting multiple shots in the same location creates larger dots. Volumetric fluid dispensing repeatability is improved with active temperature/viscosity control. Lines and complex geometries are generated by adjacent dot dispensing.

Jetting Valve Applications

Jetting Valve Technology can be used for a wide array of applications including conformal coating, surface mount adhesive dispensing, underfill, encapsulants, UV adhesives and silver epoxy. Jet Dispensing eliminates the need for the Z-Axis. The PS-8200 Jetting Valve is highly accurate and repeatable. These fluid dispensing valves are easy to maintain while wasting less material. The PS-8200 Jetting Valve is an ideal companion to any of our tabletop or inline, robotic, fluid dispensing workcells. For more information visit our [Dispensing and Underfill page](#).

Circuit Assembly Applications

- Underfill
- Die Attach
- Surface Mount Technology (SMT)
- Chip Encapsulation
- No-flow Underfill
- Chip Scale Package
- BGA Solder Ball Reinforcement
- Conductive Adhesive Dispensing
- Flat Panel Display Dispensing