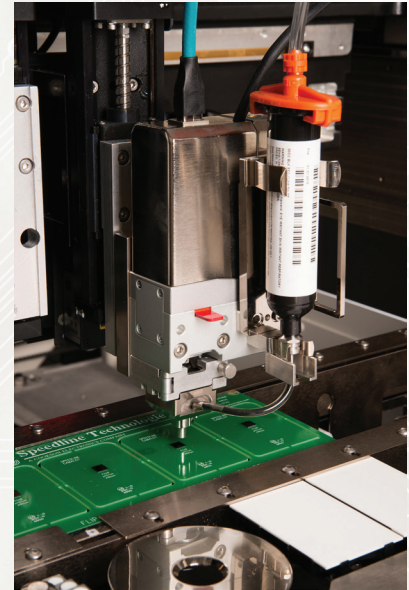


NanoShot™ Jetting Technology FAQ

The Camalot® NanoShot pump is the next generation of 'jetting' technology. Offering high speed, up to 600Hz, and ultra-fine resolution with dot sizes <300 microns, this patented pump features state-of-the-art motion control technology, simple maintenance, quick changeover, and a low cost of ownership.



Q: What are the performance specs of the Camalot NanoShot?

A: NanoShot offers high speed dispensing, up to 600 Hz, and ultra-fine resolution with dot sizes < 300 microns and single shot weights <0.005mg.

Q: What are some of the applications and materials for NanoShot?

A: They include Underfill, UV material, Encapsulation, SMA, Silver Epoxy, and others.

Q: How does 'Closed-loop architecture' affect NanoShot's performance?

A: Closed-loop architecture results in >30% improved repeatability over current pump technologies. This translates directly into higher yields and throughput through tighter process control.

Q: How does it work?

A: Patent-pending controls use real-time feedback from every piston cycle to ensure accurate and repeatable strokes with micron-level resolution. This level of process control is perfectly matched to NanoShot's high speeds and micro dot sizes for outstanding process capability, repeatability, and optimum throughput.

Q: How does 'Auto-tune' help?

A: The Auto-tune feature provides automatic calibration of the pump. Proprietary software controls calibrate the pump, enabling single shot accuracy of dissimilar material volumes with a single hardware set and no manual adjustments.

Q: Has the reliability of NanoShot been established through life testing?

A: Yes, through the pumps development units have been constantly running an accelerated "Iron Man" test and accumulated >1 billion cycles. The results of these tests have guided the design path to ensure a robust and reliable pump system.

Q: What platforms can I use the NanoShot with?

A: The NanoShot is designed for use with the Prodigy dispenser, creating an unbeatable combination of speed, accuracy, and flexibility. These include up to a 50% increase in UPH in 25% less floor space; +/- 35 µm @ 3σ XY accuracy; 1.5g peak acceleration; dual head configurability; and more.