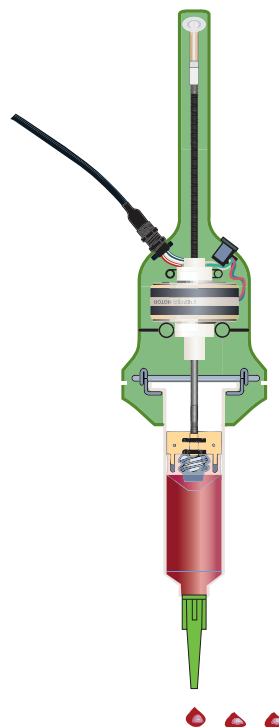


SmartDispenser®

Traditional LDS9000® Mode vs. ProcessControl²® Mode

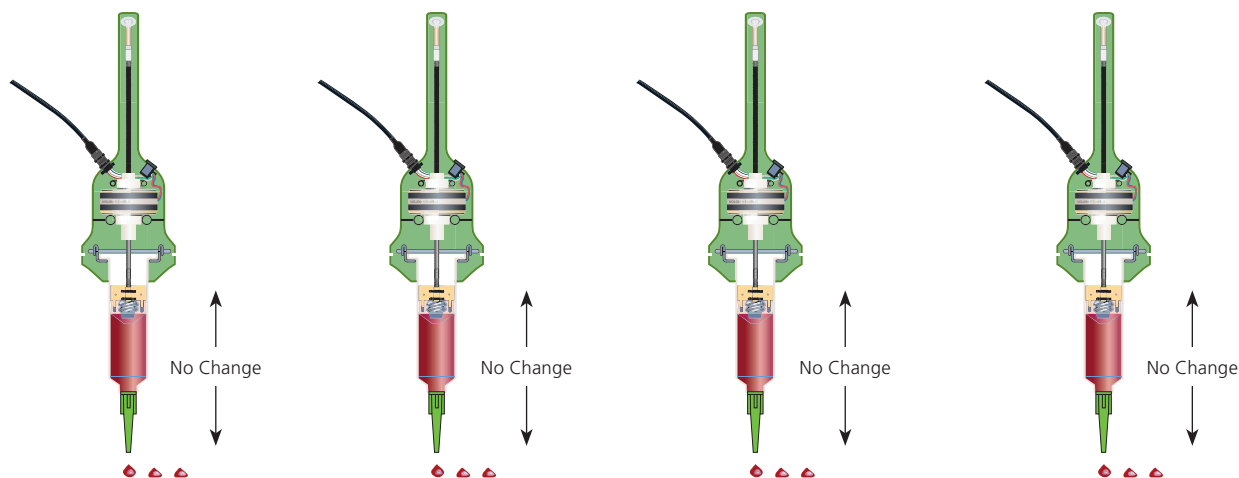
Two operating modes for two different levels of repeatability

The Linear Drive System, stepper motor and lead screw, guarantee the stroke length, forward and reverse motion, is exactly the same for every dispense until the syringe is empty. Stability of the drive system is the most important factor to repeatable fluid dispensing.



Traditional Mode

The Linear Drive System guarantees the stroke length, (forward and reverse motion) exactly for every dispense until the syringe is empty. Stability of the drive system is the most important factor to repeatable fluid dispensing. The result is the dot or bead volume will remain up to +/-5% as the syringe reservoir empties.

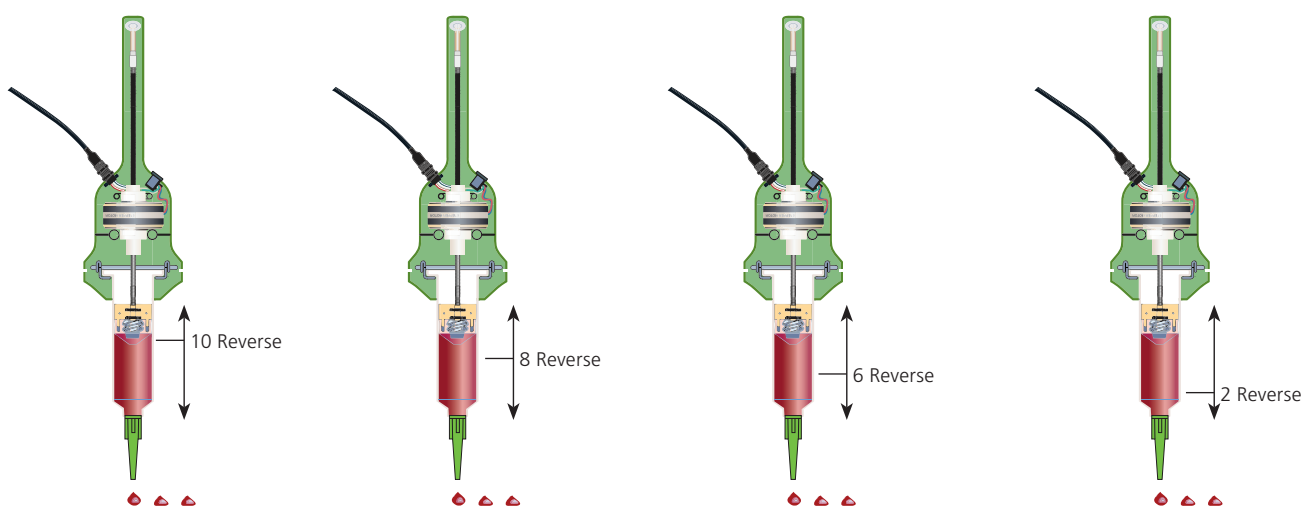


Traditional LDS9000® Mode vs. ProcessControl²® Mode

Two operating modes for two different levels of repeatability

ProcessControl²® Mode

ProcessControl²® Mode maintains forward motion while reducing reverse motion as the syringe reservoir empties. An advanced algorithm calculates how much reverse motion is reduced with each forward step. The result is the dot volume will stay constant as the syringe empties producing dispense repeatability up to $\pm 2\%$ from one dispense to the next.



One Program Worldwide

Each SmartDispenser® performs exactly the same from one system to the next, from one production facility to the next, from one country to the next with no adjustments. The patented design has proven to be the most stable drive system for dispensing assembly fluids for the past 12 years.

**Final dispense repeatability is fluid and application dependent.*