

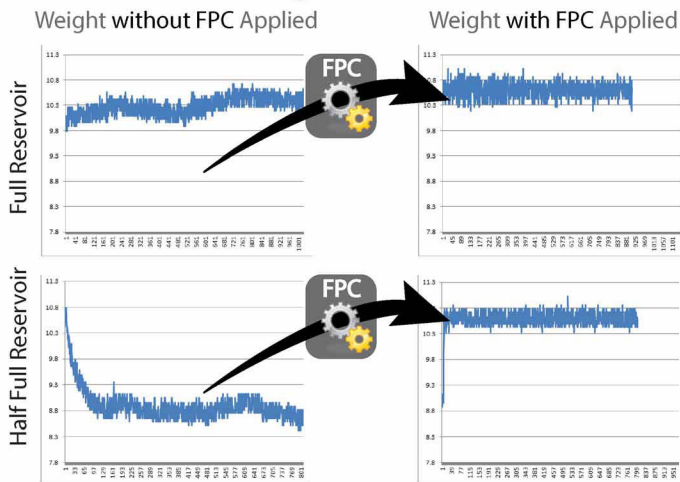
# Real Time Process Control

## FPC: Fluid Pressure Control

Patented Pressure Regulating System for  
Fluid Dispensing Systems for FPC Technology

**Do you know if you are starving or drowning your pump?** Consistent dispense results start with even fluid delivery from the reservoir. Feeding fluid from a reservoir under constant pressure does not account for stopper stiction or fluid level. Different fluid materials, batches, and levels in the syringe or reservoir can affect flow when fluid is fed from a syringe.

### Weight Results



Any fluid fed from a reservoir may produce varied results when fed by constant pressure. This is very evident with large reservoirs of thermal grease, gasketing material, or RTVs. When starting to feed fluid from a large, full reservoir into the pump, a certain pressure is required. If that pressure remains constant as reservoir fluid is depleted, the amount of fluid entering the pump will vary, causing a difference in pump output and/or performance.

When using smaller reservoirs to feed solder paste or conductive adhesive, dispensing results are also highly variable as reservoir content diminishes. The fluxes used with solder pastes and conductive adhesives make the

**Run your pump at optimal levels at all times** with patented Real Time Process Control (FPC) instead of starving or drowning it with inadequate or excessive fluid flow from the reservoir.

walls of the reservoir sticky which hinders the stopper/plunger when under constant pressure. Dispensing results show a diminished size or, if the stopper surges forward, an increased size.

Couple this calibration procedure with our gantry mapping process, Contour Mapping™, which is performed on all GPD Global® dispensers, and our high resolution encoded drive motors, and it is easy to see why GPD Global® is a leader in high precision, high accuracy dispensing systems.

### Active Process Compensation

Fluid Pressure Control (FPC) is a patented real time dispense compensation system that maintains a consistent fluid pressure to the inlet of the pump regardless of fluid levels and pressure in the reservoir. Dispense compensation happens during the process, not only at calibration.

FPC is available to interface with a variety of dispense pumps. It can be seamlessly integrated with existing GPD Global dispense platforms or, with an offline control box, it can easily interface with your robot or control system for operation and messaging.



environments, the backlit calibration routine can be used in conjunction with our standard on-axis illumination or other variant of Dark-Field lighting.



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