

Eliminate defective disposable hygiene products and reduce material waste by controlling adhesive variation with Valco Melton's FlexFlow™ System. Its metering device continuously monitors the actual adhesive flow rate. The dedicated control system automatically adjusts the pump speed on the adhesive melter when it deviates from the application's set point.

Get These Immediate Benefits:

- Eliminate defective products caused by add-on inconsistency and fluctuation
- Automatically control and adjust the amount of adhesive dispensed in real time
- Retrofit into a new or existing production line, without additional investment
- Independently control up to 4 production lines
- Minimize ramp-up waste and achieve flow stabilization in 3-4 seconds from machine start
- Analyze your processes and production performance with FlexFlow's downloadable reports and ensure continuous process improvements



FlexFlow guarantees a precise and reliable adhesive flow, making it the ideal solution for applications where even the smallest variation in adhesive dosage can result in a defective product. Examples include diaper back-ear, hook and tape attachment, or feminine pad release liner application.



FlexFlow™ Control System

FlexFlow controllers feature a programmable mapping of input and output signals, which allows users to control up to four production lines with independent product specifications from one intuitive, full-color LCD touchscreen. To simplify set up, operations can be programmed in grams per product.

This intelligent system continuously monitors the actual amount of adhesive being dispensed and compares it to the application's set point. When the actual flow rate deviates from the set point, FlexFlow automatically adjusts pump speed to ensure the correct amount of adhesive is dispensed.

The charts on the right illustrate the time in seconds it takes for the adhesive flow to stabilize around a given set flow, with and without the use of flow control systems.

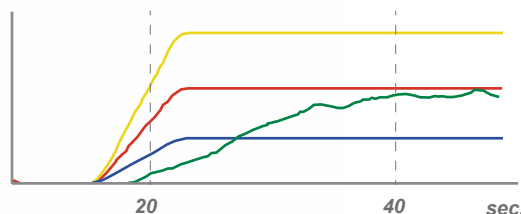


Fig. 1 - Flow Stabilization Without Flow Control

Adhesive flow takes 40 seconds to reach the target amount. After that, the flow is not consistent, even at a constant pump speed.

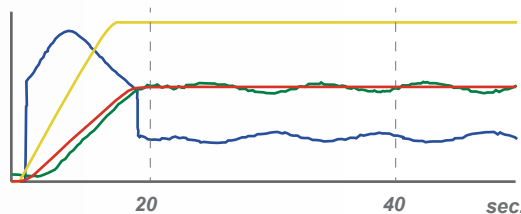


Fig. 2 - Flow Stabilization With Flow Control

The use of FlexFlow reduces stabilization time to only 4 seconds and then continues to maintain consistency

Line Speed ——— Yellow ——— Real Flow ——— Green ———
 Flow Set Point ——— Red ——— Pump Speed ——— Blue ———

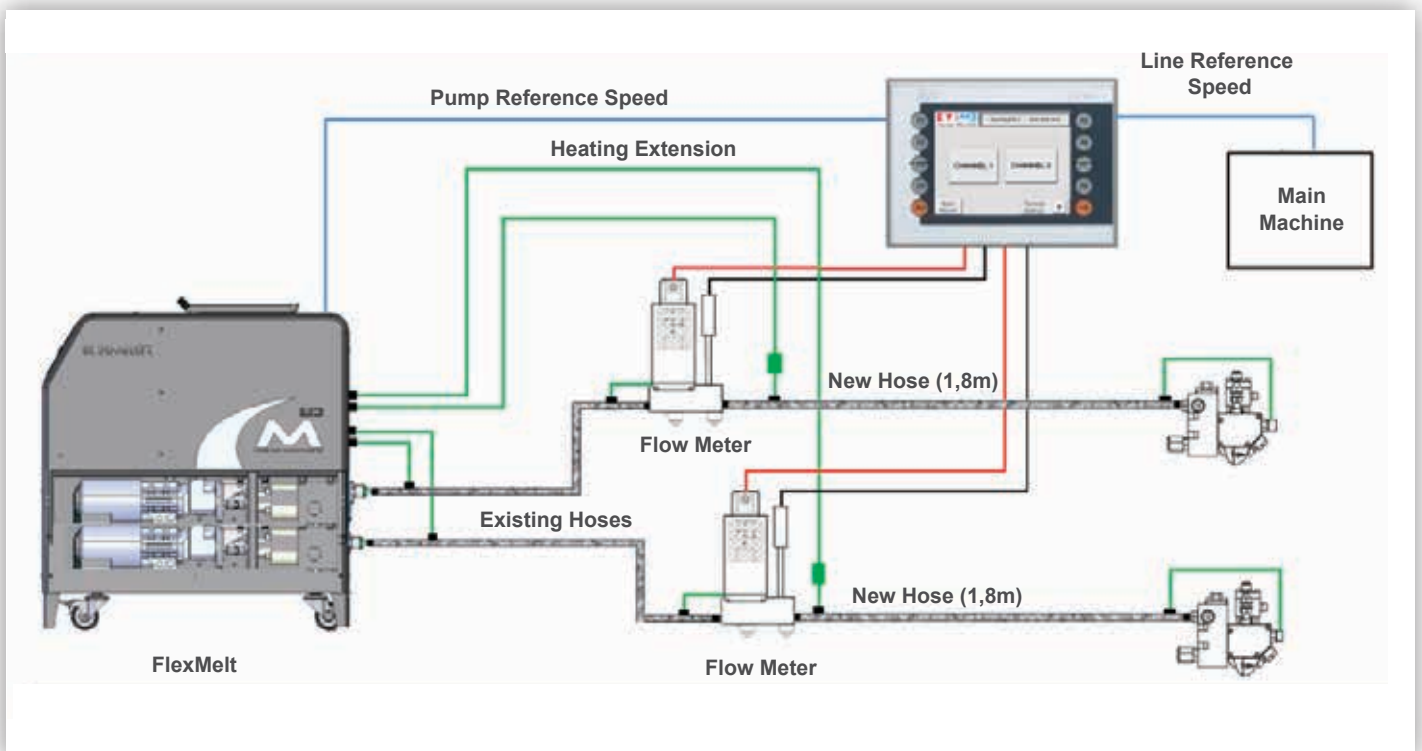
FlexFlow™ Adhesive Flow Meter



FlexFlow™ Series Adhesive Flow Meters measure the actual amount of adhesive being dispensed and sends a signal to the Control System. This allows the controller to analyze the accuracy of the adhesive flow, comparing it to the value indicated during the programming tasks.

A pressure transducer can be optionally integrated on the flow meter to constantly monitor the pressure on the adhesive dispensing system. Adhesive pressure changes are most commonly caused by clogged nozzles or filters, or a leak in the system. Once the pressure transducer has detected the problem, the control cabinet can be programmed to close the line to prevent the manufacturing of defective products.

System Layout



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