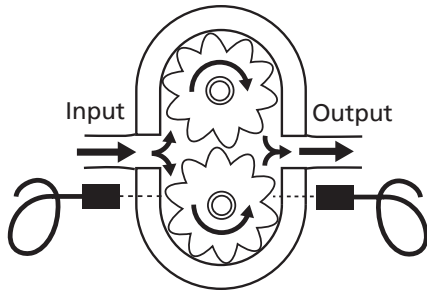




Are Flow Meters right for you?



Q. Why do customers ask about “Flow Meters”?

A. They want to make sure they are getting the correct amount of adhesive onto their product.

Q. Are there different types of flow meters?

A. Flow meters are located prior to the “pipe” through which a liquid passes. There are no “universal” flow meters. Flow meters range from Electromagnetic to Ultrasonic to Paddle Wheel. For hot melt adhesives, PD (positive displacement) meters are recommended.

Q. What is a Positive Displacement flow meter?

A. The PD flow meter is a high precision mechanical/electrical device in which free floating gears turn as liquid passes through them. As the gears turn, a sensor detects that movement sending an electrical impulse which can be used to provide instantaneous flow profile data.

Q. Can PD flow meters be used with hot melt adhesives?

A. PD meters can be designed to work over a wide range of fluid viscosities and with specific modifications, will work with hot melts. To operate with hot melt adhesives, PD flow meters must be heated. The higher the heat the bigger the challenge to isolate and protect the electrical sensors and their controls. Another challenge is that any fluid entering a PD flow meter must be “very clean” and highly filtered. This is especially challenging when using hot melts which tend to degrade causing severe viscosity changes and char formation.

Q. Are PD flow meters expensive?

A. Yes. They are expensive to buy. And when used with hot melt adhesive, they can be even more expensive to modify and to maintain.

Q. Should I consider a flow meter if I am using a handgun to apply the adhesive?

A. Hot Melt Systems have the potential for unintended and undesirable changes in the application process that can go undetected. In manual (handgun) applications, the operator is your best and most efficient detection device. If you are looking for improvements in cost efficiencies and product quality, your best investment is in operator training and a good PM program.

Q. When should a PD flow meter be considered when using a hot melt adhesive?

A. A PD meter should only be considered in high volume/high-speed automatic gun applications where very precise bead or coating thickness is required. PD flow meters can notify and record adhesive output variations. They can be especially effective in blind applications where output is critical, and variations can easily go unnoticed.

