

INLINE

with Hoffer Flow Controls

Meeting The Challenges of Low Flow Measurement In The Coatings Industry

Hoffer Flow Controls turbine flowmeters and electronics play an integral part in many commercial processes, where there is a need for measurement of a clean liquid or gas. Many unique applications use Hoffer turbine flowmeters to improve the way a process works resulting in improved performance and savings for the company. Unique applications and customization are areas in which Hoffer Flow Controls excels.

The Winter 2002 Inline features the Hoffer MF Series of Mini-flowmeters employed to monitor fuel flow in high velocity spray coating applications. These applications call for measurement of a liquid fuel at a very low flow rate.

The Hoffer Mini-flowmeters precisely monitor the fuel for a leading worldwide supplier of coating services and thermal spray powders. Specific amounts of fuel are combined with flammable industrial gases in the combustion chamber of a nozzle that in-turn creates a supersonic spraying velocity. High accuracy of fuel flow measurement is critical in controlling the exact blend of fuel and gases to produce the required velocity of these combustible materials. This high velocity is used to spray the coatings which actually penetrate the surface. The coating, when applied to the

surface, exhibits extremely high density and corrosion-resistance to wear thus extending the life of the product.

Referred to as flame sprayers, these guns are designed to apply a variety of powdered materials/abradable coatings to a wide scope of applications in industries such as aircraft, computer, optical, plastics, primary metals and textiles.

In this particular application the repeatable flow range is specified at .02 to .15 GPM. In addition to the Mini-flowmeter, an intelligent transmitter is used to provide linearization. The transmitter also provides features such as a Windows® based configuration program, a 4-20 mA loop powered analog output and an FM intrinsically safe approval which is a requirement for this application.

The MF Series meters meet the needs for extremely low flow measurement in many industrial liquid and gas applications. Linear flow range capabilities are 0.015 to 3.00 gallons per minute in liquid applications. Maximum flow rates in gas flow applications are 0.05 to 1.00 ACFM.

Once again, meeting the challenges and finding solutions for various industrial low flow processing applications around the world is what



Above a flame spray gun, part of a system used to apply coatings to a variety of products which enhance the products resistance to wear.

brings customers back to Hoffer Flow Controls, again and again. Our reputation for producing the highest quality turbine flowmeters in the world can be seen through the many quality awards received and product innovations introduced through the years. Like the coatings application above, our Mini-Flowmeters can be found in blending and batching applications throughout the soft drink, pharmaceutical, rolled steel, food, aerospace and chemical industries.

For more information on the MF Series of turbine flowmeters visit us at our web site at www.hofferflow.com or call us to inquire about your unusual application.