

Application News

Magnetic Flow Meter Improves Material Quality in Extrusion Process

Industry: Industrial

Service: Cooling Water Flow Rate

Fluid: Water

Overview

Extruder processes require water to cool precision die profiles, produced from mixed compound pellets. Multiple calibration tables and chambers are often used to evenly cool and stabilize the extruded shape, ensuring quality performance. Effective Monitoring and control of water flow can tighten process variable producing a more consistent product.

Situation

A global leader in High Quality PVC/Vinyl extrusions for home window, doors, decking and shutters sought to improve their process control. Water used for cooling product was throttled by the operator by hand. Different operators could use different amounts of manually regulated water creating inconsistent cooling and this impacted overall product quality. An additional challenge presented was that space on the extrusion machine was scarce or unavailable.

Solution

Flow Technology carefully considered the application requirements and chose the EL1100 wafer series electromagnetic flow meter to fulfill the customers flow measurement needs. City or untreated water is an excellent media for a electromagnetic flow meter which has no flow providing the customer a very compact and reliable solution restriction, zero pressure drop and no moving parts providing the customer a very compact and reliable solution.

System Description

The compact wafer style meter provided accurate flow rate feedback. The meter provides a local display but also incorporates a pulse and analog output to a larger display, control valve, and/or data collection/monitoring system. The MC608 converter also data logs and can be daisy chained for multiple unit outputs utilizing a single conductor. As a bi-product, initial reports are water usage has declined.

Technical Information

Flowmeter: EL1100 Wafer Mag Meter

Electronics: MC 608 Transmitter with display

Fluid: City water at approximately 100 gpm



**Model EL 1100 Wafer with MC 608 Electronics
Flow rate ~ 100 GPM**



8930 S. Beck Avenue, Suite 107, Tempe, Arizona 85284 USA
Tel: (480) 240-3400 • Fax: (480) 240-3401 • Toll Free: 1-800-528-4225
E-mail: ftimarket@ftimeters.com • Web: www.ftimeters.com
© 2013 Flow Technology, Inc. DB-101138 Rev A