GF S.p.A. achieves fast, reliable and accurate filling with Emerson’s Micro Motion® Coriolis meters

RESULTS
• Fill cycle times reduced
• High accuracy with improved repeatability
• Media can be changed without the need to disassemble machinery
• Filling data aids compliance with 21 CFR Part 11

CUSTOMER
GF S.p.A., based in Parma, Italy, is a leader in the design and manufacture of high-tech filling equipment and quality control systems for the pharmaceutical, medical and food industries.

APPLICATION
Precision measurement in filling machinery for injectables, infusions, ophthalmic preparations, syrups and detergent solutions.

CHALLENGE
GF had been using filling technologies based on time-pressure instruments, piston-syringe and peristaltic (roller type) pumps for filling machines being supplied to the pharmaceutical industry. In this highly competitive market, the company wanted to reduce filling times, improve accuracy and repeatability, and enable tighter filling tolerances. GF also wanted to enable its customers to change media within the same measuring instrument and to carry out in-line sterilization without disassembling the machine.

SOLUTION
The Micro Motion Model FMT Filling Transmitter is specifically designed for high-speed, precision-fill measurement in filling and dosing applications. Using the Model FMT filling transmitter with Micro Motion ELITE® and H-Series flowmeters, GF was able to significantly improve system response time and reduce batch cycle times by taking advantage of integrated valve control from the transmitter rather than the traditional pulse output set up through a programmable logic controller (PLC).

“Our measurement results, which have now been validated by our customers, confirm that Emerson’s Micro Motion Coriolis flowmeters are the best performing measurement instrumentation.”

Marco Serventi,
Sales Manager, GF S.p.A.

For more information:
www.MicroMotion.com/life-sciences
www.MicroMotion.com
A further benefit is that the rangeability of the Coriolis flowmeter allows different media to be dispensed without changing any mechanical components of the machine. For example, fillings can be in the range from 0.5 g to 5 Kg. Data from the flowmeter is logged as part of a data management system to help meet the requirements of the U.S. Food & Drug Administration’s 21 CFR Part 11 rules for electronic records. Any filling errors or drift away from the set point can be used to generate alarms for the operator so that corrective action can be taken.

In addition, the temperature measurement integrated into the Micro Motion ELITE Coriolis flowmeter enables the operator to check that critical parts of the machine have been correctly sterilized at temperatures up to 160°C.

Based on the successful collaboration with Emerson, GF has adopted Micro Motion meters on a range of filling machinery. The high reliability and accurate results provided have now been validated by GF customers over a number of successful applications.

“Micro Motion Coriolis technology is accurate, reliable and user-friendly - adding value for the end users of our machines.”

Marco Serventi,
Sales Manager, GF S.p.A.