

Micro Motion® Coriolis Flowmeter Provides Cost-Effective Check on Utility Billings

RESULTS

- Billings for natural gas significantly reduced
- Received rebate of six months' charges from the utility
- Provides company with check-metering capability, which includes low costs of installation and ownership
- Measures natural gas accurately, regardless of variations in flow rate



APPLICATION

A material company in Southern California uses natural gas to fire a boiler for basic heat and steam production. A utility measures the material company's natural gas consumption with a rotary meter and invoices the company accordingly.

CHALLENGE

When natural gas prices rose sharply, the material company realized it needed a simple, cost-effective way to verify the accuracy of its utility bill. The company's natural gas usage had a relatively wide flow range, so the solution needed to be able to account for this variation.

SOLUTION

The company selected a Micro Motion® Coriolis flowmeter over competing technologies for several reasons. In addition to offering proven accuracy and rangeability in gas applications, the meter was also easy to install, operate and maintain. Because Micro Motion flowmeters do not need flow conditioning or straight pipe runs, the new meter was installed easily in the existing piping.

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The Micro Motion flowmeter performs accurately over a wide flow range, unlike the utility's rotary meter.



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Also, Micro Motion flowmeters measure mass flow directly. This eliminated the need to compensate for changing pressure or temperature in a flow computer, while providing output in standard volume units. And without moving parts to wear and cause drifting calibration, the Micro Motion meter required no regular maintenance.

The company was soon able to document a difference of 4 to 18% between its meter and the utility's meter. It determined that the utility's rotary meter was over-registering at high flow rates. Because of the wide turndown of the Coriolis meter, it was accurate over the entire flow range. Furthermore, since the Micro Motion meter measures mass flow directly, it was also accurate over changing process conditions.

After reviewing the compelling data, the utility installed a new billing meter, which brought the readings of the two meters to within 0.5% of each other. As a result, the utility agreed to issue a rebate totaling six months of natural gas usage as compensation for over-billing.

