

# The Amazing Foxboro CFT50 Digital Coriolis Flowmeter



#### **CFT50 Advantages**

- Highly accurate mass, density, and temperature measurement
- Unprecedented, precise liquid/gas flow measurement without skips or stalls
- Fast startup up to ten times faster than conventional Coriolis meters
- Highly accurate batches, starting from empty tube
- Elimination of costly downtime, rework, and workarounds



www.foxboro.com/instrumentation



# Overview

The Foxboro CFT50 digital Coriolis mass flow transmitter handles the measurements at which other Coriolis meters fail. It overcomes the problems associated with entrained gases, empty tube conditions, or flash-prone fluids. It fully realizes the promise of Coriolis measurement to achieve high accuracy, eliminate downtime, avoid workarounds and help keep the profit flowing.

Customers report the CFT50 provides stellar performance in the world's most challenging applications, including tanker and truck loading/unloading, centrifuge bottoms, ethylene oxide, sanitary batching, pharmaceutical batching, and food/ dairy/beverage measurement.

## Performance

Paired with the superior Foxboro mass flowtube, its advanced digital technology means the CFT50 finally does Coriolis flow measurement right.

Foxboro's patented software-based system prevents the erratic liquid/gas flowtube vibrations that cause measurement failures, by maintaining a digitally precise process flow measurement — while simultaneously retuning the drive of the Coriolis flowtube every half-cycle of the drive frequency. You can measure from liquid to gas back to liquid without slippage or stoppage.

You can even get accurate measurement with the flowtube starting from empty! And the CFT50 still responds up to ten times faster than conventional Coriolis meters. Particularly vital for batch measurement, this reduces startup time while increasing production throughput — and profitability.

With the CFT50, finally there's a Coriolis flowmeter that has the response time to handle even small batches and quickly changing processes.

#### Value

What does it cost when you lose a batch and must clean out your reactor? How much maintenance time can you waste removing every last molecule of air from your process? How much process material and profit per minute are lost if your Coriolis meter can't handle your measurement?

CFT50 users report significant savings from the first day of installation.

Get the only Coriolis meter that can make a real cost difference. Get the Foxboro CFT50 and you'll immediately start to

- Decrease downtime
- Reduce materials lost
- Increase maintenance savings
- Save personnel time and effort



#### The Coriolis facts of life

It's a fact of life: conventional Coriolis meters just can't handle air or other gas entrained in a process liquid.

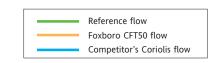
This problematic flow creates erratic vibrations in the flowtube. And often causes the meter to stall out completely. So when they encounter even small bubbles, or a start-from-empty condition, Coriolis meters typically exhibit bursts of no measurement, or wildly wrong measurement.

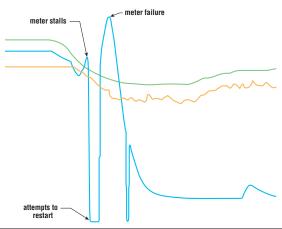
Needless to say, these failures make accurate process measurement and control impossible. Which, in another fact of life, can severely impact your profits. In the worst cases, they can even threaten plant or environmental safety.

Perhaps you've applied a conventional Coriolis meter to a gasentrained process — with poor results. Were you told the problem was not the meter, it was your process? And did you then try, at substantial cost, to modify your process — again, with minimal or no success?

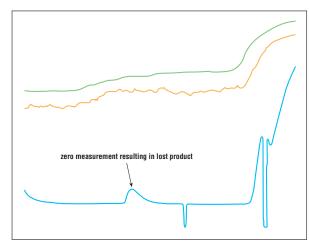
The truth is, the flowmeter was probably a major part of your problem all along. Until now.

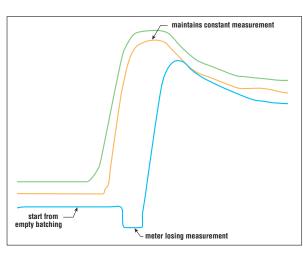
With the Foxboro CFT50, that kind of Coriolis meter failure is no longer a fact of life.





Note these actual lab tests. With gas in the process fluid, the competitor's meter goes into slug flow, stalls, tries to restart — but you get no reliable measurement while entrained gas lasts ...





.... However, notice the Foxboro CFT50 continues to accurately track right along with the reference flow line. No lost measurements. No lost product. No problems ...

... Or your batch application may demand startup from an empty tube. Attempting this liquid/gas measurement, the competitor's meter delays startup. But the Foxboro CFT50 tracks right along, with no expensive rework required.



### Proven

Other Coriolis meters have had their problems, as discussed previously. But the Foxboro CFT50 mass flow transmitter really works.

It's already proven its value in a large number of customer applications around the world. In any case calling for a Coriolis meter that can handle entrained gas and demonstrate lightning-fast response, this meter has proven to be the only one that does the job.

Handling nitrogen blanketing, foaming, or flashing. Measuring ethylene oxide. Batching from empty. Loading and unloading railcars, tankers, and trucks. Put the CFT50 to work on *your* most challenging Coriolis measurement problem.

You won't be disappointed.

# Call or visit today

Find out more about the amazing CFT50 or other Foxboro flow products by visiting www.foxboro.com/instrumentation or calling 1-888-FOXBORO.



Foxboro Foxboro, MA 02035-2099 1-508-549-2424 1-888-FOXBORO Fax: 1-508-549-4999

Invensys and Foxboro are trademarks of Invensys plc or its subsidiaries and affiliated companies. All other marks may be trademarks of their respective owners.

© 2004 Invensys plc. All rights reserved. Printed in U.S.A. Bulletin E43-6 08/04 0409003

