

FlowTimes - March 2010

Your Update on Flow, Temperature, and Pressure Measurement from Flow Research

Editor: Dr. Jesse Yoder; Volume 11, Number 1 - ISSN 1350-7204

Welcome to **FlowTimes!** This issue updates you on some important new developments in the world of flow. It also brings you up-to-date on some of our new and upcoming market studies. As you will see, the push for energy and the search for oil and gas is having an impact on the world of flow, and it is impacting our projects as well.



*Dr. Jesse Yoder on the road to Dubai
(Photo by Flow Research)*

1. Letter from the President

From July - December 2009, I did quite a lot of traveling to the Middle East and Europe. This travel was mainly connected to research we are doing for our upcoming study on gas flow measurement. I found the Middle East to be a fascinating place, with massive natural supplies of both crude oil and natural gas. Besides Dubai and Abu Dhabi, I visited Saudi Arabia, Qatar, and Oman.

From July - December 2009, I did quite a lot of traveling to the Middle East and Europe. This travel was mainly connected to research we are doing for our upcoming study on gas flow measurement. I found the Middle East to be a fascinating place, with massive natural supplies of both crude oil and natural gas. Besides Dubai and Abu Dhabi, I visited Saudi Arabia, Qatar, and Oman.

I gained a much better understanding of the vast wealth that exists in the Middle East in both crude oil and natural gas. Yet the oil and natural gas producers over there face many of the same problems that companies do in other parts of the world. Like US companies, they are trying to decide between new-technology and traditional technology flowmeters. Custody transfer applications are critical for them. One difference is that many of the companies are partially or wholly owned by the government, and many of the companies there are very large.



*On a desert safari, outside of Dubai
(Photo by Flow Research)*

In the last newsletter, I wrote that I wanted to have a camel ride. I am happy to report that I did have a camel ride during a desert safari outside of Dubai. The main surprise was when the ride was over -- the camel kneels very quickly, and you have to hang on to stay onboard, so to speak. The ride in the jeep over the sand dunes that was part of the safari was a little unnerving, but I managed to make it through without too much difficulty. The natural beauty of the desert stands in sharp contrast to the modern cities, including Dubai, Abu Dhabi, and Doha.



In addition to doing research for our gas flow study, we published two studies last year:

The World Market for Magnetic Flowmeters, 4th Edition (May 2009) (www.flowmags.com)

The World Market for Thermal Flowmeters (October 2009) (www.flowthermal.com)

We have scheduled a new edition of our gas flow study that will build on my Middle East experience:

Magmeter photo courtesy of KROHNE

The World Market Gas Flow Measurement, 2nd Edition (July 2010) (www.gasflows.com)

We are adding a new feature to this study. We are adding three separate modules:

Module A: Natural Gas Producers Worldwide - Module A is mainly oriented towards



*Above: Oman Gas Company, Muscat, Oman
(Photo by Flow Research)*

companies that want to enhance their instrumentation sales worldwide to the larger producers of natural gas. It will include company profiles of the large producers, strategies for marketing to them, and a discussion of trends in flow measurement relative to these large companies.

Module B: Natural Gas Producers in the Middle East - Module B will include profiles of natural gas producers in the Middle East, and will be oriented towards instrumentation companies that want to increase their sales to the Middle East.

Module C: The World Market for Custody Transfer of Natural Gas - Module C will focus specifically on the market for custody transfer of natural gas, which is the fastest-growing niche within the flowmeter market. It will contain market data on ultrasonic, turbine, and DP flowmeters used for custody transfer applications, and will discuss strategies for selling into this market.

Modules A, B, and C can be ordered as add-ons to the gas flow study, or as standalone reports. These additional modules will provide a great deal of in-depth research that will complement and build on the results of the gas flow study.

The 3rd edition of our classic Volume X study includes all types of flowmeters, and will be published in September.

I hope you will be able to take advantage of our research into the flowmeter and liquid analytical markets. Please let me know if you would like more information on any of our upcoming studies.

Yours in flow,
Jesse Yoder
Flow Research
jesse@flowresearch.com

2. Environmental Requirements Boost Thermal Flowmeter Sales. The new age of environmental awareness, together with the Kyoto Accord and and greenhouse gas initiatives, has resulted in a rewriting of the rules on greenhouse gas emissions. There is suddenly a demand to measure greenhouse gases in applications that formerly may have gone unnoticed. Many of these applications present opportunities for thermal flowmeters. These new environmental requirements are helping boost the sales of thermal flowmeters. You can find out more in our new study, **The World Market for Thermal Flowmeters**, which is hot off the press! Find out more at www.flowthermal.com.



FMC Technologies Headquarters in Houston, TX (Photo by Flow Research)

3. FMC Technologies Acquires Multi Phase Meters. Houston, Texas (September 24, 2009) - FMC Technologies, Inc. (NYSE: FTI) announced today its intent to acquire Multi Phase Meters AS (MPM). Based in Stavanger, Norway, MPM is a global leader in the development and manufacture of high-performance multiphase flowmeters for the oil and gas industry. FMC intends to acquire 100 percent ownership of MPM upon closing, with an initial cash payment of approximately \$30 million and two earn-out payments based on 6.6 times 2012 and 2013 EBITDA. The transaction is expected to close in the fourth quarter of 2009 and be accretive in 2011.

MPM's metering technology delivers high accuracy and self-calibrating multiphase meters, with low maintenance features to meet the industry's increasingly demanding requirements for subsea applications as well as topside applications. The MPM product line augments FMC's portfolio of technologies for optimizing oil and gas recovery.

"By expanding our product offering through MPM's advanced multiphase flowmeters, FMC will

be able to further optimize its subsea technologies and therefore bring significant value to our customers,” said Peter D. Kinnear, FMC’s Chairman, President and Chief Executive Officer.

“We are pleased to become part of FMC Technologies and believe that the combination will further advance our product lines and solutions for a global set of oil and gas customers,” said Hans Olav Hide, Chief Executive Officer of MPM.

Note: This acquisition was completed on October 20, 2009.

Note: For comments on the meaning of this acquisition, see our Market Barometer, Q3 & Q4 2009. For information on the Market Barometer, go to www.worldflow.com.

4. Exxon to Acquire XTO Energy. Irving, Texas (December 14, 2009) -- Exxon Mobil Corporation (NYSE: XOM) and XTO Energy Inc. announced today an all-stock transaction valued at \$41 billion. The agreement, which is subject to XTO stockholder approval and regulatory clearance, will enhance ExxonMobil’s position in the development of unconventional natural gas and oil resources.

Under the terms of the agreement, approved by the boards of directors of both companies, ExxonMobil has agreed to issue 0.7098 common shares for each common share of XTO. This represents a 25 percent premium to XTO stockholders. The transaction value includes \$10 billion of existing XTO debt and is based on the closing share prices of ExxonMobil and XTO on December 11, 2009.

“We are pleased that ExxonMobil and XTO have reached this agreement,” said Rex W. Tillerson, chairman and chief executive officer of Exxon Mobil Corporation.

“XTO is a leading U.S. unconventional natural gas producer, with an outstanding resource base, strong technical expertise and highly skilled employees. XTO’s strengths, together with ExxonMobil’s advanced R&D and operational capabilities, global scale and financial capacity, should enable development of additional supplies of unconventional oil and gas resources, benefiting consumers both here in the United States and around the world.”

Tillerson said the agreement is good news for the United States economy and energy security, as it will enhance opportunities for job creation and investment in the production of America’s own clean-burning natural gas resources.

XTO’s resource base is the equivalent of 45 trillion cubic feet of gas and includes shale gas, tight gas, coal bed methane and shale oil. These will complement ExxonMobil’s holdings in the United States, Canada, Germany, Poland, Hungary and Argentina.

Following the transaction closing, ExxonMobil intends to establish a new upstream organization to manage global development and production of unconventional resources, enabling the rapid development and deployment of technologies and operating practices to increase production and maximize resource value. The new organization will be located in Fort Worth, Texas, in XTO’s

current offices.

Bob R. Simpson, chairman and founder of XTO, said that over the company's 23-year history, XTO has developed technical expertise and has assembled a substantial, high-quality and diverse resource base in producing basins across the United States.

"XTO has a proven ability to profitably and consistently grow production and reserves in unconventional resources," said Simpson. "As the world's leading energy company, ExxonMobil will build on our success and open new opportunities for the development of natural gas and oil resources on a global basis."

Tillerson said the agreement is part of an ongoing, disciplined evaluation of timely investment opportunities to create value for shareholders, and to help meet long-term global energy demand growth. The agreement is consistent with ExxonMobil's business model which is focused on sustainable, long-term value creation. Completion of the transaction is expected in the second quarter of 2010.

Note: For an in-depth analysis of the meaning of this acquisition and other acquisitions in the natural gas industry, see the Energy Monitor for Q3 & Q4 2009. For information on the Energy Monitor, go to www.worldflow.com.

5. Flow Research will soon publish a study on the worldwide vortex flowmeter market. This study is scheduled for delivery in February 2010, and is called **The World Market for Vortex Flowmeters, 4th Edition**. We plan to reveal how the market has changed since the American Petroleum Institute (API) approved its standard for the use of vortex flowmeters for custody transfer applications. This approval occurred in January 2007. For more information, including an updated study overview, go to www.flowvortex.com. This website also has links to nine articles on vortex flowmeters, including one published in the June 2009 issue of Flow Control. *If you have not yet ordered this study, you can still do so at the pre-publication discount.*

6. Here is our study schedule for this year (drum roll please). By becoming a Founding Sponsor for these studies, you can participate in the research and also receive a significant discount:

- **The World Market for Vortex Flowmeters, 4th Edition** - February 2010 (www.FlowVortex.com)
- **The World Market for Liquid Analytical Instruments** - April 2010 (www.FlowAnalytical.com)
- **The World Market for Gas Flow Measurement, 2nd Edition** - July 2010 (www.GasFlows.com) *Note: Includes three add-on modules on natural gas producers and custody transfer of natural gas.*
- **Volume X: The World Market for Flowmeters, 3rd Edition** - September 2010 (www.floweverything.com) *A new edition of our classic study that includes all types of flowmeters!*

7. Stay up-to-date on developments in the flowmeter and energy industries with a free trial subscription to the Worldflow Monitoring Service. Our Worldflow Monitoring Service includes quarterly reports and timely updates:



- **Market Barometer** – A quarterly report on the flow, temperature, and pressure markets
- **Energy Monitor** – A quarterly report on the oil & gas, refining, power, and renewables industries
- **Flash Reports** – Breaking news in instrumentation and energy
- **White Papers** – In-depth analysis of important issues
- **Worldflow Online** – 24/7 access to market data, strategies, and past Worldflow reports going back to 2002

The Worldflow Monitoring Service features a website, www.worldflow.com, which serves as the launching pad for Worldflow Online. To receive a free trial subscription

to this valuable service, go to www.worldflow.com and fill out the Free Trial Subscription Form, or send an email to info@flowresearch.com with your contact information. Please be sure to include your mailing address when requesting a free trial subscription.

*What do you think of **FlowTimes**? We welcome your comments! Please send any comments or suggestions to jesse@flowresearch.com.*

FlowTimes is published by Flow Research, Inc.

Editor:

Dr. Jesse Yoder – jesse@flowresearch.com

Associate Editors:

Belinda Burum – belinda@flowresearch.com

Norm Weeks – norm@flowresearch.com



Flow Research, Inc.

27 Water Street

Wakefield, MA 01880

[1] 781- 245-3200

[1] 781- 224-7552 (fax)

info@flowresearch.com

www.flowresearch.com