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## Volume X: The World Market for Flowmeters, 3<sup>rd</sup> Edition

## **Overview**



### Data gathered from contacts with over 365 people at 270 flow companies

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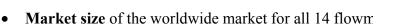
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#### Another 'instant classic' from Flow Research

#### **Volume X: The World Market for Flowmeters, 3rd Edition**

For the first time in many years, you can profit from comprehensive market research on the worldwide flowmeter market – all in one place. *The World Market for Flowmeters,*  $3^{rd}$  *Edition,* is the most complete picture ever presented of the worldwide flowmeter market. This new study, being published in August, includes both new-technology and traditional technology flowmeters, as well as emerging flow technologies of sonar and optical. We have contacted more than 365 people at 270 flow companies to gather this information for you. This full-color study includes:



- Market size **forecasts** for each flowmeter type through \_\_\_\_\_
- Market shares for each flowmeter type in 2009 with annual forecasts through 2014
- Both worldwide and regional market size and market share data
- A **technology description and analysis** for each flowmeter type, including major competitive strengths and weaknesses
- A product line analysis for all of the major manufacturers of each technology type
- Company profiles with product information for easy comparison
- Informative selling strategies for companies already in a market segment, or planning to enter one

#### Why we are publishing this study

Although 2009 was a down year for many companies, the flowmeter market began improving in the fourth quarter of that year. We see strong evidence of significant growth in 2010, in part due to continued growth in the energy markets and demand for instrumentation in China and India. In addition, suppliers have released a steady stream of new products, especially for new-technology flowmeters. It was time to take a fresh look at the worldwide flowmeter market to determine the amount of growth that has occurred, and to see how the different technologies compare with each other today. We will also determine how the economic downturn has impacted the market.



The view from 20,000 feet

#### Segmentation covers what our clients want

Our research shows that the 2007 global market for flowmeters was just over US\$4.5 billion. That's a big market! In order to make this market more understandable, we have divided it into three flowmeter groups. From there, we've looked at each of the flowmeter technologies individually. Then we've listened to what our clients have told us is the most important market segmentation for each technology.



Taking a closer look

For instance, the Coriolis, ultrasonic, and vortex chapters gives the breakdown between liquid, gas, and steam. The magnetic market is

divided between wafer, flanged, and insertion types. All flowmeter technologies are treated in similar detail, including a basic set of segmentations for each flowmeter technology, as well as segmentations specific to each flowmeter technology.

The study provides worldwide geographic breakouts provided for each flowmeter technology:

- North America
- Europe (including Central Europe and the FSU)
- Japan
- Asia without Japan
- Rest of World (Latin America, Africa, Middle East)

The following market segments are common to each flowmeter technology chapter:

- Market size in dollars and units
- Manufacturer market shares
- Average selling prices by region
- Technology analysis
- Product summaries by major manufacturer
- Supplier tables by fluid, hardware, or technology

#### Market segmentations specific to individual flowmeter technologies

- Coriolis Flowmeters Liquid, gas, steam
- Magnetic Flowmeters
  Wafer, flanged, and insertion
- Ultrasonic Flowmeters Liquid, gas, and steam
- Vortex Flowmeters
  Multivariable, smart, conventional
- Thermal Flowmeters
  Liquid, gas
- Differential Pressure Transmitters Liquid, gas, steam

- Primary Elements Shipments by type
- Positive Displacement Flowmeters Municipal water, muni/ind gas, oil, ind liquids
- Turbine Flowmeters Municipal water, muni/ind gas, oil, ind. liquids
- Open Channel Flowmeters Shipments by type
- Variable Area Flowmeters Liquid, gas, steam
- Target Flowmeters Average selling prices by region

#### New, traditional and emerging technology

The study focuses on three flowmeter groups and their flowmeter technologies:

- New-technology: Coriolis, magnetic, ultrasonic, vortex, thermal
- Traditional technology: differential pressure (DP), primary elements, positive displacement (PD), turbine, open channel, variable area, target
- Emerging technology: optical, sonar

An overview chapter on each of the flowmeter groups includes valuable summary data. For example, the New-Technology overview chapter provides technology descriptions, compares new-technology flowmeters to the DP standard, describes the paradigm case method and its several criteria, and details new-technology flowmeter shipments on a worldwide and regional basis. Our paradigm case method of analysis determines the most suitable applications for each flowmeter type – and is backed up with our customer survey results, extensive supplier questionnaires, and other elements of our longterm involvement in the instrumentation field.

The chapter treatments on traditional and emerging technologies are equally as detailed. There are also individual chapters for each of the new-technology and traditional technology flowmeters.

*The World Market for Flowmeters* contains updated 2009 data for each flowmeter type from individual studies Flow Research has conducted over the years. Our method has always been to use a bottom-up approach when analyzing any market. In this way, we are able to both confirm what we believe we already know as well as discover important new trends. Our success is based upon identifying what is new and comparing this information with our long term knowledge of the market under study. We report all of our findings to you.

#### Selling strategies forecast best areas for growth

Company strategies apply to the entire flowmeter market, as well as to individual product lines. Tactical and strategic recommendations are included for suppliers in each market segment. A world view of the market forecasts the best areas for future growth.

#### Key issues addressed in this study

- Growth in the ultrasonic market, especially in custody transfer applications
- Comparison of DP flowmeters and primary elements to other flowmeter markets
- Impact of the expanding oil & gas industries on the flowmeter markets
- Effects of growth in China, India, and other developing countries on global markets
- Continued expansion of magnetic and vortex flowmeter opportunities and markets
- Impact of new-technology flowmeters on the turbine and positive displacement markets
- Continued growth of the Coriolis flowmeter market
- Mergers and acquisitions in the worldwide flowmeter market
- Impact of new standards, such as the API standard for vortex in custody transfer

#### Supplier information helps you compare manufacturer offerings

Detailed company profile information of all major suppliers into each of the individual flowmeter markets includes a product analysis – manufacturer by manufacturer – that allows you to quickly compare the product lines of all major suppliers. There is no other report available today with this critical information combined into a single comprehensive view of the market.

The company profiles include important data such as contact information, revenues, product lines, company history, recent acquisition activity, and sales strategies. Each company's flowmeter product line is summarized in easy-to-read charts which include Series and Model names and designations. Sales strategies include descriptions of operating geographies, and the strengths and weaknesses of the firm's product offering within the context of their market.

#### **Company Profiles**

We provide company profiles on the leading 35 flowmeter suppliers:

- ABB Automation Products GmbH
- Badger Meter
- Bopp & Reuther Messtechnik GmbH
- Brooks Instrument
- Cameron Measurement Systems
- Danaher: McCrometer /Hach
- Dresser
- Emerson Process Management: Rosemount, Bristol, Daniel, MicroMotion
- Elster-Instromet
- Endress+Hauser
- FCI
- FMC Technologies
- Foxboro (Invensys Group)
- Fuji Electric
- GE Measurement & Control Solutions
- Honeywell
- IDEX
- Itron
- KROHNE

- OVAL Corporation
- Racine Federated Inc
- Roper Industries: Neptune Technology Group/Flow Technology
- Sensus
- SICK AG
- Siemens
- Sierra Instruments Inc.
- SMAR
- Spirax-Sarco Limited
- Thermo Fisher Scientific
- Tokimec
- Tokyo Keiso
- Toshiba
- Veris Inc.
- Yamatake (azbil)
- Yokogawa Corporation

#### Make great decisions with the our data

As you know, having the best information available on a subject helps you make the best decisions. Flow Research has always been a source of reliable, accurate data that companies can trust whether they are making an instrument purchase decision or are assessing a merger or acquisition opportunity.

This study will quickly bring any reader up-to-speed on the global flowmeter market and its many components. Here are a few of the ways businesses tell us they use our studies to succeed:

- Compare growth rates and market sizes of different flow technologies
- Gain a worldwide perspective of competing suppliers in an industry, market, or technology
- Make an informed choice when in a product purchasing mode
- Use as a training or educational document
- Quickly survey merger and/or acquisition targets
- Accurately forecast market demand for the many flowmeter technologies
- Understand the technical differences between new, traditional, and emerging technologies
- Have a reference standard of competitive technologies and models

#### Table of Contents: The World Market for Flowmeters, 3<sup>rd</sup> Edition

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Dr. Jesse Yoder visits Abu Dhabi

### Why you must have this study

- Stay current with up-to-the-minute data on flowmeter shipments
- Understand how the 14 flow technologies stack up against each other
- Benefit from knowledge gleaned from 18 years of data and 100+ studies
- Be among the first to own an "instant classic" at a price you can afford
- Capitalize on insights from onsite visits to suppliers and end-users in the Middle East, Europe, and the United States
- Learn strategies to help you build your product line
- Assess your competitive positions with detailed company profiles

plus

150+ amazing charts and tables like this one:

Millions of Dollars	2009	2010	2011	2012	2013	2014	CAGR
Coriolis	XXX.X	XXX.X	xxx.x	XXX.X	XXX.X	XXX.X	x.x %
Magnetic	XXX.X	XXX.X	xxx.x	x,xxx.x	x,xxx.x	x,xxx.x	x.x %
Ultrasonic	XXX.X	XXX.X	XXX.X	XXX.X	XXX.X	XXX.X	x.x %
Vortex	xxx.x	XXX.X	XXX.X	XXX.X	XXX.X	XXX.X	x.x %
Thermal	xx.x	XX.X	XX.X	XX.X	XX.X	XXX.X	x.x %
Diff. Pressure	xxx.x	XXX.X	xxx.x	XXX.X	XXX.X	XXX.X	x.x %
Primary Elements	xxx.x	XXX.X	XXX.X	XXX.X	XXX.X	XXX.X	x.x %
Pos. Displacement	xxx.x	XXX.X	xxx.x	XXX.X	XXX.X	XXX.X	x.x %
Turbine	XXX.X	XXX.X	XXX.X	XXX.X	XXX.X	XXX.X	x.x %
Open Channel	XXX.X	XXX.X	xxx.x	XXX.X	XXX.X	XXX.X	x.x %
Variable Area	xxx.x	XXX.X	XXX.X	XXX.X	XXX.X	XXX.X	x.x %
Target	X.X	X.X	X.X	X.X	X.X	X.X	x.x %
Total	x,xxx.x	x,xxx.x	x,xxx.x	x,xxx.x	x,xxx.x	x,xxx.x	x.x%

## Shipments of All Flowmeters Worldwide by Technology (Millions of Dollars)

### The Flow Research Founding Sponsor Program

It's not too late to become a Founding Sponsor for Volume X: The Worldwide Market for Flowmeters,  $3^{rd}$  Edition – or our other upcoming studies – and enjoy a significant discount.



Blaise Pascal – philosopher, inventor, mathematician, writer

Flow Research instituted the Founding Sponsor Program to produce studies that most closely match our clients' needs. This program enables companies who wish to participate at a high level in a study's research to influence its scope and segmentation. In addition, Founding Sponsors receive regular updates from Flow Research on study progress, and receive a significant discount on the regular price of the study.

Procedure: Early in the planning phase of a study, Founding Sponsors receive a proposal that includes the proposed segmentation. Founding Sponsors can propose additional segmentation, and can also suggest changes to the proposed segmentation. While the decision to adopt particular segmentation ultimately lies with Flow Research, and is based on input from all contributors, we will do our best to accommodate the specific needs of each of our clients.

During the research phase of a study, Flow Research will issue regular reports that provide updates on the progress of the research. These reports will be sent to Founding Sponsors, who are then invited to provide any additional input or comments into the study.

Being a Founding Sponsor requires making an early commitment to purchase the study. However, in return, Founding Sponsors receive a significant discount off the regular price of the study. Payment can be made either in one amount at the beginning of the study, or split into two, with the second payment due upon delivery of the study.

For additional details, or to find out how the Founding Sponsor program applies to any particular study, please contact Flow Research. We look forward to working with you!

If you have any questions about the Founding Sponsor program, please contact Jesse Yoder at (781) 245-3200, or jesse@flowresearch.com.

#### Flow Research studies contribute to an ongoing view of the flowmeter market

Listed below is a summary of Flow Research studies completed during the last few years in the area of process control instrumentation. Conducting these studies has contributed to our understanding of the flowmeter technologies included in *Volume X: The World Market for Flowmeters*, 3<sup>rd</sup> Edition. These studies are further described at www.flowresearch.com/flow.htm

Volume I: The World Market for Coriolis Flowmeters, 3rd Edition (September 2008) Volume II: The World Market for Magnetic Flowmeters, 4th Edition (May 2009) Volume III: The World Market for Ultrasonic Flowmeters, 3rd Edition (January 2008) Volume IV: The World Market for Vortex Flowmeters, 3rd Edition (July 2010) Just released Volume V: The World Market for DP Flowmeters and Primary Elements (January 2007) Volume V-A: The World Market for DP Flow Transmitters (September 2007) Volume V-B: The World Market for Primary Elements (September 2007) Volume VI: Worldwide Survey of Flowmeter Users, 2nd Edition (January 2006) Volume VII: The World Market for Positive Displacement Flowmeters (Q4, 2010)\*\* Volume VIII: The World Market for Turbine Flowmeters (Q3, 2010)\*\* Volume IX: The World Market for Pressure Transmitters, 2nd Edition (October 2007) Volume X: The World Market for Flowmeters (August 2010)\*\* Volume XI: The World Market for Gas Flow Measurement, 2<sup>nd</sup> Edition (September 2010)\*\* Volume XII: The World Market for Steam Flow Measurement (March 2008) Volume XIII: The World Market for Mass Flow Controllers (July 2008) Volume XIV: The World Market for Thermal Flowmeters (October 2009)

#### \*\*Studies in progress

#### What are New-Technology Flowmeters?

New-Technology flowmeters include Coriolis, magnetic, ultrasonic, vortex, and thermal technologies. They share four features:

- 1. They have been introduced since 1950.
- 2. They incorporate technological advances that avoid some of the problems inherent in earlier flowmeters.
- 3. They are the focus of more of the product development efforts undertaken by the major manufacturers.
- 4. Their measured performance, especially accuracy, is superior to that of Traditional Technology meters on a standard basis.

New-Technology meters have enhanced features, including self-diagnostics, and will make use of up-to-date communication protocols such as HART, Foundation Fieldbus<sup>TM</sup>, and Profibus. New-Technology meters have other advantages as well, including few or no moving parts, and reduced pressure drop.

Traditional Technology flowmeters include differential pressure, open channel, positive displacement, target, turbine, and variable area technologies.

## Volume X: The World Market for Flowmeters 3<sup>rd</sup> Edition



Rotana Beach, Abu Dhabi Photo by Flow Research

# We have contacted over 365 people at 270 flow companies worldwide to gather updated data for this study.



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#### Why Flow Research?

- We specialize in flowmeter markets and technologies
- We have researched all flowmeter types
- We study suppliers, distributors, *and* end-users
- Our worldwide network of contacts provides a unique perspective
- Our mission is to supply the data to help your business succeed