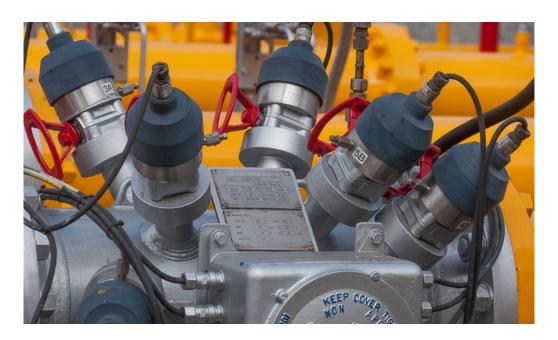
## The World Market for Ultrasonic Flowmeters, 7<sup>th</sup> Edition

Flow Research covers this fast-growing market in three parts: a Core Study and two Modules that analyze the Inline, Clamp-On, and Insertion markets.

Choose the modules that best fit your needs!

#### — OVERVIEW —



## Publication Date: December 2023



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#### **Worldwide Ultrasonic Flowmeter Studies**

Flow Research is working on a new set of three market studies on the worldwide ultrasonic flowmeter market, one of the most dynamic flowmeter markets. These studies will determine the size of the ultrasonic flowmeter market in 2022 and forecast its market size through 2027:

- Core Study: The World Market for Ultrasonic Flowmeters, 7th Edition
- Module A: The World Market for Inline Ultrasonic Flowmeters
- Module B: The World Market for Clamp-on and Insertion Ultrasonic Flowmeters

We believe Flow Research is the only company to provide such a comprehensive analysis of the worldwide ultrasonic flowmeter market.

## Why three studies? See the forest and the trees.

The ultrasonic flowmeter market is unique in that it consists of three distinct CORE STUDY
The World Market
for Ultrasonic
Flowmeters

MODULE A
The World Market
for Inline
Ultrasonic
Flowmeters

MODULE B
The World Market
for Clamp-on and
Insertion Ultrasonic
Flowmeters

types (inline, clamp-on, and insertion) with fundamentally different applications and industries. Some companies manufacture only one or two of the three types. We divide the research results into a Core Study and two Modules, and analyze the inline, clamp-on, and insertion markets individually.

By separating the data into individual studies, we can provide much more information than in a single study on the entire market – and you can choose detailed research on only the flowmeter types that you manufacture or interest you. This method enables us to separate out unit price and unit quantity data for each technology, and provide a distinctive analysis for each of these three fundamentally different ultrasonic flowmeter types.

#### The three studies offer:

- Market size for all types of ultrasonic flowmeters in 2022 and 2023 worldwide and by region
- Market shares for all types of ultrasonic flowmeters in 2022 worldwide and by region
- Market growth and forecasts for all types of ultrasonic flowmeters through 2027
- Industries and applications where ultrasonic flowmeters are currently used, and areas of new market growth
- Product analyses for the main companies selling into the ultrasonic flowmeter market
- Supplier strategies for selling into the ultrasonic flowmeter market
- Company profiles of the main ultrasonic flowmeter suppliers

#### **Rationale for Studies**

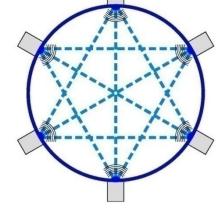
The dynamic ultrasonic flowmeter market is driven in part by the expanding market for custody transfer of natural gas – a segment where ultrasonic flowmeters excel. Both user interest and market growth are strong in ultrasonic as well as other new-technology process control instrumentation: Coriolis, magnetic, vortex, and thermal flowmeters.

We have followed the new-technology flowmeter market closely since 2000. We completed our first ultrasonic study in 2001, followed by the 2<sup>nd</sup> Edition in 2003, the 3<sup>rd</sup> Edition in 2008, the 4<sup>th</sup> Edition in 2013, the 5<sup>th</sup> Edition in 2017, and the 6<sup>th</sup> Edition in 2021. This 7<sup>th</sup> Edition of our ultrasonic studies set builds on the knowledge gained over the years, but also represents a completely fresh look at the market.

#### **Technology Differences**

One important issue we will explore is the contrast in growth between **transit time** and **Doppler** flowmeters. While Doppler flowmeters remain an excellent solution for dirty liquids, transit time flowmeters have been showing faster growth in recent years. Much of the new product development is going into transit time meters. Transit time flowmeters are typically more accurate than Doppler meters, and multipath transit time meters have become more widely used for custody transfer of natural gas.

These studies also will analyze the market for **multipath** ultrasonic meters for both gas and liquid, and segment this market by number of paths. The ultrasonic flowmeter market for custody transfer of natural gas is one of the fastest growing markets within flow. We expect multipath meters for petroleum liquids to continue to show significant growth.



End view illustration of an ultrasonic flowmeter showing 9 of its 18 non-parallel paths

#### Key issues we plan to address

- Contrast in growth between transit time and Doppler flowmeters
- The market for multipath ultrasonic meters segmented by number of paths
- Contrast between inline, clamp-on, and insertion ultrasonic flowmeter growth
- Comparisons of portable vs. fixed clamp-on ultrasonic flowmeters
- Expanding use of ultrasonic flowmeters for custody transfer of natural gas
- New entrants in the ultrasonic flowmeter market
- Mergers and acquisitions in the ultrasonic flowmeter market

## **Core Study:** The World Market for Ultrasonic Flowmeters

The **Core Study** is designed to provide a comprehensive view of the entire ultrasonic flowmeter market, and to combine the most important segmentation data of the inline (spoolpiece), insertion, and clamp-on components of this market. It includes all three submarkets of the worldwide ultrasonic flowmeter market:

**CORE STUDY** 

The World Market for Ultrasonic Flowmeters

- Inline ultrasonic flowmeters
- Clamp-on ultrasonic flowmeters
- Insertion ultrasonic flowmeters

The study presents high-level data on the three submarkets and combines the totals into a single ultrasonic flowmeter market view. So, if you need to know the geographic breakout of the total ultrasonic market, rather than only the geographic breakout for clamp-on meters, then the Core Study will provide that answer. Likewise, if you need to know the segmentation by fluid type or by industry for the total ultrasonic market, you can find the answers in the Core Study.

#### **Study Organization**

The Core Study bases its segmentation on the worldwide findings of the two companion standalone studies, Modules A (inline) and B (clamp-on and insertion), which provide more detailed segmentation. It segments the three technologies by eight geographic regions and presents worldwide totals for each of the technologies. We also include the average selling price for ultrasonic flowmeters worldwide and by region. The Core Study reviews nine other flowmeter technologies, shares growth factors relevant to ultrasonic flowmeters, and provides product analysis for each of the major suppliers.

The study provides worldwide market size data for 2022 and 2023 in both dollars and units for each of the three ultrasonic technologies and by geographic region. It also provides forecast data for each technology type both worldwide and by region for each year of the study period from 2022 through 2027. Market data includes CAGR (compound average growth rates) for each region through 2027. While 2023 is not complete, many companies can project their totals for this year.

#### Segmentation

#### **Geographic Segmentation**

- North America (United States and Canada)
- Western Europe
- Eastern Europe / Former Soviet Union (FSU)
- Mideast / Africa
- Japan
- China
- Asia / Pacific (including India)
- Latin America (Mexico, Central and South America)



#### Shipments of All Ultrasonic Flowmeters Worldwide and by Region

#### **Type**

- Inline
- Clamp-on
- Insertion

#### **Average Selling Price**

- Worldwide
- By Region

#### Fluid Type

- Petroleum Liquids
- Non-petroleum Liquids
- Gas
- Steam

## Market Shares of Ultrasonic Flowmeter Manufacturers

- Worldwide
- Inline
- Clamp-on
- Insertion

#### **Industry**

- Oil & Gas
- Refining (refineries, gas processing)
- Chemical
- Food & Beverage
- Pharmaceutical
- Pulp & Paper
- Metals & Mining
- Power
- Water & Wastewater
- Other

## **Inline Ultrasonic Flowmeters by Distribution Channel**

- Direct Sales
- Independent Representatives
- Distributors
- E-Business

#### Clamp-on and Insertion Ultrasonic Flowmeters by Distribution Channel

CORE STUDY
All Ultrasonic
Flowmeters

- Direct Sales
- Independent Representatives
- Distributors
- E-Business

#### **Inline Ultrasonic Flowmeters by Customer Type**

- End-users
- Original Equipment Manufacturers (OEMs)
- Systems Integrators
- Engineers/Consultants

## Clamp-on and Insertion Ultrasonic Flowmeters by Customer Type

- End-users
- Original Equipment Manufacturers (OEMs)
- Systems Integrators
- Engineers/Consultants

#### **Strategies for Success**

- Competitive points of product emphasis
- Discussion of market forces at work
- Pursuing new applications
- Technical developments
- Customer education and other market strategies and tactics
- Acquisitions and product partnerships
- Forming alliances to enhance product offerings

#### **Company Profiles**

- Business profiles of the main suppliers of ultrasonic flowmeters
- Histories, current organization
- Overall product line summaries
- Ultrasonic flowmeter product line descriptions

CORE STUDY
All Ultrasonic
Flowmeters

## The following are some of the many companies we are profiling in the Core Study and Modules A and B:

- Anhui Jujie Automation Technology
- Badger Meter
- Baker Hughes: Panametrics
- Eastech Flow Controls
- Emerson Automation Solutions
- Endress+Hauser
- Faure Herman Ultraflux
- FLEXIM
- Fluenta
- FTI Flow Technology, Inc.
- Fuji Electric
- GF Piping Systems
- Goldcard Smart Group
- GWF
- Honeywell Elster
- Höntzsch

- IDEX Corporation: Accusonic
- KROHNE
- OVAL Corporation
- Rittmeyer
- RMG
- Sensia
- SICK
- Siemens
- Tecfluid
- TechnipFMC
- Tokyo Keiki
- Tokyo Keiso
- Vortek Instruments
- XSENS Technologies
- And more

Publication Date
Core Study:
The World Market for
Ultrasonic Flowmeters, 7th
Edition

Q4 2023

#### Flow Research Gold Partner Program

By becoming a Gold Partner, you can enjoy a significant discount on the regular price of the study.

Being a Gold Partner requires making an early commitment to purchase the study, but you can make payments 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 more details, please contact Jesse Yoder at +1 781 245-3200 or jesse@flowresearch.com.

## **Module A:** The World Market for Inline Ultrasonic Flowmeters

The inline market is quite different from the clamp-on and insertion markets in applications, industries, price points, and many other factors. By isolating the inline (spoolpiece) market from the clamp-on and insertion markets, we provide a much more compelling and informative analysis.

MODULE A
Inline
Ultrasonic
Flowmeters

Multipath inline ultrasonic flowmeters are especially important in the fast-growing market for custody transfer of natural gas. In this module we analyze the inline market in terms of dollar and unit shipments worldwide and by region, as well as by average selling prices worldwide and by region.

This study provides segmentation for 15 categories:

- Technology Type
- Single/Dual Path Transit Time
- Multipath Transit Time
- Mounting Type
- Single and Dual Transmitters
- Fluid Type
- Intelligence Level
- Communication Protocol
- Petroleum Liquids Applications
- Non-petroleum Liquids Applications
- Gas Applications
- Line Size
- Industry
- Distribution Channel
- Customer Type

## What's in this for your company?

- See the emerging applications and where the growth is
- Understand world and regional markets
- Get to know your real competition
- Learn what other suppliers manufacture, where, and for whom
- Rely on the best information for the best decisions

#### Module A: Worldwide Data Segmentation

All segmentation for this inline ultrasonic flowmeter study is provided worldwide as well as by the eight geographic regions below, with forecast data through 2027.

#### **Geographic Segmentation**

- North America (United States and Canada)
- Western Europe
- Eastern Europe/FSU (Former Soviet Union)
- Mideast/Africa
- Japan
- China
- Asia/Pacific (including India)
- Latin America (Mexico, Central and South America)

## Shipments of Inline Ultrasonic Flowmeters Worldwide and by Region in Revenues and Units

Worldwide and by Region by Technology Type

- Transit Time Single Path / Dual Path
- Transit Time Multipath

Plus individual segments for **Shipments of each of the Technology Types above** Worldwide and by Region

#### Average Selling Prices of All Inline Ultrasonic Flowmeters Worldwide and by Region

## Average Selling Prices of Inline Ultrasonic Flowmeters Worldwide by Region by Technology

- Transit Time Single Path/Dual Path
- Transit Time Multipath

## **Shipments of Inline Ultrasonic Flowmeters Worldwide by Mounting Type**

- Wafer
- Flanged
- Other

## Market Shares of Inline Ultrasonic Flowmeter Manufacturers

• Worldwide and by geographic region

## **Shipments of Inline Ultrasonic Flowmeters Worldwide by Configuration**

- Single transmitter
- Dual transmitter

## **Shipments of Inline Ultrasonic Flowmeters Worldwide and by Region**

#### **Intelligence Level**

- Smart
- Conventional

#### **Communication Protocol (smart meters)**

- HART (wired)
- Foundation Fieldbus<sup>™</sup>
- Profibus®
- Modbus
- Ethernet
- Wireless
- Other







#### (Inline Ultrasonic Flowmeters continued)

#### Fluid Type

- Petroleum Liquids
- Non-petroleum Liquids
- Gas
- Steam

#### **Petroleum Liquid Applications**

- Custody Transfer of Petroleum Liquids
- Check Metering
- Leak Detection (upstream / midstream / downstream)
- Liquefied Natural Gas (LNG) including custody transfer and other applications
- In-plant Process Measurement
- Other

#### **Non-petroleum Liquid Applications**

- Custody Transfer of Non-petroleum Liquids
- Check Metering
- Water Treatment/Disposal/Reinjection of Oil/Gas Wells
- In-plant Process Measurement
- Batch / Filling
- Other

#### **Industry**

- Upstream Oil & Gas
- Midstream Oil & Gas
- Refining (Oil / Gas Processing / Treatment)
- Downstream Oil & Gas (transportation, distribution)
- Chemical
- Food & Beverage
- Pharmaceutical
- Pulp & Paper
- Metals & Mining
- Power
- Water & Wastewater
- Other





#### **Gas Applications**

- Custody Transfer of Natural Gas
- Check Metering
- Leak Detection
- Process Measurement
- Compressed Natural Gas (CNG)
- Flare / Stack Gas Flow Measurement
- Other

#### Line Size

- < 2 inches
- > 2-4 inches
- > 4-8 inches
- > 8-12 inches
- > 12-24 inches
- > 24 inches

#### **Distribution Channel**

- Direct Sales
- Independent Representatives
- Distributors
- E-Business

#### **Customer Type**

- End Users
- Original Equipment Manufacturers (OEMs)
- Systems Integrators
- Engineers/Consultants

#### **Strategies for Success**

- Growth factors and technologies effecting change in the market
- Strategies for selling into the competitive inline ultrasonic flowmeter market

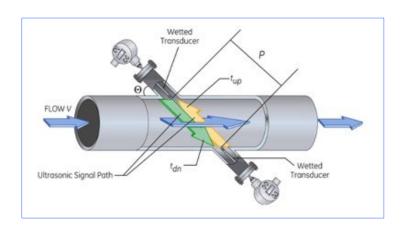
## **Company Profiles of the main suppliers of inline ultrasonic flowmeters**

- Histories, current organization, overall product line summaries
- Inline ultrasonic flowmeter product line descriptions
- Company strategies

#### **Publication Date:**

**Module A:** The World Market for Inline Ultrasonic Flowmeters

Q4 2023





Christian Doppler

# Module B: The World Market for Clamp-on and Insertion Ultrasonic Flowmeters

Clamp-on devices are highly versatile. They can be used as portable or fixed meters for economical meter upgrades, as check meters, and in a host of other applications. Insertion devices permit users to obtain the benefits of ultrasonic technology in virtually any line size.

MODULE B
Clamp-on and
Insertion
Ultrasonic
Flowmeters

The segmentation in *Module B*: The World Market for Clamp-On and Insertion Ultrasonic Flowmeters, will provide a comprehensive view of these two ultrasonic flowmeter technologies, their markets, and their unique qualities and advantages.

#### Module B: Worldwide Data Segmentation

All segmentation will be provided worldwide as well as by the eight geographic regions below, with forecast data provided through 2027. This study will provide a **separate section** of segmentation **for clamp-on** ultrasonic flowmeters **and** a **separate section** of segmentation **for insertion** ultrasonic flowmeters.

*Note:* **Distribution Channels** and **Customer Types** for clamp-on and insertion ultrasonic flowmeters combined are included in the Core Study segmentation.

#### **Geographic Segmentation**

- North America (United States and Canada)
- Western Europe
- Eastern Europe/FSU (Former Soviet Union)
- Mideast/Africa
- Japan
- China
- Asia/Pacific (including India)
- Latin America (Mexico, Central and South America)

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#### **Clamp-On Ultrasonic Flowmeters**

Shipments of Clamp-On Ultrasonic Flowmeters Worldwide and by Region Technology

- Transit Time Single/Dual Path
- Transit Time Multipath
- Doppler

Plus individual segments for **Shipments of each of the Technology Types above** Worldwide and by Region

#### (Clamp-On Ultrasonic Flowmeters continued)

#### **Average Selling Prices**

• Average selling prices for all eight regions

#### **Average Selling Prices by Technology Type**

- Transit Time Single/Dual Path
- Transit Time Multipath
- Doppler

#### **Mounting Type**

- Portable
- Fixed

#### Fluid Type

- Petroleum Liquids
- Non-petroleum Liquids
- Gas
- Steam

#### **Liquid Applications**

- Check Metering
- Leak Detection (upstream / midstream / downstream)
- Liquefied Natural Gas (LNG) including all applications
- In-plant Process Measurement
- Other

#### **Industry**

- Upstream Oil & Gas (exploration & production)
- Midstream Oil & Gas (from upstream to refining/processing facility)
- Refining
- Downstream Oil & Gas (refined product transportation and distribution)
- Chemical
- Food & Beverage
- Pharmaceutical
- Pulp & Paper
- Metals & Mining
- Power
- Water & Wastewater
- Other

#### Market Shares for Leading Suppliers of Clamp-on Ultrasonic Flowmeters

- Worldwide
- For each geographic region





#### **Insertion Ultrasonic Flowmeters**

#### **Geographic Segmentation**

- North America (United States and Canada)
- Western Europe
- Eastern Europe/Former Soviet Union (FSU)
- Mideast/Africa
- Japan
- China
- Asia/Pacific
- Latin America (Mexico, Central and South America)

#### Shipments of Insertion Ultrasonic Flowmeters Worldwide and by Region

#### **Technology**

- Transit Time Single/Dual Path
- Transit Time Multipath
- Doppler

Plus individual segments for Shipments of each of the Technology Types above

#### **Average Selling Prices**

• Worldwide by all eight regions

#### and by Technology Type

- Transit Time Single/Dual Path
- Transit Time Multipath
- Doppler

#### Fluid Type

- Petroleum Liquids
- Non-petroleum Liquids
- Gas
- Steam

#### Industry

- Oil & Gas
- Refining
- Chemical
- Food & Beverage
- Pharmaceutical
- Pulp & Paper
- Metals & Mining
- Power
- Water & Wastewater
- Other

#### Application

- Check Metering
- Flare/Stack Gas Flow Measurement
- In-plant Process Measurement
- Other

## Market Shares for Leading Suppliers of Insertion Ultrasonic Flowmeters

- Worldwide
- For each geographic region

#### **Strategies for Success**

- Growth factors and technologies effecting change
- Strategies for selling into the competitive clamp-on and insertion markets



#### **Company Profiles**

- Business profiles of the main suppliers of clamp-on and insertion ultrasonic flowmeters
- Histories, current organization, overall product line summaries
- Clamp-on and insertion ultrasonic flowmeter product line descriptions
- Company strategies



#### **Publication Date**

Module B:
The World Market for Clamp-on and
Insertion Ultrasonic Flowmeters
Q4 2023



www.FlowUltrasonic.com

#### Seven reasons to sign up for these studies today!

- 1,200+ pages in the three studies with a complete analysis of the inline, clamp-on, and insertion ultrasonic flowmeter markets.
- Only market research study available that clearly separates the data on the inline, clamp-on, and insertion ultrasonic flowmeter markets.
- Backed up by 20+ years of research into the ultrasonic and competing flowmeter markets.
- Completely analyzes the ultrasonic flowmeter market, including market size, market forecasts, market shares, strategies for success, and supplier profiles.
- We visit our clients for in-person interviews and to see the production and calibration facilities. We have visited clients multiple times in the United States, Europe, the Middle East, and Australia.
- We attend industry conferences for in-person contact and to track the latest developments. This year so far we attended the MCAA Industry Forum (Arlington, Texas) and the CEESI Gas Ultrasonic Conference (Colorado Springs, Colorado).
- Brought to you by Flow Research, the world's leading market research company on flowmeters and instrumentation.

#### Flow Research, Inc.

Flow Research is the only market research company that publishes studies on all nine flowmeter types and whose primary mission is to research process control instrumentation markets. In addition to studies on both new and conventional flowmeter types, we have researched pressure transmitters; temperature sensors and transmitters, infrared thermometers and thermal imagers; level devices; analytical instrumentation; and selected API-certified valves. We also publish studies on oil & gas and other major flowmeter markets. In addition, Flow Research started a working group on flowmeter calibration (FRWG.org) and published two studies on flowmeter calibration facilities, one each for liquids and gas.

#### **Partnerships and Alliances**

Flow Research helps flowmeter companies form alliances and partnerships to provide specific solutions or broaden their customer base and distribution channels. These partnerships can include manufacturers of valves, hoses, transmitters, or other flow-related products, as well as other flowmeter manufacturers.



Dr. Jesse Yoder, president and founder of Flow Research

#### **Distributorships**

Are you thinking about expanding your presence in the U.S.? We can help you find distributors for your flowmeters and other instrumentation.

#### **Custom Projects**

Companies commission us for custom projects when they want more detailed information on a specific subject than is possible in an off-the-shelf report. They may be evaluating the future or expansion of a product line, determining whether to acquire or merge with another company, or seeking to better understand their customer needs.

#### Consulting

We also work with companies individually to formulate strategies that help them succeed in an increasingly complex world. Dr. Yoder and his team have studied hundreds of companies and have advised most of the top flowmeter suppliers on market and product strategies.

#### **Research Team Background**

**Dr. Jesse Yoder**, the lead analyst for this study, is President of Flow Research Inc., which he founded in 1998. He has worked as a writer and analyst in process control and instrumentation since 1987 and has created market research studies since 1990. Since then he has written over 280 market research studies, most of them on flow and instrumentation, and over 300 articles on flow and instrumentation for trade journals. (See <a href="https://www.flowarticles.com">www.flowarticles.com</a>.)

Dr. Yoder received a PhD in philosophy from the University of Massachusetts Amherst in 1984 and spent 10 years as an adjunct philosophy professor at the University of Massachusetts Lowell

and Lafayette College. Dr. Yoder also worked 10 years as a technical writer, including for the process control division of Siemens, and taught technical writing at Northeastern University and the UMass Lowell.

Dr. Yoder has received two U.S, patents for the flowtube meter, a new dual tube/dual sensor method of measuring flow, in 2015 and 2017. This meter's two prototypes have been tested at CEESI in Nunn, Colorado.

CRC Press published Dr. Yoder's two-book set, <u>Advances in Flowmeter Technology</u>, on the history, operating principles, growth factors, representative companies, and frontiers of research for all 10 types of flowmeters. The first volume, <u>New-Technology Flowmeters</u>, published September 6, 2022, was followed by <u>Conventional Flowmeters</u> on December 15.

In 2015, ISA published Dr. Yoder's book, <u>The Tao of Measurement</u>, with Richard E. Morley as co-contributor. Topics included temperature, pressure, flow, time, length, and area.



Belinda Burum

**Belinda Burum**, Vice President, joined Flow Research in 2002. Since then, she has served as senior strategic advisor and been involved with most of our projects and publications. She has also worked as a writer and editor in journalism, advertising, and high tech marketing communications and customer references for 40+ years in the U.S. and Switzerland and is a published author and book editor. She has travelled extensively and enjoyed teaching English in Massachusetts, California, and Ecuador.

**Leslie Buchanan**, Research and Publication Production Associate, joined Flow Research in 2010 with skills from work and life experiences here and abroad. She assists with research and writing, and handles many publication aspects of Flow Research studies.

**Vicki Tuck**, Administrative Assistant, joined Flow Research in 2012 with experience in both the fast-paced law firms of Boston and in various nonprofit organizations. She assists with administrative tasks, including database and collecting news for the Worldflow publications.

**Kaleigh Flaherty**, Director of Marketing, created social media posts for us starting in May 2021 before going back to school to finish her degree in marketing at Coastal Carolina University in Conway, South Carolina. She rejoined us in August 2022 to expand our social media presence and manage other outreach activities.



Kaleigh Flaherty

For more information on Flow Research, please visit our website at <u>www.flowresearch.com</u>. Please follow us on Facebook, LinkedIn, Twitter, and Instagram. We also invite you to join our Flow Research LinkedIn group.

#### **Recent and Currently Scheduled Flow Research Studies**

#### **New-Technology Flowmeter Studies**

Mass Flowmeter Series <u>www.massflows.com</u>

The World Market for Mass Flow Measurement (Core Study)

The World Market for Coriolis Flowmeters, 7<sup>th</sup> Edition <u>www.flowcoriolis.com</u>

The World Market for Thermal Flowmeters, 3<sup>rd</sup> Edition <u>www.flowthermal.com</u>

The World Market for Mass Flow Controllers, 4<sup>th</sup> Edition

The World Market for Magnetic Flowmeters, 7<sup>th</sup> Edition <u>www.flowmags.com</u>

www.flowmfc.com

www.flowmfc.com

www.flowpd.com

The World Market for Ultrasonic Flowmeters, 7<sup>th</sup> Edition <a href="www.flowultrasonic.com">www.flowultrasonic.com</a>

The World Market for Vortex Flowmeters, 7<sup>th</sup> Edition www.flowvortex.com

The World Market Update for Mass Flow Controllers

The World Market for Multiphase Flowmeters, 2<sup>nd</sup> Edition <u>www.flowmultiphase.com</u>

Multiphase: Module A: The World Market for Watercut Meters <u>www.watercutmeters.com</u>

#### **Conventional Flowmeter Studies**

The World Market for Pressure Transmitters, 5<sup>th</sup> Edition <u>www.worldpressure.com</u>

The World Market for Primary Elements, 2<sup>nd</sup> Edition <a href="www.flowplate.com">www.flowplate.com</a>

The World Market for Positive Displacement Flowmeters, 3<sup>rd</sup> Edition

The World Market for Turbine Flowmeters, 3<sup>rd</sup> Edition <a href="www.flowturbine.comm">www.flowturbine.comm</a>

The World Market for Variable Area Flowmeters <u>www.flowva.com</u>

#### **Cross-Technology Flowmeter Studies**

Volume X: The World Market for Flowmeters, 9<sup>th</sup> Edition www.flowvolumex.com

Volume X: Module A: Strategies, Industries, and Applications www.flowvolumex.com

The World Market for Gas Flow Measurement, 4<sup>th</sup> Edition www.gasflows.com

Gas Module A: Applications and Strategies for Gas Flow Measurement www.gasflows.com

Gas Module B: Natural Gas Production, Consumption, and Flow www.gasflows.com

Measurement in the Oil & Gas Industry

Flowmeters in the Oil & Gas Industry www.oilflows.com

#### Flow Calibration Studies

Core Study: Worldwide Gas Flow Calibration Facilities and Markets <u>www.flowcalibration.org</u>

Module A: Worldwide Liquid Flow Calibration Facilities and Markets www.flowcalibration.org

#### **Temperature**

Market for Temperature Sensors in the Americas, 3<sup>rd</sup> Edition www.tempresearch.com

Overview: The World Market for Ultrasonic Flowmeters, 7<sup>th</sup> Edition Flow Research, Inc.

# The World Market for Ultrasonic Flowmeters, 7<sup>th</sup> Edition

- OVERVIEW -



Oman Gas Company Photo by Flow Research



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#### Why Flow Research? We ...

- Are the only company whose sole focus is the flowmeter instrumentation market
- Research all new-technology and conventional flowmeters
- Contact every known supplier
- Offer our studies in both electronic and color-printed hardcopy versions
- Draw on flowmeter data dating back to 1992, when we began actively following the market