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For Immediate Release

Flow Research: World Energy Markets Drive Growth in Turbine Flowmeter Market

Wakefield, Massachusetts; April 28, 2016 — A new research study from Flow Research finds substantial growth in the gas flow measurement market. According to this new study, *The World Market for Gas Flow Measurement, 3rd Edition*, by Flow Research (www.flowresearch.com), the worldwide market exceeded \$1.7 billion in 2014. New-technology gas flowmeters made up \$788 million of this total, while traditional technology gas flowmeters revenues were \$930 million. Coriolis and ultrasonic are the fastest growing gas flowmeter markets.

Turbine Flowmeters Have a Large Installed Base

One major growth factor for turbine flowmeters is the large installed base of turbine flowmeters worldwide. Because they have been around longer than new-technology meters, turbine flowmeters have had more time to penetrate the markets in Europe, North America, and Asia.

Installed base is a relevant growth factor because often when ordering flowmeters, especially for replacement purposes, users replace like with like. The investment in a flowmeter technology is more than just the cost of the meter itself. It also includes the time and money invested in training people how to install and use the meter. In addition, some companies stock spare parts or even spare meters for replacement purposes. As a result, when companies consider switching from one flowmeter technology to another, there is more than just the purchase price to consider.

The large installed base of turbine flowmeters worldwide will continue to be a source of orders for new meters in the future.

Industry Associations Provide Approvals for Turbine Meters

Turbine meters are specified by approval bodies for use in custody transfer for utility measurement in residential, commercial, and industrial applications. These organizations include the American Water Works Association (AWWA), the American Gas Association (AGA), and the International Standards Organization (ISO) in Europe. These approvals have been in place for many years.

The approval of a standard by the American Gas Association for using turbine flowmeters for custody transfer of natural gas has been a significant factor in the use of turbine meters for gas applications. However, now turbine meters face competition from ultrasonic meters, and the report on the use of Coriolis flowmeters has also been approved by AGA (Report #11). DP flowmeters are also widely used for natural gas flow measurement. So while turbine meters have enjoyed an advantage in the past, based on their approvals, this advantage is diminishing as new-technology flowmeters are approved for custody transfer of natural gas.

Despite the competition, turbine meters still retain a significant share of the market for custody transfer of natural gas. However, ultrasonic flowmeters are the dominant flowmeter type for this application, and have gained significant market share in the past five years. Other flowmeter types used for custody transfer of natural gas include Coriolis and DP flowmeters. Because of their high accuracy, turbine flowmeters are often used as reference meters for flow calibration purposes.

There are several reasons why turbine meters will continue to maintain their wide usage for gas flow applications. One is that turbine meters have a significant cost advantage over ultrasonic meters, especially in the larger pipe sizes. Their price may also compare favorably to DP flowmeters, especially in cases where one turbine meter can replace several DP meters. Users who are already familiar with turbine technology, and who don't want to spend the extra money required to invest in a new technology, are likely to stay with turbine meters.

Secondly, turbine meter suppliers are making technology improvements to make turbine meters more reliable. Many of these improvements involve making the moving parts more reliable. By making the ball bearings out of more durable material, such as ceramic, turbine suppliers have been able to add significantly to the life of the bearings. This is important, since some customers select new-technology meters over turbine meters because turbine meters have moving parts.

According to Dr. Jesse Yoder, president of Flow Research:

“The entire flowmeter market experienced a downturn in 2008 and 2009, along with the whole economy. By 2011, many companies found that their sales had returned to 2008 levels. However, a different kind of downturn occurred in 2014 when oil & gas prices began to decline. This had a negative impact on flowmeter suppliers selling into the oil & gas market, especially in 2015. While the future is difficult to predict, indications are that both oil & gas prices are on their way back up. In the meantime, some gas flowmeter suppliers are looking to industries such as chemical, food & beverage, and pharmaceutical on an interim basis until oil & gas prices ramp up again to more profitable levels. Given these many options and current market conditions, we see continued strong growth for the gas flowmeter market.”

About Flow Research

Flow Research, with headquarters in Wakefield, Massachusetts, is the only independent market research company whose primary mission is to research flowmeters and other instrumentation products and markets worldwide. Flow Research has years of experience in doing both off-the-shelf studies and custom work. Published studies can be purchased by anyone interested in the topics. These studies are developed through interviews with suppliers, distributors, and end-users, and are presented in a clear and consistent manner. Topics include all of the flowmeter technologies – both new and traditional – as well as temperature sensors, temperature transmitters, level products, and pressure transmitters.

A growing area of interest – especially related to custody transfer – is flowmeter calibration. Flow Research has recently completed two studies, one on gas and one on liquid, of flow calibration facilities and markets (<http://www.flowcalibration.org>).

The company also focuses on the energy industries, especially on oil and gas production and measurement. Special topics include custody transfer, multiphase measurement, and liquefied natural gas (LNG). A series of quarterly reports called the Worldflow Monitoring Service provides regular updates on both the flowmeter markets and the energy industries (<http://www.worldflow.com>).

For more information, visit <http://www.flowresearch.com> or call +1 781-245-3200.