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**For immediate release**

## **Despite Challenges, Turbine Flowmeter Market Remains Strong**

Wakefield, Massachusetts; April 2, 2003 — There are more manufacturers of turbine flowmeters than of any other flow technology, according to a new market study from [Flow Research](#) and [Ducker Worldwide](#). The study, entitled [The World Market for Turbine Flowmeters](#), identifies 140 suppliers of turbine flowmeters. The study projects that worldwide turbine flowmeter revenues will decline from \$410 million in 2001 to \$348 million in 2006. This represents a compound annual growth rate of –3.2 percent. Commercial and industrial flowmeters are included, but not residential meters. The study divides the market into water, gas, oil, and industrial liquid applications.

Even though turbine flowmeters are losing ground to new-technology flowmeters in some market segments, they still remain a viable choice for steady, medium to high-speed flows. While the first turbine meter was invented in 1790, these meters were not

widely used in industrial markets until after World War II. Since that time, turbine meters have become solidly entrenched in the water, gas, oil, and industrial liquid flow measurement markets.

One main difference between turbine and positive displacement flowmeters is that turbine meters compute flow based on a velocity measurement, while positive displacement meters actually capture the flow and measure it volumetrically. Turbine meters excel at measuring clean, steady, medium to high-speed flow of low-viscosity fluids. Positive displacement meters, by contrast, excel at measuring low-speed flows and high viscosity fluids. While there are some applications in which they compete, turbine and positive displacement flowmeters are more complementary than competing.

Turbine meters do face challenges from new-technology meters in gas, oil, and industrial liquids flow measurement. For industrial gas and oil measurement, the main challenges are from ultrasonic and Coriolis meters. Ultrasonic flowmeters are becoming accepted for custody transfer gas flow measurement, especially for larger size pipe. Coriolis meters are also gaining approval for custody transfer of natural gas.

For oil and industrial liquids measurement, turbine meters also face challenges from new-technology meters. For oil measurement, the main challengers are Coriolis and ultrasonic meters. For industrial liquids, magnetic flowmeters are also replacing turbine meters for some applications. Positive displacement meters are very widely used for oil and hydrocarbon measurement, especially for custody transfer applications.

According to Dr. Jesse Yoder, president of Flow Research, Inc., “There are several reasons why turbine meters will continue to maintain their wide usage for gas, oil, and industrial liquid 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 differential pressure (DP) flowmeters, especially in cases where one turbine meter can replace several DP meters. Turbine meter suppliers are also making technology improvements to make turbine meters more reliable. Many of these

improvements involve making the moving parts more reliable. And turbine meters will continue to experience growth in the commercial water and gas utility markets.“

### **Flow Research, Inc.**

[Flow Research](#) is a market research company that specializes in providing market data and strategies on flowmeters and other measurement devices. Dr. Jesse Yoder, who has 16 years' experience as a writer and analyst in process control, founded flow Research in 1998. The company recently completed a series of eight market studies on the worldwide flowmeter market, including a new study that includes all ten flow technologies. This study is called [The World Market for Flowmeters](#).

[Flow Research](#) is partnering with [Ducker Worldwide](#) (Bloomfield Hills, MI) to produce a series of ten market studies on flowmeters, covering all the flow technologies. [The World Market for Turbine Flowmeters](#) is the eighth in this series. Ducker Worldwide has 40 years' experience researching industrial and business markets, and has offices throughout the world. **Flow Research can provide charts and graphics from The World Market for Turbine Flowmeters upon request.**

Another service provided by [Flow Research](#) is the [Worldflow Monitoring Service](#). This Worldflow service includes monthly reports on the flow and process industries. These reports include the [Market Barometer](#), [Process Industry Monitor](#), and [User Perspective](#). It also includes a centralized “[Living Database](#)” of detailed product information from many suppliers of flowmeters worldwide.