



**Flow Research, Inc.**

27 Water Street  
Wakefield, MA 01880  
(781) 245-3200  
(781) 224-7552 (fax)  
[www.flowresearch.com](http://www.flowresearch.com)  
[www.ducker.com](http://www.ducker.com)

Contacts: Jesse Yoder, Flow Research: (781) 245-3200 – [jesse@flowresearch.com](mailto:jesse@flowresearch.com)

Nick Limb, Ducker Worldwide: (248) 644-0086 - [nickl@ducker.com](mailto:nickl@ducker.com)

**For immediate release**

## **New Flow Research Study Predicts Strong Growth for Coriolis Flowmeters**

Wakefield, Massachusetts; September 23, 2003 — The Coriolis flowmeter market continues to grow, despite the economic woes of the past several years. This is one finding in a new market study from Flow Research called **The World Market for Coriolis Flowmeters**. Worldwide sales of Coriolis flowmeters totaled \$435 million in 2002. Revenues are projected to grow at a CAGR (compound annual growth rate) of 7.6 percent through 2007, when they are expected to reach \$627 million. This makes Coriolis flowmeters the second fastest growing flowmeter, behind only ultrasonic meters.

Despite projections for strong Coriolis flowmeter growth, sales of Coriolis flowmeters were up by only six percent in 2002 from their year 2000 value. This represents an average annual growth rate of only three percent per year, which is modest growth for what is normally a fast-growing flowmeter. This shows that Coriolis flowmeters were not exempt from the effects of the economic downturn that has afflicted many of the

instrumentation and process control markets over the past several years. Projections for stronger future growth for Coriolis meters are based in part on the improving economic climate.

Accuracy and reliability are still the strongest driving forces behind the worldwide Coriolis flowmeter market. While Coriolis flowmeters typically have a higher purchase price than almost any other type of flowmeter, they earn this back over time through reduced installation and maintenance costs. Unlike positive displacement and turbine meters, they do not have moving parts that are subject to wear over time, apart from their vibrating tube. And unlike pressure transmitters with orifice plates, they do not have components that can be knocked out of position or are intrusive to the flowstream in the way that orifice plates are.

Coriolis flowmeters remain the most accurate flowmeter. This is why they are often the meter of choice for custody transfer applications. A number of organizations have written standards that apply to the use of Coriolis flowmeters for custody transfer and billing applications. If end-users need or simply want very high accuracy, they will often select a Coriolis flowmeter. Coriolis flowmeters are more accurate than most other new-technology flowmeters, including magnetic, ultrasonic, and vortex.

Users also select Coriolis flowmeters when they want a mass flow measurement. This is often the case in the chemical industry, and in other process industries. Coriolis meters give a direct, rather than an inferred, mass flow measurement. In some cases, users may also select a turbine meter along with a densitometer to compute mass flow measurement. Another option is to use a multivariable differential pressure transmitter that also measures pressure and temperature and computes mass flow.

Size restrictions remain the most severe limitation of Coriolis flowmeters. Coriolis meters larger than two inches become expensive and unwieldy. While some six-inch Coriolis flowmeters are sold, more than 90 percent of all Coriolis meters sold are of size two inches or smaller. Until this size problem is solved, Coriolis flowmeters will remain

more complementary to than competing with ultrasonic flowmeters. Ultrasonic flowmeters perform best in line sizes of four inches and above.

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

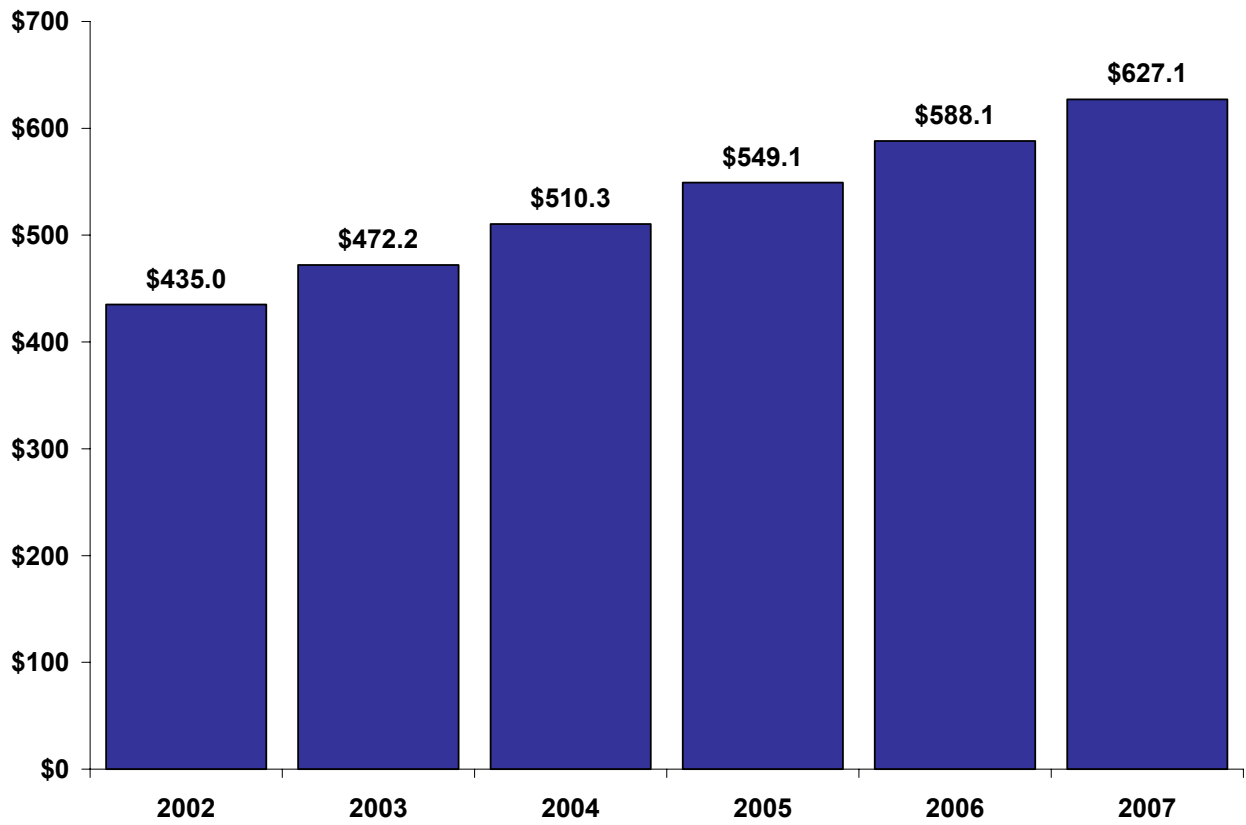
Flow Research is a market research company that specializes in providing market data and strategies on flowmeters and other measurement devices. Dr. Jesse Yoder, who has 16 years' experience as a writer and analyst in process control, founded Flow Research in 1998. The company recently completed a series of ten market studies on the worldwide flowmeter market, including **Volume I, The World Market for Coriolis Flowmeters**. Other studies are individual volumes on the worldwide ultrasonic, magnetic, vortex, positive displacement, and turbine flowmeter markets. **Volume IX, The World Market for Pressure Transmitters**, will be published in the next few weeks. **Volume X, The World Market for Flowmeters**, includes all ten flow technologies.

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. Ducker Worldwide has 40 years' experience researching industrial and business markets, and has offices throughout the world.

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 **Worldflow Barometer**, **Worldflow Monitor**, and **Worldflow Perspective**. The service is designed to provide up-to-date information between market studies.

**The chart on the following page shows the projected growth of the ultrasonic flowmeter market through 2007. Flow Research can provide additional charts and graphics from The World Market for Coriolis Flowmeters and from other studies upon request.**

**Total Shipments of Coriolis Flowmeters Worldwide from 2002 to 2007  
(Millions of Dollars)**



**CAGR = 7.6%**