



Big Shift to “New Technology” Flowmeters Predicted

Pages: 28; January, 2002

A major shift is occurring in the flowmeter market to those technologies developed in the last half century, according to a new study. Revenues from new technology flowmeters are projected to increase at an average annual rate of 8.8 percent through 2005. The study, *The World Market for New Technology Flowmeters*, was conducted by Flow Research (www.flowresearch.com) and Ducker Worldwide (www.ducker.com).

The study defines “new technology” flowmeters as Coriolis, magnetic, ultrasonic, vortex and multivariable differential pressure (DP) meters. They have four features in common. First, they have been introduced in the last 50 years. Second, they incorporate technological advances that avoid some of the problems inherent in earlier flowmeters. Third, they are more the focus of new product development efforts by the major flowmeter suppliers than traditional technology meters. Fourth, their performance, including criteria such as accuracy, is better than that of traditional technology meters. Traditional technology flowmeters include single-variable DP, open channel, positive displacement, thermal, turbine and variable area meters.

The shift towards new technology flowmeters is occurring for a number of reasons. First, users today are looking for the high accuracy (0.1 to 1.0 percent) that newer flowmeters provide. Customers are looking for accuracy in custody transfer applications, to avoid unnecessary loss of fluids, and to make more precise measurements when measuring fluids for manufacturing purposes.

Second, users today are looking for reliability. They prefer to “set it and forget it.” Users are demanding flowmeters that they can install without having to worry about whether they are still measuring correctly, or whether they will fail to operate at all. Many traditional technology flowmeters have moving parts, which are subject to wear. This is especially true of turbine and positive displacement flowmeters. Orifice plates are also subject to wear, and they cause substantial pressure drop. While turbine and positive displacement flowmeters can provide high accuracies, the fact that they have moving parts reduces their reliability in the long term.

Third, the study asserts, new technology flowmeters offer more features, including advanced software capabilities, more application-specific packages and highly durable materials of construction. Self-diagnostics, including the capability of projecting maintenance requirements, is an important feature, as well.