



NEWS RELEASE

Emerson's viscosity measurement technology helps Laurin Maritime improve marine fuel efficiency

Micro Motion® Viscomaster™ Viscosity meter provides accurate measurement, helps meet latest emission regulations

BOULDER, COLO (September 22, 2010) – Emerson Process Management has successfully installed its **Micro Motion® Viscomaster™** Viscosity meter on the MT Tintomara, a 44,999 DWT product tanker operated by Laurin Maritime. The Viscomaster meter was installed to help improve fuel efficiency by accurately measuring viscosity, density and temperature of the heavy fuel oil (HFO) that supplies the vessel's main and auxiliary engines.

The Viscomaster meter replaced the original mechanical sensor, which needed regular cleaning, maintenance and recalibration – a difficult and time-consuming process. In addition, to meet the requirements of new emissions regulations, the fuel for the engines has to be changed from HFO to gasoil depending on where the vessel is operating. These frequent changes in fuel density were proving challenging for sensors based on traditional technologies.

The Micro Motion Viscomaster unit with adapter flange was mounted on the onboard booster unit – a skid-based package that conditions the HFO between storage tank and injection system of the engine. The booster unit ensures that the fuel being delivered provides the correct flow rate, cleanliness, pressure, temperature and viscosity for efficient and reliable operation of the engine. Emerson offers a range of retrofit installation adaptors for capillary or in-line installation. These adaptors enable quick and easy replacement of alternative viscosity measurement technologies, without the need for mechanical changes to pipe work or skid design.

“The mechanical installation was straightforward and was completed by connecting the Viscomaster meter to the existing control unit – no other equipment needed to be replaced,” said Henrik Olsson, chief engineer onboard the MT Tintomara.

The Micro Motion Viscomaster range of self-contained, head-mounted transmitters uses vibrating fork technology to measure density and viscosity. They are highly tolerant to harsh environments such as onshore and offshore power plants, and provide reliable, accurate control with little or no maintenance or recalibration. Integral 4-20mA and RS 485 Modbus outputs remove the need for external amplifiers or terminal boxes.

The meters are approved by Lloyd's Register for marine environments and have a wide range of equivalent worldwide marine approvals. Their installation flexibility, ruggedness, ease of use, and extensive range of standard features have resulted in broad adoption by users and OEM providers.

“After a few months, the sensor was taken out of the adapter for inspection,” continued Olsson. “It was totally clean of fuel or build-up that could affect the accuracy of the measurements. The Viscomaster meter is performing perfectly on-board, and maintenance time and costs have been reduced to a minimum. Based on this success, the chief engineers of other vessels in our fleet are considering the benefits of changing to Emerson's Micro Motion Viscomaster viscosity meters.”

About Emerson Process Management

Emerson Process Management (www.EmersonProcess.com), an Emerson business, is a leader in helping businesses automate their production, processing and distribution in the chemical, oil and gas, refining, pulp and paper, power, water and wastewater treatment, metals and mining, food and beverage, life sciences and other industries. A division of Emerson, Micro Motion, (www.EmersonProcess.com/MicroMotion) invented the first practical Coriolis flowmeter in 1977, and is consistently rated as the world's leading Coriolis flowmeter supplier, measured in both technology and customer support. Micro Motion technology and expertise plays a key role in the Emerson mission of combining superior products and technology with industry-specific engineering, consulting, project management and maintenance services. Emerson brands include: PlantWeb™, Fisher®, Syncade™, Micro Motion®, Rosemount®, Daniel®, DeltaV™, Ovation™, and AMS Suite.

About Emerson

Emerson, based in St. Louis, Missouri, USA, is a global leader in bringing technology and engineering together to provide innovative solutions for customers in industrial, commercial, and consumer markets through its network power, process management, industrial automation, climate technologies, and appliance and tools businesses. Sales in fiscal 2009 were \$20.9 billion. For more information, visit www.Emerson.com.

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Larger photo

Emerson's Micro Motion Viscomaster Viscosity meter installed onboard the MT Tintomara is helping Laurin Maritime improve fuel efficiency and meet latest emission regulations.

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