



MTS Systems Corporation
Sensors Division
3001 Sheldon Drive
Cary, NC 27513
Phone 919-677-0100, Fax 919-677-0200

IMMEDIATE RELEASE

September 8, 2008 *MTS633*



For More Information, Contact:

Matt Hankinson

Marketing Manager

919-677-2347

matt.hankinson@mts.com

Patricia Staino, BtB Marketing

Public Relations Executive

919-872-8172

patricia@btbmarketing.com

Magnetostrictive sensors provide the precision needed in linear motors and actuators...

MTS SENSORS' DEMONSTRATES LINEAR POSITION FEEDBACK AT INTERNATIONAL TRADE SHOWS

CARY, N.C.- (September 8, 2008) - MTS Systems Corp., Sensors Division is demonstrating the features and benefits of magnetostrictive sensor technology with a linear actuator demonstration at its booth (D3227) at the 2008 International Manufacturing Technology Show. The demo, which features an RMC controller from Delta Computer Systems and MTS Sensors' Temposonics® R-Series linear position sensor with SSI output, shows how dynamic linear actuators solve drive and transport tasks with high performance by utilizing magnetostrictive technology in the measurement system.

“The linear system converts energy from the rotary motor into linear motion using a linear actuator such as a belt-drive or ball screw,” said Matt Hankinson. “By adding our absolute, linear position sensor on the output, we can compensate for mechanical transmission errors and disturbances at the load rather than relying on the rotary encoder on the motor.”

The Temposonics technology by MTS Sensors provides non-contact, absolute position feedback that is highly robust to shock and vibration as well as contamination.

MTS SENSORS DEMO BENEFITS OF MAGNETOSTRICTION, PAGE 2

According to Hankinson, these features make the magnetostrictive sensor technology ideal for applications such as machine tools, cutting machines, handling and assembly robotics or packaging machines. “Due to positioning accuracy, durability and reduced maintenance requirements, the linear position measurement system improves the quality and efficiency of the production line.”

The balloon demo on display at IMTS operates by allowing the user to move a dart on a carrier towards a balloon attached by a second carrier to a linear actuator system. As the dart approaches the balloon, a position sensor for the balloon carrier enables it to quickly move it out of harm’s way. The position of both the balloon and dart are updated every 0.5 milliseconds by an MTS R-Series SSI sensor with 1 micron resolution. The position feedback is provided to an RMC75E motion controller from Delta Computer Systems which uses a target generator in the position control loop to determine the desired trajectory for the balloon. The motion controller then sends a signal to the servo drive to command the desired position in the servomotor at a velocity of up to 10 feet/second.

The R-Series sensor with SSI output in the demo offers a resolution as low as one micron. With measuring rates up to 4 kHz and baud rates up to 1.0 MBd, the sensor ensures superior performance in the linear system. The precise position control is enabled by a repeatability of 0.001% and linearity of 0.01% of the full stroke. A linearity of 20 microns independent of stroke length can be achieved if using the linearity correction option.

Recently, a similar demo was a popular attraction at the Hannover Fair in Germany. That demonstration featured a direct linear drive developed by EAAT GmbH (Chemnitz, Germany) as well as MTS Sensors’ Temposonics R-Series linear position sensor with SSI output. In that demo, a linear motor converted electrical energy directly into linear motion without mechanical linkages. The winding was fitted on a firmly mounted stator while the considerably shorter magnetic conductor plate slid over the horizontal inductor. The speed curve of the traveling magnetic field and of the magnet plate was synchronous over a segmented length of 1,800 mm.

MTS SENSORS DEMO BENEFITS OF MAGNETOSTRICTION, PAGE 3

Prior to selecting the MTS sensor for this linear motor, EAAT evaluated the Temposonics technology in comparison to other manufacturers of magnetostrictive sensors. The MTS sensors were chosen for the linear motor because they out-performed similar sensors in terms of reliability and resistance to noise. Unlike other magnetic-based technologies, the performance of the MTS magnetostrictive sensor was not impacted by interference from the linear motor.

Both of these demonstrations served to highlight key features and benefits of MTS Sensors' magnetostrictive technology, including absolute position measurement and non-contact (and thus wear-free) operation.

For more information on Temposonics Sensors, please contact: MTS Systems Corp, Sensors Division, 3001 Sheldon Drive, Cary, NC 27513. Phone: (919) 677-0100. E-mail: info@mtssensors.com or visit their web site at <http://www.mtssensors.com>.

MTS Sensors, a division of MTS Systems Corp., is the global leader in the development and production of magnetostrictive linear-position and liquid-level sensors. Based on MTS' patented Temposonics® technology, the Sensors Division is continually developing new ways to apply magnetostrictive sensing technology to solve critical applications in a variety of markets worldwide. With facilities in the U.S., Germany and Japan, MTS Sensors Division is an ISO 9001 certified supplier committed to providing innovative sensing solutions that deliver customers with reliable, cost effective sensing devices.

For over 25 years, Delta Computer Systems has been a supplier of motion controllers, color sensors, and other industrial products that enable OEMs and integrators to build better machines and get to market quickly. For more information contact Bill Savela, Delta Computer Systems, Inc. 11719 NE 95th Street, Suite D, Vancouver, WA 98682. Phone: (360) 254-8688, Fax: (360) 254-5435, or E:mail: bsavela@deltamotion.com.

###