Turning Haptics Module DHM2: Modular Testing System for Control Dials in Laboratory and Production

In cooperation with the renowned sensor manufacturer Lorenz Messtechnik GmbH, testing and automation specialist SYSTEC presents its turning haptics module DHM2 at the SENSOR+TEST 2016.

In automotive and consumer sectors, so-called turning haptics measuring systems are used for the survey of control dials in order to detect and evaluate their haptic torque characteristics.

The turning haptics module DHM2 is a measuring system, especially developed for this application and can easily be integrated into automated and laboratory systems. The centerpiece of this module is the unsupported torque sensor DR-2500, specially designed for this application by Lorenz Messtechnik GmbH. Without bearings between rotor and stator, bearing frictions which can distort the measurement result are nonexistent.

By the very sensitive measuring range of ±0.1 N m, an active output of ±5 VDC and mechanical overload protection, integrated in the measuring string, torque characteristics of all common control dials can be detected.

By means of different gripper variants of the ZG3 series, the module can also be adapted to specific requirements on the part of control dial geometry. The opening and closing of the gripper occurs by the integrated electromechanical NC.

A special feature of the system is the high tolerance of radial offset between the module and control dial. This offset may be up to 0.5 mm in any direction without affecting the measurement result negatively. By this feature, laborious fine adjustment of the control dial is omitted.

The system has an integrated encoder, which allows an exact allocation of torque and angle of rotation.

The DHM2 can be individually operated as a laboratory system, but also be integrated as a production system in a line production.

Control and data transfer occur via Ethernet; for the line operation, the module is also equipped with 16 DIO on board for direct digital communications.

For the evaluation of the measurement results, an evaluation tool is available. For the use in production and testing lines, the system can be operated with our test sequencer.
About SYSTEC, Corporation for Automation, Systems and Technical Documentation mbH

SYSTEC is a Nuremberg-based company with a 25-year history. With more than 30 employees, SYSTEC develops holistic system solutions for following branches: automotive, healthcare, electronics, consumer, communications, printing, semiconductor, chemical, biotechnology and defense. These system solutions are characterized by high performance, reliability, robustness, expandability and future security. Main focal points are testing systems for line ends, as well as laboratory test systems.

Further information: www.systec-gmbh.com

About Lorenz Messtechnik GmbH

Since the foundation of the company in 1985, a steady growth was listed. Within shortest time, the company, certified according to DIN EN ISO 9001: 2008 and with more than 70 employees, developed to one of the leading suppliers of sensors and system solutions for the measurement of force, torque and weighing.

By the constant expansion of the product range, a large variety of associated measuring amplifiers, displays and evaluation devices is available. Next to an extensive standard range, customized individual solutions for most various measurement tasks are offered.

To round off the range of products, complete testing facilities for development, production and quality assurance as complete solutions according to customer requirements are designed and manufactured. The in-house DAkkS calibration laboratory for the measurand N·m also reflects the high quality demand of our products.

Further information: http://www.lorenz-messtechnik.de