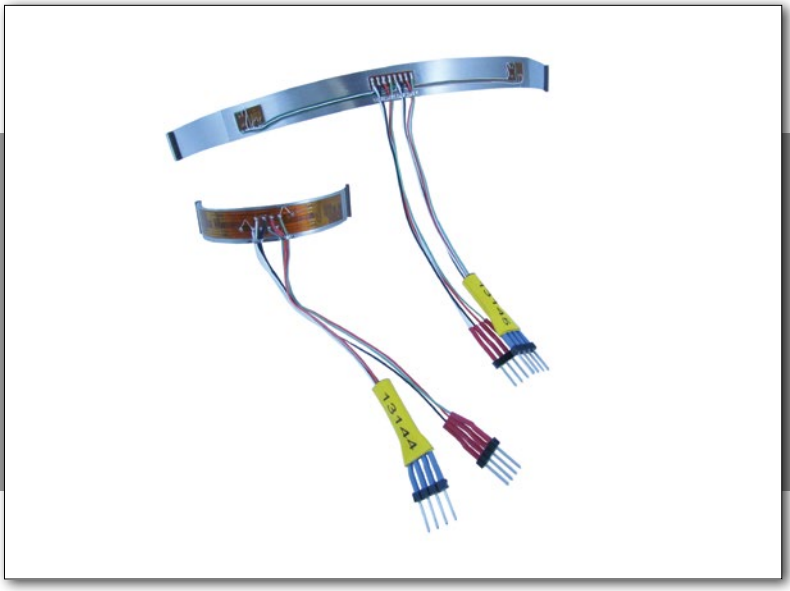
TELEDYNE
LECROY TEST SERVICES
Everywhereyoulook™

Quick Stem Sensor (QSS)

Commercially Dedicated for Nuclear Application



The Accuracy Standard

Field-installed thrust and torque sensor for motor or air operated valve maintenance and diagnostics.

Accuracy:

- QSS Calibrated (sensor only): ±3.0%
- QSS Uncalibrated (sensor only): ±8.1%

Applications:

- Commercial Grade Dedication for Safety Related use in Nuclear Applications
- Motor operated, air operated and main steam isolation valves
- Maintenance and Diagnostic Testing
- Safety-Related Valve Testing
- Performance Trending

Background

Utilities operating nuclear power plants agree that the correct functioning of all motor operated valves, and particularly those in safety-related systems, is of paramount importance. The Nuclear Regulatory Commission has issued Generic Letters GL89-10, GL96-05 and other documents which relate to this concern. Operability must be demonstrated under design-basis conditions if practical. The QSS is the industry standard for measuring valve stem torque and thrust.

Description

Teledyne LeCroy Test Services' (TLTS) **Quick Stem Sensor (QSS)** is a patented device which is applied to a valve stem using a layer of adhesive. The one-piece QSS consists of strain gages wired in a Wheatstone bridge and is configured to measure thrust and torque simultaneously. A QUIKLOOK diagnostic system or equivalent will acquire the output signal from the QSS and display measurements in engineering units such as lbs or ft-lbs.

The easy-to-install sensor can be used with or without calibration, depending on accuracy requirements. If greater accuracy is required, the QSS can be calibrated in-situ for thrust and torque using any QUIKLOOK system, or equivalent device. The QSS makes it possible to acquire accurate, nonintrusive direct measurements and significantly reduces installation time without compromising measurement quality.

TLTS can supply custom QSSs for high temperature applications, large stem diameters and irregular shapes, such as our **Square Quick Stem Sensor (SQSS)** shown here.

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For more information, please visit our website or email sales_testservices@teledyne.com