

Spring Pack Calibration Stand (SPCS)



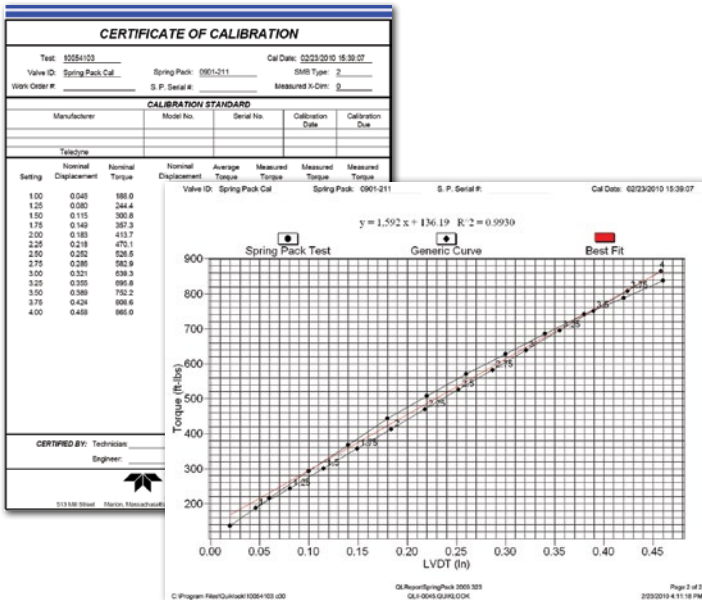
Hardware

- Mounting table with fixture storage shelf
- Fixturing for springpack sizes from 000 through 4
- Hydraulic hand pump/cylinder for loading springpack
- Optional electric pump

Software

Standard QUIKLOOK-FS software includes QLReportSpringpack which provides:

- Calibration certificate
- Plot of both calibration and generic data
- Sensitivity equation (1st, 2nd, or 3rd order curve fits)



The Teledyne LeCroy Test Services (TLTS) Spring Pack Calibration Stand (SPCS), is used to characterize the load versus displacement (spring rate) of customer spring packs from SMB 000 through SMB 4 Limitorque actuators. The stand utilizes a highly accurate LVDT displacement sensor and load cell in conjunction with one of TLTS's diagnostic systems and QUIKLOOK-FS software to provide the user with a best fit straight line or polynomial characterization of each spring pack. The characterization can be displayed as a function of load versus displacement or converted to implied actuator torque vs. displacement using "effective" moment arm data available within the industry. This data contains a 10% increase in moment arm length for conservatism.

The accuracy of the load cell is 0.5% of reading. The LVDT has an accuracy of 0.5% of reading and the QL3-FS system has an accuracy of 1% or reading for a combined accuracy 1.25% of reading when displaying load versus displacement