Analysis of resistive type pressure sensors for static calibration

ABSTRACT

This paper discuss the measurement of resistive type pressure sensor namely FlexiForce from Tekscan. The important parameters of the sensor such as linearity, hysteresis, settling time and sampling time have been investigated and a measurement system with graphical user interface has been developed. The analysis results of 80 calibrated sensors show that the developed measurement system is highly practical and easily blended in with standard pressure sensor calibration procedures. The measurement data of each sensor can be used for calibration of the sensors.

Keyword: Resistive sensor; Calibration; FlexiForce