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ABSTRACTS

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CONDITION OF MEASUREMENT CHAIN WITH POSITION SENSOR

(pages 1-6)

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Keywords: measurement, calibration, uncertainty, gauge

Abstract: The paper deals with experimental identification of condition of measurement chain with position sensor. The position sensor is industrial version used mainly for measurement of position of any moving parts. It uses technology of conductive plastic. Gauge length blocks are used for identification of its condition.

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NEW METHOD OF THREE-POINT VIBRATION MEASUREMENTS OF TENSILE MODULUS OF THIN SAMPLES – AND ITS APPLICATION TO THE VARIETY OF SPECIMENS

(pages 7-12)

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Keywords: Tensile modulus, three-point bending, thin samples, dynamic and static methods, uncertainty of measurement

Abstract: We describe an improved method of measuring the modulus of elasticity by means of three-point bending, based on dynamic approach. This method is particularly suitable for relatively short thin specimens, and - in addition - with a wide range of shaped cross-sectional variety. In conclusion, we present a comparison of this method with the classical static one for a standard circular sample.