

Andrzej Aniszewicz: A Portable Measuring Arm for Performing Accurate Measurements of the Geometric Dimensions of Construction Elements

A modern portable measuring arm for performing accurate measurements of geometric dimensions of railway construction objects and elements with a complex spatial structure, used in the Metrology Laboratory of the Railway Research Institute, is described in the article. The Institute's external and internal customers could be the recipients of the measurements. The measuring arm is particularly useful for measuring damaged, deformed elements, e.g. due to accidents. Measurement of such elements with specialized railway devices or commonly used instruments would be impossible to perform with the required measurement uncertainty. The article presents examples of the use of a portable coordinate, six-axis measuring arm and the results of geometrical dimensions measurements made by the Metrology Laboratory of the Railway Research Institute. Examples of types of objects are shown, for which the coordinate measuring arm has been used so far.

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