Methods of Measuring of Residual Stresses and Evaluation of Residual State of Functional Surfaces by X-Ray Diffractometric Methods

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Objectives of the paper are intended to implement system solutions to nondestructive evaluation of technologies associated with verification of equipment, preparation of samples with different types of functional properties and their subsequent evaluation of various scientific methods. The main objective of experiments is to transform new knowledge of non-destructive technologies into industrial practice in the evaluation of functional properties of the surface and subsurface layers of these technologies. The aim is to increase the level of cooperation R & D institutions with social and economic practices through knowledge and technology transfer, and thus contribute to increased economic growth of the regions in Slovakia. This work is related to the project with the University of Zilina OPVaV-2009/2.2/04-SORO number (26220220101). Its name is Intelligent System for Nondestructive Technologies to evaluation of functional properties of parts of X-ray-diffractometry. The main objective of the project is to transform new nondestructive technology for knowledge transfer to industry for evaluation of functional parts in surface and subsurface layers of non-destructive techniques.

Keywords: residual stress, X - ray diffractometry, machining

Aknowledgement

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