

**REGARDING AN ISSUE OF CONDUCTING DEVICE
COMPETENCY TESTS AND INCREASING A RELIABILITY
OF PRIMARY FORMING**

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Design and performance of devices were gradually improved, and so were their testing methods.

The main purpose of tests is to evaluate technological level indicators, quality of devices, workbenches and technological systems, and to develop the most efficient methods for designing operational machine or system concerning information obtained and according to the given technical requirements.

Device tests on primary forming reliability include the accuracy of particular mechanisms and the precision in parts of device (workbench) manufacturing examinations. Validation process consists of tests on spindle rotation accuracy, linearity and flatness of guiding rails or surfaces of tables, guidescrews precision, etc. The position of the driven elements at stoppage, and proper alignment and movement of the components of the workbench are set and the parallelism or perpendicularity of the main guiding rails or surfaces of tables and axes of a spindle are estimated.

Due to intense development of measuring equipment, high-precision devices are used more and more often. They provide the ability to record data automatically and even to process it in some cases.

Each of the parameters to check has a direct or reverse impact on shaping a product, which is the result of the manufacturing process. There are different methods and systems used to improve reliability of a device. Based on gained results, probability of a non-failure work is calculated, adequate usage of these elements in the device is considered and the reliability of the whole system is determined in general.

To keep the data gained through experiment in the device during its entire usage, the technological assessment of the reliability of the product must be held.

Took into account all indicators that could affect the work of the device, the competent conclusion about propriety of its usage and possible ways of improving reliability of its work using different systems are considered.

Reviewed actions give us a certain ability to prognose the way of product-shaping and precision of its manufacturing using calculations.

Key words: primary forming, product-shaping, increasing a reliability, testing.