
Reliability of automated machine tools

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The paper deals with the analysis, evaluation and calculation of the reliability of the automated machine tools (AMT). It also considers the main parameters affecting the reliability of the AMT. The author offers to carry out calculation of the functional reliability of the flexible manufacturing cell by a system-functional method. The article shows a possibility of obtaining information about the reliability of the AMT when there are a limited number of test subjects. Problems of forming said reliability margin of the AMT and its use to assess the reliability of the AMT are under consideration. The impact of a safety margin for the individual parameters on the AMT resource is illustrated by examples.

Keywords: *automated machine tools, reliability, reliability assessment, calculation of the reliability, functional reliability, parametric reliability.*

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