

ERGODESING AS A METHOD FOR THE DESIGN OF THE QUALITY OF PRODUCTS ON THE BASIS OF BENCHMARKING

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Abstract

Of particular importance are the ergonomic and aesthetic indicators that influence the emotional component of the consumer value of the product. Ergonomic design is an extremely important and complex issue that can only be fully solved with the participation of many professionals - engineers, marketers, designers. Such an integrated approach can provide high ergonomic quality indicators. The main aim of this research was to focus on the ergodesign of the product as a mandatory element of the technical proposal, sketch and technical projects where the quality of goods and conditions of effective operation are largely determined by the completeness of ergonomic requirements.

In the complex assessment of the ergonomic level of quality it is recommended to use a comprehensive method of assessing the level of quality based on the comparison of quality indicators on the given values. The starting point of the procedure for assessing the quality of the product is to determine the range of ergonomic indicators. Practical application of quality level modeling is possible with the use of ergodesign. Benchmarking is an effective tool of ergodesign in the field of quality. The study used the method of qualimetric assessment of quality of work in obtaining the final result. Approaches to the formation of product quality based on labor quality and graphoanalytical methods are used as special forecasting methods for the optimal level of product quality. The technology of qualimetric assessment of the quality of work in obtaining the final result - the technical design of the product in the form of a set of design documentation and a test batch of products. To assess the benefits of the criterion of optimizing the level of product quality in the design process used calculation and graphics methods, in particular, graphics. The method of optimizing the level of quality of the designed product, which can be realized by the method of computer graphics and the method of least squares by regression parameters, is given for determining the quality level optimization at maximum profit.

An effective marketing tool is proposed - internal benchmarking, the targeted application of which allows you to create the greatest value for consumers and provide competitive advantages for the company. The method of product design takes into account the requirements, the compromise between the shape of products and their design in accordance with the requirements of efficient and economical production. The application of the qualimetric method of assessing the quality of work allowed to obtain the value of individual quality of work at the levels of the structural unit. Determining the coefficients of significance of the quality of work by type of work and calculating on their basis the individual coefficients of quality of work of performers was the basis for making management decisions in the field of product quality. The method of qualimetric assessment of the quality of work is the basis for increasing the size of wages for participation in the project and improving the quality of work. Computer technology and graph analysis models are also used in addition to the qualimetric assessment of the quality of work of specialists.

The presented method of qualimetric assessment of quality of work in obtaining the final result is effective for optimizing the level of quality of the designed product, which can be implemented by computer graphics and least squares by regression parameters. The author's approach to assessing the quality of goods on the basis of benchmarking, based on ergodesign should be used in production in modern conditions.

Key words: *Ergonomic design (ergodesign), Marketing researches, Prognostication, Consumer value of goods, Product quality control.*