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ANALYSIS OF METHODOLOGICAL APPROACHES FOR TECHNICAL EVALUATION OF THE LEVEL AND QUALITY OF GARAGE EQUIPMENT

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Annotation
This article analyzes methodological approaches for technical evaluation of the quality of equipment used in modern automobile enterprises in the region of Uzbekistan.

Keywords: Garage, equipment standard, technical readiness coefficient, production, production indicator.

Introduction

Methods of assessing the technical level of garage equipment were formed simultaneously with the process of forming equipment production as elements of future quality systems of manufacturing enterprises [1-4]. At the same time, the main task, as a rule, is to evaluate the technical level of its production samples and justify directions for their improvement to increase the level of product quality. We will consider the main methodical approaches to solving this problem specified in normative documents and special technical training literature [5-11].

Materials and Methods

Assessment of the technical level of garage equipment according to GOST 15467-79. As part of the policy of ensuring product quality at the state level, it is envisaged to assess its technical level. GOST 15467-79 "Product quality management" specifies product quality indicators and their determination methods in this standard. We list the most commonly used part of them in basic practice.

Product quality is a set of characteristics of products that lead to their suitability to meet certain needs by their purpose [12-19].

A single indicator of product quality can refer to a unit of product and a unit of products of the same type, representing a simple characteristic.

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A complex indicator of product quality represents several simple features or a complex feature of a product consisting of several simple products together [20-27]. For example, the coefficient of technical training:

$K_g=T/(T+T_V)$

Here T is product failure (reliability indicator); T_V - is the average recovery time (repair index).

Product quality indicator used in decision-making:

$$K = \sum_{i=1}^{n} K_i * q_i \quad (1)$$

Here is the evaluation of one metric in K_i-scores; q_i is the weight of this feature in points.

If the determinant is complex, it is called generalized. If at least one indicator is equal to zero, then the total indicator should be equal to zero, that is, the quality of the product should be considered unsatisfactory.

The integral indicator of product quality is characterized by the ratio of the total useful effect of using or consuming the product to the total costs for creating and using it:

$$I = \frac{E}{H_y + H_i} \quad (2)$$

Here, E is the overall beneficial effect of using or consuming the product (for example, vehicle mileage in ton-kilometers per service life for repairs); Hy is total costs for creating products (development, production, installation, and other one-time costs); Total costs for using Hi products (maintenance, repair, and other running costs) [28-33].

In addition to the integral indicator of product quality, the value of the so-called specific costs per unit of its impact can also be used. The main value of the product quality indicator is the indicator accepted as the basis for a comparative assessment of its quality [34-40].

The relative value of the product quality indicator is the value of the product quality indicator evaluated against the basic value of this indicator. The weight coefficient of the product quality indicator is the quantitative characteristic of the importance of the quality indicator among other indicators of its quality. The technical level of the product-relative feature describes the technical perfection of the products evaluated by the quality of the product based on the comparison of the values of the indicators, and the basic values of the relevant

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indicators. Qualimetry is a branch of science, the subject of which is quantitative methods of assessing the quality of products.

Methods of determining product quality indicators:

measurement method measurements using technical means;

recording method-tracking and calculating specific numbers of product or cost events;

the method is calculated based on the use of its parameters from theoretical or empirical relationships of product quality indicators. It is used to forecast product quality;

Expert method - based on the decision made by experts; social method - collecting and analyzing the opinions of its actual or potential consumers.

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