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DEVELOPMENT OF MEASURES TO IMPROVE PRODUCTION QUALITY MANAGEMENT

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Abstract: This article discusses the quality management system, outlines the basics of quality management and requirements in accordance with standards, stages of the quality control process, identifies the principles of quality control organization, and factors that affect quality. In addition, the study of domestic and foreign experience allows us to conclude that the management of integration processes is the most relevant and effective solution to problems of improving product quality. And the formation of an integrated quality management program will allow (through the use of a continuous quality improvement mechanism) to minimize risks and ensure cost rationalization in the quality management system.

Keyword: Quality management, product quality level, efficiency, quality system, and the degree of quality improvement.

Relevance of the topic. The modern market economy imposes new requirements on the product quality management system. This is due to the fact that the stability of any company, its position in the market is determined by the level of competitiveness. In turn, the competitiveness of products is associated with the action of several dozen factors, among which the first place goes to the quality of products.

Purpose and objectives of the study. Study of quality management systems, indicators that influence their development, principles of evaluation and control of their activities.

Research result. The following scientists paid attention to the quality of products: A. A. Golikov, W. E. Deming, D. Coton, G. G. Azgaldov, S. D. Ilyenkova, S. T. Lapidus, M. H. Mexon, M. Torsten, D. H. Harington. They were of the opinion that product quality is a set of properties, the

influence of which allows you to distinguish one product from another, and the origin of quality occurs in the process of its release.

One of the main issues faced by enterprises today is the quality control of products and the degree of their improvement. To successfully solve this problem, it is necessary to create an optimal quality management system that allows you to ensure the production of a competitive and high-quality product, to establish quality control at all stages of the production process.

The main indicator of the company's activity is the quality of products. Its increase and improvement determines the company's position in the current market conditions, the development of scientific and technical progress, and the increase in production efficiency, which is the main feature of the activities of leading companies in the world.

Effective control has an impact on the quality of the product, as well as makes it possible to avoid all possible failures in operation, identify and eliminate them with the least losses for the company.

To implement a quality control system, the following stages must be performed:

1. Define the concept of control: it can be a comprehensive control system Controlling or private checks;
2. Statement of the control task, which can consist in a decision on the need, accuracy, regularity, effectiveness of the quality management process;
3. Study of objects and subjects of quality control, determination of methods, means and scope of the quality control system and setting deadlines for verification;
4. Determination of planned and actual indicators of the product quality level;
5. Search for deviations of actual data with planned data and identify the reason for the deviation;
6. Analysis of deviations and causes, distribution of powers, and identification of actions aimed at eliminating deficiencies.

Ensuring high quality involves effective management of all phases of activity, from the origin of the idea to the production of products. For the effectiveness of the quality control system, it is necessary to improve the technical control services, which creates conditions for the development of real quality control plans based on the received research and experience of the enterprise, the prevention of defects, the imbalance of the production process, deviations of actual indicators from the planned ones.

Based on quality management functions, the management process within the organization (enterprise) can be represented as a process of marketing research of consumers ' needs and their preferences regarding the quality of the product.

Management functions also include:

- quality planning;
- organization of works on quality;
- encouraging employees to actively work to ensure the required product quality;
- product quality control and evaluation;
- development and implementation of product quality management measures.

In the process of quality management, an important function is control (design control, input control of materials and components, operational control during manufacture, acceptance control of finished products). Control can be carried out by the manufacturer, and can —through inspection, verification OTC (independent quality control). Any control allows you to establish deviations and identify deviations from the specified requirements and standard.

We can distinguish the following features that make it easier to perform technical control:

- input control, which is carried out when receiving raw materials and materials for production;
- current control required to control product quality compliance with regulatory requirements;
- operational control of production, carried out during the progress or after the completion of one processing operation;

- acceptance control, as a result of which it is possible to make a conclusion about the suitability of the product;

- inspection control carried out by specially authorized persons.

The experience of leading competitive firms has established that high-quality products that meet the requirements and preferences of consumers can be manufactured only with a detailed study and analysis of the market. The most effective method used by the most successful companies is a quality management system based on international standards ISO 9000 series. This standard plays a significant role for companies whose goal is to enter the international market.

ISO 9000 series standards were implemented by the technical Committee based on the results of the analysis of the accumulated experience of leading enterprises in the field of creation, implementation and operation of product quality systems. They are recommendations for quality management and General requirements for ensuring high quality and developing elements of quality systems [1].

Product quality management generally takes into account the structure and content of the management process: identification of the volume of product needs by consumers; assessment of the actual level of product quality; development, selection and implementation of measures to ensure the planned level of product quality (Figure 1).

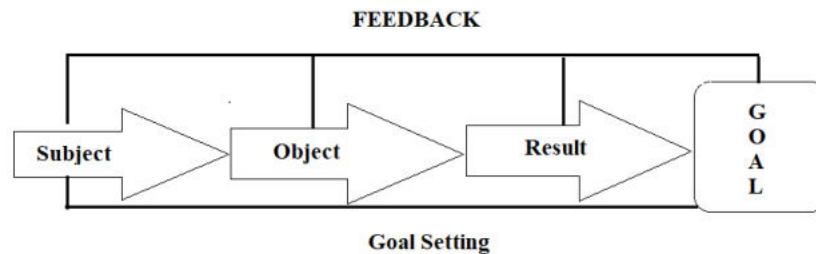


Figure 1 - General view of the product quality management structure

The solution of management tasks in the product quality management system provides three levels: macro-level, performance management, activity management and the main functions of management systems: macro- functions, General and particular functions [2].

The product quality management system implements the functions of strategic, tactical and operational management; decision- making functions

decisions, control actions, analysis and accounting; information and control functions- specialized and common for all stages of the product life cycle (LC).

The research and design stages are being completed:

- confirmation of the achieved level of test quality (approbation) of the created sample;
- development of the product reference sample and its certification;
- development of the standard (technical conditions) and design of prices for the product.

Experience has shown that quality sections have the greatest effect when a new management philosophy is used, which is based on the quality problem.

At domestic enterprises, the quality management service is assigned specific functions to solve the main tasks, in particular:

–coordination of work to achieve the required level of quality at all stages of the product life cycle-from scientific research and manufacturing to control and service;

–calculation of costs for ensuring product quality in workshops and in the enterprise as a whole;

–determining the costs due to the influence of factors on achieving the required quality level in order to eliminate (reduce) waste;

–coordinating the activities of all the company's services on quality issues, developing ideas in the field of quality and informing about the results achieved;

–assistance in selecting suppliers and determining the quality rating of partners, developing requirements for payments with suppliers (together with the logistics support service);
–organization of quality training for employees of specific enterprise services [3].

Conclusion. Thus, the most optimal solution is a quality management system at the enterprise, developed on the basis of international standards ISO 9000 series, which are considered to be generalized for use in almost any field of activity. However, since they are somewhat unified, this will require the presence of trained qualified personnel, or the assistance of third-party quality specialists in developing the necessary documents. The ultimate goal of improving the quality management system at the enterprise is to maximize profits by increasing the competitiveness of products and services, entering new markets, and, quite naturally, strengthening the position of the enterprise.

References

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