

PLACEMENT AND EFFICIENCY OF METROLOGICAL SUPPORT IN ENTERPRISES

BADALOV UTKIRBEK NOMOZ OGLI.

Jizzakh Polytechnic Institute, assistant, independent researcher

Orcid: [0000-0003-4983-6805](https://orcid.org/0000-0003-4983-6805)

Abstract: The main purpose of metrological support in manufacturing is to enhance the competitiveness of the product throughout all stages of its creation and utilization, considering its quality and market relations under the conditions of production. The level of metrological support in manufacturing directly influences the quality indicators of the product, and particular attention is paid to metrological issues to improve its effectiveness. Metrological support in manufacturing aims to have a direct impact on the quality characteristics of the product, intending to enhance its competitiveness in the market. It is focused on improving the efficiency of the product's creation and utilization at every stage, emphasizing the conditions related to quality and market relations. In manufacturing, the degree of metrological support significantly affects the product's quality indicators, and specific attention is given to metrological issues with the goal of enhancing its effectiveness.

Keywords: Quality, technical documents, certification, standards, products, measurements.

The main goal of metrological supply in production is to increase the quality of the product at all stages of its creation and use and its competitiveness in the conditions of market relations, to ensure the interchangeability of aggregates, parts, details, the necessary accuracy, objectivity and reliability of measurement results. on the basis of providing scientific-research and experimental design works and increasing the output of tests, performing measurement works related to trade and providing household services to the population, solving health care, labor and environmental protection issues is to do [1].

The level of metrological supply in production directly affects the quality indicators of the product, in order to increase the effectiveness of this effect, special importance is given to issues of metrological supply [2]. The legal procedure established in metrology protects the rights and interests of legal entities and individuals from negative consequences due to unreliable measurement results, state management agencies and organizations on issues of production, repair, sale and lease of measuring instruments. Establishing relations between public entities, creating the basis and conditions for ensuring the unity of measurements and the required accuracy in all areas of the national economy complex of the Republic of Uzbekistan, ensuring the unity of measurements national to harmonize the rules and measures of the system with the recommendations of similar systems of international organizations and other countries in order to eliminate technical obstacles in international cooperation, to ensure international and regional cooperation in the field of metrology activities, measurements, comparison, calibration, creation of conditions for implementation of interstate agreements on mutual recognition of results of testing, certification and accreditation of metrological agencies and services, requirements and rules of quality systems of agencies at the level of economic entities, as well as requirements and rules of other systems operating in enterprises and organizations It is important to coordinate with The main tasks of the metrological service in production, that is, on the basis of the introduction and compliance with the International System of Units and on the provision, standardization, certification and accreditation of metrological norms, rules and measures of the agency, the unit of measurements on the basis of harmonization with the recommendations of international organizations and national systems, to help the development of interstate relations of the Republic of Uzbekistan, to predict the development of the agency of the Republic of Uzbekistan as an integral part of the national economy complex, the unity of measurements, the required accuracy, reliability providing, and improving measurement methods, measuring tools, increasing productivity and reliability, participation in the development of scientific and technical potential, national

economy, organization of measurements in a favorable order in market conditions, and all aspects of product creation ensure the quality and competitiveness of products based on metrological assurance at all stages, with the required reliability of measurement results in all areas of public interest, including trade, health, labor safety, products and technologies, environmental protection it is necessary to create legal and legal bases for installation and maintenance [3]. Implementation of the goals and tasks of metrological supply in production enterprises is carried out by metrological supply of the country's national economy complex, taking into account economic subjects of all levels of different specializations and forms of ownership. The creation and improvement of state standards of units of magnitude and high-precision measuring instruments, the organization and conduct of scientific research in order to determine the standards and rules for transferring the dimensions of units of magnitude from standards to all measuring instruments play an important role in the production of products [4].

Standardization of the main statutes, rules, requirements and norms of ensuring the unity of measurements in metrological supply in production enterprises, creating and maintaining the legal, normative and methodological basis, protecting the enterprise from the negative consequences of unreliable measurements. development and approval of metrological standards and regulations, creation and management of metrological infrastructure consisting of science, information and metrological departments, technical, labor and material and financial resources [5].

It is necessary to determine the regional and inter-sectoral coordination of metrology in industrial enterprises, the determination, approval, storage and application of standards of metrological regulations, measuring tools, methods and general metrological conditions for measurement results. It is necessary to implement metrological control in production, to establish the adoption of normative acts on metrology issues together with service agencies. Coordination work on improving the qualification of scientific and engineer-technical personnel in metrology, ensuring the unity of measurements, metrological inspection at the enterprise within the framework of state metrological inspection and control

according to the state standard of the Republic of Uzbekistan UzDst 8.002 and control is important. Measurement information is subject not only to quantitative requirements, but also to qualitative ones. It consists of such characteristics as measurement accuracy, reliability, cost and efficiency. All these quality descriptions are based on metrological assurance. Metrological supply can be defined as the determination and implementation of technical tools, procedures and rules, norms, scientific and organizational bases necessary to ensure the unity of measurements and achieve the required accuracy [6]. Based on the description, it is possible to say that it is necessary to organize, ensure and implement the serviceability of measuring instruments, develop and implement regulatory documents for carrying out measurements, processing and recommending their results, conducting expert examination of documents, conducting state tests of measuring instruments, conducting metrological certification of measuring instruments and methods is an example of the task of metrological supply.

There are four organizations of metrological supply.

First, the "scientific basis" of metrology is the science of measurements.

Secondly, "Technical bases" state standards of units of magnitude, transfer of units of units from standards to working tools, creation and development of measuring tools, compulsory state tests of measuring tools and metrological attestation of methods of their execution, measuring tools conducting mandatory state comparisons in development, repair and use, creation of standard samples on the composition and properties of substances and materials, standard references, mandatory state tests of products [7]. The third is the metrological service of the Republic of Uzbekistan, which consists of the metrological services of the state and courts. Fourthly, "Regulatory-legal basis" consists of the relevant laws of the Republic, state standards, state and industry regulatory documents.

Metrological maintenance consists in increasing the quality of the product, the efficiency of production and its automation, ensuring the interchangeability of details and aggregates, ensuring the reliability of accounting of material assets and energy resources, protecting the environment, and maintaining health. The level of

metrological supply directly affects the quality of the product. In order to further increase the efficiency of this effect, special importance is given to metrological preventive works and issues of metrological maintenance in the preparation of production. This, in due course, will create a suitable basis for the deeper formation of market relations in our Republic and the increase of the possibility of export of manufactured products [8].

The conclusion for the topic "Placement and Efficiency of Metrological Support in Enterprises" could highlight the significance of establishing robust metrological support within enterprises. It may emphasize the crucial role of accurate measurements, calibration processes, and quality assurance mechanisms in ensuring the reliability and precision of products and services. Additionally, the conclusion could stress the potential positive impact of efficient metrological practices on overall operational excellence, customer satisfaction, and compliance with industry standards. Implementing and maintaining a strong metrological infrastructure within enterprises is essential for fostering trust, achieving consistent quality, and meeting regulatory requirements in various industries.

References:

1. Juraboevich B. N. Products in Manufacturing Enterprises the Essence of Quality Management //International Journal of Development and Public Policy. – 2021. – Т. 1. – №. 5. – С. 117-118.
2. Бадалов Н. Ж., Бадалов У. Н. КОРХОНАЛАРДА МАҲСУЛОТЛАР СИФАТИНИ БОШҚАРИШНИНГ АСОСИЙ ФУНКЦИЯЛАРИ //Academic research in modern science. – 2022. – Т. 1. – №. 1. – С. 38-45.
3. O'g B. O. N. et al. The role of quality management system in increasing product quality in enterprises //Web of Scientist: International Scientific Research Journal. – 2021. – Т. 2. – №. 12. – С. 228-233.
4. Jo'raboevich B. N. QUALITY EXPORT PRODUCTS IN ENTERPRISES GENERAL AND SPECIAL IN PRODUCTION IMPORTANCE OF REGULATIONS //ResearchJet Journal of Analysis and Inventions. – 2022. – Т. 3. – №. 6. – С. 1-7.
5. Jo'raboevich B. N. QUALITY EXPORT PRODUCTS IN ENTERPRISES GENERAL AND SPECIAL IN PRODUCTION IMPORTANCE OF REGULATIONS //ResearchJet Journal of Analysis and Inventions. – 2022. – Т. 3. – №. 6. – С. 1-7.
6. Jo'raboyevich B. N. ROLE OF COMPARISON, CALIBRATION AND METROLOGICAL CERTIFICATION IN ENTERPRISES //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 10. – С. 168-175.
7. Jo'raboevich B. N. QUALITY EXPORT PRODUCTS IN ENTERPRISES GENERAL AND SPECIAL IN PRODUCTION IMPORTANCE OF REGULATIONS //ResearchJet Journal of Analysis and Inventions. – 2022. – Т. 3. – №. 6. – С. 1-7.
8. BADALOV U. N. O. THE IMPORTANCE OF TESTING LABORATORIES AND THEIR ACCREDITATION //INTERNATIONAL SCIENTIFIC CONFERENCE" INNOVATIVE TRENDS IN SCIENCE, PRACTICE AND EDUCATION". – 2022. – Т. 1. – №. 2. – С. 163-169.