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ADVANTAGES OF IMPLEMENTING IATF 16949 QUALITY MANAGEMENT SYSTEM IN THE AUTOMOTIVE INDUSTRY

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Abstract: IATF 16949 (formerly IATF 16949) is an international industry standard and technical specification. The standard describes the requirements for the quality management systems of companies involved in the design, development, production, installation and maintenance of automotive products.

Keywords: IATF 16949, product, quality, enterprise, standard.

Relevance of the topic: the increasing share of the automotive industry in the national economy and industrial production, the automotive industry being the most competitive industry in the world, radical quality improvement to ensure competitiveness (70% of the value and quality of a car is created at enterprises supplying components), the expansion of the geographical location of the automotive industry (cars are produced in the cities of Asaka, Samarkand, Khorezm, Tashkent), the competitive environment in the automotive industry requires the introduction of modern quality management requirements and certification:

- reduce supply chain costs;
- introduction of international quality management requirements;
- continuous improvement of the quality management system and rational use of resources [1].

The rapid development of the automotive industry in Uzbekistan is mainly due to the launch of joint ventures and the expansion of their activities. The number of such enterprises is increasing day by day, and talented young people of our country are working in them. The requirements for products and production itself are considered “normal” requirements for auto giants. These requirements are mainly reflected in their internal quality standards for automobile production and compliance with international standards.

Currently, more than 1,500 enterprises in the republic have developed and implemented quality management systems that comply with international standards at the international and national levels, and have successfully obtained certificates.

The need for automobile manufacturers to comply with international standards and implement a quality system based on international standards, in turn, imposes a number of requirements on their component suppliers. The implementation of the requirements of the international standard IATF16949:2009 and its additional guidelines was considered one of these problems.

Developing and implementing a quality management system based on the requirements of the international standard IATF16949:2016 is one of the most important issues facing enterprise management in order to increase competitiveness and profitability.

A distinctive feature of the application of IATF 16949 is the requirement for organizations to use a number of tools:

• APQP (Advanced product quality planning) - advanced product quality planning and management plan.
• PPAP (Production part approval process) - Component production approval process.
• FMEA (Failure mode and effects analysis) - Analysis of potential failure modes and effects.

• SPC (Statistical Process Control) - Statistical Process Control.
• MSA (Measurement System Analyses) - Analysis of measurement systems.

This feature was inherited by IATF 16949 from the American standard QS-9000. The most common modern methods of APQP, PPAP, FMEA, SPC, MSA are actually the refined methods of the American automotive school QS-9000.

However, the use of QS-9000 methods is not mandatory and organizations may, in agreement with the consumer, use other tools that include similar requirements, such as the methods of the German Automobile Association (VDA) [2].

Compliance with the requirements of the IATF 16949 standard has certain advantages.

• Reduce waste and reduce defects. The implementation of this point is based on the introduction of a process approach. Thanks to its use, the enterprise is able to increase the efficiency of production processes, as a result of which the amount of defective products produced and the cost of resources and time are reduced.

• License for trade operations. Certification is a mandatory condition of trade relations for almost all automotive companies, as this system greatly facilitates doing business, as it is recognized all over the world.

• Ease of use and flexibility. Since IATF 16949 is based on the IATF 9001 standard, it can be easily integrated with other management systems such as OHSAS 18001 and IATF 14001. As a result, implementing IATF 16949 requires much less financial and time investment, while providing good prospects for further business development.

• Maintaining a good brand reputation. The organization's partners and customers are interested in confirming the quality of the manufacturer's products. Therefore, the presence of a certificate of compliance with the requirements of IATF 16949 leads to consistently high product quality and demonstrates the stability of the supplier company.

• Reduce costs by eliminating the need for duplication. Obtaining IATF 16949 compliance certification helps to exempt you from obtaining similar documents such as EAQF, AVSF, QS-9000, etc. Also, second and third party audits are optional [3,4].

List of used literature:

1. IATF 9000:2005 Quality Management System. Basic regulations and terms.
2. UzDSt IATF 16949:2011 Quality management system. Specific requirements for the application of ISO 9001:2008 to automotive industry and component manufacturers.
3. IATF 16949:2009 (R) (Third Edition), Quality Management System. "Specific Requirements for IATF 9001:2008 for Suppliers of Components and Materials in the Automotive Industry" Technical {'} 2009-06-15.
4. UzDSt ISO 9000:2009 Quality Management System. Basic regulations and terms