

УДК 006.9:811.111

Herasimionak A., Yalovik E.

## **Importance of Implementing a Measurement Management System in Companies of the Republic of Belarus**

Belarusian National Technical University  
Minsk, Belarus

Measurement management system is a set of interrelated or interacting elements necessary to achieve metrological confirmation and continual control of measurement processes.

An effective measurement management system ensures that measuring equipment and measurement processes are fit for their intended use and is important in achieving product quality objectives and managing the risk of incorrect measurement results. The objective of a measurement management system is to manage the risk that measuring equipment and measurement processes could produce incorrect results affecting the quality of an organization's product. The methods used for the measurement management system range from basic equipment verification to the application of statistical techniques in the measurement process control [1].

A measurement management system is a completely new phenomenon for Belarusian companies. It hasn't been implemented in our country yet. Nevertheless, the measurement management system has already been successfully implemented in many foreign countries.

This system has a similar structure to the quality management system. The measurement management system, in its essence, is a subsystem of the quality management system. However, the measurement management system has a narrower application area.

The implementation of the measurement management system in a company includes the following steps: 1) investigation of existing inconsistencies of the structure, processes and resources of the metrological service; 2) pattern generation of the processes of the measurement management system in a company; 3) substantiation of the structure of the metrological service; 4) justification of the resources required for the measurement management system; 5) development of a procedure for planning, providing, managing and improving a single method of measuring, controlling and testing within the measurement management system.

In companies where many different measurements are carried out it is advisable to introduce a measurement management system.

The development and implementation of the measurement management system in companies will enable them to achieve the following results: 1) the increase of the reliability of measurement results at all stages of the product life cycle; 2) the optimization of the quantity of measuring equipment and personnel.

These results will help to reduce production costs by minimizing the volume of poor-quality products and to increase consumer confidence in product quality.

Therefore, the introduction of a measurement management system in companies of the Republic of Belarus has great economic importance.

#### References:

1. International Standard Measurement Management Systems. – Requirements for measurement processes and measuring equipment: ISO 10012:2003. – First edition. – 2003.