

специалисты не имели данных о значении характеристики, следовательно, не могли управлять ими.

Требования к качеству измерений в сегодняшней системе улучшения качества с помощью регулирования величины отклонений безусловно выросли. Но обеспечить более жестко ограниченную неопределенность измерений недостаточно. Изменилась функция измерения. Теперь оно выполняется

ради получения объективной информации для последующего улучшения. Поэтому главным становится создание и использование адекватного информационного сопровождения в ходе подготовки производства, планирования измерений, верификации улучшений. Метролог XXI века должен быть членом межфункциональной команды проекта подготовки производства и выпуска нового изделия. ■

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# Metrological Support in the System of Continuous Quality Improvement

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## key words

quality improvement, measurement quality, measured size, critical values, management plan, measurement methodology, corrective actions

In the second half of the twentieth century, in economically developed countries, the concept of managing the production system, based on the constant improvement of the quality of commercial products, became dominant. It turned out that the increase in customer satisfaction many times overcompensates for the increase in production costs due to increased sales. We have analyzed the role of information support in the implementation of the concept of continuous improvement. The results of the analysis showed the following. Traditionally, the basis for assessing the conformity of characteristics to requirements was the measurement / control process, which the metrological service performed without the involvement of other specialists. Today, the requirements for the quality of measurements by controlling the magnitude of deviations have increased. The measurement function has changed. Now it is performed for the sake of obtaining objective information for subsequent improvement. Therefore, the main thing is the creation and use of adequate information support in the course of production preparation, measurement planning, and verification of improvements. A metrologist today is an active member of a cross-functional team of specialists to prevent loss of project profitability.

## References

1. GOST R 51814.2–01 Quality systems in the automotive industry. Method of analysis of types and consequences of potential defects.
2. GOST R 51814.5–05 Quality systems in the automotive industry. Analysis of measuring and control processes.
3. Kas'yanov S.V., Fattakhova G.R., Yamalieva R.A. Podgotovka i vnedrenie dokumentirovannoy protsedury Otsenka priemlemosti izmeritel'nykh protsessov [Preparation and implementation of the documented procedure Assessment of the acceptability of measuring processes], *Product quality control*, 2017, no. 8, pp. 50–53.