# STATISTICAL METHODS IN PRODUCT QUALITY CONTROL

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The basic techniques and tools of statistical process management are considered in the article, starting from quality assurance through its improvement and up to achieving the quality of world level.

In the process of developing the economic reforms in Russia much attention is paid to the quality of production and services. Now one of the serious problems for Russian enterprises is creating the system of quality providing the manufacture of competitive production. Quality provides competitiveness of goods. The quality system should consider the features of an enterprise, cut the costs for production and its introduction into the market. Quality is an important tool in the struggle for commodity markets.

Statistical methods are the effective tool of gathering and analyzing information on quality. The application of these methods does not demand big expenses and makes it possible to judge the status of the investigated phenomena (objects, processes) in quality system to predict and regulate the problems at all the stages of production life cycle and on the basis of it to develop optimum administrative decisions.

Nowadays the popular methodology is the concept of "Six sigms". The term sigma is a statistical one and designates a standard deviation. Ideally we observe the process without deviations, with constant quality on exit. In real life we come across deviation, and those of them which fall outside the limits of comprehensible level are called defects.

The purpose of "Six sigms" is to increase the quality and reduce the quantity of defects. It can be applied in companies of any types or size. "Six sigms" is a process, philosophy, the complete set of tools. Is approach is universal.

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