Analysis of implementation of Lean Production tools at Russian and European industrial enterprises

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More and more industrial companies in recent years are starting to apply the principles of Lean Production in their business. These principles are aimed at continuous operation efficiency improvement without radically changing the organizational structure of the enterprise. A distinctive feature the Lean Production system is that it provides mechanisms to ensure the convenience of every workplace, which allows to increase the labor productivity without significant additional costs. At the same time, this system reduces the time to market and inventory levels, thereby helping to improve enterprise efficiency at the lowest cost. A classic example is the success of the Toyota Production System, founded in 1950 in Japan and now adopted in Russia as well. Some prerequisites for its development and for adaptation of the best foreign practices existed at domestic enterprises before, but these have not been transformed into a united concept. The key element that gave the advantage to Toyota is the Lean Production philosophy brought to every employee. When deciding to implement the Lean Production system, it is necessary to analyze which of its tools will be most effective for a particular company. The paper presents a classification of the main tools of Lean Production, examines the key characteristics of Kaizen, 5S, Value Stream Maps and Total Productive Maintenance. The effects of every tool implementation are assessed with reference to policy directions of industrial enterprise.

Keywords: quality management, Lean Production principles, management tools, production process.

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