

LEANing Towards Success: How Metal Processors Can Improve Their Performance and Competitiveness



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Originally conceived by Japan's Toyota, lean manufacturing is a philosophy for managing production by continuously seeking to eliminate any possible waste. It and lean management aim to involve every employee and maximise focus on customers.

The system is used successfully in both business and personal life. The greatest returns are observed in the production environment: the lean approach significantly improves financial performance and the use of time and other resources. Existing and potential losses are classified into types, allowing analysis of ways to prevent them. It is important that all processes covered by such a transformation create value for customers.

The lean concept was first introduced in

[Ukraine's steel industry](#)

in the early 2000s. Metinvest began to use it in 2010 at Khartsyzsk Pipe, which then became the Group's lean test site. Consultants from Poland helped to train people and test the methodology, and the new specialists then returned to their work areas and started lean teams. The process began with pilot workshops and was gradually rolled out to all areas. Today, lean principles are in place at all Metinvest enterprises, and generated US\$32 million of benefit for the Group in 2018 alone.

Incidentally, lean involves not just economics, but culture as well. It is crucial to help employees understand that they need lean principles to be able to propose improvements and optimisation solutions, and bring their ideas to life.

Making lean manufacturing successful requires support from the managements of enterprises. It is also important that middle and low-level managers are properly motivated to buy into the idea.



We are proud to say that lean culture has taken strong roots at Metinvest-SMC. Managers of all levels, including sales managers, have bought into the concept, and we have developed and implemented an incentive system. Employees prepare and submit proposals to simplify and improve their work. For instance, we have been using digital signatures for our documents for two years now, and we do it not only inside the organisation, but also with external partners. It all started with logistics services, which we began purchasing paper-free.

By optimising internal logistics and using visual management, we reduced order preparation time and made crane operations more effective. As a result, our

[steel product](#)

shipments rose by 20-30%. By better organising the workplace and reducing time spent on adjusting equipment, we also reduced main equipment downtime and improved productivity.

In Ukraine, while there are steel-processing companies advanced in lean, they are few. One is Modern-Expo. According to its representatives, implementing lean management increased productivity by 30%, reduced the size of production areas by 25% and halved waste in five years, generating a ten-fold payback on lean investments.

For most steel processors, however, the lean approach remains uncharted territory. Here is a typical example. A client would like 1,000 tonnes of steel structures in three months, while the mill produces only 300 tonnes a month. Also, due to market specifics, production can be suspended at any time. As such, the mill can supply a maximum of 150 tonnes a month, meaning that the 1,000 tonnes requested can be produced in seven months. This does not suit the customer and the mill loses the order. As long as producers prioritise their own needs over those of customers, they cannot become an effective partner in large projects.

Metal processors seeking to endure in the market might like to consider going through a lean management school. Together with the Ukrainian Steel Construction Centre and Metinvest's Corporate University, Metinvest-SMC has developed and launched the Basic LEAN Competence Enhancement Programme for managers. Participants will learn how to offer higher-quality goods to the market, which drives customer satisfaction. On completion, companies that begin to implement the lean concept improve productivity and reduce production costs, which can propel them from the domestic market to the export business. The sector overall will be able to raise more investment, while optimisation will make companies more attractive employers.