The topic of lean management has been present in the pages of Management and Production Engineering Review (MPER) for a long time. In the previous issue there are 4 articles devoted to these issues. Their authors are associated with the European Academy for Industrial Management (AIM). Also this edition of Management and Production Engineering Review is largely devoted to the subject of lean management.

The term lean production was used for the first time in the article by John Krafcik in 1988 and then, as lean management, popularized thanks to the publication of Daniel T. Jones, Daniel Ross and James P. Womack’s *The Machine that Changed the World*. Lean management derives directly from the Toyota Production System, although its roots go back to the beginning of the 20th century and the production system of Frederic W. Taylor, the production line of Henry Ford, the work of Lilian and Frank Gilbreth, and others. Lean management is based on the achievements of many scientists and engineers who deal with issues of work organization and production management, as well as experience and original solutions of, among others, S. Shingo, T. Ohno, K. Toyoda, J. Womack, J. Liker, G. Shook and M. Rother.

Since its inception, after the initial period of skepticism and even failures (e.g. in the US and Western Europe), lean management has gained enormous popularity in many sectors of industry and services, and has become a “standard” approach to the improvement of production organization. The effectiveness of lean management concepts and methods have been confirmed in many countries and enterprises of various industries, confirming their effectiveness not only in production and supply chains, but also in the services sector: in education, health care, administration, and others.

Lean management creates favorable conditions for the application of information technology. Currently, one of the challenges posed by lean management is the use of Industry 4.0 technologies, which should enable further improvement of productivity, quality and flexibility of production as well as the implementation of lean management concepts, among others in small scale production, customization of products, etc.

In this issue of MPER there are three articles devoted to issues of lean management:

- applying the principles of lean management and selected technologies of Industry 4.0 in automated warehouse systems,
- building and implementation of lean and green strategies for the terrestrial container terminal hub,
- teaching lean manufacturing principles and techniques in a learning factory environment.

These articles devoted to lean management were written by members of the European Academy of Industrial Management (AIM), representing the leading European universities educating in the field of industrial engineering and management.

AIM pursues to be a leading European academy that develops and promotes education and research in the fields of industrial engineering and management. The previous issues of MPER edited by AIM members were devoted to sustainable production and cyber-physical systems and were published respectively in 2013 as vol. 4, in 2015 as vol. 3 and 2018 as vol. 4.

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