Tricanter Production Process Optimization by Digital Factory Simulation Tools

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As a result of globalization the aspects of raising productivity and speed of production with extreme requests on the flexibility of the production systems are gaining importance. These aspects of production are affected by type of product and production and mainly by the capability of companies to correctly manage the manufacturing process. Manufacturing process is globally quicker than it was and the areas of logistics and production planning are still gaining more importance. Gradual changes are also in complexity of production. Without modern tools for production planning it would be very hard to manage production effectively. These tools are part of digital factory concept. Because of those tools the effective planning of production and utilizing the production facilities capacity to its fullest is possible. This paper describes development and implementation of the digital factory concept and its tools in our partner company and is built on previous paper dedicated to common implementation principles of digital factory tools. The main goal of digital factory implementation was optimization of the Tricanter production planning process, elimination of bottle-necks of production system and optimization of manufacturing facilities capacities utilization.

Keywords: Digital Factory Tools, Simulation, Optimization, Production Process Planning, Bottle-Neck Analysis

Acknowledgement

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