Digital Factory Simulation Tools

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The article deals with the use of Siemens digital factory concept for production capacity planning. In the increasing competitive environment of globalized world economy, pressure to grow efficiency of production processes and systems greatly increases. In addition the increasing complexity of product requires appropriate as well as assembly and logistic processes as production process planning and control. These requirements in the production process planning and control may be due to its complexity filled only with appropriate instruments provided by comprehensive concept of the digital factory, which allow effective use of information on production, promote collaboration between departments and provide relevant data to anyone who needs it. This paper describes implementation of digital factory simulation tools for the production process planning and control at our industrial partner. This approach to production capacity planning using the digital factory concept is unique in the Czech Republic.

Keywords: Digital factory; simulation; optimization; production process control; production process planning

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References


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