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Production process evaluation and improvement by using the method of discrete event simulation (Conference Paper)

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Abstract

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The label printing and packaging industry has a rapidly growing and evolving market in the world. The most important aim of the companies is to accomplish the demand and expectations of the customers in the market. Label printing houses have to improve their production processes to produce fast and good quality products. In this paper, system performance was analyzed and remedial solutions were sought for a company, which is active under variable demand conditions. Aim of this study is identifying bottlenecks, balancing production lines and improving system efficiency by using simulation. A conceptual model was created including two main production lines and a discrete event simulation model was created at Arena software. After validation and verification steps scenario analysis were conducted and solutions for production problems and improvement suggestions were made to the management of the company. © 2017 EUROSIS-ETI. All rights reserved.

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