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Analysis of the integration between information tools discrete event simulation and production system

Rodrigo Ferro, Andre Luiz Helleno and Aparecido dos Reis Coutinho Methodist University of Piracicaba, Brazil

The discrete event simulation is a tool that has been used in production systems to aid decision making in order to increase speed and assertiveness of decisions. However, the modeling phase of discrete event simulation becomes a limitation in a decision making process that requires the response speed. This happens due to the time of collection of information from the production system and the time required for the processing of the information collected. This study aims to analyze the information integration tools that assist in the flow of data between production systems with discrete event simulation models allowing streamline the modeling stage and analysis of data generated in the simulation. Initially an exploratory research in scientific literature on the main tools used in managing and analyzing information between discrete event simulation and production systems was carried out. Then it was possible to develop a map with the integration of information between the production system and discrete event simulation both on-line form when off-line. Analyzing the map developed is possible to identify the points to be developed to move forward in an online simulation system and integrated manufacturing.

Biography

Rodrigo Ferro has obtained his Graduate degree in Industrial Mechanical Engineering from the Methodist University of Piracicaba (2006) and Master's degree in Production Engineering from the Methodist University of Piracicaba (2014). He is currently a Professor of Production Engineering at the Methodist University of Piracicaba and Researcher Level D at CNPq.

rodrigo.ferro@sieen.com.br

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