

عنوان مقاله:

(Using discrete event simulation to improve the production line (Case study: Takvin production Company

محل انتشار:

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خلاصه مقاله:

In this paper, we investigate the TAKVIN production company, which produces bolts for the automotive industry. In this research, we consider the production line that makes two different bolts. Note that each product has four stages of becoming fabricated, and the operation sequence for each product is different. One of the critical sections with which the company comes across several issues in this production line is packing products. Due to not being mechanized as well as lack of human resources, this section is becoming the bottleneck of the production line, and hence, the efficiency of the production line has been decreased. Using discrete event simulation, we try to model the problem in the Enterprise Dynamic (ED) software. We employed a paired t-test to validate the simulated model with the actual one. Having validated the model, we analyze the results. Finally, two scenarios are presented to enhance the efficiency of the production line.

کلمات کلیدی:

Discrete event simulation, Optimization via Simulation, Job shop scheduling, ED

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