ABSTRACT

In the industrial sector, the state of the lathe plays a very important role, especially in the machining industry. CV. Tojaya Machinery is a company engaged in the manufacturing industry that produces industrial machines. This company produces various needs of industrial companies such as roll press cutting automatic machine for grinding noodles. CV. Tojaya Machinery experienced a decline in its production target for the automatic noodle grinder roll press cutting machine. One of the causes of the decrease in the target is the presence of material queues in the turning process resulting in a bottleneck. This is caused by the shortage and excess of material to be processed, especially on a lathe. The method used in this study is the discrete event simulation approach which begins with making an initial model that is in accordance with real conditions then proceed with making an improvement model as a suggestion, this method is considered to be able to simulate a production system. The solution proposed in this study to achieve optimal production goals is to add 1 unit of flattening roll part production machine to reduce processing time and increase machine capacity. The company's production achievement is 300 units, after implementing alternative solutions, the result is 413 units.

Keywords: Bottleneck, Model, Queue, Discrete-Event Simulation.