

ABSTRACT

PT AGRONESIA INKABA Division is a company that manufactures products with rubber as raw materials and has the type of job order production. On the production floor PT AGRONESIA INKABA Division has particularly incompatibility problems in production quantities with production targets that have been planned in advance.

The purpose of this thesis is to perform production scheduling to determine the optimal production schedule by using the Simulated Annealing algorithm to minimize makespan. The data used in this research are jobs, machines, demand, processing time and sequence of operations data.

By processing the data using the C# .Net application, the time needed to complete the 10 jobs on July 2011 was 22596,5 minutes. While the target of the company by using scheduling SPT (Shortest Processing Time) is equal to 25699.5 minutes. This suggests that a decline in the value of makespan by using the Simulated Annealing algorithm is 12,07% compared to the actual scheduling by the company.

Keywords : Production Scheduling, Static Job Shop, Simulated Annealing,
Makespan