

ABSTRACT

PT. Indonesian Aerospace is one of the companies involved in the aircraft industry in Indonesia. Various forms of products caused by varying the operating process is also called job shop. The product is based on orders from customers like tool manufacturing service Casa in shop machining tool having problems. The time planned by the company to make the product more than the target. So the purpose of this research make scheduling with genetic algorithm method for minimizing the makespan.

Input to the genetic algorithm is jobs and operations, the engines were used, operating time, and some parameters like a population size, Probability of crossover, Probability of mutation, and maximum generation. The process of scheduling with genetic algorithm as an evolutionary process of individuals in the real world.

Based on the calculation and analysis have been conducted, the schedule is generated capable of minimizing the makespan of 16.68624% or a total of 3.41 hours in December 2010.

Keywords : Job Shop, Makespan, dan genetic algorithm