

ABSTRACT

PT. Indosaluyu Primajaya is a company that produces aluminum profiles and assembly of aluminum box for Boxcar. The company has a problem with the inaccuracy resulting production delays order on consumers and the queues on extrusion machines resulting in a waiting time on the machine.

The purpose of this final project is to perform production scheduling to determine the best production schedule using heuristic methods Pour and Campbell, Dudek and Smith (CDS) that can minimize makespan and analyzed comparison between the company's actual condition and scheduling using the method. The data used in this research are process time, operator skill, working environmental, and demand. The comparative analysis will be calculated by using the relative error and the efficiency index.

Based on the research results, CDS methods and Pour Heuristics methods can be used as an alternative scheduling to minimize makespan in four categories, namely demand data, processing time, the adjustment factors and the efficiency factors that result makespan of 1567,53 hours to minimize 39,53 hours or 2,4 % of the actual condition of the company that produces 1607.06 hours. Likewise Pour Heuristics method produces makespan for 1574,34 hours or 2,03 % faster than the company's actual condition. Based on these criteria, CDS methods the best method that used for company.

Keywords: Production Scheduling, Makespan, Heuristic Pour, CDS, Relative Error, Efficiency Index