

ABSTRACT

PT. Dirgantara Indonesia is one of many companies engaged in aircraft manufacturing. This final project will discuss about job scheduling in the Rubber Press ABB machine problem, especially on the metal forming shop. The problem found is the idleness of Rubber Press ABB causing a longer makespan. Idleness is caused by the arrival of parts that are not homogenous and parts that does not fit in the leftover space on the machine. This is why a schedule that can minimize makespan according to the problem and characteristic of Rubber Press ABB is needed.

The scheduling uses the reverse dispatching rule approach to minimize makespan. Reverse scheduling approach means calculating in reverse from due date until the job starting time is found. The dispatching rule used is LTPT (Longest Total Processing Time) which will prioritize jobs with the longest processing time first. This choice of method is to guarantee the arrival of parts to the Rubber Press ABB is on time. A combination of parts that will be placed in the Rubber Press ABB tray which minimizes waste space in each cycle is needed as the scheduling input. According to the results using this backward approach, the value of makespan has decreased from the actual state. The actual state resulted in a makespan of 5 work days or 35 hours while the proposed method gives a makespan of 21.63 hours.

Keywords: *Production scheduling, makespan, Rubber Press ABB, backward scheduling, LTPT*