ABSTRACT

This final project main purpose is research about job scheduling on factory machine at PT Delima Jaya. The machine is the main machine in fabrication production process, which is called Hydraulic Shearing. Product output that is processed in this machine are vary in the thickness.

The main problem is the time queue of this machine's operation is high because the job scheduling of this machine, as a single cutting machine, has not optimized yet. Therefore, a job scheduling optimization is required to solve this problem.

Heuristic approach is selected to solve the problem with its goal function in minimization of tardiness. NBR algorithm method will be used in this final project to solve this problem. Calculation of CR and BR is used to generate a solution and with the best NBR value in order to minimize tardiness.

According to the Net Benefit of Relocation result with 13 iteration, there is a new job sequencing that can reduce number of tardiness by 20.97967 *%.*

Keyword : Production Schedulling, NBR Algorithm, Hydraulic Shearing, Tardiness