## *ABSTRACT*

*Scheduling process in Pindad company of engineering division used FCFS method (First Come First Serve) and this method caused longer makespan possibility. Based on historical data of machining division, it shows delay around 33%. Therefore, the purpose of this research was making a schedule using CDS (Campbell Dudek and Smith) and Tabu Search to minimize makespan. This undergraduate thesis used the schedule based of each family product. For example, the family number 2 produced makespan around 232,28 hours from calculation result with CDS algorithm and Tabu Search. This cumulative scheduling of all job with these method would produce makespan at 422,17 hours from the last result of 446,32 hours. The result of this research was a simple application that produce better scheduling. By using this application, the scheduling in Pindad company will be more optimal.*



*Keyword : Flow shop scheduling, Family product, CDS, Tabu Search*