

ABSTRACT

PT Pan Panel is a manufacturing company engaged in the furniture. Production scheduling is implemented using the First Come First Serve (FCFS) production system. FCFS method to do sorting based on the job who came done in advance. This led to the completion of the entire production time (makespan) is not clear and have a tendency to a longer makespan. Under these conditions, in the final project is given an alternative method of production scheduling through application of the method of Campbell, Dudek and Smith (CDS) to minimize the makespan.

CDS method is a development of the Johnson algorithm that performs production scheduling based on the smallest processing time of n jobs and m machines. CDS scheduling method in this study had 18 iterations. Iteration is the best there is at $k = 12, 13, 14$ and 15 in the order 3-5-2-1-4 production scheduling. Makespan value obtained is equal to 261.03 hours. Production scheduling with application of the CDS method can minimize the makespan of 18.05%.

Key words: *production scheduling, Campbell, Dudek and Smith (CDS), Makespan*