

## **ABSTRACT**

*PT PINDAD is one of the BUMN (Badan Usaha Milik Negara) part of the manufacturing industry in the field of Primary Equipment and Weapons Systems (Alutsista) and commercial product. One of the products in the field of transport is the Air Brake System consists of several assembly, one Isolating Cock assembly consisting of Rumah Isolating Cock, Flens, Penutup, and Baut Ventilasi.*

*Makespan and order completion time limit makes the company trying to fulfill orders on time. The work done by the company is adding shifts. Lot size transfer batch used can affect the makespan. Makespan caused lengthy order completion using First Come First Served rule regardless of lot size transfer batch.*

*In achieving the goal of minimizing makespan, it is proposed scheduling algorithm Campbell, Dudek, and Smith (CDS) with calculated the lot size transfer batch Rumah Isolating Cock component with subplot size 6 units and 6 units, Flens components with subplot size 9 units and 3 units, Penutup component with subplot size 4 units and 8 units, and Baut Ventilasi components with subplot size 12 units, repeat for five times so 60 units Isolating Cock can minimizing makespan from 117 hours or 18 shifts to 45.8 hours or 8 shifts thus saving the time of completion of 60,85%.*

**Keywords :** CDS, Transfer Batch