

## CHAPTER 2

### LITERATURE REVIEW

Setiawan (2003) has done the research in develops time line approaching formula and current schedule by pay attention to lot splitting including overlapping, order splitting, and transport time between machines.

Suhendri (2005) has done the research at PT. Aneka Adhilogam Karya. The research is done by reallocate machine's load and by operation splitting. It aimed to minimize makespan.

Sari (2006) has done the research at PT Iprima Nusa Permata Dianmas. It aimed to define precise scheduling method by analysis of several scheduling method. The method was scheduling by lot transfer depend on maximum capacity of material handling.

This research studies about comparing several lot sizes to reach minimum makespan. The total number of product being produced is 32. Lot sizes examined are 4, 8, 16, and 32. Gantt Chart simulation is done using Microsoft Excel program.

The difference between this research and the previous ones is: the result of current research is case study in companies while this research is literature review used for further research in order to achieve the aims of long-term research project of the Production System Laboratory of UAJY about the effect of product structure complexity, process routing complexity, and setup time-run time ratio on makespan minimization in multilevel product scheduling.