## ABSTRACT

CV. Surya Pelangi is a company engaged in the convection field that produces apparel for personal use, schools, offices, and others. CV.Surya in processing consumer orders applies a make to order system, make to order is an ordering system that makes customers provide product specifications and designs from the design, the company provides materials, manufactures materials, and sends them to customers (Sukaria, 2009). CV. Surya Pelangi applies a flowshop flow system on its production floor. Flow shop is the process of producing a product with the same process sequence starting from materials to finished goods. The flow shop used is pure flowshop, pure flowshop is a flow shop, all tasks will flow on the same production line. The initial scheduling carried out by the company, namely FCFS (first come first serve), the method was confirmed through interviews and field observations. Initial scheduling of delays on lacost 24 s and lacost 20 s products. The delay for lacost 24s products is 25 hours and lacost 20s is 11 hours and the average delay is 9 hours. This study aims to minimize delays for schedule scheduling, namely batch scheduling using the delivery algorithm method. The first step is collecting data in the form of order data, processing time data, machine data, the due date of each order. Data collection was carried out by field observations and interviews with the manager of CV. Surya Pelangi. The second step is data processing in the form of sorting orders based on EDD if orders with the same due date are carried out based on SPT. Calculation of raw time, breaking orders into batches, sorting largest batches, applying shipping rule methods, calculating late performance. the third step is analysis and the last step is conclusions and suggestions. The results of the research that has been done, the average delay is 0 hours

Keywords: Batch scheduling, Flow Shop, Tardiness, Shorthest Processing Time, Earlist Due date