## ABSTRACT

Industrial development in Indonesia is increasing along with the advancement of science and technology. PT. XYZ is one of the companies that plays an important role in the aircraft industry. PT. XYZ have several departments to make their products. One of the department is the department to make component parts. In that department there are several machine that called department machining. PT. XYZ at this time, in releasing part that will be produce at department machining using MRP (Material Requirement Planning) I method. Production planning in MRP (Material Requirement Planning) I does not calculate for capacity on the production floor and WIP (work in process). Because it does not consider that, there is often a mismatch between the plan and the actual so that it causes delays in completing the part with the specified time. Department machining in PT. XYZ can only complete parts on time by as much as 53% and 47% experience delays in completion in January 2019. To overcome this, a good production scheduling planning method is needed considered the conditions on the production floor and controlling production activities is needed called shop floor control (SPC). Load Oriented Manufacturing Control (LOMC) is a method of planning a production scheduling that takes into account the condition of the production floor. From using Load Oriented Manufacturing Control (LOMC) the release date, start date and finish date can be on schedule and can reduce discrepancy of 29,5%. Control systems using Load Oriented Manufacturing Control (LOMC) can use applications to make it easier to determine when parts will be produced so there is no bottleneck and can increase throughput. In this application there is a menu for adding parts to be produced, calculating capacity, and for knowing when the part is started and finished.

Keyword: Shop Floor Control, Load Oriented Manufacturing Control, Throughput, Work In Process