ABSTRACT

PT Dirgantara Indonesia is the only aerospace company engaged in the design and development of aircraft, manufacturing of civil and military aircraft, light aircraft and medium aircraft. Tailboom MK-II is the part that has the highest demand level, which is 2 tailbooms per 3 weeks. Based on the observations that have been made, there is a shortage of parts from sheet metal parts on the assembly line of the MK-II tailboom equipt components. At this time PT Dirgantara Indonesia is still unable to meet the needs of parts on the assembly line in a timely manner. This is due to delays in the production process on the fabrication line so that the delivery of parts is delayed. The delay in delivery of parts on the fabrication line is caused by three factors (man, method, and material). Therefore, to solve the problem of delays in Sheet Metal parts, it is necessary to have a control system to control the production process. One of the tools from Just In Time, namely Kanban, is able to control the flow of information and material flow so that it can produce parts at the right amount and time. This study proposes the design of an Electronic Kanban system using the Constant Work In Process method. This method is used to determine the transfer flow of kanban cards to be used on the production floor. Kanban electronics are used in the Raw Material Warehouse, Fabrication, and Assembly store departments. Based on the simulation, it is found that electronic kanban can reduce delays in the production of sheet metal parts by 53% due to method factors.

keywords: Just In Time, Kanban, Elektronik Kanban, Pesawat Terbang