ABSTRACT

PT INKA (Persero) is one of several manufacturing companies in Indonesia that produces integrated trains in Southeast Asia. PT. INKA (Persero) implements a business strategy of make-to-order where PT. INKA (Persero) will produce trains if there are incoming orders and in accordance with consumer demand. Currently PT. INKA (Persero) is experiencing problems with delays in assembly, especially in the Longitudinal Beam assembly section. Delays that occur in the Longitudinal Beam assembly process are caused by the unavailability of parts during assembly. Unavailability of parts during assembly due to the flow of information that is not running smoothly. To overcome the problem of delay in the Longitudinal Beam assembly, a production control in the form of Kanban is needed. Kanban is one of the Just In Time tools where kanban can control the production flow so that it is on time and according to needs. The kanban designer in this study uses the constant quantity withdrawal kanban method to calculate kanban cards which will later be applied in the Longitudinal Beam assembly area. The result of the kanban design in the Longitudinal Beam assembly process is that it can reduce delays by 54%. This is because the kanban design can provide information about what parts, how many and when these parts should be produced.

Keywords: ***Kanban, Constant Quantity Withdrawal Kanban, Delay, Longitudinal Beam***