

ABSTRACT

MASRUROTIN: Line Balancing Analysis of Auto Wash Machine (AWM) Products Assembly Line in PT XYZ

PT. XYZ is one of the premier electronic goods manufacturers in Indonesia that offers extensive manufacturing capabilities for a complete range of electronic. This purpose of this project is to analyze the current line of auto wash machine and how to develop an efficient and effective way of assembling line in auto wash machine in order to meet the requirement of the customer. Firstly, analysis the operation time which is observed one by one operation in three types of auto wash machine in PT.XYZ and should observe waiting time that occur while operation time go on. Meanwhile, problem definitions, data of operation times, data of waiting time from the company were gathered. Current line was analyzed by calculation of percentage by line efficiency, balance delay to analyze of balance loses, and smootest index. Line efficiency calculation need to help in order to know the value of the efficiency by total of workstation time and divided by cyce time equal number of worksation. To measure fluency of the current line of autowash machine using smootest index. Later on, setting up the system that causes slow production or intterupt production occured. By line balancing will be fixed operator position a balance to distribute workload each operator, not overburden, and during the greet layout, tools and fixtures design as well and finally the best solutions were selected

Keyword: line balancing analisysis, operation time, line effiency