Productivity study and line balancing of GGMG & CALICO production line

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ABSTRACT
Assembly line balancing is assumed to have fixed task within specified task time during the initial stage of the mass production. The problem of current case study of this assembly line was the production line cannot meet the expected output plan with imbalance station cycle time. In this paper, productivity study and line balancing is applied to improve production line of GGMG & CALICO. The desired cycle time defined using the Standard Time Data (STD) which required the person to perform assign task till completion by defining the performance rating of person. The proposed solution proved by the implementation analysis conducted in the research. The results showed that the productivity of production line which is tremendously increased within 50% after implementation. There are six factors identified during the study which are bottleneck stations, workpiece flow, line layout, ergonomic, resource assignment and buffer allocation.

KEYWORDS:
Assembly Line, Cycle Time, Line Balancing, Productivity, Simulation

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