

Impact on the production line performance from the optimization assignment of the operator

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ABSTRACT

According to the reports and research of production and performance, the differences of global productivity are getting more districted. From this statement, we could infer that the performance depends on each person. Hence, in order to keep the balance of design, most works stations of production line are distributed by multipath assignment. However, while the operators are assigned into the production line, some unpredictable lose would happened due to imbalance of design of production line which is affected by people.

In order to reach the balance of production line, the research of assignment problem should be executed. Unfortunately, the researches of production line balancing are less focused on the productive ability of operators. Moreover, most researches are related to the results of theories via small experiments, and ignored if they are suitable for each industry. Therefore, it is compulsory to do the research through real productive packaged operation and improve the performance. In this work, we optimized the assignments to keep the balance of production line, and improve the performance and productivity. Hence, it is important that building a standard rule for operator assignment and making every operator to work effectively and decrease unnecessary lose.

Keyword: Hungarian method 、 Line balance 、 Analytic Hierarchy process 、 Focus group