# A Review on Simple Assembly Line Balancing Type-e Problem

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**ABSTRACT**
Simple assembly line balancing (SALB) is an attempt to assign the tasks to the various workstations along the line so that the precedence relations are satisfied and some performance measure are optimised. Advanced approach of algorithm is necessary to solve large-scale problems as SALB is a class of NP-hard. Only a few studies are focusing on simple assembly line balancing of Type-E problem (SALB-E) since it is a general and complex problem. SALB-E problem is one of SALB problem which consider the number of workstation and the cycle time simultaneously for the purpose of maximising the line efficiency. This paper review previous works that has been done in order to optimise SALB -E problem. Besides that, this paper also reviewed the Genetic Algorithm approach that has been used to optimise SALB-E. From the reviewed that has been done, it was found that none of the existing works are concern on the resource constraint in the SALB-E problem especially on machine and tool constraints. The research on SALB-E will contribute to the improvement of productivity in real industrial application.

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