

ANALYSIS AND EVALUATION OF ASSEMBLY LINE BALANCING IN A REFRIGERATION PLANT

SANJEEV VERMA, RAHUL DEV GUPTA AND B. L. SETHI

Abstract

The main objective of the line balancing is to distribute tasks evenly over the work stations so that idle time of men and machines is minimized. The line balancing problem is to “arrange the individual processing and assembly tasks at the work stations so that the total time required at each work stations is approximately the same”. In most practical situation it is very difficult to achieve perfect balance. The goal of assembly line balancing is to provide balancing work assignments for all operators such that some operators are not more heavily loaded than others. In this paper we present, characterize and formulate a general assembly line balancing problem in a refrigeration plant. An evaluation is done by using heuristic assembly line balancing methods. This evaluation gives an information about line efficiency, balance delay, cycle time reduction and manpower saving.

Keywords: Heuristic; Assembly line balancing