

Production Planning using Simulation Approach verses Hybrid Approach: A Case Study

M M Hossain

**Department of Industrial and Production Engineering
Rajshahi University of Engineering and Technology, Rajshahi 6204, Bangladesh**

M D Byrne

**Division of Operations Management, Business School
University of Nottingham, Jubilee Campus
Nottingham NG8 2BB, United Kingdom**

K M A Haque, and M A Islam

**Department of Industrial and Production Engineering
Rajshahi University of Engineering and Technology, Rajshahi 6204, Bangladesh**

M A A Zunaid

**Department of Mechanical Engineering
Rajshahi University of Engineering and Technology, Rajshahi 6204, Bangladesh**

Abstract

The traditional production planning model based upon the famous linear programming formulation has been well known in the literature. Simulation approach is also used to solve production planning problem as alternative method. Hybrid approach is tried to extract the advantage of both approaches and as well as the capacity feasible production plan. In this paper simulation approach is used to obtain production plan for the MPMP problem. It is found that the simulation approach has shown the better result which can be concluded that the hybrid approach may not be suitable for all situations.

Keywords

Production Planning, Simulation, Hybrid Approach.