

流線式生產線之保護性產能設計模式研究

吳鴻輝, 顏文芳

工業工程與系統管理學系

管理學院

hhwu@chu.edu.tw

摘要

Due to the serious dependent events exist among stations of a serial production line, the throughput performance of a line is seriously influenced by the statistical fluctuation (variability) of production time of each station. The statistical fluctuation of each station, however, is more and more severe under the competitive pressure, such as shorter product life cycle, more product models, or less quantity of an order, etc.. It is necessary and significant to design a flow-balanced serial production line, which is immunized against the statistical fluctuation. How to determine the reasonable protective capacity is one of the major problems confronted in the design of a flow-balanced serial production line. In this paper, a systematic model based on Theory of Constraints (TOC) and flow-balanced concept is proposed to decide the reasonable protective capacity for a serial production line.

關鍵字：Capacity Balanced, Flow Balanced, Protective Capacity, Theory of Constraint (TOC), μ -balanced serial production line.