

A Case Study on Line Balancing Techniques for Apparel Sewing Line

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Abstract

Quick responsiveness to market demand become an essential issue for apparel supply chain and as well as for all participants of the chain. To improve responsiveness to market apparel manufacturers are trying to improve their current production system and continuously looking for new production tools and techniques in order to be responsive with the rapid changes of trend in consumers of apparel products. Among all processes of apparel manufacturing sewing is the most critical one due to engagement of a great number of operations, various types of machines and huge manpower with different skill levels. This case study focused on assembly line balance for sewing lines with different techniques and compared among the techniques. Finally the study reveals that every technique has some advantageous options over others regarding productivity, reduction of lead time, quality level, operational complexity and product style and quantity. The study also revealed the options for practitioners to improve their manufacturing performance in the paradigm of quick response manufacturing system.

Keywords

Apparel manufacturing, Sewing line, Line balancing