

FACTORS AFFECTING QUICK CHANGE OVER TIME, APPAREL INDUSTRY IN SRI LANKA

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Setups of machines and equipment are almost unavoidable in production operations, mainly with the increase of the number of products: These types of operations only add costs to the product and are unacceptable because they do not add value. There are techniques, such as the Quick Change-Over (QCO) that lead to the reduction of setup times. QCO is one of the lean production methods used for reducing waste in manufacturing process. The concept of QCO is about minimizing change over time between two different styles. It provides a rapid and efficient way of converting a manufacturing process from running the current product to the next product. However, in the present situation in the Apparel industry in Sri Lanka, this QCO is considerably high and adds more burdens to the cost structure. Therefore, the main objective of this study was to measure the success of QCO implementation and to identify the critical success factors affecting QCO. The case study approach was used for this study and one of the reputed garment manufacturers in Sri Lanka was selected. Basically, data were collected through observations and questionnaire. Multiple linear regression and multinomial regression methods were used to analyse the data. Results showed that industry needs to increase for the satisfaction level of the employees, improve "Kaizen" and enhance autonomous maintenance to reach an optimum quick change over time.

Keywords: Autonomous maintenance, Critical success factors, Kaizen, Quick change over