

Lean Manufacturing Implementation in Small and Medium Industry

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Abstract

Lean manufacturing is an approach that aims to remove and reduce wastes in every aspect of production including the customer relations, supplier systems, product design, and plant management. The purpose of this study is to identify low productivity activities at an electronic company assembly line. An actual case study at an electronic company in Malaysia was conducted for this purpose. WITNESS simulation software was used in this study to identify the waste that existed in the production line. It was identified that Gauging Process of the assembly line had been addressed as the production line with the lowest productivity. The lean manufacturing concept employed has identified and rectified the problems related to low productivity in the assembly line based on Witness simulation results. The method used in the study has been acknowledged as a standard for future line set-up.

Keywords: lean manufacturing; WITNESS; simulation; assembly line; waste reduction.

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