



DEVELOPMENT OF MATERIAL INFORMATION FLOW CONTROL

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“I declared that this thesis is the result of my own work except the ideas and summaries which I have clarified their sources. The thesis has not been accepted for any degree is not concurrently submitted in candidature of any degree.”

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ABSTRACT

This research paper is demonstrating the adaptation of the Material Information Flow Control (MIFC) in implementing Lean Manufacturing at an automotive stamping factory in Malaysia. MIFC or its commercial name, Value Stream Mapping (VSM) is one of lean tools, which uses icons representation to help in identifying potential improvement in the manufacturing processes. Furthermore, VSM provides all the details on the materials flow from the supplier until customer as well as the medium uses in the information flow between sections. This research paper also provides the step by step of the process of applying VSM in the manufacturing environment from the mapping of current condition of the plant, future state map of future improvement until the results of the implementation of the improvements. The finding shows that VSM is an effective lean tool in identifying waste or weaknesses in the manufacturing plant. It helps in the decision making of what improvement tools should be use in future (pull system; First in First Out (FIFO) system) of the flow as well as reducing the cost of manufacturing up to RM36,000 annually and hence, increase profitability of the plant.

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