

Industrial Research Project Title	Plant Layout Improvement by Computer Modeling : a Case Study in Automobile Part Factory
Industrial Research Project Credits	6
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Degree of Study	Master of Engineering
Department	Production Engineering
Academic Year	2001

Abstract

Report on this industrial research project is to improve the layout of press part production in an automobile part factory. By using ProModel, the simulation technique is used to find the way to improve the lay out. Because of unproper machine location, workers need to spend move time for longer distance to transport. The objective of this industrial research project is to reduce handling distance by specific the appropriate location of machine at production of press part department in production line E. The researcher proposed the ways to improve production line lay out in 3 alternatives by relocating machines and in-process storage areas. The efficiency of each alternative was assessed by distance, time of handling, and cost of relocation.

The result of the simulation model indicated that every alternative could reduce handling distance and handling time. The most effective alternative can reduce the handling distance 1,106.55 meters or 64.90 percent and the utilization time of material handling equipment is reduce more than 50 percent.

Keywords : Plant Layout Improvement / ProModel / Simulation