
MODELING AND SIMULATION OF A LEAN SYSTEM. CASE STUDY OF A PAINT LINE IN A FURNITURE COMPANY

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Abstract

Since they were first developed, lean methodologies have grown in importance and scope and have been applied in both manufacturing and service. However, determining how to transform a common manufacturing company into a lean one, as well as how to evaluate the future company, are challenges for both researchers and manufacturers. This paper presents a case study of a lean manufacturing implementation for the paint line system in a furniture company. A systematic method for execution is shown. In addition, a simulation model is constructed to evaluate the new system in comparison with the MRP system. The new system promises much improvement in terms of a resource's utility and the system's productivity.

Keywords: Lean Techniques, Simulation Model, Paint Line, Furniture Company

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