

APPLYING LEAN CONCEPT IN ASSEMBLY PROCESSES

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Rezumat. *Articolul prezintă conceptul de producție Lean Manufacturing, principalele metode ale sistemului de producție Lean (Just-In-Time, Jidoka, Munca standardizată, Management vizual – Andon, 5S, Verificarea erorilor – Poka Yoke, Schimbarea rapidă a fabricației – SMED, Menținerea productivă totală – TPM, Harta fluxului de valoare – VSM, Kanban) și recomandări privind aplicarea acestora. Sunt analizate principalele caracteristici referitoare la: fabricație, exploatare, tipul de producție, planificare, diagnosticare și mentenanță. Unul din obiectivele acestui articol este să-i ofere cititorului informațiile necesare pentru a cunoaște mai mult despre posibilitatea implementării Lean pentru o linie flexibilă de asamblare și a estima mai bine beneficiile obținute ca urmare a implementării.*

Abstract. *The article presents the production philosophy Lean Manufacturing, the main methods of the Lean production system (Just-In-Time, Jidoka, Standardized Work, Visual Management – Andon, 5S, Verification of errors –Poka Yoke, the fast changing of the fabrication – SMED, The maintenance of total productivity –TPM, The map of value flow – VSM, Kanban) and recommendations on its applications. Are analyzed the main characteristics: manufacturing, operating, production type, planning, diagnostic and maintenance. One of the goals of these articles is to provide readers with informational resources for learning more about possible implementation of Lean in a flexible assembly line and the benefits derived from these system conversions.*

Keywords: Lean Manufacturing, Assembly lines, Workstation, VSM, Kaizen report.

1. Introduction

The term lean centers around the idea that the customer purchasing a good or service is only willing to pay for the value added "steps" in making or delivering such a service. Therefore the non value adding "steps" and its associated costs are barred by the manufacturing company, thus reducing margins for the manufacturer.

Lean Manufacturing is "A systematic approach to identifying and eliminating waste through continuous improvement by flowing the product at the demand of the customer." [1]

Lean Manufacturing or Lean is a manufacturing term used to describe a manufacturing, industrial or service operation which operates with little or no type of *muda* (waste), thus making the operation very efficient and only consisting of value adding steps from start to finish, as can be seen in a value stream map. [5]

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