







Q

Home ► All Journals ► Engineering & Technology ► International Journal of Production Research ► List of Issues ► Volume 49, Issue 11 ► A framework for assessing the use of lea

International Journal of Production Research >

Volume 49, 2011 - <u>Issue 11</u>

2,163 102 0

Views | CrossRef citations to date | Altmetric

Original Articles

A framework for assessing the use of lean production practices in manufacturing cells

Tarcisio Abreu Saurin , Giuliano Almeida Marodin & José Luis Duarte Ribeiro

Pages 3211-3230 | Received 28 Aug 2009, Accepted 26 Mar 2010, Published online: 28 May 2010



Abstract

Full Article

■ Reprints & Permissions

This study introduces a framework for assessing the use of lean production (LP) practices in manufacturing cells (MCs). The development of the framework included four stages: (a) defining LP practices applicable to MC, based on criteria such as the inclusion of practices that workers could observe, interact with and use on a daily basis; (b) defining attributes for each practice, emphasising the dimensions which were typical of their implementation in LP environments; (c) defining a set of evidence and sources of evidence for assessing the existence of each attribute-the sources of evidence included direct observations, analysis of documents, interviews and a feedback meeting to validate the assessment results with company representatives; (d) drawing up a model of the relationships among the LP practices, based on a survey with LP experts. This model supports the identification of improvement opportunities in

MC performance based on the analysis of their interfaces. A case study of an MC from an automobile parts supplier is presented to illustrate the application of the framework.

Keywords:

cellular manufacturing

lean production

performance measurement

Related Research Data

U-shaped production lines: A review of theory and practice

Source: International Journal of Production Economics

Lean manufacturing: context, practice bundles, and performance

Source: Journal of Operations Management

GROUPABIL1TY: an analysis of the properties of binary data matrices for group

technology

Source: International Journal of Production Research

The first step in planning group technology

Source: International Journal of Production Economics

Design rules for implementing the Toyota Production System

Source: International Journal of Production Research

Manufacturing Strategy

Source: Unknown Repository

A review of lean assessment in organizations: An exploratory study of lean practices

by electronics manufacturers

Related research 1



People also read

Recommended articles

Cited by 102

Information for

Authors

R&D professionals

Editors

Librarians

Societies

Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

Help and information

Help and contact

Newsroom

All journals

Books

Keep up to date

Register to receive personalised research and resources by email



Sign me up











Accessibility



Copyright © 2025 Informa UK Limited Privacy policy Cookies Terms & conditions



Registered in England & Wales No. 01072954 5 Howick Place | London | SW1P 1WG