

Accepted Manuscript

Flexible sustainable manufacturing via decision support simulation: A case study approach

K.T. Shibin, Angappa Gunasekaran, Rameshwar Dubey

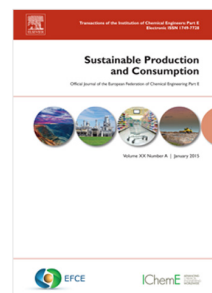
PII: S2352-5509(17)30032-5
DOI: <http://dx.doi.org/10.1016/j.spc.2017.08.001>
Reference: SPC 105

To appear in: *Sustainable Production and Consumption*

Received date : 17 February 2017
Revised date : 12 August 2017
Accepted date : 19 August 2017

Please cite this article as: Shibin K.T., Gunasekaran A., Dubey R., Flexible sustainable manufacturing via decision support simulation: A case study approach. *Sustainable Production and Consumption* (2017), <http://dx.doi.org/10.1016/j.spc.2017.08.001>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Flexible Sustainable Manufacturing via Decision Support Simulation: A Case Study Approach

Research Highlights

The main purpose of this article is to illustrate a decision support system for the redesign of an existing assembly facility in an automotive factory for new product introduction in a flexible and sustainable way with the help of a simulation-based optimization approach.

In our study, we have assigned equal weightage to each performance parameter of the facility, including economic, environmental, social, and manufacturing flexibility.

Our analyses further helped validate the changes required before implementation. Implementation of the proposal based on our findings helped the organization achieve economic benefits and environmental benefits. Along with these benefits, our studies have also helped improve safety measures and working conditions.

Finally, we have outlined the limitations of our study and noted future research directions.

Download English Version:

<https://daneshyari.com/en/article/4999496>

Download Persian Version:

<https://daneshyari.com/article/4999496>

[Daneshyari.com](https://daneshyari.com)