



Call for Papers: Journal of Intelligent Manufacturing

Special Issue: Pull Strategies in Manufacturing Systems and Supply Chains: Recent Advances.

**Guest Editors: Jose M. Framinan
Henri Pierreval**

Introduction

Material flow control in manufacturing facilities and in supply chains can typically be based on two major strategies, namely push, and pull. Pull strategies have their origins in the early 1970s, in particular through the development of the Just-in-Time (JIT) techniques at Toyota production plants. Since then, these techniques have been adopted by manufacturing firms worldwide for improving productivity. Pull strategies underline the importance of material flow control and coordination mechanisms that react to actual occurrences of demand rather than future demand forecasts. In recent years, it has been pointed out that the management of supply chains can also benefit from pull strategies, and that research was needed to extend and adapt these strategies for synchronizing the production of plants organized into networks.

Although the interest of pull strategies in the last decades has reflected into a high number of contributions in the field, there is still a considerable amount of work ahead. For instance, it is difficult to understand the mechanisms or properties that make some strategies preferable to others, or to forecast under which manufacturing scenario some strategies outperform others. In addition, new pull strategies have been introduced in the last years, as well as new scenarios for their application, including the coordination of materials in a supply chain. Finally, the integration of these strategies into planning frameworks, and the research of their relationships with related techniques is also worth investigating.

Objectives

The objective of this special issue is to bring together the most up to date research in the modelling, design, operation, and deployment of pull strategies. While research in pull strategies encompasses a wide range of topics and methodologies, we expect this special issue to provide a good overview of current approaches, issues, and trends within the field.

In addition, we also aim to publish high-quality papers on advanced modelling and innovative design of supply chains, with emphasis put on the application of new information and network technologies. Conceptual, analytical, and empirical papers focusing on pull strategies as well as case studies can be considered for this special issue.

Potential Topics

Papers related to the issues raised above are welcome. Potential topics include, but are not limited to:

- Modelling and operation of pull strategies.
- Design and optimisation of new/hybrid pull control systems.
- Performance analysis of different pull strategies.
- Analysis and operation of JIT supply chains.
- Planning and scheduling in a pull context.
- Comparison of pull/push/hybrid strategies.
- Cost /Human factor considerations.
- Robustness issues.
- Integration of pull and push concepts.
- Configuration and optimization of pull systems.
- Pull issues in networks of plants.
- Case studies.

Submission

Authors are kindly requested to send a declaration of intention, as soon as possible, with:

- the authors list
- the contact author's email
- provisional title
- abstract, if available

to the guest editors:

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Manuscripts should be submitted using the journal website: <http://jims.edmgr.com>. When doing so, they should choose the article type "S.I.: Pull Strategies in Manufacturing".

Deadline for manuscript submission: 30th November 2008