Taylor & Francis
Online

International Journal of Production Research ›
Volume 50, 2012 - Issue 3

1,084 Views | 32 CrossRef citations to date | 0 Altmetric

Original Articles

Capacity coordination in hybrid make-to-stock/make-to-order production environments

H. Rafiei & M. Rabbani

Pages 773-789 | Received 05 Jul 2010, Accepted 29 Oct 2010, Published online: 14 Jun 2011

Cite this article https://doi.org/10.1080/00207543.2010.543174

Sample our Economics, Finance, Business & Industry Journals
>> Sign in here to start your access to the latest two volumes for 14 days

Full Article | Figures & data | References | Citations | Metrics
Reprints & Permissions | Read this article | Share

Abstract

One of the most important decisions in hybrid make-to-stock/make-to-order (MTS/MTO) production systems is capacity coordination. This paper addresses capacity coordination of hybrid MTS/MTO production systems which deal with MTS, MTO and MTS/MTO products. The proposed model is developed to cope with order acceptance/rejection policy, order due-date setting, lot-sizing of MTS products and determining required capacity during the planning horizon. Additionally, a backward lot-sizing algorithm is developed to tackle the lot-sizing problem. The proposed model presents a general framework to decide on capacity coordination without too many limiting mathematical assumptions. The model combines qualitative and quantitative modules to cope with the aforementioned problems. Finally, a real industrial case study

is reported to provide validity and applicability of the proposed model. Having the model applied in the case study, considerable improvement was achieved.

Keywords:

production planning | hybrid make-to-stock/make-to-order | capacity coordination | acceptance/ rejection policy | due-date setting | lot-sizing

Related research

People also read | Recommended articles | Cited by 32

Hybrid make-to-stock and make-to-order systems: a taxonomic review

Kay Peeters et al.
International Journal of Production Research
Published online: 22 Jun 2020

Tactical production planning in a hybrid Make-to-Stock–Make-to-Order environment under supply, process and demand uncertainties: a robust optimisation model

Masoud Khakdaman et al.
International Journal of Production Research
Published online: 16 Jul 2014

Information for

- Authors
- R&D professionals
- Editors
- Librarians
- Societies

Open access

- Overview
- Open journals
- Open Select
- Dove Medical Press
- F1000Research

Opportunities

- Reprints and e-prints
- Advertising solutions
- Accelerated publication
- Corporate access solutions

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

Copyright © 2026 Informa UK Limited Privacy policy

Cookies Terms & conditions Accessibility

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