



Book Selection

Edited by J Crocker

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Inventory Management and Production Planning and Scheduling (Third Edition)

EA Silver, DF Pyke and R Peterson

*John Wiley & Sons Ltd., 1998. xxii + 754 pp. £30.50.
ISBN 0 471 11947 4*

It would seem appropriate to first declare an interest. The senior author is a long-standing friend, and we have shared in writing one paper. I am included in an extensive list of acknowledgements, which otherwise reads like a *Who's Who* of the OR/OM world. The first and second editions referred to one of my earliest papers: a reference omitted from this third edition. So honours are about even!

The book has been divided into five parts. The first discusses inventory management and production planning in relation to business strategy, with a chapter devoted to the determination of forecasting strategy and the selection of forecasting methods. The second part is concerned with traditional decision systems for the inventory control of individual items, taking into account seasonal demand, probabilistic demand, and different attitudes of management toward costing the risk of insufficient capacity in the short run.

The third part deals with special classes of items: including the most important (Class A), the large group of low-activity items (Class C) and style goods and perishable items (the newsboy problem). Part Four considers coordination of groups of items: first, in a family of items, at a single location, that have something in common such as a supplier, or transport mode or production equipment and secondly in a multi-echelon framework. The final part is concerned with decision making in a production environment and covers aggregate production planning, MRP, ERP, JIT, OPT, and short-range production scheduling.

It will be helpful for those who know the previous editions to be aware of the following significant changes from the second edition.

- A third author, David Pyke, has joined the team. Surprisingly, this is not pointed out in the preliminary pages. His particular interest seems to be in supply chain management and multi-echelon inventories and a new chapter is added that incorporates some of the latest research and experiences of leading firms.
- A greater emphasis on the use of spreadsheets, and a consequent reduction in emphasis on graphical and tabular aids in decision making.
- New chapters are devoted to just-in-time (JIT), with a discussion of optimised production technology (OPT), and to production scheduling.
- Introductions to enterprise resource planning systems (ERP), such as SAP, and the economic lot scheduling problem are provided.
- More coverage of both operations strategy and of the news vendor problem and its application to style, or fashion, goods.
- Significant updating of the references to the academic and practitioner literature, and expanded end-of-chapter problem sets.
- Removal of the MIDAS case to supplementary material.

In my review of the first edition¹ I said that it was 'excellent value for money and should become a work frequently consulted by teachers, students and managers, because of the extent and thoroughness of its coverage of the important practical subject of inventory management and production planning, and because of the clear way in which the material is presented'. So it proved to be. The statement is equally true of the third edition.

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Reference

- 1 Rand GK (1979). Review of 'Rein Peterson and Edward A Silver: decision systems for inventory management and production planning'. *J Opl Res Soc* 30: 1133–1134.