Encyclopedia of Production and Manufacturing Management

"This encyclopedia is an important work. It deserves widespread use by everyone who cares about American manufacturing at the dawn of the new century. I am pleased to commend it to persons who work in manufacturing management and to everyone who cares about the future of American industry."

Jerry J. Jasinowski, President
The National Association of Manufacturers
July 18, 1999 (In the Foreword of Encyclopedia of Production and Manufacturing Management)

The Encyclopedia of Production and Manufacturing Management has been developed to serve this field as the fundamental reference work. In the last two decades, production and manufacturing management absorbed in rapid succession several new production management concepts: manufacturing strategy, focused factory, just-in-time manufacturing, concurrent engineering, total quality management, supply chain management, flexible manufacturing systems, lean production, mass customization, and more (see Table of Contents for a complete list). It is clear that with the increasing globalization of manufacturing, the field will continue to expand. This explosive growth in concepts and practices underscores the need for this volume.

The **Encyclopedia's** audience is a technically diverse one. It includes anyone concerned with manufacturing techniques, methods, and manufacturing decisions. The articles are fundamentally designed to serve as initial sources of information for all readers, with special emphasis on the needs of students and practitioners. In addition, most researchers in manufacturing deal fairly exclusively with a limited number of manufacturing areas. The **Encyclopedia** provides the researcher with an effective reference tool covering the *broad* spectrum of topics (new and classic) in production and manufacturing management. The entries in this encyclopedia include the most recent technical and strategic innovations in production and manufacturing management.Comprehensiveness and currency are the guiding principle of topics covered in the **Encyclopedia.**

The **Encyclopedia** consists of articles of varying lengths--the longer articles on important concepts and practices range from five to fifteen pages. There are about 100 such articles written by nearly 100 authors from around the world. In addition, there are over 1000 shorter entries on concepts, practices and principles. The range of topics and depth of coverage is intended to suit both student and professional audiences. The shorter entries provide digests of unfamiliar and complicated subjects. Difficult subjects are made intelligible to the reader without oversimplification.

The articles themselves are organized for a consistent presentation. The structural organization used in the majority of the articles is as follows: Description and basic concepts; Historical perspective; Strategic perspectives; Implementation; Technology perspective; Significant analytical models; Effect on performance; Timing—When it is appropriate?; Location—Where is it used or practiced?; Results; Cases and Collective wisdom.

A special feature of this encyclopedia is the list called Manufacturers and Organizations Discussed in the **Encyclopedia** following the Table of Contents. Several articles use real life examples from more than 100 manufacturing and other firms from the U. S., Japan, Europe, and other countries. The practices of some manufacturers such as Chrysler, Ford, GM, and Toyota are discussed. The list provides an easy and quick access to references about companies and organizations in the list. At the end of the Encyclopedia, there are two Appendixes with different bibliographies. **Appendix I** is organized alphabetically and includes writings on all topics covered by the encyclopedia. **Appendix II** is a topical bibliography under 21 broad topics from Capacity Planning to Supply Chain. The second bibliography can greatly speed the search for publications on a given topic. The two appendixes should serve as valuable research tools.

Alphabetical List of Major Articles

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