

# **PURCHASING AND MATERIALS MANAGEMENT**



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# **PURCHASING** *and* **MATERIALS MANAGEMENT**

[For the Students of B.E./B. Tech. and M. Tech. (Production and Industrial Management) also useful for BBA and MBA Courses]

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First Edition 2011

ISBN : 81-219-3648-9

Code : 07524

PRINTED IN INDIA

By Rajendra Ravindra Printers Pvt. Ltd., 7361, Ram Nagar, New Delhi -110 055  
and published by S. Chand & Company Ltd., 7361, Ram Nagar, New Delhi -110 055.

# Preface

Materials Management constitutes all activities i.e. physical supply, physical distribution and operations planning and control. Other processes used are business logistics and supply chain Management.

The Importance of Materials Management lies in the fact that it controls near about 45% to 70% cost of the material in input in the final product with this realization, the emphasis has shifted to materials management heavily. Now a days purchasing section is regarded as the profit centre of the firms. Industrial advisors and experts say that the role of purchasing manager is very crucial for smooth running of the firm Savings in purchasing results in value addition in the conversion process. Thus materials management covers the functions involved in planning, sourcing, moving, storing and controlling materials most effectively and efficiently.

This book contains 25 chapters. Chapters 1–2 discuss the concept and objectives of materials management chapter – 3 deals Computer Application and System Analysis, Chapter 4–9 deal with Standardization, Classification and Codification of Materials Planning and Budgeting followed by stores and stores management and Automatic Storing and Ware Housing and Stores in Stock yards. Chapter 10–14 discuss preservation of materials, Handling, of Material Inventory Planning and Control, Inventory management models and selective Inventory control. Chapter 15 discuss the Strategies for taking decisions regarding making a product in house or out sourcing the same. Chapter 16 details elementary principals of purchasing so as to gain the basic information for purchase management. It is essential to purchase from high performing vendors, therefore it is essential to evaluate and rate all venders associated with the company. This process of evaluation and ratings is described in Chapter 17, Chapter 18, and Chapter 19 deal with the details of purchasing valuable materials just in time.

As said earlier that it is 60% to 70% materials cost involved in the final Product, therefore skillful purchase of quality material is of paramount importance, these details are described in chapters 20–21.

Storing of materials involves costs such as space, protection and accounting. Inorder to minimize these, it is essential that Surplus obsolete and waste must be minimized, therefore stock maintenance and accounting of all materials including that of surplus and waste must be managed properly. Chapter No. 22–23 describes the management of the aforesaid topics.

Legality in purchasing has to be maintained inorder to avoid litigation leading to unnecessary costs to management. This is described in chapter 24. Chapter no. 25 deals with some Case Studies and review questions.

Today, materials management forms part of the core curriculum of the engineering in B. Tech & M. Tech. programmes (production and Industrial Management Engineering) and also forms part of the courses of the BBA, MBA programmes. The theoretical aspects covered in this book have been supplemented with select case studies to enable the students to have a comprehensive view of the subject. The authors have referred to the existing literature they gratefully acknowledge the sources of reference.

Comments and suggestions from the readers for the improvement of the book will be most welcome.

**Dr. K. C. Jain**  
**Er. Jeet Patidar**

## Acknowledgement

It is with great pleasure the authors Acknowledge the timely encouragement and motivating suggestion to go for writing a book on Purchasing and Materials Management. Without their source of motivation it was not possible to write this book, therefore We were sincerely thankful to the following eminent professors in the area of management for their valuable suggestions and encouragement as and when required during the time of writing this book.

1. Dr. M.L. Patidar, Director, Balkavi Bairagi collage of management, Neemach (M.P).
2. Dr. Deepika Gupta Head of the Department of Business Administration Mandsaur Institute of Technology, Mandsaur (MP).
3. Dr. P. L. Verma Reader Mechanical Engineering Department SATI, Vidisha.
4. Professor Nageshwar Rao Ex Director, JLN Management Institute Vikram University, Ujjain.
5. Professor Shefali Tiwari, Gujarati Institute of Management Studies indore (MP).
6. Prof. Sumeet Khurana, Den faculty of Management Trans National Society Group of Institute Acropolis II.

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Chapter

# 1

# Material Management

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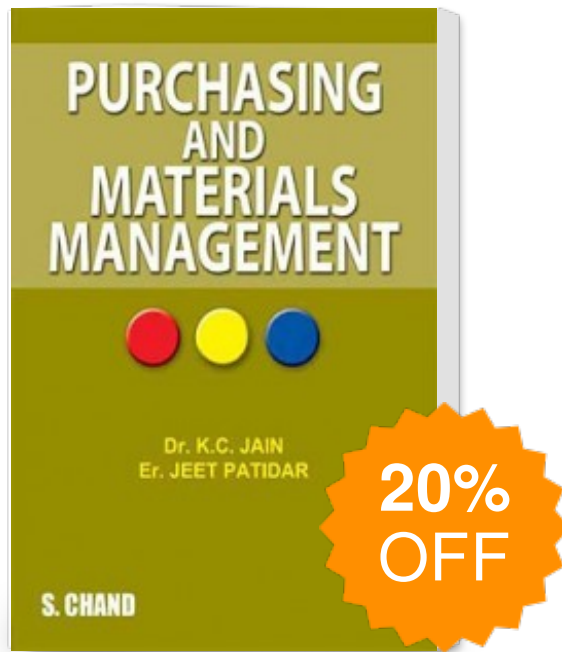
## 1.1 INTRODUCTION

Materials management is one of the basic functions of every organization. Alongwith the other functions of finance, technical, commercial and HRD. It has an equal contribution to make to the triple objective of survival, stability and growth in any healthy economic success of any manufacturing company has a direct relationship with the efficacy of its materials management function. Since any organisation can only have a limited amount of capital to be invested in its fixed and current assets one of the prime responsibilities of every management is to deploy these critical resources so as to give the maximum yield to the organisation. An average manufacturing organisation in India has approximately 80% of its current assets invested in inventories with the rest being in sundry debtors, cash and other miscellaneous items. Thus it is quite evident that successful materials management can contribute immensely to improving the efficiency of working capital employed in an organisation.

Inventories are nothing but cash stored up. The vital difference between this “cash” and the conventional cash is that while the former does not earn interest but on the other hand requires additional funds for servicing it, the latter can be utilised in any fashion that the owner desires. The cash which is utilised for buying raw materials has to flow through the process of being converted into work-in-process and subsequently finished goods. As and when these finished goods are sold and dispatched to customers, the organisation gets back its cash in the form of accounts and the cash which had gone into the procurement of raw-materials originally and some surplus cash is generated. This is what is commonly known as the “cash cycle”. Every healthy organisation always strives for a reduction in the total duration of the cash cycle and thus achieve an accelerated pace of its turning over. The rate at which cash turns back into cash is one of the measures of the efficiency of the organisation.

It needs to be emphasised here that while investing in inventory holdings the organisation should keep in mind the opportunity cost of this investment. Any funds which are tied up in inventory cannot be utilised for other purposes like investing for future growth, diversification or for maintaining a better liquidity situation.

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Publisher : SChand Publications ISBN : 9788121936484

Author : Jeet Patidar

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