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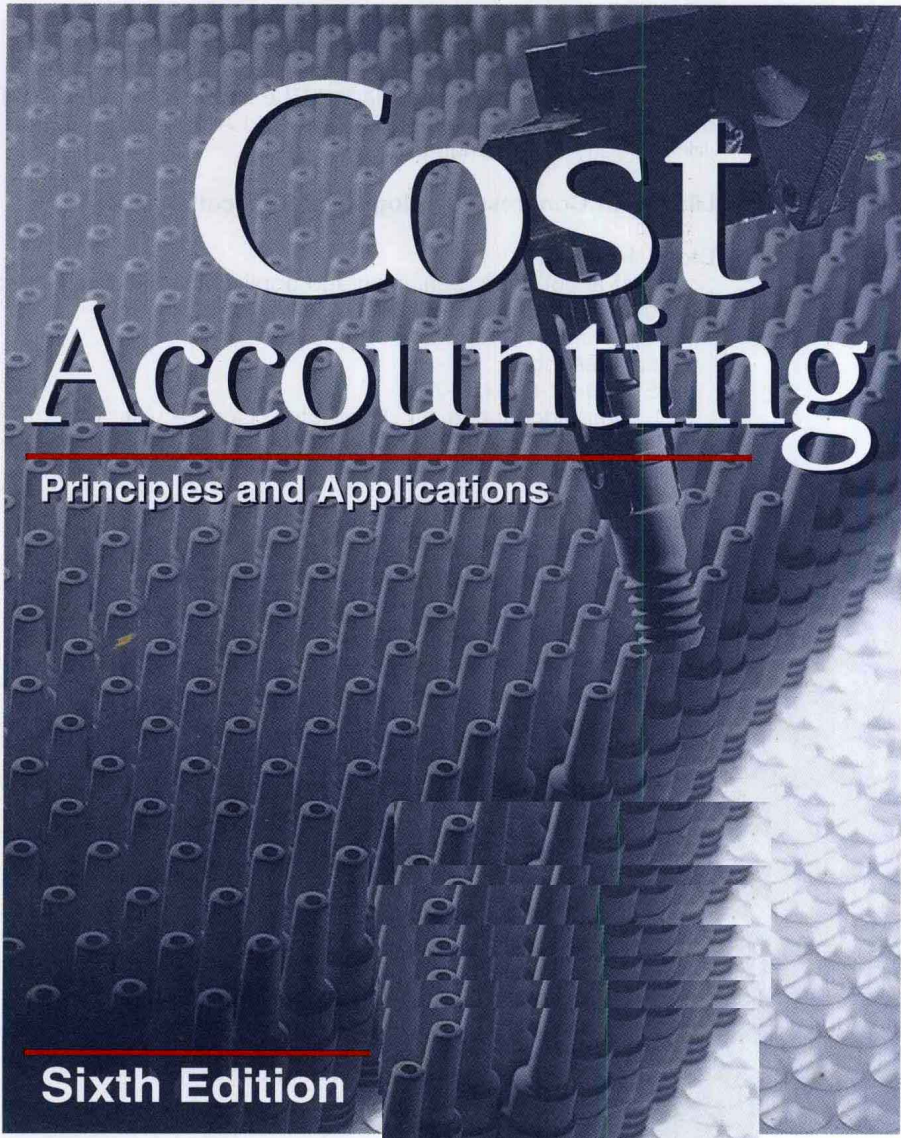
Cost Accounting

Principles and Applications

Sixth Edition

Horace R. Brock

Linda A. Herrington



Cost Accounting

Principles and Applications

Sixth Edition

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**Glencoe
McGraw-Hill**

New York, New York

Columbus, Ohio

Woodland Hills, California

Peoria, Illinois

Photo Credits: Cover John Madere/The Stock Market; Part 1 Tom McHugh/Photo Researchers; Part 2 David A. Barnes/FPG; Part 3 Mark Joseph/Tony Stone Images.

Library Of Congress Cataloging-in-Publication Data

Brock, Horace R.
Cost accounting: principles and applications/Horace R. Brock,
Linda A. Herrington.—6th ed.
p. cm.
Includes index.
ISBN 0-02-803428-7
1. Cost accounting. I. Herrington, Linda A. II. Title.
HF5686.C8B76 1998
657'.42—dc21

97-50268
CIP

Glencoe/McGraw-Hill

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Cost Accounting: Principles and Applications, Sixth Edition

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5 6 7 8 9 027 06 05

ISBN 0-02-803428-7

Preface

A TOTAL INSTRUCTIONAL SYSTEM

A cost accounting instructional system should serve the career objectives of all students who require an understanding of accounting. Its components should satisfy the learning needs of students who are preparing for a wide range of business and professional pursuits. Moreover, instructors should be able to customize their cost accounting courses by matching instructional components with the abilities of individual students and with the levels of accomplishment that are required for different career objectives. A cost accounting instructional system should, therefore, contain performance objectives, reading resources, student application materials, comprehensive projects, student self-checks, and instructor's materials.

In preparing the sixth edition of *Cost Accounting: Principles and Applications*, the authors have created an instructional system that meets all of these criteria.

TEXTBOOK

This student resource text is designed for use in postsecondary cost accounting courses. The sixth edition provides a practical knowledge of cost accounting systems and procedures, and will prepare students for many of the career opportunities available in cost accounting. It will also enable them to understand and use cost accounting data in other types of business careers.

The book begins by giving students an overview of the nature and purpose of cost accounting. Then students learn the basic concept that cost flow matches work flow. After that, they are led throughout the major areas of cost accounting: job order cost accounting, process cost accounting, budgeting, standard costs, direct costing, and non-manufacturing costs.

Managerial considerations, especially as related to cost control, are indicated at every opportunity in Parts 1 and 2. Part 3 is devoted exclusively to cost accounting as a management tool. Also, the uses of computers in cost accounting are discussed throughout the text.

Each new segment of instruction is carefully explained and illustrated. Review questions and managerial discussion questions, along with application activities in the form of exercises, problems, and alternate problems, help students to integrate their learning while everything is fresh in their minds. Each chapter ends with a summary of the basic principles and procedures covered in the chapter.

SPECIAL NEW FEATURES OF THE TEXT

- Special vocabulary is emphasized by including a list of new terms on the chapter opener page, use of bold type where the term is defined, and a glossary of terms at the end of the textbook.
- Many new flow charts that capstone cost accounting concepts.
- Student Self-Review activities in each chapter include questions and answers to help students reinforce chapter concepts. These activities modularize each chapter into effective learning segments.
- Business Horizons bring real-world applications into the cost accounting course.
- A short, concise summary appears at the end of each chapter.
- A managerial emphasis in this edition is supported with Managerial Implications, Managerial Discussion Questions and Managerial Decision Cases.
- Each chapter contains Exercises and Problems A and B.
- Three Mini-Practice Sets support job order, process cost and budget, and standard cost accounting.
- Extensive reorganization of Capital Investment Decisions.
- Master problems have been added to emphasize key concepts in the Process Cost Accounting Section.

LEARNING AIDS

A number of learning aids are available for use with the sixth edition of *Cost Accounting: Principles and Applications*. These materials are designed to enhance the effectiveness of the course for the student.

Study Guide and Working Papers

The *Study Guide and Working Papers* manual permits each student to study at his or her own pace. Performance Objectives inform students what they should know and be able to do after completing each chapter. Reading assignments direct students to the appropriate section in the textbook reading assignment. (A self-check key is provided at the end of the *Study Guide and Working Papers*.) All the working papers needed to solve the problems or the alternate problems and the three Mini-Practice Sets in the textbook are provided in the *Study Guide and Working Papers*.

Spreadsheet Template Disk

The disks contain template files for Microsoft Excel, Version 5.0. The files are designed for students who have a basic understanding of spreadsheet construction and are able to build formulas for computations. The student disk contains one problem each for 24 of the chapters. The problems are identified in the textbook by a computer symbol. The instructor's disk contains the solutions for each problem.

Practice Sets

Two short practice sets are available for use with this textbook: *Robotor Manufacturing, Inc.—A Job Order Practice Set* and *Comptech Manufacturing Corporation—A Standard Costs and Budgeting Practice Set*. These practice sets will enhance the course by allowing students to apply their knowledge of cost accounting to realistic on-the-job situations.

TEACHING AIDS

Solutions Transparencies

A variety of helpful teaching aids are available for use with *Cost Accounting: Principles and Applications, Sixth Edition*.

An *Instructor Transparency Package* containing solutions for each of the regular problems in the text is available.

Course Management and Solutions Manual

This teaching aid contains chapter teaching pointers and answers to all the review questions, managerial discussion questions, exercises, and cases found in the textbook. A facsimile key for the problems and Mini-Practice Sets is included. Check figures are provided for the problems and Mini-Practice Sets, and these may be duplicated for the students.

This manual also contains teaching suggestions, model schedules, transparency masters of accounting forms, and instructions for using the spreadsheet template.

Glencoe Student Assessment System (GSAS)

The test generator component of the Glencoe Student Assessment system contains one test for each of the 27 chapters. The tests may be generated in printed or on-line form. The program allows the instructor to modify the tests.

ACKNOWLEDGMENTS

The authors would like to thank the following educators for their thoughtful reviews and careful checking, which provided a solid base for this revision:

Andy Anderson
Wichita State University
Wichita, KS

Tom Land
Bessemer State Technical College
Bessemer, AL

Michael J. Choma
Newport Business Institute
Lower Burrell, PA

Leonard T. Long
Fisher College
Boston, MA

Jarvis Dean
Chattanooga State Technical Community College
Chattanooga, TN

Jeffrey A. Trevas
Chaparral College
Tucson, AZ

George L. DeOrio
Sawyer School
Pittsburgh, PA

Frank Walker
Lee University
Cleveland, TN

Judith E. Kizzie
Clinton Community College
Clinton, IA

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CHAPTER 9
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CHAPTER 10
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CHAPTER 11
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Porch and Garden Company, Inc.

CHAPTER 12
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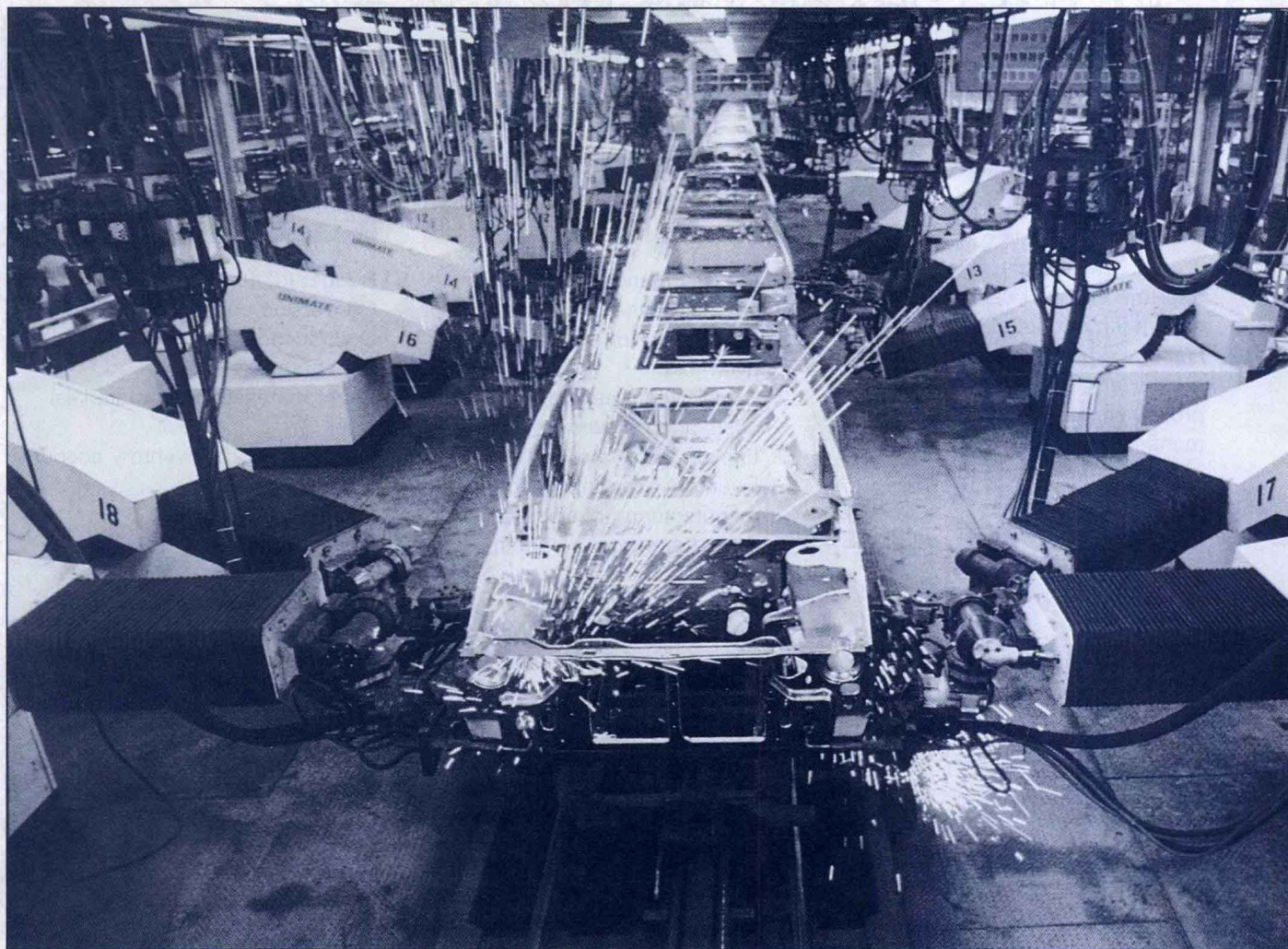
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CHAPTER 1

Monitoring Costs

Every business is run to make a profit for its owners. *Profit* is the amount of income left after the various costs of operation have been deducted. In general, higher costs mean smaller profits, and lower costs mean larger profits. No wonder the successful manager keeps a close watch on costs; it is necessary for survival. Accounting provides the tools that management needs to monitor costs.

OBJECTIVES

1. Classify manufacturing costs as being direct materials, direct labor, or manufacturing overhead.
2. Explain the meaning of *prime costs* and *conversion costs*.
3. Explain the role of the three inventory accounts used in a manufacturing business.
4. State the purpose of cost accounting.
5. Determine the type of cost accounting system to be used in various types of manufacturing operations.
6. Prepare a statement of cost of goods manufactured.
7. Prepare an income statement for a manufacturing business.

NEW TERMS

Budget (p. 10)
Conversion cost (p. 8)
Cost accountant (p. 12)
Direct labor (p. 7)
Direct materials (Raw materials) (p. 5)
Finished Goods Inventory account (p. 9)
Indirect labor (p. 7)
Indirect materials (p. 7)
Job order cost system (p. 11)
Manufacturing (p. 4)
Manufacturing overhead (p. 7)
Prime cost (p. 8)
Process cost system (p. 11)
Raw Materials Inventory account (p. 8)
Statement of cost of goods manufactured (p. 3)
Work in Process Inventory account (p. 8)

MANAGEMENT'S NEED FOR COST INFORMATION

For cost information, management relies heavily on the income statement. The information in this statement helps the company operate on a sound basis. As a business enterprise becomes larger, managers are no longer able to depend solely upon personal observations and involvement in daily operations and must place greater reliance on production reports and cost statements. As a result, the financial statements for the firm become much more elaborate and the costs receive much more detailed treatment.

A wholesale or retail business acquires merchandise to resell to customers. Its income statement shows the details of the cost of goods sold. Computing the cost of goods sold for a merchandising business is a relatively straightforward process. The beginning inventory of merchandise is added to current net purchases to obtain the cost of goods available for sale; then the ending inventory of merchandise is subtracted to obtain the cost of goods sold.

Computing the cost of goods sold for a manufacturing business is much more complex and involves many more cost elements. For a manufacturer, the cost of goods sold in one period does not necessarily equal the cost of goods manufactured. For this reason, the Cost of Goods Sold section of the income statement of a manufacturing business shows the beginning inventory of goods finished in prior periods added to the cost of goods manufactured during the current period to obtain the cost of goods available for sale. The inventory of finished goods on hand at the end of the period is then subtracted from the total available to obtain the cost of goods sold.

A manufacturer must purchase raw materials and then incur many types of costs in converting the raw materials into products to be sold to customers. In a furniture factory, for example, raw materials in the form of lumber must be purchased and then processed by mechanical equipment to achieve the desired dimensions. Workers assemble the individual pieces and paint and finish them to specifications. Overhead expenses such as the consumption of supplies, utilities, building and equipment maintenance, and janitorial services are incurred as part of the process. With so many operations going on, management must maintain a close watch to see that work on the product is done carefully and efficiently and at a reasonable cost. Because of the many elements that comprise the cost of goods manufactured, the income statement of a manufacturing business is supported by a separate report known as a **statement of cost of goods manufactured**.

In a manufacturing business, the cost of goods manufactured appears in the Cost of Goods Sold section of the income statement. (The function of cost of goods manufactured is similar to that of merchandise purchases in a merchandising business.) The income statement for the year ended December 31, 19X9, for the Kramer Manufacturing Corporation is shown on page 4. The accompanying statement of cost of goods manufactured is shown on page 5.

KRAMER MANUFACTURING CORPORATION**Income Statement****Year Ended December 31, 19X9**

<u>Revenue</u>		
Sales		\$570,854
<u>Cost of Goods Sold</u>		
Finished Goods Inventory, Jan. 1	\$ 38,700	
Add Cost of Goods Manufactured	320,834	
Total Goods Available for Sale	\$359,534	
Less Finished Goods Inventory, Dec. 31	38,500	
Cost of Goods Sold		321,034
Gross Profit on Sales		\$249,820
<u>Operating Expenses</u>		
Selling Expenses		
Sales Salaries Expense	\$36,588	
Payroll Taxes Expense—Sales	2,345	
Delivery Expense	22,490	
Sales Supplies Expense	27,498	
Advertising Expense	16,710	
Total Selling Expenses		\$105,631
Administrative Expenses		
Officers' Salaries Expense	\$65,000	
Office Salaries Expense	18,366	
Payroll Taxes Expense—Administrative	3,784	
Office Supplies Expense	6,412	
Bad Debts Expense	1,083	
Total Administrative Expenses		94,645
Total Operating Expenses		200,276
Net Income From Operations		\$ 49,544
<u>Add Other Income</u>		
Interest Earned		1,300
		\$ 50,844
<u>Less Other Expense</u>		
Amortization of Organization Costs		500
Net Income Before Income Taxes		\$ 50,344
Provision for Income Taxes		9,470
Net Income After Income Taxes		<u>\$ 40,874</u>

MANUFACTURING COSTS CLASSIFIED

Manufacturing is the process of converting materials into finished goods by using labor and incurring other costs, generally called *manufacturing overhead*. Overhead costs include utilities, supplies, taxes, insurance, and depreciation. One of the functions of a cost accounting system is to classify and record all costs according to category. The three major manufacturing cost classifications—*direct materials*, *direct labor*, and *manufacturing overhead*—are the basis for all cost accounting procedures. (See the chart of typical costs on page 6.)