

# **Accounting for Inventory**

---

**2<sup>nd</sup> Edition**

Steven M. Bragg

# Table of Contents

---

<b>Chapter 1 – Overview of Inventory.....</b>	<b>1</b>
Learning Objectives .....	1
Introduction.....	1
The Definition of Inventory .....	1
Accounting for Inventory .....	2
Inventory Transactions .....	4
Inventory Flow in a Push Environment.....	5
Inventory Flow in a Pull Environment.....	6
Summary .....	7
Review Questions .....	8
Review Answers.....	9
 <b>Chapter 2 – Periodic and Perpetual Inventory Systems .....</b>	 <b>11</b>
Learning Objectives .....	11
Introduction.....	11
The Periodic Inventory System .....	11
The Perpetual Inventory System.....	12
Summary .....	13
Review Questions .....	14
Review Answers.....	15
 <b>Chapter 3 – Inventory Record Accuracy.....</b>	 <b>17</b>
Learning Objectives .....	17
Introduction.....	17
Inventory Record Errors .....	17
Environmental Factors Impacting Record Accuracy .....	18
Employee Factors Impacting Record Accuracy .....	19
Labeling Issues Impacting Record Accuracy .....	19
Inventory Naming Conventions Impacting Record Accuracy.....	20
Excessive Data Recordation.....	20
Inventory Data Collection Methods .....	21
The Data Entry Backlog Problem.....	22
Backflushing .....	23
Controls over Record Accuracy .....	24
Inventory Review Reports .....	24
The Negative Inventory Balance .....	25
Inventory Auditing.....	25
The Corrective Action System.....	26
Summary .....	27
Review Questions .....	28
Review Answers.....	29
 <b>Chapter 4 – Inventory Counting and Reconciliation .....</b>	 <b>31</b>
Learning Objectives .....	31
Introduction.....	31
How to Set Up Inventory Record Keeping .....	31
The Physical Inventory Count .....	32
Concerns about the Physical Inventory Count.....	33
Physical Count Improvements .....	34
Cycle Counting .....	35
Control Group Analysis .....	37
100% Count Analysis .....	38
Inventory Reconciliation .....	38
Summary .....	40

## Table of Contents

Review Questions .....	41
Review Answers.....	42
<b>Chapter 5 – Estimating Ending Inventory.....</b>	<b>43</b>
Learning Objectives .....	43
Introduction.....	43
The Gross Profit Method .....	43
The Retail Inventory Method .....	44
The Effect of Overstated Ending Inventory .....	45
Summary.....	45
Review Questions .....	46
Review Answers.....	47
<b>Chapter 6 – Inventory Cost Layering .....</b>	<b>49</b>
Learning Objectives .....	49
Introduction.....	49
Inventory Cost Layering Overview .....	49
The First in, First Out Method .....	50
The Last in, First Out Method.....	51
The Dollar-Value LIFO Method .....	52
The Link-Chain Method.....	54
The Weighted Average Method .....	55
The Specific Identification Method .....	56
Summary.....	57
Review Questions .....	58
Review Answers.....	59
<b>Chapter 7 – Standard Costing of Inventory.....</b>	<b>61</b>
Learning Objectives .....	61
Introduction.....	61
Overview of Standard Costing .....	61
How to Create a Standard Cost .....	61
Historical, Attainable, and Theoretical Standards .....	62
How to Account for Standard Costs.....	62
Overview of Variances .....	63
The Purchase Price Variance .....	64
Material Yield Variance .....	65
Labor Rate Variance .....	65
Labor Efficiency Variance .....	66
Variable Overhead Spending Variance.....	66
Variable Overhead Efficiency Variance .....	67
Fixed Overhead Spending Variance .....	68
Problems with Variance Analysis .....	68
The Controllable Variance.....	69
The Favorable or Unfavorable Variance .....	69
Where to Record a Variance.....	69
Which Variances to Report .....	70
How to Report Variances .....	71
Summary.....	71
Review Questions .....	72
Review Answers.....	73
<b>Chapter 8 – Job Costing.....</b>	<b>75</b>
Learning Objectives .....	75
Introduction.....	75
Overview of Job Costing .....	75
When Not to Use Job Costing.....	76

## Table of Contents

Accounting for Direct Materials in Job Costing .....	76
Accounting for Labor in Job Costing .....	77
Accounting for Actual Overhead Costs in Job Costing .....	78
Accounting for Standard Overhead Costs in Job Costing.....	78
The Importance of Closing a Job .....	80
The Role of the Subsidiary Ledger in Job Costing.....	80
Summary .....	81
Review Questions .....	82
Review Answers.....	83
<b>Chapter 9 – Process Costing .....</b>	<b>85</b>
Learning Objectives .....	85
Introduction.....	85
Overview of Process Costing .....	85
The Weighted Average Method .....	86
The Standard Costing Method .....	87
The First In, First Out Method .....	88
The Hybrid Costing System .....	90
Process Costing Journal Entries .....	90
Problems With Process Costing.....	91
Summary .....	92
Review Questions .....	93
Review Answers.....	94
<b>Chapter 10 – Overhead Allocation .....</b>	<b>95</b>
Learning Objectives .....	95
Introduction.....	95
Overhead Allocation.....	95
Averaging of Overhead Rates.....	98
Summary .....	98
Review Questions .....	99
Review Answers.....	100
<b>Chapter 11 – Obsolete Inventory.....</b>	<b>101</b>
Learning Objectives .....	101
Introduction.....	101
Expected Dispositions Method.....	101
Reserve Method.....	102
Expensing Method.....	104
Issues with Obsolete Inventory Recognition .....	104
Summary .....	105
Review Questions .....	106
Review Answers.....	107
<b>Chapter 12 – The Lower of Cost or Market Rule.....</b>	<b>109</b>
Learning Objectives .....	109
Introduction.....	109
Lower of Cost or Market Rule .....	109
Inventory Translation Adjustment.....	111
Practical Application.....	111
Summary .....	112
Review Questions .....	113
Review Answers.....	114
<b>Chapter 13 – Inventory Spoilage, Rework, and Scrap.....</b>	<b>115</b>
Learning Objectives .....	115
Introduction.....	115

## Table of Contents

Definition of Spoilage .....	115
Accounting for Normal Spoilage.....	115
Accounting for Abnormal Spoilage.....	116
Accounting for the Sale of Spoilage.....	117
Cost Allocation to Spoilage .....	117
Definition of Rework .....	117
Reporting Rework.....	118
Accounting for Rework .....	118
Definition of Scrap .....	119
Accounting for Scrap.....	119
Summary .....	120
Review Questions .....	121
Review Answers.....	122
<b>Chapter 14 – Joint and By-Product Costing.....</b>	<b>123</b>
Learning Objectives .....	123
Introduction.....	123
Split-Off Points and By-Products.....	123
Why We Allocate Joint Costs.....	124
Joint Cost Allocation.....	124
Joint Product and By-Product Pricing .....	125
Special Concerns With By-Product Costing.....	125
Summary .....	125
Review Questions .....	126
Review Answers.....	127
<b>Chapter 15 – Inventory Disclosures.....</b>	<b>129</b>
Learning Objectives .....	129
Introduction.....	129
Inventory Disclosures.....	129
Summary .....	130
Review Questions .....	131
Review Answers.....	132
<b>Chapter 16 – Inventory Transactions.....</b>	<b>133</b>
Learning Objectives .....	133
Introduction.....	133
Initial Cost Recognition .....	133
Acquired Inventory Transactions.....	134
Backflushing Transactions .....	134
Bill and Hold Transactions .....	134
Consignment Transactions .....	135
Cross Docking Transactions .....	135
Drop Shipping Transactions.....	135
Engineering Change Order Transactions .....	136
Goods in Transit Transactions .....	136
Kitting Transactions.....	136
Lower of Cost or Market Adjustments .....	137
Obsolete Inventory Adjustments .....	137
Overhead Allocation Transactions .....	137
Physical Count Adjustments .....	138
Receiving Transactions.....	138
Sale Transactions.....	138
Scrap and Spoilage Adjustments.....	139
Summary .....	139
Review Questions .....	140
Review Answers.....	141

## Table of Contents

<b>Chapter 17 – Internal Revenue Code for Inventory .....</b>	<b>143</b>
Learning Objectives .....	143
Introduction.....	143
IRC Section 471 – General Rule for Inventories.....	143
IRC Section 472 – Last In, First Out Inventories.....	143
IRC Section 473 – Qualified Liquidations of LIFO Inventories.....	145
IRC Section 474 – Simplified Dollar-Value LIFO Method .....	147
IRC Section 1504(a) – Affiliated Group.....	149
Summary.....	149
Review Questions .....	151
Review Answers.....	152
 <b>Chapter 18 – Inventory Transfer Pricing.....</b>	 <b>153</b>
Learning Objectives .....	153
Introduction.....	153
Overview of Transfer Pricing.....	153
Market Price Basis for Transfer Pricing .....	154
Adjusted Market Price Basis for Transfer Pricing .....	155
Negotiated Basis for Transfer Pricing .....	155
Contribution Margin Basis for Transfer Pricing .....	156
Cost Plus Basis for Transfer Pricing .....	156
Cost Anomalies in a Cost-Based Transfer Price.....	156
Pricing Problems Caused by Transfer Pricing .....	157
The Tax Impact of Transfer Prices.....	158
Summary.....	159
Review Questions .....	160
Review Answers.....	161
 <b>Chapter 19 – Inventory Controls .....</b>	 <b>163</b>
Learning Objectives .....	163
Introduction.....	163
Purchasing Process Overview .....	163
In-Process Purchasing Controls.....	164
Additional Purchasing Controls – Fraud Related .....	166
Additional Purchasing Controls – Periodic Actions.....	167
Receiving Process Overview .....	167
In-Process Receiving Controls.....	169
Additional Receiving Controls – Fraud Related .....	170
Additional Receiving Controls – Periodic Actions .....	170
Shipping Process Overview .....	171
In-Process Shipping Controls.....	173
Additional Shipping Controls – Fraud Related .....	173
Additional Shipping Controls – Periodic Actions .....	174
Intercompany Controls .....	175
Inventory Valuation Controls .....	175
Warehouse Controls .....	177
Production Controls.....	177
Summary.....	178
Review Questions .....	179
Review Answers.....	180
 <b>Chapter 20 – Fraudulent Inventory Transactions .....</b>	 <b>181</b>
Learning Objectives .....	181
Introduction.....	181
Those Who Commit Fraud .....	181
Financial Statement Fraud – Labor Component.....	181
Financial Statement Fraud – Materials Component.....	182

## Table of Contents

Financial Statement Fraud – Overhead Component .....	184
Revenue Fraud.....	185
Inventory Theft .....	186
Common Fraud Risk Factors .....	187
Fraud Prevention Tactics .....	188
Summary.....	189
Review Questions .....	190
Review Answers.....	191
<b>Chapter 21 – Inventory Policies.....</b>	<b>193</b>
Learning Objectives .....	193
Introduction.....	193
Inventory Policies .....	193
Receiving Policy.....	193
Point of Ownership Policy .....	193
Responsibility for Inventory Policy .....	194
Inventory Access Policy .....	194
Inventory Owned by Third Parties Policy.....	194
Consigned Inventory Identification Policy .....	194
Physical Count Policy .....	195
Cycle Counting Policy .....	195
Inventory Record Access Policy .....	195
Bill of Material Updates Policy .....	195
Standard Costing Updates Policy .....	195
Lower of Cost or Market Updates .....	195
Obsolete Inventory Updates .....	196
Bill and Hold Policy .....	196
Collections Take-Back Policy.....	196
Summary.....	196
Review Questions .....	197
Review Answers.....	198
<b>Chapter 22 – Inventory Budgeting .....</b>	<b>199</b>
Learning Objectives .....	199
Introduction.....	199
The Production Budget .....	199
Other Production Budget Issues .....	200
Budgeting for Multiple Products .....	201
Ending Inventory Concepts .....	202
Impact of Changes in Ending Inventory .....	203
The Ending Finished Goods Inventory Budget .....	203
Direct Materials Budgeting Overview .....	205
The Direct Materials Budget (Roll up Method).....	205
The Direct Materials Budget (Historical Method).....	206
The Direct Materials Budget (80/20 Method) .....	207
Anomalies in the Direct Materials Budget .....	208
The Role of the Direct Materials Budget .....	209
Summary.....	209
Review Questions .....	210
Review Answers.....	211
<b>Chapter 23 – Inventory Measurements .....</b>	<b>213</b>
Learning Objectives .....	213
Introduction.....	213
Overview of Inventory Measurements.....	213
Average Inventory Calculation .....	213
Inventory Turnover Measurements .....	214

## Table of Contents

Inventory Turnover Ratio .....	215
Raw Materials Turnover.....	215
Work-in-Process Turnover .....	216
Finished Goods Turnover .....	216
Inventory Accuracy Percentage .....	217
Excess Inventory Measurements.....	218
Obsolete Inventory Percentage .....	218
Percent of Inventory Greater than XX Days .....	219
Returnable Inventory Valuation.....	220
Opportunity Cost of Excess Inventory.....	220
Summary .....	221
Review Questions .....	222
Review Answers.....	223
<b>Glossary .....</b>	<b>225</b>
<b>Index .....</b>	<b>229</b>