COST FLOWS IN A MANUFACTURING FIRM

Income Statement

Sales
CGS
GM
Period
Profit
Norton Industries, a manufacturer of cable for the heavy construction industry, closes its books and prepares financial statements at the end of each month. The statement of cost of goods sold for April 2000 follows:

Norton Industries
Statement of Cost of Goods Sold
For the Month Ended April 30, 2000
($000 omitted)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory of finished goods, March 31</td>
<td>$ 50</td>
</tr>
<tr>
<td>Cost of goods manufactured</td>
<td>790</td>
</tr>
<tr>
<td>Cost of goods available for sale</td>
<td>$840</td>
</tr>
<tr>
<td>Less inventory of finished goods, April 30</td>
<td>247</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$593</td>
</tr>
</tbody>
</table>

Additional Information

- Of the utilities, 80 percent relates to manufacturing the cable; the remaining 20 percent relates to the sales and administrative functions.
- All rent is for the office building.
- Property taxes are assessed on the manufacturing plant.
- Of the insurance, 60 percent is related to manufacturing the cable; the remaining 40 percent is related to the sales and administrative functions.
- Depreciation expense includes the following:
  - Manufacturing plant $20,000
  - Manufacturing equipment 30,000
  - Office equipment 4,000
  - $54,000
- The company manufactured 7,825 tons of cable during May 2000.
- The inventory balances at May 31, 2000, follow:
  - Direct materials inventory $ 23,000
  - Work-in-process inventory 220,000
  - Finished goods inventory 175,000
Norton Industries
Preclosing Account Balances
May 31, 2000 ($000 omitted)

Cash and marketable securities $ 54
Accounts and notes receivable 210
Direct materials inventory (4/30/00) 28
Work-in-process inventory (4/30/00) 150
Finished goods inventory (4/30/00) 247
Property, plant, and equipment (net) 1,140
Accounts, notes, and taxes payable 70
Bonds payable 600
Paid-in capital 100
Retained earnings 930
Sales 1,488
Sales discounts 20
Other revenue 2
Purchases of direct materials 510
Direct labor 260
Indirect factory labor 90
Office salaries 122
Sales salaries 42
Utilities 135
Rent 9
Property tax 60
Insurance 20
Depreciation 54
Interest expense 6
Freight-in for materials purchases 15

Prepare a statement of cost of goods manufactured and an income statement for Norton Industries for May 2000.
Consider the following information for American Marine Craft, Inc.
for the year ended December 31, 2004:

Depreciation expense-Administrative office $ 32,000
Depreciation expense-Plant and equipment 65,000
Direct labor-Wages 435,000
Direct materials inventory, Dec. 31, 2004 18,000
Direct materials inventory, Jan. 1, 2004 18,000
Direct materials purchases 144,000
Finished goods inventory, Dec. 31, 2004 28,000
Finished goods inventory, Jan. 1, 2004 15,000
Heat, light, & power-Plant 36,000
Indirect labor 25,000
Property taxes-Plant 34,000
Sales representatives' salaries 145,000
Sales revenue 1,500,000
Supervisor's salary 56,000
Supplies-Administrative office 6,000
Supplies-Plant 23,000
Work-in-Process inventory, Dec. 31, 2004 12,000
Work-in-Process inventory, Jan. 1, 2004 23,000

Required:
Prepare a statement of cost of goods manufactured and an income
statement for American Marine Craft for the year ended December 31,
2004.
The following data pertain to Spartan Products Company:

Sales revenue $1,000,000
Direct materials inventory, Jan. 1, 2004 20,000
Direct labor-Wages 350,000
Depreciation expense-Plant and equipment 80,000
Indirect labor-Wages 5,000
Heat, light, and power-Plant 12,000
Supervisor's salary-Plant 40,000
Finished goods inventory, Jan. 1, 2004 35,000
Work-in-Process inventory, Dec. 31, 2004 25,000
Supplies-Administrative office 6,000
Property taxes-Plant 13,000
Finished goods inventory, Dec. 31, 2004 40,000
Direct materials inventory, Dec. 31, 2004 30,000
Sales representatives' salaries 190,000
Work-in-Process inventory, Jan. 1, 2004 35,000
Direct materials purchases 100,000
Supplies-Plant 4,000
Depreciation-Administrative office 30,000

### SPARTAN PRODUCTS COMPANY

#### Statement of Cost of Goods Manufactured

For the Year Ended December 31, 2004

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials inventory, Jan. 1, 2004</td>
<td>$20,000</td>
</tr>
<tr>
<td>Purchases of direct materials</td>
<td>$100,000</td>
</tr>
<tr>
<td>Total direct materials available</td>
<td>$120,000</td>
</tr>
<tr>
<td>Direct materials inventory, Dec. 31, 2004</td>
<td>$30,000</td>
</tr>
<tr>
<td>Direct materials used</td>
<td>$90,000</td>
</tr>
<tr>
<td>Direct labor</td>
<td>$350,000</td>
</tr>
<tr>
<td>Factory overhead</td>
<td></td>
</tr>
<tr>
<td>Heat, light, and power-Plant</td>
<td>$12,000</td>
</tr>
<tr>
<td>Supplies-Plant</td>
<td>$4,000</td>
</tr>
<tr>
<td>Property taxes-Plant</td>
<td>$13,000</td>
</tr>
<tr>
<td>Depreciation expense-Plant and equipment</td>
<td>$80,000</td>
</tr>
<tr>
<td>Indirect labor</td>
<td>$5,000</td>
</tr>
<tr>
<td>Supervisor's salary-Plant</td>
<td>$40,000</td>
</tr>
<tr>
<td>Total factory overhead</td>
<td>$154,000</td>
</tr>
<tr>
<td>Total manufacturing costs</td>
<td>$594,000</td>
</tr>
<tr>
<td>Add: Beginning work-in-process inventory, Jan. 1, 2004</td>
<td>$35,000</td>
</tr>
<tr>
<td>Total manufacturing costs to account for</td>
<td>$629,000</td>
</tr>
<tr>
<td>Less: Ending work-in-process, Dec. 31, 2004</td>
<td>$25,000</td>
</tr>
<tr>
<td>Cost of goods manufactured</td>
<td>$604,000</td>
</tr>
</tbody>
</table>

### SPARTAN PRODUCTS COMPANY

#### Income Statement

For the Year Ended December 31, 2004

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales revenue</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td></td>
</tr>
<tr>
<td>Finished goods inventory, Jan.1, 2004</td>
<td>$35,000</td>
</tr>
<tr>
<td>Cost of goods manufactured</td>
<td>$604,000</td>
</tr>
<tr>
<td>Total goods available for sale</td>
<td>$639,000</td>
</tr>
<tr>
<td>Finished goods inventory, Dec. 31, 2004</td>
<td>$40,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$599,000</td>
</tr>
<tr>
<td>Gross margin</td>
<td>$401,000</td>
</tr>
<tr>
<td>Selling and administrative expenses</td>
<td></td>
</tr>
<tr>
<td>Sales representatives' salaries</td>
<td>$190,000</td>
</tr>
<tr>
<td>Supplies-Administrative office</td>
<td>$6,000</td>
</tr>
<tr>
<td>Depreciation expense-Administrative office</td>
<td>$30,000</td>
</tr>
<tr>
<td>Total selling and administrative expenses</td>
<td>$226,000</td>
</tr>
<tr>
<td>Net income</td>
<td>$175,000</td>
</tr>
</tbody>
</table>