

Required:

Materials are added at the beginning of the process. Conversion costs (labor and capital costs) are incurred uniformly. The firm uses the FIFO method of inventory accounting. How many equivalent units of conversion cost were used in the current quarter in Department 100?

P 9-2: IPX Packaging

IPX is a specialized packaging company that packages other manufacturers' products. Other manufacturers ship their products to IPX in bulk. IPX then packages the products using high-speed, state-of-the-art packaging machines and ships the packaged products to wholesalers. A typical order involves packaging small toys in see-through plastic and cardboard containers.

IPX uses a flexible budget to forecast annual plantwide overhead, which is then allocated to jobs based on machine hours. The annual flexible overhead budget is projected to be \$6 million of fixed costs and \$120 per machine hour. The budgeted number of machine hours for the year is 20,000.

At the end of the year, 21,000 machine hours were used and actual overhead incurred was \$9.14 million.

Required:

- Calculate the overhead rate set at the beginning of the year.
- Calculate the amount of over/underabsorbed overhead for the year.
- The company's policy is to write off any over/underabsorbed overhead to cost of goods sold. Will net income rise or fall this year when the over/underabsorbed overhead is written off to cost of goods sold?

P 9-3: Densain Water

The Densain Water plant in Naples, Florida, bottles purified and flavored waters in a variety of sizes (20, 36, 48, and 64 ounces) for sale through vending machines and retail stores. Volume is measured as bottled ounces. The plant's annual budgeted fixed manufacturing overhead amounts to \$1.8 million, and variable manufacturing overhead is projected at \$0.005 per bottled ounce. Projected volume in the Naples plant next year is 200 million ounces. Actual volume for the year accumulated to 210 million ounces and total manufacturing overhead incurred (both fixed and variable) was \$2.85 million.

Required:

- Calculate the Densain Naples plant overhead rate.
- How much overhead was absorbed to products in the Naples plant?
- Calculate the Densain Naples plant's over- or underabsorbed overhead.
- Describe the effect on income when the over- or underabsorbed overhead calculated in (c) is written off to cost of goods sold.

P 9-4: MacGiver Brass

MacGiver Brass is a brass plating firm with sales of \$8 million and profits before taxes of \$625,000. MacGiver has a loan outstanding at its local bank for working capital purposes. As the loan officer reviewing MacGiver's loan application, you are charged with making a recommendation as to whether the \$608,000 loan should be renewed for another year.

Upon reviewing MacGiver's most recent annual report, you find the following footnote:

Underabsorbed overhead of \$462,000 was prorated to inventories ($\frac{2}{3}$) and cost of goods sold ($\frac{1}{3}$).