

CASE 3A – AUERBACH ENTERPRISES

Auerbach Enterprises manufactures air conditioners for automobiles and trucks manufactured throughout North America. The company designs its products with flexibility to accommodate many makes and models of automobiles and trucks. The company's two main products are MaxiFlow and Alaska. MaxiFlow uses a few complex fabricated parts, but these have been found easy to assemble and test. On the other hand, Alaska uses many standard parts but has a complex assembly and testing process. MaxiFlow requires direct materials costs which total \$135 per unit, while Alaska's direct materials requirements total \$110 per unit. Direct labor costs per unit are \$75 for MaxiFlow and \$95 for Alaska.

Auerbach Enterprises uses machine hours as the cost driver to assign overhead costs to the air conditioners. The company has used a company-wide predetermined overhead rate in past years, but the new controller, Bennie Leon, is considering the use of departmental overhead rates beginning with the next year.

The following planning information is available for the next year for each the four manufacturing departments within the company:

	Overhead Costs	Machine Hours
Radiator parts fabrication.....	\$ 80,000	10,000
Radiator assembly, weld, and test....	100,000	20,000
Compressor parts fabrication.....	120,000	5,000
Compressor assembly and test.....	<u>180,000</u>	<u>45,000</u>
Total	<u>\$480,000</u>	<u>80,000</u>

Normally, the air conditioners are produced in batch sizes of 20 at a time. A production batch of 20 units requires the following number of hours in each department:

	MaxiFlow	Alaska
Radiator parts fabrication.....	28	16
Radiator assembly, weld, and test.....	30	74
Compressor parts fabrication.....	32	8
Compressor assembly and test.....	<u>26</u>	<u>66</u>
Total	<u>116</u>	<u>164</u>

Required:

1. Compute the departmental overhead rates using machine hours as the cost driver.
2. Compute a company-wide overhead rate using machine hours as the cost driver.
3. Compute the overhead costs per batch of MaxiFlow and Alaska assuming:
 - (a) The company-wide rate.
 - (b) The departmental rates.
4. Compute the total costs per unit of MaxiFlow and Alaska assuming:
 - (a) The company-wide rate.
 - (b) The departmental rates.
5. Is one product affected more than the other by use of departmental rates rather than a company-wide rate? Why or why not?