

## *Case 4*

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# *Balder-Dash Inc.*

*by*

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Balder-Dash Inc. (B-DI) is a large conglomerate with both manufacturing and service-based businesses. B-DI's goal is to provide its customers (who are original equipment manufacturers or OEMs) one-stop shopping for a wide range of component parts. B-DI's customers will pay a small premium for quality but are extremely cost conscious.

An opportunity to purchase an item it currently produces to sell as part of a bundle of products to one of its major customers has occurred. You have been assigned to recommend a course of action.

The item in question, a small fabricated metal part, currently is sold for \$5.00 and has annual demand of 10,000 units. Demand is stable and reasonably uniform throughout the year. One of B-DI's suppliers was asked to quote the part and has come back with a price of \$4.00. The current standard cost for this part is \$6.70. The G&A (general and administrative) and R&D (research and development) costs add 20% to the standard cost for figuring profits on a per item basis. Accounting and purchasing have recommended discontinuing the part since no profit is made on the part. Marketing has proposed that the part be outsourced, which will convert an annual loss of \$30,400 into a small profit. Marketing has indicated that discontinuing the part will not directly impact sales of the remainder of the bundle to the major customer but has expressed a concern that while pricing this item, the customer would "shop around" for other items in the bundle.

The current cost accounting picture is shown in Table 4-1.

**Table 4-1      Current Standard Cost for Manufactured Part**

<u>Cost item</u>	<u>Cost per Unit</u>	<u>Annual Total</u>
Direct material	1.00	10,000
Direct labor	4.00	40,000
Indirect labor (supervision)	1.20	12,000
<u>Indirect overhead (warehouse)</u>	<u>.50</u>	<u>5,000</u>
Total manufacturing costs	6.70	67,000
<u>G&amp;A / R&amp;D costs</u>	<u>1.34</u>	<u>13,400</u>
<u>Total revenues</u>	<u>5.00</u>	<u>50,000</u>
Profit (loss)	(3.04)	(30,400)

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The proposed cost accounting picture is shown in Table 4.2.

**Table 4-2      Proposed Standard Cost for Purchased Part**

<u>Cost Item</u>	<u>Cost per Unit</u>	<u>Annual Total</u>
Direct material	4.00	40,000
Direct labor	0.00	0
Indirect labor (supervision)	0.00	0
<u>Indirect overhead</u>	<u>0.00</u>	<u>0</u>
Total manufacturing costs	4.00	40,000
<u>G&amp;A / R&amp;D costs</u>	<u>.80</u>	<u>8,000</u>
<u>Total revenues</u>	<u>5.00</u>	<u>50,000</u>
Profit (loss)	.20	2,000

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## **The Manufacturing Process**

Manufacturing takes place in a 1000 square foot area in an under-utilized warehouse on the main plant site. With improvements to planning and scheduling, lead times are dropping as are inventory requirements. It is projected that the raw material inventory will increase slightly over the next few years due to increases in demand, the work-in-process inventory will be stable, and the finished goods inventories will decline. Total warehousing requirements are expected to remain stable over the next five years.

The plant uses an overhead allocation of \$5.00 per square foot per year. This is based on the plant's electric bill of \$500,000; other utilities at \$150,000; and building and grounds, maintenance, janitorial, and so forth at another \$850,000. There are 300,000 square feet on the site, so the allocated cost is \$1,500,000 over 300,000 square feet, which equals \$5 per square foot per year.

The supervisor assigned to this product supports this product in addition to other duties in the main production facility. These duties include scheduling, maintenance oversight, as well as direction of direct labor for one of the plant's two main production departments—machining operations. When the part in question is being made, which is infrequent, this supervisor will visit the warehouse several times a day to assess the status of production. Currently one-fifth of his full time salary of \$60,000 per year (including labor-related overhead) is allocated to this product.

As stated previously, this part is produced infrequently. When production of the part is in process, “production associates” from the “floater pool” (a group of cross-trained workers who fill in for vacations, sickness, and worker absences) are used. If five of the production associates in the labor pool are available, average weekly demand can be satisfied in one day. If fewer than five production associates are available, production takes correspondingly longer. Annual direct labor requirements for this part thus equate to one full time employee or \$40,000 per year (including labor-related overhead).

The raw material for the part in question costs \$1.00/kg if purchased new. However, the raw material for this part is not purchased directly but is the recovered drop from the production of another part (XV12C). The part in question consumes about half the drops from current production levels for XV12C. The drops not used in making the part in question are sold as scrap for \$.25/kg (each drop weighs .75 kg). Currently, XV12C production is forecast to remain at current levels for the next three years.

G&A and R&D are allocated based on 20% of the cost of goods manufactured.

**Suggestions for the Student:**

1. Are there any inaccuracies in the standard costs?
2. Should the part in question be outsourced?
3. What is the financial impact of your recommendation?
4. What other recommendations (or investigations) would you make (or start) based on your findings to date?