

Final case study essay



**ASSIGN
BUSTER**

Storage Systems, Inc. , sells a wide range of drums, bins, boxes, and other containers that are used in the chemical industry. One of the company's products is a heavy- duty corrosion- resistant metal drum, called the XSX drum, used to store toxic wastes. Production is constrained by the capacity of an automated welding machine that is used to make precision welds. A total of 2, 000 hours of welding time are avail-able annually on the machine. Since each drum requires 0. 8 hours of welding time, annual production is limited to 2, 500 drums. At present, the welding machine is used exclusively to make the XSX drums.

The accounting department has provided the following financial data concerning the XSX drums: Management believes 3, 000 XSX drums could be sold each year if the company had sufficient manufacturing capacity. As an alternative to adding another welding machine, management has looked into the possibility of buying additional drums from an outside supplier. Metal Products, Inc. , a supplier of quality products, would be able to provide up to 1, 800 XSX- type drums per year at a price of \$ 120 per drum, which Storage Systems would resell to its customers at its normal selling price after appropriate relabeling.

Jasmine Morita, Storage Systems production manager, has suggested that the company could make better use of the welding machine by manufacturing premium mountain bike frames, which would require only 0. 2 hours of welding time per frame. Jasmine believes that Storage Systems could sell up to 3, 500 mountain bike frames per year to mountain bike manufacturers at a price of \$ 65 per frame. The accounting department has provided the following data concerning the proposed new product: The

mountain bike frames could be produced with existing equipment and personnel.

Manufacturing overhead is allocated to products on the basis of direct labor-hours. Most of the manufacturing overhead consists of fixed common costs such as rent on the factory building, but some of it is variable. The variable manufacturing overhead has been estimated at \$ 1. 05 per XSX drum and \$ 0. 60 per mountain bike frame. The variable manufacturing overhead cost would not be incurred on drums acquired from the outside supplier. Selling and administrative expenses are allocated to products on the basis of revenues.

Almost all of the selling and administrative expenses are fixed common costs, but it has been estimated that variable selling and administrative expenses amount to \$ 0. 85 per XSX drum and would be \$ 0. 40 per mountain bike frame. The variable selling and administrative expenses of \$ 0. 85 per drum would be incurred when drums acquired from the outside supplier are sold to the company's customers. All of the company's employees direct and indirect are paid for full 40- hour workweeks and the company has a policy of laying off workers only in major recessions.