Williams Company, located in southern Wisconsin, manufactures a variety of industrial valves and pipe fittings that are sold to customers in nearby states. Currently, the company is operating at about 70 percent capacity and is earning a satisfactory return on investment. Glasgow Industries Ltd. of Scotland has approached management with an offer to buy 120,000 units of a pressure valve. Glasgow Industries manufactures a valve that is almost identical to Williams’ pressure valve; however, a fire in Glasgow Industries’ valve plant has shut down its manufacturing operations. Glasgow needs the 120,000 valves over the next four months to meet commitments to its regular customers; the company is prepared to pay $21 each for the valves.

Williams’ product cost for the pressure valve, based on current attainable standards, is

|  |  |  |
| --- | --- | --- |
| Direct materials |   | $6 |
| Direct labor (0.5 hr per valve) |  | $8 |
| Manufacturing overhead (1/3 variable) | $9 |
|  Total manufacturing cost |   | $23 |

Additional costs incurred in connection with sales of the pressure valve are sales commissions of 5 percent and freight expense of $1 per unit. However, the company does not pay sales commissions on special orders that come directly to management. Freight expense will be paid by Glosgow.

In determining selling prices, Williams adds a 40% markup to product costs. This provides a $32 suggested selling price for the pressure valve. The marketing department, however, has set the current selling price at $30 to maintain market share.

Product management believes that it can handle the Glasgow Industries order without disrupting its scheduled production. The order would, however, require additional fixed factory overhead of $12,000 per month in the form of supervision and clerical costs.

If management accepts the order, Williams will manufacture and ship 30,000 pressure valves to Glasgow Industries each month for the next four months. Shipments will be made in weekly consignments, FOB shipping point.

1. Determine how many additional direct labor hours will be required each month to fill the Glasgow order.

2. Prepare an analysis showing the impact on operating profits of accepting the Glasgow order.

3. What is the minimum unit price management could accept for the Glasgow order without reducing operating income.

4. Use the Goal Seek function in excel to calculate the minimum unit selling price calculated above in #3.

5. If the order was accepted sales of 5,000 units per month to regular customers would be precluded (at a selling price of $30.00per unit). What is the revised breakeven selling price per unit for the Glasgow special sales order?