

Target Costing

1. A company has the capacity of production of 80,000 units and presently sells 20,000 units at ₹100 each. The demand is sensitive to selling price and it has been observed that every reduction of ₹10 in selling price the demand is doubled. What should be the target cost at full capacity if profit margin on sale is taken as 25%?
What should be the cost reduction scheme by applying value engineering, if at present 40% of cost is variable with same percentage of profit? If Rate of Return is 15%, what will be maximum investment at full capacity?

2. Bee manufacturing company sells its product at ₹1,000 per unit. Due to competition its competitors are likely to reduce price by 15%. Bee wants to respond aggressively by cutting price by 20% and expects that the present volume of 1,50,000 units p.a. will increase to 2,00,000. Bee wants to earn a 10% target profit on sales. Based on a detailed value engineering the comparative position is given below:

	Existing	Target
Direct material cost per unit	₹400	₹385
Direct manufacturing labour per unit	55	50
Direct machinery costs per unit	70	60
Direct manufacturing cost per unit	525	495
Manufacturing overhead:		
No. of orders (₹80 per order)	22,500	21,250
Testing hours (₹2 per hour)	4,500,000	3,000,000
Units reworked (₹100 per unit)	12,000	13,000

Manufacturing overheads are allocated using relevant cost drivers. Other operating cost per unit for the expected volume are estimated as follows:

Research & development	₹20
Design and processing	30
Marketing	100
Customer service	15

Required:

- (1) Calculate target costs per unit and target costs for the proposed volume showing break-up of different elements.
- (2) Prepare target product profitability statement.

3. Sterling Enterprises has prepared a draft budget for the next year as follows:

Quantity	10,000 units
Sales price per unit	30
Variable costs per unit: Direct Materials	8
Direct Labour	6
Variable overhead (2 hrs × Re. 0.50)	1
Contribution per unit	15
Budgeted Contribution	1,50,000
Budgeted Fixed costs	1,40,000
Budgeted Profit	10,000

The Board of Directors is dissatisfied with this budget, and asks a working party to come up with an alternate budget with higher target profit figures.

The working party reports back with the following suggestions that will lead to a budgeted profit of ` 25,000. The company should spend ` 28,500 on advertising, but the target sales price up to ` 32 per unit. It is expected that the sales volume will also rise, inspite of the price rise, to 12,000 units.

In order to achieve the extra production capacity, however, the work force must be able to reduce the time taken to make each unit of the product. It is proposed to offer a pay and productivity deal in which the wage rate per hour is increased to ` 4. the hourly rate for variable overhead will be unaffected.

Ascertain the target labour time required to achieve the target profit.