

| Parameter (with Formula) | Chennai | Pune | Gurugram |
|--|---|--|---|
| <u>Daily Production</u> (Production Volume / 365) | Given: <i>Production Volume (2027) = 50,000 cars</i> Calculation: $50,000 \div 365 = 137 \text{ cars/day}$ | Same as Chennai: 137 cars/day | Same as Chennai: 137 cars/day |
| <u>Safety Stock</u> (Daily Sales \times Days in Safety Stock) | Calculation: $137 \times 10 = 1370 \text{ cars}$ | Calculation: $137 \times 10 = 1370 \text{ cars}$ | Calculation: $137 \times 10 = 1370 \text{ cars}$ |
| <u>Cycle Inventory</u> (Quantity Consumed per Replenished Cycle \div 2) | Given: <i>Replenishment 2 times in 15 days</i> Cycle = $15 \div 2 = 7.5$ days $(137 \div 7.5) \div 2 = 514 \text{ cars}$ | Given: <i>Replenishment 3 times in 30 days</i> Cycle = $30 \div 3 = 10$ days $1370 \div 2 = 685 \text{ cars}$ | Given: <i>Replenishment every 5 days</i> Cycle = $137 \times 5 = 685$ cars $685 \div 2 = 342.5 \text{ cars}$ |
| <u>Average Inventory</u> (Cycle Inventory + Safety Stock) | Calculation: $514 + 1370 = 1884 \text{ cars}$ | Calculation: $685 + 1370 = 2055 \text{ cars}$ | Calculation: $342.5 + 1370 = 1712.5 \text{ cars}$ |
| <u>Inventory Cost</u> (Total Cars \times Material Cost, then Holding Cost) | <i>Material Cost: 420K INR</i> <i>Holding Cost: 12%</i> Inventory Value = $1884 \times 420K = 791,280,000 \text{ INR}$ Annual Cost = 94,953,600 INR Cost per Car = Rs 1900 | <i>Material Cost: 430K INR</i> <i>Holding Cost: 15%</i> Inventory Value = $2055 \times 430K = 883,650,000 \text{ INR}$ Annual Cost = 132,547,500 INR Cost per Car = Rs 2651 | <i>Material Cost: 470K INR</i> <i>Holding Cost: 10%</i> Inventory Value = $1712.5 \times 470K = 804,875,000 \text{ INR}$ Annual Cost = 80,487,500 INR Cost per Car = Rs 1610 |