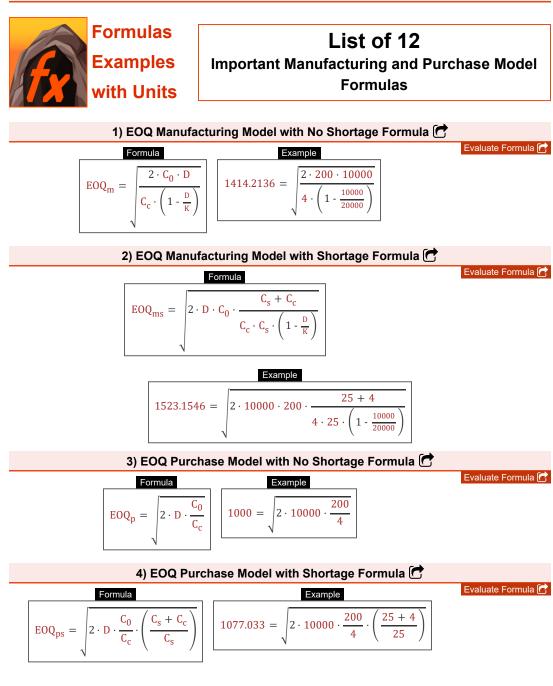
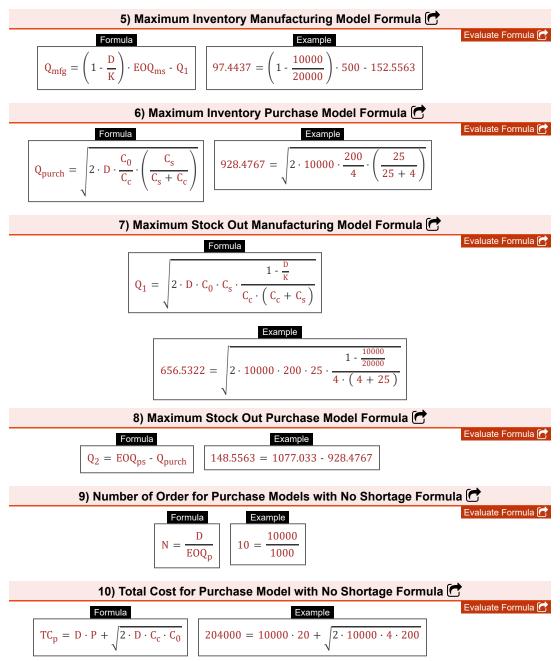
# Important Manufacturing and Purchase Model Formulas PDF





## 11) Total Optimum Cost for Manufacturing Model Formula 🕝

Formula	 Example
$TOC_{m} = \sqrt{2 \cdot D \cdot C_{c} \cdot C_{0} \cdot \left(1 - \frac{D}{K}\right)}$	$2828.4271 = \sqrt{2 \cdot 10000 \cdot 4 \cdot 200 \cdot \left(1 - \frac{10000}{20000}\right)}$

## 12) Total Optimum Cost for Purchase Model Formula 🕝

### Formula

 $TOC_{p} = \left| 2 \cdot D \cdot C_{c} \cdot C_{0} \cdot \frac{\overline{C_{s}}}{C_{s} + C_{c}} \right|$ 

	Example
3713.9068 =	$2 \cdot 10000 \cdot 4 \cdot 200 \cdot \frac{25}{25+4}$

Evaluate Formula

## Variables used in list of Manufacturing and Purchase Model Formulas above

- C<sub>0</sub> Order Cost
- C<sub>c</sub> Carrying Cost
- C<sub>s</sub> Shortage Cost
- D Demand per Year
- EOQ<sub>m</sub> EOQ Manufacturing Model No Shortage
- EOQ<sub>ms</sub> EOQ Manufacturing Model with Shortage
- EOQ<sub>p</sub> EOQ Purchase Model No Shortage
- EOQ<sub>ps</sub> EOQ Purchase Model
- K Production Rate
- N Number of Order Purchase Models no Shortage
- P Purchase Price
- Q<sub>1</sub> Maximum Stock out Manufacturing Model
- Q2 Maximum Stock out Purchase Model
- Qmfg Maximum Inventory Manufacturing Model
- Qpurch Maximum Inventory Purchase Model
- TC<sub>p</sub> Total Cost for Purchase Model No Shortage
- TOC<sub>m</sub> Total Optimum Cost for Manufacturing Model
- TOC<sub>p</sub> Total Optimum Cost for Purchase Model

## Constants, Functions, Measurements used in list of Manufacturing and Purchase Model Formulas above

Functions: sqrt, sqrt(Number)
 A square root function is a function that takes a
 non-negative number as an input and returns the
 square root of the given input number.

## **Download other Important Industrial Engineering PDFs**

 Important Industrial Parameters Formulas ()
 Important Manufacturing and Purchase
 Important Manufacturing Period Formulas ()
 Important Manufacturing Period Formulas ()

Try our Unique Visual Calculators
• Multiply fraction ()

Please SHARE this PDF with someone who needs it!

This PDF can be downloaded in these languages

English Spanish French German Russian Italian Portuguese Polish Dutch

7/8/2024 | 12:19:10 PM UTC

