

Inventory & Procurement Toolkit

Economic Order Quantity (EOQ) & Safety Stock Operations Guide

INVENTORY PROCUREMENT PARAMETERS & FORMULA RESULTS

Parameter / Metric	Formula Derivation	Result Value	Unit
Annual Demand (D)	Input - Total Consumption	10,000	Units / Year
Cost Per Order (S)	Input - Fixed Ordering Cost	\$50.00	USD / Order
Annual Holding Cost (H)	Input - Carrying Cost	\$4.00	USD / Unit / Year
Supplier Lead Time (L)	Input - Delivery Time	14	Days
Buffer Safety Stock	Input - Risk Protection	200	Units
Daily Consumption (d)	D / 365 Days	27.4	Units / Day
ECONOMIC ORDER QUANTITY (EOQ)	$\sqrt{2 \times D \times S / H}$	500	UNITS / ORDER
REORDER POINT (ROP)	$(d \times L) + \text{Safety Stock}$	584	UNITS