



Rooms Division Course

Option

Stock Control



English only

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Definition

Stock control (inventory control) is a method to calculate the number of items needed during a precise time.

Supplying the stock

When considering the quantity of products to be ordered, we should take into account:

- **Lead-time**
- **Safety stock**
- **Minimum stock**
- **Maximum stock**

It also helps us know when exactly is the last delay for ordering the items, so that we do not fall short and make the hotel's guest experience suffer.



Lead time

- ✓ Lead time is the period of time, in number of days, needed to receive the items of a purchase order (called P.O. in the industry)
- ✓ Lead time can also be explained as “The days between ordering and receiving.”



Safety stock

- ✓ Safety stock is the number of purchase units that must always be on hand, in order to operate in event of emergencies.
- ✓ What kind of emergencies there may happen ?
- ✓ The Executive Housekeeper will decide the percentage amount of the safety stock.
- ✓ It is a percentage calculated based on the formula:
“Average daily use x Lead time”



Minimum stock

- ✓ The minimum number of purchase units that should be in stock at any given time.
- ✓ Established by considering the usage factor, associated with each item.



Maximum stock

- ✓ **Greatest number of purchase units that should be in stock at any given time.**
- ✓ **Factors to take into account :**
 - ✓ Availability of storage space
 - ✓ The period for which the items will be stored.

Why ?

- ✓ **Too long – they may lose their quality.**
- ✓ **They may expire.**



Minimum Stock Formula

(Average Daily Consumption x Days between ordering and receiving) + Security Stock

What are the days between ordering and receiving the PO called ?

✓ **Lead time**

Filling the formula

- ✓ **Average daily consumption :**
 - ✓ Forecasted average occupancy
 - ✓ Average consumption of the item :
 - ✓ Which varies if the room is on stay over or check-out
 - ✓ It also varies depending on the room occupancy (single or double use)
- ✓ **Days between ordering and receiving:**
 - ✓ Given by the suppliers (as per contract)

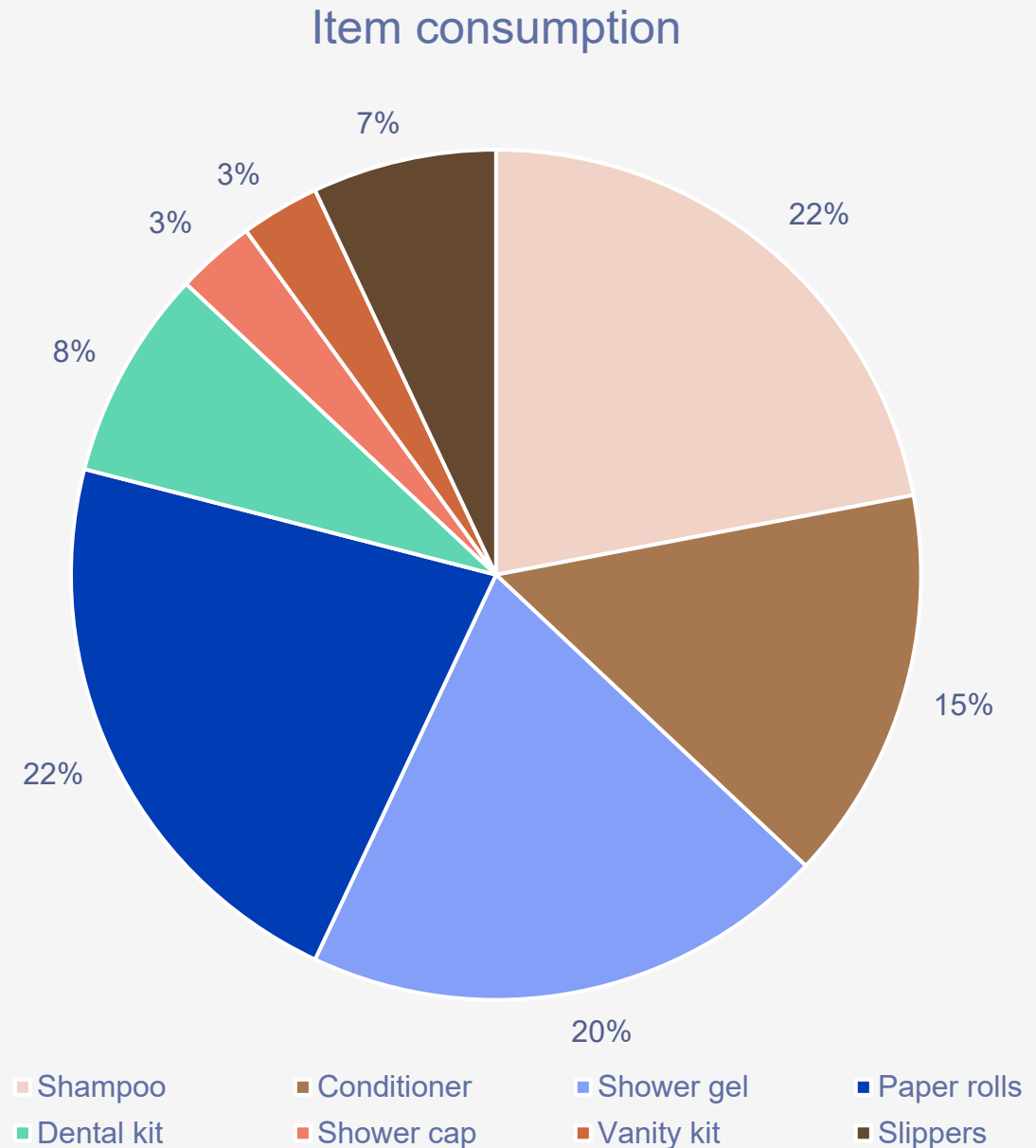


Filling the formula

- ✓ **Security stock :**
- ✓ Percentage defined by the Executive Housekeeper
 - ✓ Usually between 10 and 20%
- ✓ **The exact % will depend on the item usage**

For example :

- ✓ Shower gel has a high consumption → % will be higher
- ✓ Conditioner has a low consumption → % will be lower



Formula reminder

Minimum Stock Level =

(Average Daily Consumption x Days between ordering and receiving) + Security Stock



Any questions ?

Exercise #1

According to the information below, calculate the minimum stock of toilet paper in your hotel per month.

150-room hotel

Average occupancy **80%**

Average stayover **38.34%**

Average checkout **61.66%**

Average changing rolls per stayover **1 roll**

Average changing rolls per check-out **2 rolls**

It can be purchased on **1 pallet of 4 packs of 24 rolls each**

Lead time **15 days**

Security stock **15%**

Price per roll **CHF 0.45**

1) Average Daily consumption :

1 Pallet : 4 packs x 24 rolls = 96 rolls

$(150\# \times 80\%) / 100 = 120$ rooms occupied

$(120\# \times 38.34\%) / 100 = 46$ average Stayovers

$(120 \times 61.66\%) / 100 = 74$ average Check-outs

Stayovers : 46# x 1 roll = 46 rolls

Check-outs : 74# x 2 rolls = 148 rolls

Average rolls per day : 46 + 148 = 194

2) Stock minimum :

(Average daily consumption x Days between order and receiving) + Security Stock :

$(194 \times 15) + 15\% = 3347$ rolls

$3347 / 96$ rolls = 35 pallets for 15 days → 70 per month

3) Cost per month :

70 pallets x 96 rolls x 0.35 CHF = 3'024.00 CHF

Exercise #2

According to the information below, calculate the minimum stock of shower gel per month.

510-room hotel (400 Standard Rooms & 110 Suites)

Average occupancy **80%**

Average stayover **25%**

Average checkout **75%**

Average changing in Standard Rooms per stayover **0.2 Shower gels**

Average changing in Standard Rooms per check-out **0.5 Shower gels**

Average changing in Suites per stayover **1 Shower gel**

Average changing in Suites per check-out **1.5 Shower gels**

It can be purchased in **1 box of 444 units**

Lead time **21 days**

Security stock **18%**

Price per unit **CHF 0.85**

Answer #2

Standard rooms occupied : $400 \times 80\% = 320$ Standard rooms

Suites occupied : $110 \times 80\% = 88$ Suites

Average stayovers : $320 \times 25\% = 80$ Standard rooms

Average checkouts : $320 \times 75\% = 240$ Standard rooms

Average stayovers : $88 \times 25\% = 22$ Suites

Average checkouts : $88 \times 75\% = 66$ Suites

Average consumption in Standard Rooms per stayover : $0.2 \text{ Shower gels} \times 80 \text{ STD} = 16 \text{ Shower gels}$

Average consumption in Standard Rooms per check-out : $0.5 \text{ Shower gels} \times 240 \text{ STD} = 120 \text{ Shower gels}$

Average consumption in Suites per stayover : $1 \text{ Shower gel} \times 22 \text{ Suites} = 22 \text{ Shower gels}$

Average consumption in Suites per check-out : $1.5 \text{ Shower gels} \times 66 \text{ Suites} = 99 \text{ Shower gels}$

Answer #2

Total Shower gel consumption per day : $16 + 120 + 22 + 99 = 257$ Shower gels

Stock minimum : (Av. Daily consumption x Lead time) + Security Stock $\rightarrow (257 \times 21) + 18\% = 6'368$ units

Cost per month : Price per box : $444 \text{ units} \times 0.55 \text{ CHF} = 244.20 \text{ CHF}$

Number of boxes needed : $6368 / 444 = 14.34$ boxes $\rightarrow 14$ (up to the Manager to decide)

Number of boxes per month : $(14 \text{ boxes} \times 30 \text{ days}) / 21 \text{ days} = 20 \text{ boxes}$

Price per month : $20 \text{ boxes} \times 444 \text{ units} \times 0.85 \text{ CHF} = 7'548.00 \text{ CHF}$

Exercise #3

According to the information below, calculate the minimum stock of shampoo needs for:

- ✓ 9 days
- ✓ 30 days
- ✓ Cost of minimum stock for 30 days

230-room hotel (180 Standard Rooms & 50 Suites)

Average occupancy **90%**

Average stayover per Standard Rooms **30.22%**

Average check-out per Standard Rooms **69.78%**

Average stayover per Suite **35.51%**

Average check-out per Suite **64.49%**

Average changing in Standard Rooms per stayover **1 Shampoo**

Average changing in Standard Rooms per check-out **2 Shampoos**

Average changing in Suites per stayover **2.5 Shampoos**

Average changing in Suites per check-out **3 Shampoos**

It can be purchased in **1 box of 150 units**

Lead time **9 days**

Security stock **16%**

Price per roll **CHF 0.65**

Answer #3

Standard Rooms occupied : $180 \times 90\% = 162$

Suites occupied : $50 \times 90\% = 45$

Stayovers Standard Rooms : $162 \times 30.22\% = 49$ rooms

Check-outs Standard Rooms : $162 \times 69.78\% = 113$ rooms

Stayovers Suites : $45 \times 35.51\% = 16$ Suites

Check-outs Suites : $45 \times 64.49\% = 29$ Suites

Average consumption / stayovers / Standard rooms : $49 \times 1 = 49$ shampoos

Average consumption / check-outs / Standard rooms : $113 \times 2 = 226$ shampoos

Average consumption / stayovers / Suites : $16 \times 2.5 = 40$ shampoos

Average consumption / check-outs / Suites : $29 \times 3 = 87$ shampoos

Answer #3

Total consumption per day : $49 + 226 + 40 + 87 = 402$ shampoos

Minimum stock : (Av. Daily consumption x Lead time) + Security Stock

Units for 9 days $\rightarrow (402 \text{ shampoos} \times 9 \text{ days}) + 16\% = 4'197$ shampoos

Boxes for 9 days : $(4'197 / 150) = 27.98$ boxes $\rightarrow 28$ boxes

Units for 30 days : $(28 \times 30) / 9 = 93.3 \rightarrow 93$ boxes

Cost per month : $93 \text{ boxes} \times 150 \text{ units} \times 0.65 \text{ CHF} = 9'067.50 \text{ CHF}$



Thank you

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