

1. Replenishment Model

Concept:

This model is used to **refill (replenish)** inventory whenever it goes below a certain level.

How it works:

- The company sets a **reorder level**.
- When stock drops to this level, a new **order is placed**.
- The order size depends on **demand, lead time, and safety stock**.

 **Goal:** Lead time is the time diff bw when we ordered and when we received the order.

To **avoid stockouts** and keep the inventory continuous for production or sales without holding too much stock.

2. Two-Bin Model

Concept:

A simple and practical system using **two bins (containers)** to manage stock.

How it works:

- **Bin 1:** Used for daily issues (main stock).
- **Bin 2:** Reserve/safety stock.
When Bin 1 becomes empty → **trigger a reorder**, and use Bin 2 until Bin 1 gets refilled.

Advantages:

- Easy to manage.
- No complex calculations are required.
- Very useful for **small items** like screws, nuts, or stationery.