Standard Operating Procedure (SOP): Kanban System Setup and Replenishment Protocols

This SOP details the **Kanban system setup and replenishment protocols**, covering the establishment of Kanban cards and boards, defining inventory limits, monitoring stock levels, triggering replenishment orders, communication procedures between teams, continuous review and improvement of the Kanban flow, and ensuring timely restocking to maintain optimal inventory levels and streamline production processes effectively.

1. Purpose

To provide a consistent and efficient protocol for setting up and managing the Kanban system and its replenishment processes, ensuring uninterrupted production, reduced inventory waste, and optimized workflow.

2. Scope

Applies to all staff involved in inventory management, supply chain operations, and production related to Kanban-controlled items.

3. Responsibilities

- **Inventory Management Team:** Oversees Kanban board/card setup, inventory monitoring, and restocking.
- **Production Team:** Uses Kanban system to signal when replenishment is required.
- **Supply Chain/Purchasing:** Processes replenishment orders and coordinates with suppliers.
- **Continuous Improvement Team:** Reviews and updates Kanban protocols for efficiency.

4. Kanban System Setup

4.1 Establish Kanban Cards & Boards

1. Create Kanban cards for each inventory item specifying:
   - Item Name & Code
   - Location
   - Reorder Point (Minimum Inventory Level)
   - Order Quantity
   - Supplier Details (if applicable)

2. Set up a physical or digital Kanban board divided into columns (e.g., *To Order*, *Ordered*, *Received*, *In Use*).

3. Assign cards to designated locations on the board based on status.

4.2 Define Inventory Limits

1. Determine and document minimum and maximum inventory levels for all Kanban items, considering lead times and consumption rates.

2. Review and update limits at least quarterly or upon significant demand/supply changes.

5. Monitoring Stock Levels & Triggering Replenishment

5.1 Daily Monitoring

1. Visually or digitally inspect the Kanban board/cards at set intervals (minimum once per shift).

2. Move Kanban cards to the *To Order* column/queue when actual stock reaches reorder point.

5.2 Replenishment Order Protocol

1. Notify the responsible supply chain or purchasing personnel immediately upon Kanban trigger (card move).

2. Document replenishment orders in the tracking system, including:
   - Date/Time of Order
   - Item & Quantity

- Expected Delivery Date

3. Update Kanban board status upon order placement, receipt, and stocking.

6. Communication Procedures

1. Use standard forms or digital notifications to signal Kanban status changes between production, inventory, and purchasing teams.

2. Schedule regular (e.g., weekly) review meetings to address issues and adjust Kanban parameters as needed.

3. Escalate urgent or out-of-stock items immediately using documented escalation contacts.

7. Continuous Review and Improvement

1. Review Kanban flow metrics (e.g., stockouts, lead times, overstock) monthly.

2. Collect feedback from all Kanban users regarding system bottlenecks or inefficiencies.

3. Implement improvements promptly and document SOP changes.

8. Documentation and Records

1. Maintain updated Kanban logs including all replenishment orders, receipts, and exceptions for a minimum of one year.

2. Store SOP documents and revision history in the shared document repository.

9. Revision History

Revision Date	Version	Changes Made	Approved By
2024-06-07	1.0	Initial SOP creation	Operations Manager