

Raw Material FIFO Rotation Standard Operating Procedure

1.0 Objective & Scope

The objective of this procedure is to ensure that all raw materials are rotated using the First-In, First-Out (FIFO) method to minimize waste due to expiration or degradation, maintain product quality, and achieve a minimum inventory accuracy of 99%. This procedure applies to all raw materials stored in the warehouse, including chemicals, packaging, and perishable goods, and is the responsibility of the Receiver, Inventory Clerk, and Material Handler.

2.0 Required Systems, Tools & Materials

- Mobile barcode scanner (Zebra TC21 or equivalent)
- Access to SupplyGrid WMS Dashboard on a handheld device or workstation
- FIFO bin labels with date fields (pre-printed or writeable)
- Pallet jack or forklift (as required for heavy materials)
- Clipboard and pen for manual backup records
- Safety cutter or box cutter (for opening pallet wrap)

3.0 Safety & Handling Precautions

- Wear CSA-approved steel-toed boots and high-visibility vest at all times in the warehouse.
- Use proper ergonomic lifting techniques; do not lift more than 20 kg without mechanical assistance.
- When operating a forklift or pallet jack, ensure clear visibility and sound horn at intersections.
- Inspect all pallets for stability before moving; report any damaged or leaning pallets immediately.
- Wear cut-resistant gloves when handling sharp materials or opening strapping.

4.0 Step-by-Step Procedure

1. Log into the SupplyGrid WMS Dashboard and navigate to the 'Inventory' module. Select 'FIFO Rotation' from the task list.
2. Identify the raw material location by scanning the bin barcode or entering the bin number manually.
3. Scan the barcode of the oldest pallet or container in the bin (based on the recorded receipt date). Verify the date on the label matches the system record.
4. If the oldest pallet is blocked by newer stock, carefully relocate the newer pallets to a temporary staging area using a pallet jack or forklift.
5. Move the oldest pallet to the front of the bin or to the designated pick face for immediate use.
6. Return the newer pallets to the bin, placing them behind the oldest pallet. Ensure the newer pallets are clearly labeled with their receipt date.
7. Update the bin location in the WMS by scanning the bin barcode again and confirming the new pallet positions.

8. If the oldest material is past its expiration or best-before date, flag it in the system as 'Quarantine' and move it to the designated quarantine area.
9. Repeat steps 2 through 8 for each bin containing the same raw material SKU until all locations are rotated.
10. Complete the rotation task in the WMS by selecting 'Finish Rotation' and entering any comments about discrepancies or damaged goods.

5.0 Verification & Discrepancy Reporting

1. After completing the rotation, perform a spot check by scanning the bin and verifying that the oldest material is at the front and the newest is at the back.
2. Compare the physical count of each SKU in the bin to the system count. If the variance exceeds 2%, escalate to the Inventory Manager immediately.
3. If any material is found damaged, leaking, or compromised, attach a red 'Quarantine' tag and record the details in the WMS under the 'Damage Report' section.
4. For any expired materials, generate a 'Disposal Request' in the system and notify the Quality Assurance team for disposition instructions.
5. All discrepancies must be documented on the 'Inventory Discrepancy Log' and reviewed during the weekly inventory meeting.

Regulatory Disclaimer: This document is a generic operational template provided for educational purposes. The end-user assumes all liability for reviewing, adapting, and validating all step sequences and material handling protocols against local shop capabilities.