
Welding Consumables (Tips & Nozzles) Min/Max Inventory Restock Procedure

1.0 Objective & Scope

The objective of this procedure is to maintain a continuous supply of welding tips and nozzles by enforcing a min/max inventory replenishment system. This SOP ensures that stock levels never fall below the reorder point (min) and never exceed the maximum storage capacity, preventing production downtime due to stockouts and reducing excess inventory carrying costs. The Inventory Clerk and Welding Supervisor are jointly responsible for executing and monitoring this procedure.

2.0 Required Systems, Tools & Materials

- SupplyGrid WMS or ERP system with inventory module
- Barcode scanner (handheld or mobile terminal)
- Bin location labels for each consumable SKU
- Min/Max level cards or Kanban cards (physical or digital)
- Standardized bin boxes or dividers for tips and nozzles
- Clipboard and pen for manual counts (if system unavailable)
- Requisition form or purchase order template

3.0 Safety & Handling Precautions

- Wear cut-resistant gloves when handling used or sharp consumables.
- Ensure all consumables are stored in a clean, dry area away from moisture and contaminants.
- Do not mix different tip sizes or nozzle types in the same bin to avoid picking errors.
- Use proper ergonomic lifting techniques when moving larger boxes of consumables.

4.0 Step-by-Step Procedure

1. Log into the SupplyGrid WMS and navigate to the Inventory > Min/Max Review dashboard.
2. Select the welding consumables category and filter by tips and nozzles.
3. Scan the bin location barcode for each SKU to confirm the physical location.
4. Perform a physical count of the current on-hand quantity for each tip and nozzle SKU.
5. Compare the physical count to the system quantity and the predefined min/max levels displayed on the dashboard.
6. If the physical count is at or below the min level, initiate a restock request by generating a purchase requisition or Kanban card.
7. Enter the required restock quantity (typically up to the max level) into the system and submit the requisition.

8. Place a physical Kanban card or min/max indicator card in the bin to signal that a replenishment order is pending.
9. Update the system record with the new physical count and confirm the min/max levels are still accurate for future cycles.
10. If the physical count exceeds the max level, flag the overstock for review and adjust the max level or initiate a return to supplier.
11. Repeat the process for all welding tip and nozzle SKUs in the designated storage area.
12. Log out of the system and file the completed requisition or Kanban card in the daily inventory log.

5.0 Verification & Discrepancy Reporting

1. After completing the restock request, verify that the system now shows the correct on-hand quantity and the pending order quantity.
2. If a discrepancy of more than 5% exists between physical count and system count, escalate to the Inventory Manager immediately.
3. For any damaged or expired consumables, attach a red 'Quarantine' tag and move them to the designated damaged goods area.
4. Document all discrepancies on the Inventory Discrepancy Report form and submit to the Warehouse Supervisor within 24 hours.
5. If the min/max levels are consistently causing stockouts or overstock, submit a level adjustment request to the Inventory Manager for review.

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.