
Cabinet Interior Dust Free Inspection

1.0 Objective & Quality Standard

The objective of this procedure is to ensure that all cabinet interiors are completely free of dust, wood chips, sawdust, adhesive residue, and any other foreign debris before proceeding to final assembly, hardware installation, or packaging. A clean interior prevents contamination of finished surfaces, reduces rework, and upholds the company's quality reputation.

Acceptable Quality Standard: No visible dust, debris, or residue on any interior surface when inspected under standard shop lighting (500 lux minimum) at a distance of 30 cm. Any single particle larger than 1 mm in any dimension is considered a defect. Surfaces must pass a white glove test (clean white glove wiped across surface shows no visible soiling).

2.0 Required Tools & Gauges

- Clean, lint-free white cotton gloves (for inspection and handling)
- High-intensity LED inspection light (minimum 1000 lumens, adjustable beam)
- Compressed air gun with moisture trap (max 90 PSI)
- Clean, dry microfiber cloths (lint-free)
- Vacuum with HEPA filter and crevice tool attachment
- Small handheld mirror (for inspecting hard-to-see corners)
- Magnifying glass (10x for verifying particle size if needed)
- Red tags and defect log (ShopDocs QA module)

3.0 Safety & Material Handling

- Wear safety glasses when using compressed air to prevent debris from entering eyes.
- Use hearing protection if compressed air is used continuously (noise levels may exceed 85 dBA).
- Handle cabinets with clean, dry hands or gloves to avoid transferring oils or dirt.
- Do not drag cabinets across the floor; use proper lifting techniques or carts to prevent damage.
- Ensure work area is well-ventilated if using any cleaning solvents (only approved, low-VOC cleaners).
- Keep all cleaning materials and tools organized on a clean cart to avoid cross-contamination.

4.0 Step-by-Step Procedure

1. Don clean white cotton gloves and ensure the inspection area is free of dust and clutter.
2. Position the cabinet on a clean, level inspection table or cart with all doors and drawers removed or fully open.
3. Using the high-intensity LED light, shine the beam at a low angle (approximately 30 degrees) across all interior surfaces—back panel, side walls, top, bottom, and shelf supports.
4. Visually scan each surface systematically from top to bottom, left to right, looking for any dust, chips, adhesive strings, or foreign objects. Use the magnifying glass to confirm particle size if necessary.

5. Use the handheld mirror to inspect corners, crevices, and behind fixed shelves or partitions where direct sight is obstructed.
6. Perform the white glove test: wipe a clean area of the glove across a representative interior surface (e.g., bottom panel). Inspect the glove for any visible soiling. If soiled, the cabinet fails inspection.
7. If any dust or debris is found, use the HEPA vacuum with crevice tool to remove loose particles. For stubborn residue, use compressed air (directing debris away from operator) followed by vacuuming.
8. Wipe down all interior surfaces with a clean, dry microfiber cloth to remove any remaining fine dust. Do not use any liquids unless approved for specific finishes.
9. Re-inspect the cabinet using the same lighting and visual method (steps 3-6) to confirm it meets the acceptable quality standard.
10. If the cabinet passes, close doors/drawers and move to the next station. If it fails, attach a red tag with the defect description and date, and place in the rework area.
11. Log the inspection result (pass/fail) and any rework actions in the ShopDocs QA module for traceability and continuous improvement.
12. Clean the inspection tools (gloves, cloths, mirror) and return them to their designated storage location. Dispose of used gloves and cloths if single-use.

5.0 Verification & Defect Reporting

1. The inspector must verify that the cabinet meets the acceptable quality standard defined in Section 1.0 before signing off.
2. If any dust, debris, or residue is visible after cleaning, the cabinet is considered defective and must be red-tagged immediately.
3. Red-tagged cabinets must be moved to the designated rework area. The red tag must include: date, inspector name, defect description (e.g., 'sawdust in left corner'), and cabinet ID.
4. Rework procedure: Re-clean the affected area using steps 7-9 of Section 4.0, then re-inspect. If the cabinet still fails, escalate to the QA supervisor for disposition (rework, scrap, or concession).
5. All defects must be logged in the ShopDocs QA module with the following fields: cabinet ID, defect type, severity, root cause (if known), and corrective action taken.
6. A weekly review of defect logs shall be conducted by the QA manager to identify trends (e.g., recurring dust from a specific machining station) and implement corrective actions (e.g., improved dust collection, operator training).

Regulatory Disclaimer: This document is a generic quality assurance template. The end-user assumes all liability for validating all dimensional tolerances, testing procedures, and engineering specifications against actual production requirements before deployment.