

FREE MANUFACTURING MATERIAL CONTROL TEMPLATE

Material Handling and Segregation Checklist

Use this 60-point checklist to verify material identity, powered and manual handling, travel routes, status segregation, chemical compatibility, stacking, contamination controls, location accuracy, damaged material, and corrective action.

Facility / area

Review date

Material / zone

Reviewer / owner

Internal manufacturing template. Apply current handling procedures, warehouse rules, equipment instructions, SDS information, quality-status controls, and applicable OSHA material-handling, powered-industrial-truck, and hazard-communication requirements.

1. Material identity, status, ownership, and handling readiness

- 1
- Confirm the material name or code, description, lot or batch, quantity, current status, source location, and intended destination are known before movement begins.
- CRITICAL
- HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Before material moves, confirm exactly what it is, its current status, where it should go, and whether any special lifting, contamination,...

- 2
- Verify released, pending, quarantine, rejected, rework, returned, expired, and other statuses are clearly identified before handling or transfer.
- CRITICAL
- HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Before material moves, confirm exactly what it is, its current status, where it should go, and whether any special lifting, contamination,...

- 3
- Confirm handling instructions, weight, dimensions, center of gravity, fragility, orientation, temperature, ESD, contamination, or other special requirements are available where applicable.
- CRITICAL
- HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Before material moves, confirm exactly what it is, its current status, where it should go, and whether any special lifting, contamination,...

- 4
- Verify employees know who owns the material transfer and who is authorized to approve exceptions, status changes, or alternate destinations.
- HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Before material moves, confirm exactly what it is, its current status, where it should go, and whether any special lifting, contamination,...

- 5
- Check containers, pallets, drums, reels, totes, racks, cages, or other handling units are suitable and in acceptable condition before movement.
- CRITICAL
- HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Before material moves, confirm exactly what it is, its current status, where it should go, and whether any special lifting, contamination,...

- 6
- Record transfer date, material, lot, quantity, source, destination, responsible handler, and any special controls required for the movement.
- HANDLING

FINAL STATUS | Enter

OPERATIONS OWNER | Enter

EHS / QUALITY APPROVAL | Enter

Execution tip: Before material moves, confirm exactly what it is, its current status, where it should go, and whether any special lifting, contamination,...

2. Mechanical handling equipment, forklifts, pallet trucks, and operator controls

7 Confirm forklifts, powered pallet trucks, stackers, tuggers, hoists, cranes, carts, or other mechanical handling equipment are suitable for the load and task. **CRITICAL** HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Use mechanical handling equipment only when it is suitable for the load and workplace. Powered industrial truck operators should be trained and...

8 Verify powered industrial truck operators are trained, evaluated, and authorized according to the site's program and applicable requirements. **CRITICAL** HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Use mechanical handling equipment only when it is suitable for the load and workplace. Powered industrial truck operators should be trained and...

9 Check the handling equipment is within rated capacity and the planned load does not exceed load, attachment, height, or stability limits. **CRITICAL** HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Use mechanical handling equipment only when it is suitable for the load and workplace. Powered industrial truck operators should be trained and...

10 Inspect forks, wheels, tires, chains, masts, brakes, steering, alarms, restraints, controls, lifting attachments, and visible safety features before use where required. **CRITICAL** HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Use mechanical handling equipment only when it is suitable for the load and workplace. Powered industrial truck operators should be trained and...

11 Confirm defective or unsafe handling equipment is removed from service or otherwise controlled until repaired and released. **CRITICAL** HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Use mechanical handling equipment only when it is suitable for the load and workplace. Powered industrial truck operators should be trained and...

12 Verify modifications, attachments, makeshift extensions, damaged pallets, or improvised lifting methods are not used where they could affect safe capacity or operation. **CRITICAL** HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Use mechanical handling equipment only when it is suitable for the load and workplace. Powered industrial truck operators should be trained and...

3. Aisles, travel routes, loading areas, pedestrians, and movement clearances

13

Confirm aisles, passageways, loading docks, doorways, turns, intersections, and transfer routes provide sufficient clearance for the material and handling equipment used.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Observe the full travel path before material moves. Mechanical handling routes need adequate clearance, and aisles and passageways should...

14

Verify aisles and passageways are clear, in good repair, and free from obstructions that could create a handling or pedestrian hazard.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Observe the full travel path before material moves. Mechanical handling routes need adequate clearance, and aisles and passageways should...

15

Check permanent aisles, pedestrian routes, restricted zones, crossings, staging areas, and material lanes are appropriately identified where required by the site.

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Observe the full travel path before material moves. Mechanical handling routes need adequate clearance, and aisles and passageways should...

16

Confirm blind corners, doorways, intersections, ramps, slopes, dock edges, and congested zones have suitable traffic or communication controls.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Observe the full travel path before material moves. Mechanical handling routes need adequate clearance, and aisles and passageways should...

17

Verify pedestrians are separated or otherwise protected from powered material-handling traffic using the site's approved controls.

CRITICAL

HANDLING

Handling Item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Observe the full travel path before material moves. Mechanical handling routes need adequate clearance, and aisles and passageways should...

18

Confirm emergency exits, fire equipment, electrical panels, eyewash or shower stations, and emergency access routes remain unobstructed during material movement or staging.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Observe the full travel path before material moves. Mechanical handling routes need adequate clearance, and aisles and passageways should...

4. Manual handling, lifting, carrying, pushing, pulling, and ergonomic controls

19

Confirm manual handling tasks have been assessed for load weight, size, shape, grip, frequency, travel distance, posture, and other relevant ergonomic risk factors.

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Look at the real handling task, not only the material weight. Reach distance, height, posture, frequency, grip, travel distance, and floor condition...

20

Verify employees use lifting aids, carts, hoists, pallet positioners, team handling, or other controls where the load or task makes manual handling unsuitable.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Look at the real handling task, not only the material weight. Reach distance, height, posture, frequency, grip, travel distance, and floor condition...

21

Check materials are lifted, lowered, pushed, pulled, or carried using methods that avoid unnecessary twisting, overreaching, unstable footing, or sudden uncontrolled movement.

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Look at the real handling task, not only the material weight. Reach distance, height, posture, frequency, grip, travel distance, and floor condition...

22

Confirm frequently handled materials are positioned to reduce excessive floor-level lifting, overhead reaching, long carries, or repeated awkward postures where practical.

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Look at the real handling task, not only the material weight. Reach distance, height, posture, frequency, grip, travel distance, and floor condition...

23

Verify handles, grips, container condition, sharp edges, pinch points, hot surfaces, and other material characteristics are controlled before manual handling.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Look at the real handling task, not only the material weight. Reach distance, height, posture, frequency, grip, travel distance, and floor condition...

24

Confirm employees know when to stop and request mechanical assistance, team lifting, a different container, or another control rather than attempt an unsafe manual move.

CRITICAL

HANDLING

C

PC

NC

NA

Execution tip: Look at the real handling task, not only the material weight. Reach distance, height, posture, frequency, grip, travel distance, and floor condition...

5. Released, quarantine, rejected, rework, and material-status segregation

25

Confirm released material is physically and electronically separated from quarantine, rejected, pending, rework, returned, expired, and otherwise restricted material as required.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Material status should be obvious without opening a system screen. Physical location, labels, barriers, and electronic status should all tell the same...

26

Verify quarantine and rejected locations are clearly identified and access or issue is controlled to prevent unintended use.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Material status should be obvious without opening a system screen. Physical location, labels, barriers, and electronic status should all tell the same...

27

Check material status labels, hold tags, warehouse locations, ERP or WMS status, and physical segregation agree with one another.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Material status should be obvious without opening a system screen. Physical location, labels, barriers, and electronic status should all tell the same...

28

Confirm rework, concession, deviation, inspection-pending, or conditional-release material has clear status, scope, ownership, and approved handling instructions.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Material status should be obvious without opening a system screen. Physical location, labels, barriers, and electronic status should all tell the same...

29

Verify unidentified or status-uncertain material is placed under controlled hold until identity and disposition are confirmed.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Material status should be obvious without opening a system screen. Physical location, labels, barriers, and electronic status should all tell the same...

30

Confirm status changes are authorized and documented before material is moved from restricted to unrestricted storage or production use.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Material status should be obvious without opening a system screen. Physical location, labels, barriers, and electronic status should all tell the same...

6. Chemical compatibility, hazardous-material segregation, labels, and SDS access

31

Confirm hazardous chemical containers retain required workplace or shipping labels and labels are legible during handling and storage.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Apply these checks where hazardous chemicals are handled or stored. Use container labels, SDS information, compatibility requirements, and the...

32

Verify safety data sheets are readily accessible to employees during the work shift for hazardous chemicals they may handle.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Apply these checks where hazardous chemicals are handled or stored. Use container labels, SDS information, compatibility requirements, and the...

33

Check incompatible chemicals or material classes are segregated according to applicable requirements, SDS information, and the site's compatibility rules.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Apply these checks where hazardous chemicals are handled or stored. Use container labels, SDS information, compatibility requirements, and the...

34

Confirm secondary containment, spill pallets, bunding, drain protection, caps, closures, or other containment controls are used where required.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Apply these checks where hazardous chemicals are handled or stored. Use container labels, SDS information, compatibility requirements, and the...

35

Verify leaking, damaged, bulging, corroded, unidentified, or contaminated hazardous-material containers are isolated and handled through the approved response process.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Apply these checks where hazardous chemicals are handled or stored. Use container labels, SDS information, compatibility requirements, and the...

36

Confirm employees understand required PPE, label information, SDS access, spill response, incompatible-material controls, and escalation procedures for hazardous materials.

CRITICAL

HANDLING

C

PC

NC

NA

Execution tip: Apply these checks where hazardous chemicals are handled or stored. Use container labels, SDS information, compatibility requirements, and the...

7. Stacking, racking, pallets, containers, stability, and falling-material prevention

37

Confirm materials stored in tiers are stacked, blocked, interlocked, restrained, or otherwise secured so they remain stable against sliding or collapse.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Materials stored in tiers should remain stable and secure against sliding or collapse. Inspect the load, pallet, rack, and storage method together.

38

Verify pallets, racks, shelving, bins, cages, drums, reels, containers, and supporting structures are suitable for the load and free from significant visible damage.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Materials stored in tiers should remain stable and secure against sliding or collapse. Inspect the load, pallet, rack, and storage method together.

39

Check stack height, overhang, load distribution, wrapping, banding, chocking, reel restraint, drum orientation, and other stability controls meet the approved storage method.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Materials stored in tiers should remain stable and secure against sliding or collapse. Inspect the load, pallet, rack, and storage method together.

40

Confirm heavy, unstable, awkward, or high-risk loads are positioned to reduce falling-object risk and unsafe high-level handling.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Materials stored in tiers should remain stable and secure against sliding or collapse. Inspect the load, pallet, rack, and storage method together.

41

Verify damaged pallets, broken boards, crushed containers, loose banding, unstable wraps, or shifted loads are corrected before movement or storage continues.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Materials stored in tiers should remain stable and secure against sliding or collapse. Inspect the load, pallet, rack, and storage method together.

42

Confirm stored material does not create unsafe protrusions, pinch points, leaning stacks, blocked access, or collapse risk for employees and handling equipment.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Materials stored in tiers should remain stable and secure against sliding or collapse. Inspect the load, pallet, rack, and storage method together.

8. Contamination prevention, clean handling, segregation by material family, and WIP protection

43

Confirm raw materials, components, WIP, packaging, chemicals, waste, and finished goods are segregated where mixing or cross-contamination could affect quality or safety.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Segregation is also about material integrity. Prevent clean, sensitive, food-contact, chemical, dusty, oily, allergenic, ESD-sensitive, or otherwise...

44

Verify clean, sensitive, moisture-sensitive, ESD-sensitive, odor-sensitive, allergen-controlled, dusty, oily, or other special materials are handled using the required protective controls.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Segregation is also about material integrity. Prevent clean, sensitive, food-contact, chemical, dusty, oily, allergenic, ESD-sensitive, or otherwise...

45

Check open or partial containers are closed, covered, labeled, and protected before transfer or temporary staging.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Segregation is also about material integrity. Prevent clean, sensitive, food-contact, chemical, dusty, oily, allergenic, ESD-sensitive, or otherwise...

46

Confirm forklifts, carts, pallets, totes, bins, scoops, hoses, or reusable handling equipment are cleaned or dedicated where contamination control requires it.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Segregation is also about material integrity. Prevent clean, sensitive, food-contact, chemical, dusty, oily, allergenic, ESD-sensitive, or otherwise...

47

Verify waste, scrap, leaks, spills, damaged product, cleaning chemicals, and maintenance materials are kept from contaminating usable material and WIP.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Segregation is also about material integrity. Prevent clean, sensitive, food-contact, chemical, dusty, oily, allergenic, ESD-sensitive, or otherwise...

48

Confirm temporary staging does not place incompatible, restricted, or different-status materials together in a way that creates mix-up or contamination risk.

CRITICAL

HANDLING

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Segregation is also about material integrity. Prevent clean, sensitive, food-contact, chemical, dusty, oily, allergenic, ESD-sensitive, or otherwise...

9. Location transfers, quantity reconciliation, ERP or WMS accuracy, and damaged material

49

Confirm each material movement updates the correct material, lot or batch, quantity, status, source location, and destination location in the ERP or WMS as required.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Every physical movement should leave the system and the floor in agreement. Sample transfers in both directions: from system to location and...

50

Verify transfer quantity matches the physical amount moved and discrepancies are recorded before the transaction is closed.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Every physical movement should leave the system and the floor in agreement. Sample transfers in both directions: from system to location and...

51

Check barcode scans, pallet IDs, location labels, transfer orders, move tickets, or other transaction controls match the actual material movement.

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Every physical movement should leave the system and the floor in agreement. Sample transfers in both directions: from system to location and...

52

Confirm damaged material discovered during movement is identified, segregated, assessed, and prevented from unintended issue.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Every physical movement should leave the system and the floor in agreement. Sample transfers in both directions: from system to location and...

53

Verify dropped, spilled, mixed, contaminated, missing, or misrouted material is reported and investigated through the appropriate discrepancy or nonconformance process.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Every physical movement should leave the system and the floor in agreement. Sample transfers in both directions: from system to location and...

54

Review recurring transfer errors, wrong-location moves, inventory variances, damaged stock, handling incidents, and material mix-ups for systemic improvement.

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Every physical movement should leave the system and the floor in agreement. Sample transfers in both directions: from system to location and...

10. Inspection findings, corrective action, verification, records, and management sign-off

55

Confirm checklist findings identify the material, lot, location, handling activity, status, risk, evidence, and immediate containment where required.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Close handling and segregation findings only when the physical risk and the supporting process are both corrected. Repeat issues often point to...

56

Assign each open handling or segregation finding to a named owner with priority, due date, interim control, required evidence, and escalation route.

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Close handling and segregation findings only when the physical risk and the supporting process are both corrected. Repeat issues often point to...

57

For critical collapse, traffic, contamination, chemical, status, or handling risks, verify affected activity or material is stopped, isolated, or controlled before work continues.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Close handling and segregation findings only when the physical risk and the supporting process are both corrected. Repeat issues often point to...

58

Confirm corrective actions address root causes such as layout, aisle congestion, equipment suitability, pallet quality, labeling, segregation, training, ergonomics, system controls, or workload.

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Close handling and segregation findings only when the physical risk and the supporting process are both corrected. Repeat issues often point to...

59

Verify effectiveness through repeat observation, inventory checks, incident trends, handling damage data, audit follow-up, or other objective evidence.

CRITICAL

HANDLING

Handling item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Close handling and segregation findings only when the physical risk and the supporting process are both corrected. Repeat issues often point to...

60

Record final checklist status, unresolved critical risks, affected material, follow-up actions, next review date, reviewer, warehouse or operations owner, EHS or quality reviewer, date, and management approval.

CRITICAL

HANDLING

FINAL STATUS | Enter

OPERATIONS OWNER | Enter

EHS / QUALITY APPROVAL | Enter

Execution tip: Close handling and segregation findings only when the physical risk and the supporting process are both corrected. Repeat issues often point to...