

Supplier Packaging/Labeling Standards

29 September 2009



Supplier Packaging/Labeling Standards

Rev. September 29, 2009

This document is controlled by:
Inovar
Supplier Quality and Development
1073 West 1700 North
Logan, Utah 84321
(435) 792-4949 X121
DMcFarland@Inovar-inc.com

All prior editions are obsolete and should not be used.

It is the user's responsibility to assure that only the latest revision of this standard is used. (Go to www.inovar-inc.com for the current standard.)

1.0 Introduction

- 1.1 **Purpose:** To clearly define packaging and labeling requirements to Inovar's suppliers.
- 1.2 **Scope:** This standard applies to direct material items shipped to Inovar. It applies to all suppliers including other Inovar departments/plants. This document is invoked on all Pos placed, unless specific exemption is noted on PO.
- 1.3 **Partnership:** Packaging development requires partnership. It can only function as intended when both supplier and customer work together from proposal through implementation. And then, it is absolutely crucial that both parties adhere to authorized packaging. The key is open, two-way communication.
- 1.4 **Delivery Performance Rating:** A supplier's conformance to this standard and adherence to authorized packaging is factored into the supplier's "Delivery Performance Rating."

2.0 Supplier Responsibility

2.1 General Statements:

- 2.1.1 The supplier is responsible for the packaging of direct materials to assure their proper condition and quality upon delivery to Inovar. **Parts must arrive at Inovar without damage, rust/corrosion, or contamination.** Packaging shall be defined and agreed upon prior to the first direct material shipment to Inovar.
- 2.1.2 **Although packaging authorization is required, such authorization does not relieve the supplier of their responsibility to ensure adequate packaging for proper delivery of parts to Inovar.**
- 2.1.3 Packaging shall not be a source of contamination. Barrier materials, (e.g. plastic bags), may be required. The supplier shall be responsible to wash returnable packaging when necessary.
- 2.1.4 Packaging is part of the supplier manufacturing process and shall be included as appropriate in the supplier's FMEA, Quality Plan, Source Release Plan, PPAP when these "tools" are used.
- 2.1.5 Standard Packaging – When practical, each supplier shall utilize a single size container, package, and/or pallet containing a standard quantity for each part number supplied. This requirement shall be valid for expendable and returnable packaging.
- 2.2 **Submit Proposal:** All packaging "modifications" or "new" proposals require authorization.
- 2.3 **Laboratory Simulation Testing** may be required and should be considered by the supplier to assure that the product and packaging will withstand "real-world" load conditions, handling, and any applicable transportation modes that may become necessary. If testing is required, contact your Inovar packaging representative.
- 2.4 **A Sample Shipment** may be required to test and prove that the packaging withstands delivery conditions and to allow Inovar to review the packaging. (See section 4.0)
- 2.5 **Returnable Packaging** shall be used when it is cost effective or when it is needed to meet specific Inovar objectives. When returnable packaging is not justifiable or feasible, environmentally friendly materials (recyclable) shall be used. If returnable packaging is required, suppliers shall be responsible for storing returnable packaging at their site.
- 2.6 **Inovar Expectations:** Inovar expects suppliers to proactively support and participate in actions to assure that the following conditions always exist when returnable packaging is utilized:
 - 2.6.1 The supplier uses the shipping pack as authorized. This pack has been designed to meet the requirements set forth in this document.
 - 2.6.2 Management of returnable and transportation logistics are performed in the most cost effective method compatible with delivery requirements.
 - 2.6.3 An established minimum number of containers are available at the supplier's location when they are needed.
 - 2.6.4 The supplier shall have authorized back-up packaging available. The internal dimensions and quantity of parts in the back-up packaging shall be the same as the authorized returnable packaging. The external dimensions shall not exceed the dimensions of the returnable packaging. Whenever back-up packaging is used, Inovar shall be notified prior to shipping with an explanation.

- 2.6.5 Parts must arrive at Inovar without damage, rust/corrosion, or contamination.
- 2.6.6 Inovar owned packaging shall not be used for storage and shipment of non-Inovar owned parts.
- 2.7 **Notification Required:** In addition, suppliers are expected to notify Inovar immediately in the event that containers are returned to the supplier:
 - 2.7.1 With supplied direct materials (parts) inside,
 - 2.7.2 Not properly identified (e.g. incorrect address),
 - 2.7.3 Without the full complement of returnable packaging components in the correct proportions (e.g. no lids, or more lids than totes),
 - 2.7.4 With trash or other foreign materials inside,
 - 2.7.5 Not properly prepared for safe transport (e.g. totes are banded or stretch wrapped to the pallet versus being stacked loosely),
 - 2.7.6 At a lower return rate than full packs being shipped to Inovar.
- 2.8 **ESD Protection**
 - 2.8.1 The supplier shall ensure that parts are protected from potential damage that may occur from exposure to static.
 - 2.8.2 Packaging material should be dissipative and low-generating materials.
- 2.9 **Moisture Sensitive Parts:** Parts classified by the manufacturer as Moisture Sensitive, shall be adequately protected to prevent un-needed exposure to moisture prior to, and upon receipt at Inovar.
 - 2.9.1 Product must be sealed in an industry approved Moisture Barrier Bag. A desiccant pouch and humidity card shall be required, per J-STD-033.
 - 2.9.2 The barrier bag shall be marked with a sticker denoting the material is sensitive to moisture and the J-STD-033 level.
 - 2.9.3 If the supplier has opened the bag, the number of hours decremented shall be clearly marked on a label found on the outside of the bag.

3.0 Packaging Alternatives and Requirements

3.1 Alternatives:

- 3.1.1 Returnable using bulk containers, pallets, and totes that cube-out on standard footprint sized pallets (45" x 48" , 30" x 36" , or 30" x 32") (*Preferred Method*)
- 3.1.2 Expendable
- 3.1.3 Expendable/Returnable Combination

3.2 Requirements:

3.2.1 Pallet-Load Dimensions: (Expendable or Returnable)

3.2.1.1 Foot print size and height restrictions(includes pallet)

FACE	X	DEPTH	Max. Height
48"	X	45"	50"
32"	X	30"	40"
36"	X	30"	40"
1200 mm	X	1000 mm	1000 mm
1200 mm	X	800 mm	1000 mm
44"	X	36"	40"

3.2.1.2 Within reason, no material shall extend over the edge of the pallet

3.2.2 Strapping Options: (Inovar prefers polyester strapping material that is friction welded rather than secured with a metal clip)

- 3.2.2.1 Non-Metallic Strap (Do NOT use metal banding)
- 3.2.2.2 Stretch Wrap or Shrink Wrap
- 3.2.2.3 Tape
- 3.2.2.4 Special Pallets (must be approved)

3.2.3 Corner Boards: As required to protect the pack. Fiberboard is preferred.

3.2.4 Corrugated Specifications: Corrugated (paper fiber board) packaging material must have strength to adequately withstand transportation and handling rigors from the supplier's shipping dock to Inovar's receiving dock. Corrugated material must have adequate ECT or burst test strength to protect the product.

3.2.4.1 Corrugated packaging shall not utilize metal staples.

3.2.4.2 If stacking exceptions are required, label accordingly: "DO NOT STACK, STACK ONLY 2 HIGH," etc.

3.2.5 Weight Limitation:

3.2.5.1 Max. Shipping Pack = 2,000 Lbs. (909 Kg) or as uniquely specified

3.2.5.2 Max. Sub Pack < 40 Lbs.

3.2.6 Pallet Style/Type:

3.2.6.1 Wood: All wood pallets shall conform to the National Wood Pallet Container Association Voluntary Standard for Wood pallets (NWPCA). Inovar prefers stringer, double deck, non reversible, wood pallets. Stringers for wooden pallets shall have a minimum height of 3½".

3.2.6.2 When possible, pallets should be 4-way entry.

3.2.7 **Imports** into the U.S. utilizing wooden packaging shall be free of bark and pests and according to U.S. regulations. See Internet site for the most current regulations: <http://www.aphis.usda.gov/ppg/swp/>

3.2.8 **Smallest packaging unit(s) such as plastic bags** may be considered to package parts inside totes, cartons, and/or bulk containers. However, when bags are used, they shall be marked with the Part Label as described in Section 5.

4.0 Labeling Requirements

4.1 Introduction:

4.1.1 The quality of the information on labels is essential. Bar code labels are required and used to eliminate opportunity for error. Errors made because of label deficiency are serious in nature. (Bar code print quality must pass verification per ANSI guidelines.)

4.1.2 Suppliers shall not include information relating to quality on shipping identification labels.

4.1.3 The supplier shall not apply adhesive-backed color tags to any of the required labels described herein.

4.1.4 Returnable Packaging:

4.1.4.1 Card holders are recommended to contain and protect labels in conjunction with returnable packaging. Adhesive-backed labels shall be applied directly to placards. All labels applied to returnable packaging require that label stock is polyester material or equivalent AND the adhesive is classified as a "removable" type. The supplier is responsible for the removal of all old labels.

4.1.5 General Label Specifications

4.1.5.1 Label Size: Maximum label size is 2.0 inches high X 4.0 inches wide

4.1.5.2 Label Material: Label material is not specified. Should not be degraded with room temperature storage. The label must be capable of being removed without tearing. Paper is not preferred on returnable packaging.

4.1.5.3 Label Quality and Placement: Each reel, tube or MSD package shall be labeled. Labels must adhere to package substrate and application is wrinkle-free. If your processes do not allow for un-packing parts to access tubes/reels/etc, the supplier may supply enough labels in the box for Inovar personnel to properly label every tube as it is received at Inovar.

4.1.5.4 Label Color: White in color with black printing.

4.1.5.5 Adhesives: Adhesive types can be pressure sensitive or dry gummed as long as adherence to the package substrate is assured and application is wrinkle-free. The adhesive **must not** leave a residue after the label is removed.

4.1.5.6 Human Readable Zeroes (0): If possible, supplier should show human readable zeroes (0) with a diagonal slash to differentiate them from alphabetic Os. If this is not supported by the selected font, the supplier should ensure that there is a distinct difference between alpha and numeric characters.

4.1.5.7 Label Text: The label shall contain BarCode (Code 39, Code 128 or other format approved by Inovar) and human readable characters(Font size shall be 14 or larger on all required fields) as defined.

- 4.2 Part I.D. Label: The part labels shall be applied to each reel, tube, container or MSD package. This label shall contain the following information in this order(see sample format below):
- 4.2.1 Supplier Packing List Number
 - 4.2.2 PO Number
 - 4.2.3 Inovar Part Number
 - 4.2.4 PO Line Item Number
 - 4.2.5 Manufacturer's Name
 - 4.2.6 Manufacturer's Part Number (Shall match PO, Supplier can not add additional characters without Inovar's approval)
 - 4.2.7 Lot Code / Date Code
 - 4.2.8 Material Expiration Date (MMDDYYYY or YYWW)
 - 4.2.9 Shipment Qty
 - 4.2.10 A blank space approx .75" X .75" for use during Inovar receiving
- 4.3 Mixed Item Pack Label: This package label shall be applied to each outer box when shipment is mixed. If shipment is not mixed, the Part ID label shall be placed on the reels (per 5.2 of this procedure) and on the outside box. This label shall contain the following information in this order(see sample format below):
- 4.3.1 Supplier Packing List Number
 - 4.3.2 PO Number
 - 4.3.3 "MIXED LOAD" Printed on Label in large font (45pt min.)
- 4.4 Pallet Markings: Any pallet that contains the same product shall be labeled with a Pallet ID rather than with a Package label. This is to permit an inventory clerk to identify material stored in elevated pallet racking without having to remove the pallet. Each box on the pallet shall still require a part ID label.
- 4.4.1 Size: The pallet marker shall be no smaller than 8.5" X 11" (landscape)
 - 4.4.2 Human Readable Font Shall be no smaller than 65 pt (Inovar PN minimum 80pt font)
 - 4.4.3 This pallet marker shall be secured to each pallet and visible from every side (4 sheets required)

Packing List #:	123456	PO Number:	123456
Inovar Part #:	LT121-0012345		
PO Line Item #:	1	MFG Name:	MFG Name
Manufacturer PN:	123123121321321231321		
Lot Code:	123456789012	Expiration Date:	MMDDYYYY
Qty:	12000		

Exhibit 1 – Sample Shipping/Parts I.D. Label Dimensions (not to scale)

Packing List #:	123456	PO Number:	123456
MIXED LOAD			

Exhibit 2 – Sample Mixed Load Label (not to scale)

LT101-0012345

PO 12345 QTY: 50

Manufacturer

MFG Part Number

Exhibit 3 – Sample Pallet Marking Label (not to scale)

5.0 Terms and Definitions

5.1 Mixed Item Pack: A pack containing items with different part numbers from the same supplier.

6.0 Revision Record

Revision Date	Summary of Change	Document Owner	Date of Approval
7-7-09	Initial Release	Don McFarland	Draft Only
9-29-09	Submitted for release after feedback from a few choice vendors	Don McFarland	