



PACKAGING AND LABELLING REQUIREMENTS

Issue 002

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1 Purpose

The purpose of this document is to formally communicate Siemens Energy (SE) requirements and expectations to the global supply chain related to the packaging and labeling of product being shipped to SCL.

The instructions described below are **minimum requirements** and product specific requirements could be added in agreement with SE. This instruction is the basis for the acceptance of the packing by SE or its representative. Following the instructions does not discharge the contractor from liability for damages incurred as a result of poor packing. In the case of a damage incurred due to packing defects, this document will be considered state of the art in disputes.

The contractor should continuously improve their packing methods, compare with other customers of the contractor and find best practice regarding packing methods in terms of quality, cost, consolidation, environment and handling. Other packing methods may be used if they are equivalent or more stringent than the methods described here and is approved by SE.

The SE supplier is responsible to package their product in such a manner that when it is received at its' final destination, either a SE facility or customer site, it is free from damage and meets fit, form and function requirements without the need for repair or rework. This is expected regardless of who is the responsible party for freight or transportation.

Any changes regarding the packing solution **must** be approved by SE in writing before changes are made.

Statutory packing provisions that are valid in the countries supplying and receiving the goods must be taken into account when selecting packing methods, systems and materials.

The packaging and labeling requirements are available to view and available to download from the SE Supplier Portal

2 Scope of Applicability

The packaging and labeling requirements are applicable to all suppliers, Partner Managed Inventory suppliers or partners who supply product related to SE contracts / purchase orders unless otherwise specified in the product definition or contract / purchase order. The partners shall impose the obligations of this document on its Subcontractors (if any).

NOTE: Supplier shall adhere to the process specification RPS 367 for Corrosion Protection of Components during manufacture and storage unless otherwise specified in the product definition or contract / purchase order.

3 Definitions and glossary / terminology

SE	Siemens Energy
Package	Single unit in a shipment.
Four-way-pallet	Pallet that can be handled with fork lift from all four sides.
Label	Information identifying the goods and permanently affixed on its container, package or on the product itself. Example: - Packaging Label.
Marking	Information applied on the article. Often described or indicated in the drawing, in the purchase order or production order. Example: - punched marking.
Dunnage	The materials used to provide adequate support, bracing and protection of product during shipment i.e. padding in a shipping container to prevent unnecessary movement of load.
Polythene and Polyethylene	Both shall be regarded as being the same.
Supplier Portal	Supplier facing portal holding forms and guidance material.
EBQR	Energy Business Quality Requirements
Master/ Final box	Transportation box containing consolidated shipment of multiple boxes.

4 General Requirements

4.1 Packaging and labelling requirements

The supplier shall:

- Ensure that the products are packaged and labeled in accordance with the requirements of this document to a standard that will provide adequate protection against damage, deterioration, tampering and other risks during shipment to SE, plus the storage and subsequent distribution within SE and / or external dispatch to SE customers for a period of 12 months from the time of Packing.

4.2 Designing the transport packaging

The supplier shall:

Design the packing considering below points

- The Package shall allow safe and appropriate **handling, lifting** (e.g. sufficient lifting lugs, slinging points) **and load securing**.
- The design loads are based on conditions resulting from **normal** loading during transport, storage and trans-shipment, including all cargo-handling operations.
- When dimensioning the packages, standardized dimensions of transport vehicles, pallets etc. should be taken into account where possible. Package dimensions should allow transportation by truck, train, ship or airplane from contractor to SE.
- Goods delivered on **pallet**. If otherwise agreed with SE, the package should have a bottom clearance of **at least 100 mm** for entering the arms of a forklift.

For the **next day air and small package shipping environment** (UPS, FedEx, DHL, etc.), warnings or stickers on shipping containers will not change the basic nature of the transportation and handling system. Packages shall be capable of withstanding the stacking, drops, kicks, collisions, rolling, tumbling and throwing of boxes in this system with no damage to parts and minimal damage to the packages.

4.3 Documented packaging and labeling instructions

The supplier shall:

- Establish a documented (product group / commodity specific) packaging and labeling instruction(s) with the photos that shall be made available to personnel involved in the packaging and labeling process to ensure that the product is consistently packaged and labeled in manner that meets the requirements of the packaging and labeling requirements document.
- This document (or series) shall be made available to SE upon request to ensure that the product is consistently protected, packaged and labeled in a manner that meets the requirements of this document.

NOTE: If a third party sub-vendor packages the product, the requirements given above still apply.

- Establish a process to inspect all labels and identification markings prior to the shipment ensuring they are readable.

5 Packaging

5.1 General packaging requirements

- Ensure that the product is packed in a manner that will allow the product to be removed from the packaging without damaging the product in the process.
- Ensure that the packaging material will not contaminate the goods enclosed.
- Wherever possible, use packaging which allows the reclamation of mixed materials with the minimum of effort (e.g., avoiding the use of bonding systems that prevent separation of individual materials).
- Ensure packaging is sufficient to prevent damage and preserve product integrity whilst also being minimized as far as is practicable to reduce waste.
- Use dunnage as necessary to provide adequate support, bracing and protection of product during shipment. **Wrap or bag the product** to ensure that dunnage material does not come into direct contact with the product.
- Ensure that transportation caps, covers and plugs are plastic (not rubber) and of sufficient flexibility so that cracking will not occur. Shipping caps, covers and plugs shall be push-on type and have broad flanges.
- Establish appropriate precautions to prevent the ingress of foreign objects and contamination into components with orifices.

NOTE 1: The use of self-setting packing foams injected directly into boxes is not recommended.

NOTE 2: Prohibited dunnage materials are as follows:

Any material that may present a risk of being caught inside hollow components

- Polystyrene loose chippings
- Shredded paper / tissue paper

NOTE 3: PVC shall NOT, in any circumstances, be used in contact with Titanium alloys.

NOTE 4: To facilitate reclamation / recycling, the supplier will ensure that dunnage materials are not to be mixed (when possible).

NOTE 5: The use of staples is only acceptable for packaging construction / reinforcement and must not be used for closing / sealing any openings.

5.2 Weight, size & shape of packages

The supplier shall:

- Ensure that the size, shape and weight of the packages used will not present difficulties to the normal handling.
- Indicate the heaviest side of the package when the center of gravity is off center.

5.3 Pallets

The supplier shall:

- The goods shall be delivered on approved EUR pallet, See Table 1 below.
- Overhang of the packages is NOT accepted.
- Goods shall be fastened with straps
 - o Please note that the straps shall not cover the marking or labeling of the goods, all part markings must be clearly visible.
 - o If the straps are secured with bolts the nuts must not be welded. Straps should have either cardboard or a thin piece of wood between them and the component.

Table 1 (Pallet dimensions for parts)			
Type of pallet	Pallet dimensions	Maximum weight	Maximum dimensions
EUR Pallet	1200x800x144mm	1000kg	1200x1200x800mm
Four-way pallet	1600x1200x144mm	2000kg	1600x1600x800mm
Four-way pallet	2000x2000x144mm	3000kg	2000x2000x800mm
Four-way pallet	2000x2400x166mm	3000kg	2000x2000x166mm

- Pallet goods between 25 and 1000 kilos shall **always** be delivered on **approved EUR pallet** (1200x800x144 mm).
- Ensure that when a package is physically too large or too heavy for safe manual handling it will be attached to a pallet base to enable mechanical handling
- Use pallets and bases that are in good condition
- Ensure that the pallet material is suitable to carry the product load during transit and storage.

Goods belonging to the **same** or **different** purchase order number **can be packed together** on condition that:

- The weight **not** exceeds the maximum weight specified in Table 1 for respectively pallet.
- The package **not** exceeds 800 mm in height, including pallet.

NOTE: The wood pallets used to transport goods to certain countries may require fumigation. Ensure that your shipment is compliant to these requirements.

5.4 Exceptionally large or heavy items / loads

Exceptionally large or heavy items / loads are defined as having the largest dimension of either height, width or length in excess of 2.5metres (98.4 inches), or weight in excess of 3000kgs (3 tons or 3.307 tons).

The supplier shall:

- Ensure the safe delivery and handling of exceptionally large or heavy items / loads
- Ensure that exceptionally large or heavy items / loads will only be delivered to Siemens Canada Ltd to either:
 - A pre-defined packaging and handling specification formally agreed by the Siemens receiving site.
 - The Siemens Business Unit purchase department placing the order has arranged contact with the supplier and the receiving Siemens site - as / where applicable.

5.5 Reusable containers

Reusable containers may be introduced by SE that is managed by an inbound collection service.

The supplier shall:

- Ensure that reusable containers are fit for purpose. The supplier shall contact the Siemens packaging service provider when a reusable container has been deemed to be unfit for purpose
- Store SE supplied re-usable containers indoors at all times. The minimum requirement is undercover, in a shelter, protected by three sides, a roof, and not in standing water
- Ensure that reusable containers are NOT used to deliver any product other than those designated and labelled on the container.
- Each supplier to have a process for **removing old labels** before reusing packaging

5.6 Plastic banding

The supplier shall:

Use plastic banding to package products (*when applicable*) – Metal banding shall not be used.

NOTE: Banding of multiple packages is not permitted where method of transportation to the delivery destination will include airfreight unless each individual package has release documentation and a receipt label attached (Not applicable to raw materials, forgings, castings etc).

5.7 Different packaging for different parts

Critical and Sensitive goods

The supplier shall:

Ensure extra precautions are taken to goods or articles which are manufactured with fine tolerances. E. g. threaded bolts should be covered with a protective sleeve and holes must be protected to avoid dirt and mechanical damage. **These items shall be packaged individually with a correct label stating the serial number.** When these articles are consolidated they must be fixed, secured and separated to avoid mechanical damage due to scratching, scuffing and indentations between articles or other damage created by forces that could arise during transport, transshipment or handling.

Hazardous goods

The supplier shall:

Materials to be shipped in accordance with international and local dangerous goods regulations shall always be packaged separately, marked and labelled in accordance with the relevant applicable dangerous goods regulations. All other relevant regulations have also to be met e. g. dangerous materials regulations of the used transport modes.

Goods requiring boxes

The supplier shall:

For items required to be packed in a box, the box itself should be of solid construction such as the two examples shown below, and be suitable for lifting with a forklift truck.



Lid should NOT be attached with nails. Use screws or metal straps around the box to hold the lid in place. This is because the lid needs to be removed in order to check the markings on the component upon delivery to SE.

Wherever possible, component should be positioned in the box so that the component part markings are visible to the SE goods receiving department after the package lid is opened.

Parts packaged in a box should be secured in place using a wooden frame or similar method inside the box, to prevent it from moving about during transportation — see Figure below. Any supports that need to be removed in order to take the Part out of the box should be held in place with screws from the outside instead of nails — so not to destroy the box when the component is being manoeuvred to check the identification markings.



Goods that require VCI (Vapour Corrosion Inhibitor) protection, should have a solid piece of VCI in the box, have the component wrapped in VCI material, or have the box lined with VCI impregnated paper on all internal surfaces.

6 Labelling

6.1 General labelling requirements

The supplier shall:

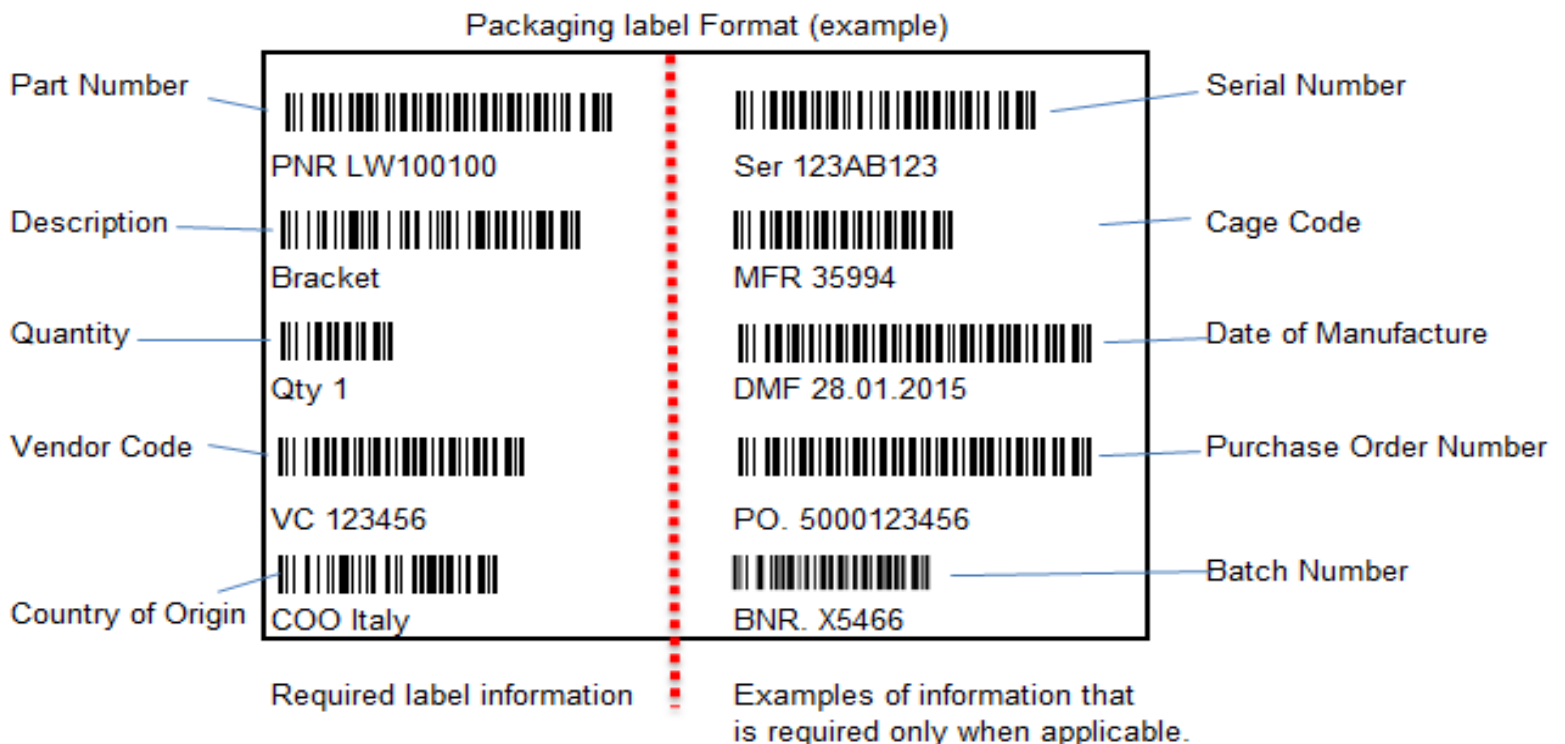
Ensure that the products are labelled to a standard that will provide adequate identification and traceability of the product to the Certificate of Conformity and Packing Slips. The supplier shall ensure that products and packages are labelled in accordance with below details

6.2 Packaging Label

6.2.1 Packaging label information

The supplier shall:

- Ensure that the packaging label is attached to all layers of packaging and contains the information shown below



NOTE 1: The Label on the outside of the box shall cover details mentioned in Table 6.2.2 with Quantity quoted as total number of parts in the package for the Part number on the label.

6.2.2 Packaging label requirements

The supplier shall:

Include the following packaging label Information as a basic (*minimum*) requirement and / or when applicable.

		Required	When Applicable
Text + barcode	PNR - Part Number – Part Number is the identity for the subject part, assembly or material item and is specified on the Siemens purchase order. Data format is PNR [space], followed by the part number	√	
	Description - Data format is the description of the product i.e. key words taken from the component definition.	√	
	QTY – Quantity refers to the total quantity of items (e.g. 1, 5, 10, 100) contained within the package. Data format is QTY [space] followed by the total number of items. The unit of measure e.g. sets, rolls, kg/lbs, meters, feet etc) are only required when applicable.	√	
	VC - Vendor Code - Data format is VC [space] followed by the supplier vendor code. (Allocated by Siemens Canada Ltd).	√	
	COO – Country of Origin – The Country of Origin is the country the parts were manufactured. Data format is COO [space] followed by the name of Country.	√	
	BNR - Batch Number – Batch Number is the unique number allocated covering Quantity of goods or material produced in a single manufacturing run. Data format is BNR [space], followed by the number	√	
	SER - Serial Number – The Serial number is required on the label if the part is serialised, as instructed by the engineering component definition e.g. drawing / Siemens technical specification, Data format is SER [space] followed by the unique serial number.		√
	MFR - Manufacturer – When identified on the engineering component definition as 'CAGE' or 'MFR', the five characters Commercial and government entity (CAGE) code is required. This identifies the organization controlling the design and part number assignment of the product. Data format is MFR [space] followed by the five digit manufacturers code. The CAGE code for Siemens Energy is 35994 (refer to relevant Engineering standards shown for applicability).		√
	DMF - Date of Manufacture – The Date of Manufacture is only required for the shelf life Items. This must be the date the life limiting process was completed (e.g., etch date / cure date / manufacture date, Lube date). Data format is DMF [space], followed by day, month and year separated by a period (i.e., DD.MM.YYYY). Cure dated parts must state the material group (A, B, X etc.)		√
Precautionary use data e.g. Hazardous material.		√	

6.3 Ship From and To address Label

The supplier shall:

- Ensure that the Ship From and to address Label is affixed to the final packaging/Box.

Example:

Ship From and To label Format (example)

Ship from :- Supplier Name and full address	Ship to:- (Final Destination) Siemens Canada Ltd 2200 Courval Dock C-5 Lachine, Quebec, Canada H8T 3H1
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6.4 Weight and Dimensions Label

The supplier shall:

- Ensure that the label showing Weight and Dimensions is affixed to the final packaging/Box.
- Weight shall be stated in Kilograms and will be inclusive of packaging material.

Weight and dimensions label Format (example)

Weight of the Box	25 KG
Dimensions	25X25X36

6.5 Labelling for boxes supplied within master/final box and for the master/ final box.

The supplier shall:

- Ensure that below listed labels are affixed permanently to each box contained in Master/ final box
 - Packaging Label
 - Weight and Dimension Label
- Ensure that the below listed labels are affixed permanently to the Master/final box containing multiple boxes
 - Packaging Labels showing total Quantity per part
 - Total Weight and Dimension Label showing details of Master/ Final box.

NOTE 1: The Label on the outside of the Box is used by Goods receipt team to sort and fast track urgent parts through the receipt process and also details are checked against the Packing slip.

6.6 Labelling information for release documentation

The supplier shall:

- Refer to EBQR release documentation section for the details of the information to be stated on release documentation
- Ensure that all information provided with the product e.g. labels, release documentation, references on the packaging etc., is stated in English unless otherwise authorised by the Siemens region receiving the goods. The suppliers from Canada can use either French or English.
- Enclose the release documentation with the component in the Box.

7 Health, Safety, and Environmental (HS&E)

General HS&E

- This standard does not purport to address all of the safety concerns, if any associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices, and to determine these limitations prior to use.
- The materials used in the packaging shall not be harmful to personnel and shall not require any special health precautions.
- Wooden boxes shall be free from splintered edges, exposed nails (no heads or tips), staples and screws.
- All packaging shall provide a safe means of storage clearly identifying any stacking Limitations.
- All materials shall have a low adverse impact on the environment - materials which present disposal problems in the location of delivery shall not be used.
- The method of packaging shall enable removal of parts without risk to persons or the Packaged item, with particular attention being paid to the protection of sharp edges and machined surfaces which present particular problems during unpacking.
- A caution label indicating HEAVY shall be applied to all boxes over 25 Kg.

8 Examples of Acceptable and Non-acceptable packaging

Boxes & labels

Identified as correct
Way up



Not identified with
Correct Side Up



No Staples to be
Used for closing
Openings



No Packaging Label on the Box
No Weight and Dimensions Label
No Ship From and To label



Sealed Opening



From and To Label
Packaging label details



RELEASE NOTE & CERTIFICATE OF CONFORMITY	
产品交付单及合格证	
To: Siemens Canada Ltd. 2200 Rue Compt. Lachin, CN 1885 3H4 Canada	From: Zip Code: Tel: Fax:
Vendor Code: 00001159- 232440	Part No. 1451: TRN14374
P.O. No. 11010 5501005629	Description: 1010 01 1000 ASST OF . V00V 0000 PYSCT AND 2PC FRONT SEAL
P.O. Line Item: 11010 00001 Plant: 6202 Storage Location: 312013	Drawing Issue No. 0000000000
Release No. 0000 2014-12-3	Security Classification: UNCLASSIFIED Serial Number: 0000000000 00000

Dunnage

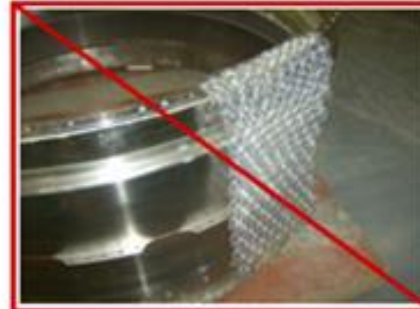
Clean Good Condition/
Recycled if Possible



Popped Bubbles



Risk of contamination



Bubble Wrap shall not
come in direct contact
with the parts



Not to be used for
as first layer
for packaging



Cover used to plug the
opening eliminating
chances of FOD ingress



Protective Cap is Mandatory



No Metal to Metal Contact

Pallet to scrap



Pallet in good condition

When binding is necessary usage of plastic binding is mandatory



Parts shall not exceed the pallet during storage or Transport

9 Checklist


The supplier shall:

- Develop the checklist provided further to the type of parts supplied to SE.
- Ensure Audit is completed using your checklist and actions are taken to address issues identified.
- A Tracker is maintained and shared with SE when requested.

Please double click on the Icon to open the Checklist

Or

Right Click on the Icon to save embedded file to the Disk.

Template Icon 

10 Reference guides for proper packaging per commodity:-
Appendix A: - Casings (including combustion components)



First Level packaging :

- Polythene Film

Dunnage :

- Bubble Wrap

Primary & Secondary Packaging :

- Reusable container designed for casing
- Wood / Plywood case
- Double or Triple wall Carton frame container

***** Special Attention *****

- Casing shall be immobilized within the case / carton
- Protection shall be provided to flange face.
- The Label as required by the guidelines.