

Instructions for packing, marking and shipping

Version: A

	Created by:	Technical approval:	ISO approval:
Name (Abbreviation)	ROHELE	VOEPIE	GREERI
Date	22.01.2024	23.01.2024	23.01.2024

Table of contents

1.	General	3
1.1	Purpose	3
1.2	Conditions.....	3
1.3	Additions, exceptions and modifications.....	3
1.4	Responsibility and liability	3
2.	Cleaning and Preservation	4
2.1	Cleaning	4
2.2	Preservation	4
3.	Packing	5
3.1	General.....	5
3.2	Choice of the Packing Type and possible protection	5
3.3	Packing requirements	5
3.3.1	Woodtreatment	5
3.3.2	Pallets	5
3.3.3	Materials.....	6
3.3.4	Steel- or synthetic straps	6
3.4	Packaging.....	6
3.5	Waterproofing	7
3.6	Centre of gravity	7
3.7	Maximum weight and size limitations	7
4.	Identification: Labelling and Tagging of equipment and materials	8
4.1	General.....	8
4.2	Identification	8
5.	Shipping marks	9
5.1	General.....	9
5.2	Location, language, application.....	9
5.3	International symbols for handling, transport, and storage	9
6.	Shipping documents	9
6.1	Shipping documents	9
6.1.1	Shipping advice.....	10
6.1.2	Packing Lists	10
6.1.3	Customs Tariff Code (Harmonized System)	11
6.2	Documents other than Shipping documents.....	11
7.	Inspection of Packing and marking	11
8.	Forwarding instructions	11
9.	Appendixes	12
9.1	Appendix I Conditions	12
9.2	Appendix II International Symbols.....	14
9.3	Appendix III: Packing Types.....	16

1. General

1.1 Purpose

These instructions are applicable for Packing, Marking and Shipping of equipment and materials as specified in the respective CTI Purchase Orders or Contracts. These instructions form an integral part of the Purchase Order or Contract issued by an entity of the CTI S.à r.l., hereinafter mentioned as CTI. Particular instructions mentioned in the individual Purchase Order or Contract prevail over the general instructions.

1.2 Conditions

These general instructions as well as any particular instructions (see appendixes) for specific items and/or projects are strictly to be adhered to. Suppliers who cannot meet these Instructions for Packing, Marking and Shipping shall inform CTI immediately. The same obligation applies if for the equipment and/or materials to be delivered by the supplier the particular or general instructions are not appropriate, incomplete and/or wrong.

Deviations from these instructions will only be accepted prior to written approval by CTI.

The packing shall be suitable to ensure that under multiple handling, normal shipping and storage conditions, no damage or corrosion shall occur to equipment and/or materials for a minimum period as specified in Appendix I hereto.

The Supplier of equipment and/or materials that will be delivered to a warehouse for packing or will be packed in Supplier's own warehouse by a specialized packing company shall act in accordance with the present instructions. CTI reserves the right to designate a specialized company from time to time.

1.3 Additions, exceptions and modifications

There may be special requirements, more particularly in terms of climate conditions, or in relation with the duration of storage and/or mode of transport, which require that this document may have to be modified, replaced or cancelled while also additional instructions may be added by CTI.

Such additions, exceptions, modifications will be subject to written notification to be given by CTI to the Supplier or to be added to Purchase Order or Contract.

1.4 Responsibility and liability

The Supplier will be held responsible for any damages and/or losses of all and any kind that may occur by not respecting these instructions.



2. Cleaning and Preservation

2.1 Cleaning

All equipment, materials and parts shall be thoroughly cleaned inside and outside and shall be free from grease, oil, weld spatter, rust and all other foreign matter prior to preservation.

2.2 Preservation

Reference is made to the applicable Purchase Order/Contract requirements and/or engineering specifications.

3. Packing

3.1 General

The instructions herein shall be considered as general directives and minimal requirements, which are applicable to the packing of all equipment and materials. All packing must be in accordance to the specific requirements of the individual purchase order or contract as well as to the governmental regulations of the country of destination.

The Supplier is responsible for the correct and adequate packing of the equipment and materials so that these equipment and materials will arrive at destination undamaged and the packing itself in such a condition that, if not otherwise required (Appendix I), it will be suitable for a minimum of 6 months storage.

3.2 Choice of the Packing Type and possible protection

The choice of the packing type and the requirement of particular protections depend on characteristics of the equipment and material to be packed, its handling requirements and kind of transport chosen (see Appendix I).

The Appendix IV shows the most suitable type of packing for equipment and materials without being exhaustive and applies unless otherwise specified in the Purchase Order or Contract.

Packing and shipping of dangerous/hazardous material, if any, shall conform to the international regulations (IATA,ADR,IMDG,IMO,RID) applicable for the purpose.

3.3 Packing requirements

3.3.1 Woodtreatment

All solid wood, used for packing (including wooden pallets) and/or stowage should be treated (heat treatment or fumigation) according to the international standard ISPM 15 (IPPC), latest version.

As these rules are not the same for all countries, the procedure is to be met for the country of final destination (see Appendix I). If the Supplier is not aware of the country of final destination he has the obligation to inform himself. Use of untreated wood is not acceptable.

If a Phytosanitary Certificate is required, it has to be issued by the official government authorities. Phytosanitary Certificate is normally required in one original and two original copies (duly stamped and signed) unless otherwise specified in the regulations of the country of destination.

3.3.2 Pallets

When equipment and/or materials are packed on pallets (wood or synthetic), these should be solid double deck pallets that provide adequate load support

during transportation and storage (under not always ideal conditions). The pallets should have a dynamic load capacity, enough to carry the mass loaded on the pallet.

Where feasible the top surface of the pallet must be flat.

The pallet design must enable safe handling by forklift, cranes etc. and storage on rough surface.

Pallets have to be covered with wrapping. For shrink foil at least one (1) layer with a thickness of 175 micron is required. For stretch foil there are at least three (3) layers required.

All corners, horizontal and vertical, have to be protected with cardboard protection strips. The pallet must be tight on all sides with steel or synthetic straps, at least three (3) straps per side.

3.3.3 Materials

The quality of packing shall provide maximum protection against damage, breakage and pilferage during transport, storage and multiple handling, including handling by e.g. hoisting, lifting devices and forklift trucks.

Any packing made of wood, must be made from new, treated wood (according to ISPM 15 IPPC, latest version), with a maximum moisture-percentage of 18%. For Cases, sides with bark, big knots, tears or rotten spots are not allowed. Thickness for sides and top must be 12mm at least. Used cases, crates and cardboard packing are not allowed.

3.3.4 Steel- or synthetic straps

Where useful or required, steel- or synthetic strap shall be used. The strap shall never be nailed.

3.4 Packaging

All equipment and materials shall be properly fixed (by bolts, clamps, supporting beams, etc.) in such a way that internal movements and/or working loose will be impossible. Under the top cover – (roof) depending on the case and crate length, a sufficient number of strong beams shall be placed and properly fixed in order to allow stacking of the cases and crates while avoiding any compression.

Equipment parts and materials which may be subject to damage by vibration and/or shock, must be protected using shock-absorbing material.

All equipment and materials which may be damaged by moisture shall be packed in airtight bags in which sufficient desiccant material (e.g. silica gel) is enclosed for the conditions mentioned in the appendix (I).

All openings on the equipment must be closed with wooden or plastic covers to prevent damage to the openings and interiors.

Fragile and loose parts easily damageable pertaining to the equipment must be securely and properly packed in a separate case.

Straw, hay, wood wool and/or newspapers shall not be used as packing and/or filling material. The use of “Styrofil” or “Pelaspanpack” as filling material is strongly recommended.

Spare parts shall be packed separately; they may however be enclosed in main cases as a separate package.

3.5 Waterproofing

If waterproofed packing is required, cases including the cover shall be internally lined with a strong type of waterproof paper or plastic foil. The bottom must be executed water-tight.

Equipment and materials shall always be packed in a foil (polyethylene or aluminium) for extra (double) protection against rainfall. Those foils to be applied in such a way that they are self draining.

3.6 Centre of gravity

On cases and crates containing goods of which the centre of gravity creates a risk to unbalance in the event of handling, the centre of gravity shall be marked clearly using the international symbol (Appendix III).

3.7 Maximum weight and size limitations

It is intended that all equipment will be shipped by the most economic and expeditious means. The design of packages is to be in accordance with the following maximum container dimensions:

a) General Purpose (Standard) Containers

	Internal dimensions	
	20' container	40' container
Length	5.895	12.029 metres
Width	2.350	2.350 metres
Height	2.385	2.392 metres
Door opening width	2.330	2.340 metres
Door opening height	2.292	2.292 metres

b) Open Top Containers

	Internal dimensions	
	20' container	40' container
Length	5.897	12.030 metres
Width	2.350	2.350 metres
Height	2.347	2.347 metres

If the Supplier expects that a package or loose piece exceeds these dimensions, he shall inform CTI immediately.

4. Identification: Labelling and Tagging of equipment and materials

4.1 General

4.1 All equipment, material, accessories, loose parts and/or spare parts shall be individually tagged with a securely attached metal or synthetic label. If no specific identification is required, see the Purchase Order/Contract and/or the technical specifications, the label shall bear as a minimum the following identification. The labels shall bear the applicable identification in indelible paint. Synthetic labels with pressed text are allowed.

4.2 Identification

CTI SYSTEMS	
Purchase Order	
Project No.	
Material Ident. No.	
Description	

In case of identification problems due to the non-respect of the present instructions by the Supplier, CTI shall be entitled to either request the Supplier to delegate at his own expense his personnel to the place of delivery of the goods in order to identify the goods supplied, or to return the equipment and/or material to the Supplier upon receipt at the Suppliers cost.

5. Shipping marks

5.1 General

The purpose of the marking is to identify the packages and detail the weight to assure efficient and correct handling during transport and upon arrival at destination. All packages shall be marked or labelled in accordance with the data shown in the packing list.
(Appendix II).

5.2 Location, language, application

Shipping marks shall be printed on two (2) long- and the topside of each package. For details of Shipping Marks, see Appendix I. All packages shall be clearly and properly marked in English language if not otherwise specified with indelible paint stencilling. If possible marks shall be in minimum A4 size (21x29,7 cm) and on larger packages A3 size (42x29,7 cm)

The texts shall be printed by means of stamps, stencil-plates or electronically. The use of stickers is not allowed, unless securely covered by plastic

Bundles and loose items shall be supplied with at least two metal labels bearing the shipping marks and placed on each side of the package.

5.3 International symbols for handling, transport, and storage

The relevant international symbols shall be used (Appendix III).

The symbols must be placed at visible spots. One shall not use more symbols than strictly necessary.

In case equipment and/or material requires to be stored under special storage conditions such conditions shall be clearly marked on the package and CTI will have to be advised in writing by the Supplier accordingly prior to shipment.

In case no notice of special storage conditions is given by the Supplier to CTI, no special precautions will be taken during storage by CTI. The Supplier will be held responsible for any and all damages which may occur due to the failure of the Supplier to provide CTI in time with the relevant special storage conditions.

6. Shipping documents

6.1 Shipping documents

The following documents shall be made available for each consignment

- Shipping Advice
- Packing List
- Harmonized export declaration for customs (for non-EU deliveries)

6.1.1 Shipping advice

A shipping advice is to be sent in advance by express, mail or by fax to the address indicated in the Purchase Order or Contract, providing the following details:

- Purchase Order or Contract number
- CTI Material Identification number
- Number of packages and their contents
- Dimensions (in cm)
- Weights, gross and net in kg
- Full delivery address
- Scheduled date of dispatch

6.1.2 Packing Lists

Packing list shall entirely be type-written in English and no abbreviations of any nature whatsoever shall be used. Should the country of destination require that Packing list and shipping marks are to be in the local language, then CTI will advise the Supplier accordingly.

All weights and dimensions shall be metric

The packing list must mention the corresponding CTI Purchase Order or Contract.

Consignments without packing list shall not be accepted and shall be returned to the Supplier at his own costs.

A packing list shall be issued for each separate package.

In case of container transport a total packing list for each container has to be issued, mentioning each individual package with the description of the content, quantity, net weight, gross weight and dimensions. In addition the packing list shall mention the total number of packages, total net- and gross weight, total volume, container and seal number. The packing list shall be attached to a package, situated right behind the container doors.

Spare parts and/or tools must specifically be mentioned on the Packing list.

In each package one (1) packing list shall be enclosed. One (1) copy of the packing list shall be attached to the outside of the package, in a waterproof envelope secured on the long side of the package.

One (1) copy of the Packing list shall be sent to the contact person of CTI mentioned in the Purchase order or Contract.

Each loose part not mentioned on the packing list will be considered as not delivered.

For specific Projects however CTI may place specific packing list forms at disposal of the Suppliers.

6.1.3 Customs Tariff Code (Harmonized System)

It is a specific requirement for all export and import movements that accurate information is provided to the respective Customs Authorities. It is the responsibility of the Supplier to provide the appropriate Customs Tariff code for all materials provided by the Supplier.

6.2 Documents other than Shipping documents

Documents other than the packing list may not be enclosed in the packages, unless otherwise clearly requested by CTI.

Documents such as installation, erection, operating and/or maintenance manuals shall be sent to the contact person mentioned in CTI's Purchase Order or Contract.

7. Inspection of Packing and marking

CTI reserves the right to inspect the packing and marking prior to shipment. The inspection may be carried out by CTI's Inspector or by a third party designated by CTI. The Supplier will be informed in due time upon CTI decision whether or not the inspection will be carried out.

Should packages arrive at port of shipment or at destination in a damaged or inadequate condition, CTI will immediately notify the Supplier. Upon notification the Supplier shall remediate without delay to any defects or inadequate packing and/or marking conditions.

In emergency cases, in case of risk of disproportionably high damages and/or in case the Supplier does not remediate in a reasonable period of time to the defects, CTI has the right without further notice to the Supplier to rectify the defects by itself or have it rectified by third party at the Suppliers expense and risk.

This does not relieve the Supplier from his contractual liability for performance of the Contract.

8. Forwarding instructions

The release for transportation to point of destination, according to the conditions described in the Purchase Order or Contract, will be given by CTI in due time after receipt of the Suppliers shipping advice.

If so requested by CTI in the Purchase Order or Contract, Packing List has to be submitted to CTI prior to shipment and all packages must be left open until receipt of notice from CTI to close packages.

Adequate storage of materials ready for shipment up to a maximum of two (2) months at the Supplier's premises will be free of charge to CTI. Any liability associated with the intermediate storage and handling shall be assumed by Supplier.

Part shipments are only allowed upon approval of CTI.

9. Appendixes

These appendixes contain:

- 9.1 Appendix I: Conditions
- 9.2 Appendix II : International Symbols
- 9.3 Appendix III : Packing Types

9.1 Appendix I Conditions

1. Country of destination

Country of destination :
 Conditions referred to in these instructions:

2. Goods to be packed for, and period required

- Express Parcel
- Air transport
- Sea transport
- Truck transport
- Rail transport
- Container transport

- Six (6) months after delivery to place of destination.
- Twelve (12) months after delivery to place of destination.
- Twenty-four (24) months after delivery to place of destination.
- Thirty-six (36) months after delivery to place of destination. (with humidity indicators)
- No special protection for long-term storage required.

3. Shipping marks to be used.

Consignee	:	
Purchase Order	:	
Supplier	:	
Packing List No.	:	
Equipment	:	
Weight Net (kg)	:	
Weight gross (kg)	:	
Outer Dimensions (cm)		
LxWxH :		
Package No. and total	:	
Port of destination	:	If required

Wherever necessary the packages shall be marked with special markings such as "TOP", "BOTTOM", "DO NOT OVERTURN", "FRAGILE", "HANDLE WITH CARE", "KEEP DRY", etc. as well as a special symbol indicating the top.



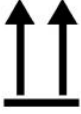













Instructions for packing, marking and shipping

The position of sling or chain shall be indicated on the packing case for facilitating the use of crane if necessary.

In the case of bundles or metal base, the markings, as herein designated, are to be placed on metal tags which shall be securely attached to the bundle or base as conspicuously as possible.

9.2 Appendix II International Symbols

Designation	Symbol	Explanation
Fragile, Handle with care		The symbol should be applied to easily broken cargoes. Cargoes marked with this symbol should be handled carefully and should never be tipped over or slung.
Use no hooks		Any other kind of point load should also be avoided with cargoes marked with this symbol. The symbol does not automatically prohibit the use of the plate hooks used for handling bagged cargo.
Top		The package must always be transported, handled, and stored in such a way that the arrows always point upwards. Rolling, swinging, severe tipping or tumbling or other such handling must be avoided. The cargo need not, however, be stored "on top".
Keep away from heat (solar radiation)		Compliance with the symbol is best achieved if the cargo is kept under the coolest possible conditions. In any event, it must be kept away from additional sources of heat. It may be appropriate to enquire whether prevailing or anticipated temperatures may be harmful. This label should also be used for goods, such as butter and chocolate, which anybody knows should not be exposed to heat, to prevent losses.
Sling here		The symbol indicates merely where the cargo should be slung, but not the method of lifting. If the symbols are applied equidistant from the middle or center of gravity, the package will hang level if the slings are of identical length. If this is not the case, the slinging equipment must be shortened on one side.
Keep dry		Cargoes bearing this symbol must be protected from excessive humidity and must accordingly be stored under cover. If particularly large or bulky packages cannot be stored in warehouses or sheds, they must be carefully covered with tarpaulins.
Centre of gravity		This symbol is intended to provide a clear indication of the position of the center of gravity. To be meaningful, this symbol should only be used where the center of gravity is not central. The meaning is unambiguous if the symbol is applied onto two upright surfaces at right angles to each other.
No hand truck here		The absence of this symbol on packages amounts to permission to use a hand truck on them.
Stacking limitation		The maximum stacking load must be stated as "... kg max.". Since such marking is sensible only on packages with little loading capacity, cargo bearing this symbol should be stowed in the uppermost layer.

Clamp here		Stating that the package may be clamped at the indicated point is logically equivalent to a prohibition of clamping anywhere else.
Temperature limitations		According to regulations, the symbol should either be provided with the suffix "...°C" for a specific temperature or, in the case of a temperature range, with an upper ("...°C max.") and lower ("...°C min.") temperature limit. The corresponding temperatures or temperature limits should also be noted on the consignment note.
Do not use forklift truck here		This symbol should only be applied to the sides where the forklift truck cannot be used. Absence of the symbol on other sides of the package amounts to permission to use forklift trucks on these sides.
Electrostatic sensitive device		Contact with packages bearing this symbol should be avoided at low levels of relative humidity, especially if insulating footwear is being worn or the ground/floor is nonconductive. Low levels of relative humidity must be expected on hot, dry summer days and very cold winter days.
Do not destroy barrier		A barrier layer which is (virtually) impermeable to water vapor and contains desiccants for corrosion protection is located beneath the outer packaging. This protection will be ineffective if the barrier layer is damaged. Since the symbol has not yet been approved by the ISO, puncturing of the outer shell must be avoided for any packages bearing the words "Packed with desiccants".

9.3 Appendix III: Packing Types

<p>ELECTRICAL</p> <ul style="list-style-type: none"> • Automation • Cables • Electrical Motors and Generators • Other Electrical Systems • Transformers 	<p>Must be packed in wooden or plywood cases or cardboard boxes, depending on transport conditions</p>
<p>FLUIDS</p> <ul style="list-style-type: none"> • Valves • Expansion Joints • Hydraulics • Piping • Turbines / Blowers / Fans 	<p>Must be packed in wooden, plywood cases, cardboard boxes, or crates, depending on transport conditions. All components with characteristics of uniformity, linearity, and dimensions such as to grouped in bundles can be assembled according to said system</p>
<p>MECHANICS</p> <ul style="list-style-type: none"> • Commercial Parts & Components • Special Machinery 	<p>These equipments are packed in wooden cases Heavy Machinery can be packed on sledges, depending on transport conditions</p>
<p>PRIMARY MATERIAL</p> <ul style="list-style-type: none"> • Castings • Forgings • Rolled Plates / Profiles 	<p>These equipments may be packed on pallets and/or wooden cases, depending on transport conditions</p>
<p>REFRACTORY</p> <ul style="list-style-type: none"> • Carbon Blocks • Carbon Ramming • Acid-Proof • Anchor Material • Castable / Gunning • High Temperature Insulating Material • Mortar • Refractory Bricks 	<p>These equipments may be packed on pallets and/or wooden cases, depending on transport conditions</p>
<p>STEEL PLATE WORK</p> <ul style="list-style-type: none"> • Mains and Ducts • Pressure Vessels • Pressure less Vessels • Welded Mechanical Constructions 	<p>This equipment is self-supporting. Must be packed on pallets, sledges, or planking's All necessary measures must be taken so that the equipment surface protection suffers no damage</p>
<p>STEEL STRUCTURES</p> <ul style="list-style-type: none"> • Heavy duty • Light 	<p>This equipment is self-supporting. Must be packed on pallets, sledges, or planking's All necessary measures must be taken so that the equipment surface protection suffers no damage</p>
<p>WEAR-RESISTING PROTECTION</p> <ul style="list-style-type: none"> • Ceramic Lining • Hard facing 	<p>These equipments may be packed on pallets and/or wooden cases, depending on transport conditions</p>