Generals rules and specifications for Packaging

FAIVELEY TRANSPORTS CZECH (Plzěn) – MAY 2019

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Table of contents

1 Purpose: 3

2 Standards per commodity: 3

2.1 small products (plastic and metalic parts) 3
2.2 Oversized products (pallets collars of wood) 4
2.3 Hazardous goods 4

3 Standards for cardboard box 5

3.1 Weight and closing method 5
3.2 Thickness 6
3.3 Labelling for packaging units 6
3.4 Recommended dimensions for cardboards 7

4 Standards for packaging: 7

4.1 Generals rules 7
4.2 Identification: 8
4.3 Palletization: 8
4.4 Wood packaging 8
4.5 Electronics products: 9

5 Load carrier allowed: 9

5.1 EUR-pallet 9
5.2 INKA Pallet 11
5.3 Storage Bins: 11

6 Returnable packaging : 12

6.1 Plastic boxes 12
6.2 Gitterboxes 12

7 acceptable and not acceptable palletized package 13

7.1 acceptable : 13
7.2 Not acceptable 14

8 Annex: Handling marks 15

1 Purpose:

The aim of these specifications is to improve the safety of good manipulation for both supplier and Faiveley Transport CZ and optimize the flow of goods and products in the supply chain. Identical processing in the packaging area with information and data handling can provide a smooth flow in all stage of the process.
This document is intended to give suppliers information about existing guidelines and specifications for packaging for FAIVELEY Transport Czech.
The standards describe in this document must be followed unless other arrangements have been met with FAIVELEY Transport Czech, previously to transport.

2 Standards per commodity:

2.1 small products (plastic and metalic parts)

- If the package contains more than 100 units, make batch packaging of 50 or 100 units. (if applicable)
- Make batch packaging in polyethylene bags in order to count and identify the different products in an easier way. Make sure the quantity of units and the reference is written on the package (figure 1).
- Put polyethylene bags in cardboard with adapted size closed with adhesive (figure 2)
- If there's more than one small package of the same products, put all of them in one big package.
- If there is more than one reference in a cardboard, **the different products have to be quickly and easily separable.**



Figure 1



Figure 2

Put every products in a cardboards if they can fit in a standard one

2.2 Oversized products (pallets collars of wood)



Figure 3

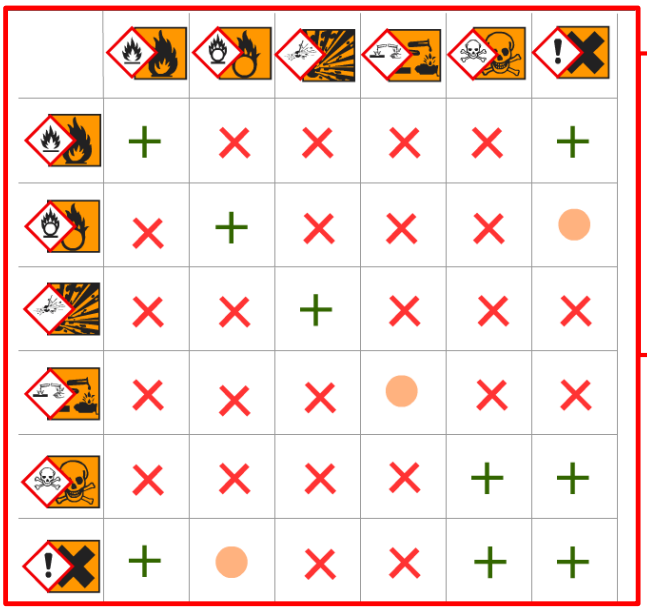


- These products need to be put in row between cardboards layer sheets on the pallets with a pallet collars of wood (figure 3). Make sure all the products put in the package are stable and correctly fix in order to avoid any damages during the transport. **Do not** heap up the products on the pallet.
- Add foam, bubble wrap or air bags if it´s necessary to wedge the empty space and warrant the good integrity of the package.
- Make sure that the pallets with wood collars are stackable (no more than three collars high).
- Plastic strap around the pallets to fix the total package is mandatory.
- **Do not** put the products directly on the pallets and **do not use** metallic strap.

2.3 Hazardous goods

It is the supplier's responsibility to ensure their packaging methods and materials comply with all applicable laws and regulations.
This is especially true for materials classified as hazardous or dangerous.

- Refer to the transport of dangerous goods the labelling need to be visible on the original packaging and on subsequent packaging.
- Make sure that the hazard and precautionary statements are written in Czech.
- Be aware to put the dangerous goods labelling on the cardboard even if there are other products which are not dangerous and to check product compatibility before packing.



+ can be stock together without restrictions

× Need to be stocked seperatly

● can be stock together only with specials considerations

In each package of hazardous goods must appear:

- UN number corresponding to the number of identification for the product
- Dangerous goods classification
- The packing Group (GP I high danger, GP II medium danger, GP III low danger)
- Codification for the packaging (type of container and materiel of construction)

Type of container
1. Drums/pails
2. (Reserved, formerly Barrels)
3. Jerricans
4. Boxes
5. Bags
6. Composite Packaging
7. (Reserved, formaly Pressure receptacle

Material of construction
A. Steel
B. Aluminum
C. Natural wood
D. Plywood
F. Reconstituted wood
G. Fiber
H. Plastic
M. Paper
N. Metal (Other than steel or aluminum)
P. Glass

- the sign of the State authorizing the package
- the name of the manufacturer or identification of the package specified by the competent authority
- the last two digits of the year of manufacture
- The weight of the full package
- The physical state (liquid or solid)

3 Standards for cardboard box

3.1 Weight and closing method

Any shipment **heavier than 15 Kg** must be put on a EUR-EPAL standard pallet or put in a INKA pallet in order to allow easier handling.

All cardboards must be closed. the use of grocery crates and plastic bag which can´t be closed is prohibited (figure 3 and 4).



Figure 4



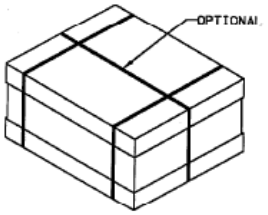
Figure 5

To close box use textile, plastic strapping, adhesive or use cardboards with lid. The use of nails or staples is not accepted.

ACCEPTABLE



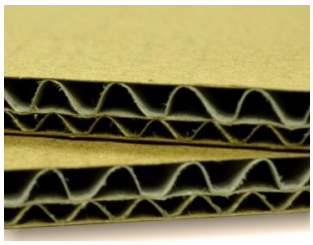




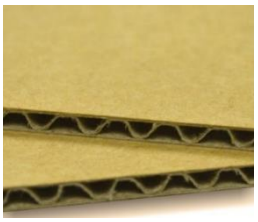
3.2 Thickness

The thickness of the cardboard depends on the mean of transport used.

In case of seaport or air freight, using double wall cardboard is mandatory but if it´s only a road transport a simple wall cardboard is allowed. In all these case the cardboards resistance must be checked for 15 Kg minimum.



Double wall carboard for air and sea transport



Single wall cardboard only for road transport

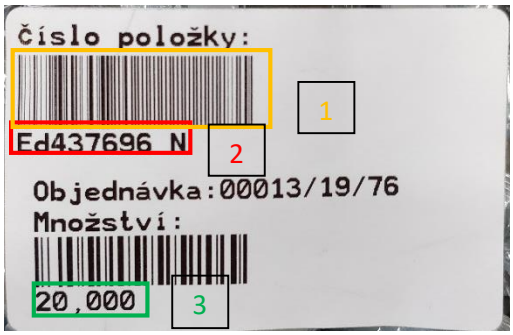
3.3 Labelling for packaging units

As a fundamental rule, every product must be clearly identifiable in both its packed and unpacked state.

Must appear on every unit package (Smallest Closed Packaging Unit, ex: cardboards, polyethylene bags, bubble pack, etc…):

- The intern identification number of FAIVELEY CZ with a barcode (Font “code 128”)
- The quantity of units

These indications are mandatory and can be completed with others depending on the supplier.
Choose by preference our following labelling:



1. **Barcode for FAIVELEY´s reference (Font “code128”)**
2. **FAIVELEY´s reference number**
3. **Quantity of units**

3.4 Recommended dimensions for cardboards

The GALIA regulation for carboards provide an easier palletization. Use these type of carboards box with lid or others cardboards with the same dimensions.

GALIA cardboards box			
REF	Exteriors dimensions L+l+H (mm) (figure 6)	Maximum carrying capacity (kg)	Interior Volume (dm^3)
C03	1200+500+500	10	280
C04	1200+400+300	10	170
C05	1000+600+500	15	280
C06	1000+600+300	15	170
C07	1000+400+500	15	190
C08	1000+400+300	15	110
C09	600+400+300	15	65
C10	600+400+250	15	55
C11	600+400+200	15	44
C12	400+300+300	15	32
C13	400+300+200	15	21
C14	400+300+150	15	16
C15	300+200+200	15	10
C16	300+200+125	15	6
C40	300+200+90	20	4

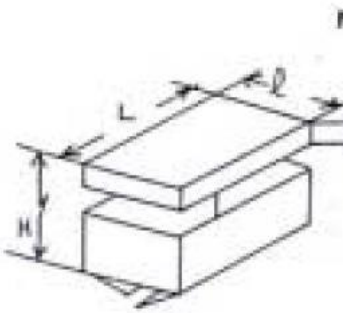


figure 6

4 Standards for packaging:

4.1 Generals rules

Products must be prepared for shipment in accordance with the best economical commercial and environmental practices.
All package must resist to a tilt, vibrations or other exteriors forces which can appear under normal conditions of transports.

The package must provide enough protection to ensure its contents arrive **damage free**.
All packaging need to be use for optimizing his filing and conserving his geometry in order to guarantee the quality of the products until his use by the customers.

It must be possible to remove the products easily and safely from the different package.
Make appear the number of package on every container.

Kits management:
The kit will be considered like a **full reference**. FAIVELEY impose a single package per kit (Example: a batch of 10 kits = 10 cardboards/pallets). Nevertheless, **the contain of a delivery must follow the exact order made by Faiveley Transport**. If an order contains only part of a kits the supplier must send the exact order line and therefore not the full kit.

4.2 Identification:

Must appear on every deliveries notes :

- Supplier´s name and his address
- Faiveley´s reference for each product
- The quantity of units for each reference
- Order Number
- Faiveley order line
- Delivery bar-code composed with :

24 characters bar cod : 8 characters Order number / 4 characters order line (0001, 0002, …) / 12 characters Quantity with font: “code128“

Exemple:



06819/17: Order number

0024: Order line

000000000001: Quantity

Must appear on every packaging handling units:

- Speciale handling instruction (refer to 8.)
- The experation date (if applicable)
- Gross weight
- The labbelling for packaging units (Refer to 3.3)

Pay attention to send the delivery note stuck on the package

4.3 Palletization:

All delivery must be palletized if the quantity of cardboards or other package can fil the surface of a pallet.



Figure 7

In general, all palletized package has to be stackable from the top level if it not the case the pallet need to be clearly identified with a warning label on top (figure 7)

A pallet must be composed of **only one reference of product**. If it is not possible restricted to a minimum the combination and compounding of materials. **The different products have to be quickly and easily separable during removal of goods and disposal of packaging** (7.1) (e.g. nails/screws from wood box).

4.4 Wood packaging

Wood Packaging Material (WPM) such as pallets and wood box used in import or export must be International Standard for Phytosanitary Measures compliant (ISPM-15 compliant) in order to prevent international transport of the spread of disease and insects that could negatively affects plants and ecosystems. **This compliance is mandatory for transport outside the EU**. The IPPC (International Plant Protection Convention) label (figure 8) must appear on every pallets and wood box to prove the ISPM-15 compliance.

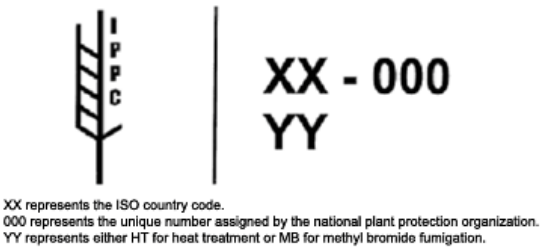


Figure 8

4.5 Electronics products:

Electronics components can be shortened by electrostatic discharge (ESD) and sensitive parts can even be destroyed. All items susceptible to Electrostatic discharge must be identified with **ESD label** and protect with at least specific **ESD protective packaging** (figure 9)

¨



Figure 9

5 Load carrier allowed:

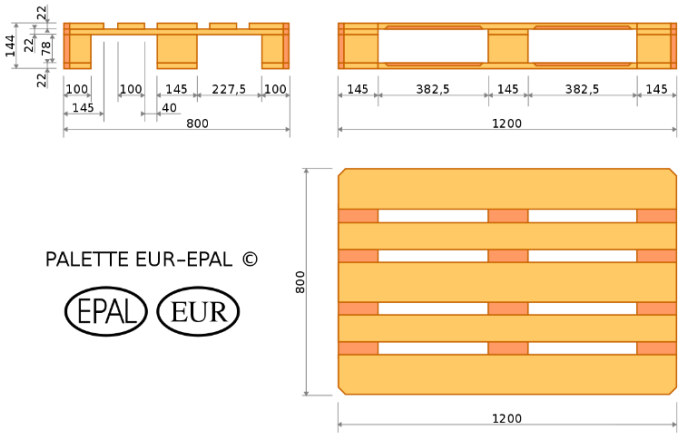
5.1 EUR-pallet

EUR-pallet is four way entry pallet so that it can be lifted and transported from all four sides

They have to be ISPM-15 compliant

The **only** dimension type allowed is **EUR1/ISO1 : 1200*800 mm**

Respect the maximum pay load **: 1000 Kg**



NOT ACCEPTABLE

If EUR pallets display one or more of the characteristics written below, the pallet are **not accepted** as a reusable package and has to be replaced or repaired.

- A board is missing or broken transversely or diagonally
- A block is missing or split to the point where more than one nail shank is visible
- The load capacity is no longer guaranteed (decay, rot or large splinters)
- Proof or evidence that impermissible repair have been done



The pallets and mesh boxes must be in perfect condition. Twisted or broken feet or boards as well as dented walls and frames create problems in the storage system and therefore may not be used

The use of others pallets dimensions is restricted to non-standards deliveries and has to be accepted by Faiveley CZ previously to transport.

Pallets constitution according to GALIA´s cardboards:

Choose by preference the cardboards underlighted in yellow in order to fill any empty space on the surface of the pallet and to warrant a better stability for the package.

Galia cardboards box			Pallet 1200*800 mm		
			Maximum Height 1300mm		
REF	Exteriors dimensions L+l+H (mm)	Maximum carrying capacity (kg)	Maximum weight palletized (kg)	Nbr of cardboards per layer	Nbr max of layers
C03	1200+500+500	10	20	1	2
C04	1200+400+300	10	80	2	4
C05	1000+600+500	15	30	1	2
C06	1000+600+300	15	60	1	4
C07	1000+400+500	15	60	2	2
C08	1000+400+300	15	120	2	4
C09	600+400+300	15	240	4	4
C10	600+400+250	15	300	4	5
C11	600+400+200	15	300	4	5
C12	400+300+300	15	360	8	4
C13	400+300+200	15	720	8	6
C14	400+300+150	15	960	8	8
C15	300+200+200	15	960	16	4
C16	300+200+125	15	960	16	4
C40	300+200+90	20	960	16	3

5.2 INKA Pallet

INKA pallets are made of dried wood shavings and pressed into form under pressure and Heat and they can be lifted and transported from the two sides.



INKA Pallets are classified as “processed wood” that is why the regulations for non-manufactured wood is not applied for these type of pallet. The heat and fumigation treatment with the insecticide methyl bromide and IPPC label are not required for INKA Pallets.

Reference	dimension	Maximum carrying capacity
INKA Typ F86	1200*800 mm	250 kg
INKA Typ F8-5	1200*800 mm	600 kg
INKA Typ F8 LF	1200*800 mm	1000 kg

NOT ACCEPTABLE

INKA pallets which can no longer be stacked due to cracks or breakages are **not accepted**. Inka pallets with missing leg are **not accepted** (see picture).



5.3 Storage Bins:



Reference	Dimensions	Maximum carrying capacity
SSI SCHAFER LF 211	Width: 103 mm Height: 76 mm Length: 168 mm	5 kg
SSI SCHAFER LF 221	Width: 150 mm Height: 122 mm Length: 234 mm	10 kg
SSI SCHAFER LF 321	Width: 209 mm Height: 145 mm Length: 343 mm	20 kg
SSI SCHAFER LF 532	Width: 312 mm Height: 200 mm Length: 498 mm	20 kg

Be sure to not exceed the maximum pay load for each bins.
Be aware that bins which can no longer be stacked due to cracks and breakages are **not accepted**.

6 Returnable packaging :

Find in this parts the two types of returnable packaging set up between suppliers and Faiveley CZ at this time. Other returnable package can be implemented but the supplier´s request need to be accepted by Faiveley CZ previously to transport.

6.1 Plastic boxes



Reference	Dimensions
Galia 4322	400x300x214
Galia 4312	400x300x114
VDA RL-KLT 4147	400x300x147

Standard preferred returnable boxes (Galia and RL-KLT)

As far as possible, for these type of stakable containers put only **one reference per box (five maximum)**. In that way the dimensions of a plastic boxe **can not exceed the dimension of the largest bins storage** allowded by FT CZ (SSI SCHAFER LF 532 refer to 5.3) beside all delivery must be palletized if the quantity of plastic box can fil the surface of a pallet and need to respect the rules about acceptable palletized package (refer to 7.1)

6.2 Gitterboxes



Dimension	Maximum Carrzing Capacity	Cargo space	Maximum Superimposed load capacity
1200x800x970 mm	1500 kg	0,75 m^3	6000 kg

NOT ACCEPTABLE

If gitterbox display one or more of the characteristics written below, the box is **not accepted** as a reusable package:

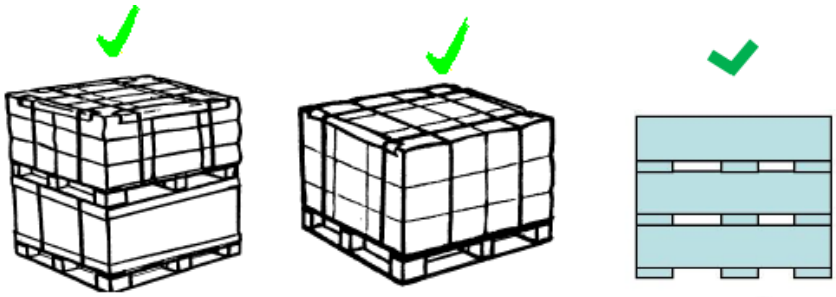
- The bottom of the box is damaged
- Ruptured or twisted round steel mesh and wire are bent to the inside or the outside
- Deformed supports or corner columns
- Front panel are unmovable or broken due to a damage
- The box can no longer stands on his four feet therefore can´t be stacked safely



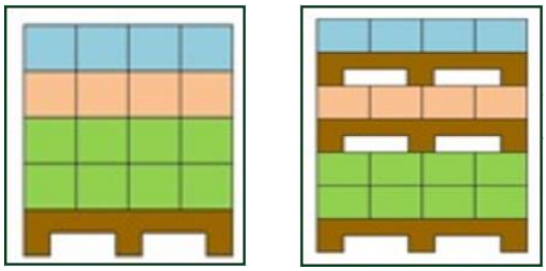


7 acceptable and not acceptable palletized package

7.1 acceptable :



Edge boards, strech wrapping, plastic banding, sufficient strength of cardboards, etc…



For multi pallets reference, references should be grouped together and separated with the spacer (pallet or cardboard).
The **total height** for each palletized package must not exceed **130 cm.**
Every palletized package must be strapped with **plastic strap** (<u>metal strapping prohibited</u>).

<u>Common sense rules:</u>

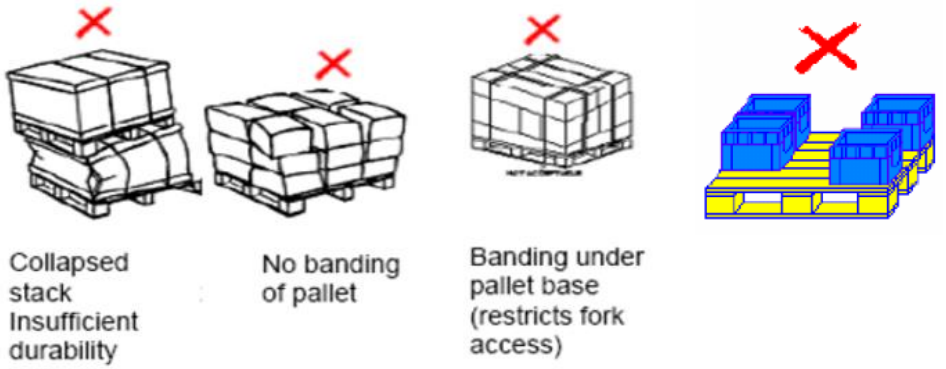
- The heavier cardboards should be placed at the bottom and the lighter ones on top.
- The straps should be tightened but shouldn´t deform or damage the cardboards (put protections under straps if necessary)
- The films must maintain all the cardboards on the pallets.

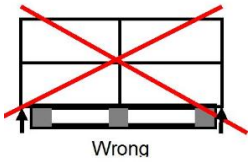
ACCEPTABLE

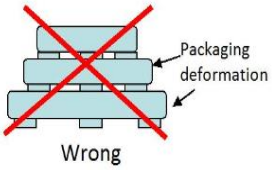


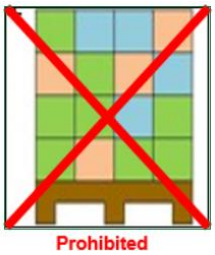
The **center of gravity** mark need to be clearly visible on **every non-standards palletized package**

7.2 Not acceptable





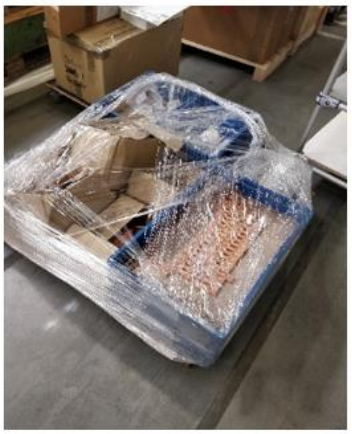




NOT ACCEPTABLE













8 Annex: Handling marks

Put adapted handling marks on the package.

Most use handling marks signification:

Symbol	Meaning	Function
	Fragile	The content of the package is fragile, and it must therefore be handled with care.
	Protect from the moisture	keep the package away from rain or damp conditions.
	Center of gravity	This symbol is intended to provide a clear indication of the position of the center of gravity. This symbol should only be used where the center of gravity is not central.
	Do not roll	The package must not rolled
	Do not stack	Stacking of the transport package is not allowed and no load should be placed on the transport package
	Limiting the mass of the stack load	Indicates the limitation of the mass of the stack load of packages.
	Right side up	Defines which side of the package should face upward
	Do not use forklift truck here	This symbol should only be applied to the sides where the forklift truck cannot be used

Signed in ……., on …….. **Signature (READ AND UNDERSTOOD):**	**Official stamp of the supplier:**