



Johnson Matthey
Inspiring science, enhancing life

Guidelines of the standard for components packaging applicable to JMBS's suppliers



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1. Objective and scope

The aim of this manual is to inform suppliers about JMBS's requirements as to packaging standards for components delivered to our plant.

By using the specifications below, we want to ensure efficient and frictionless flow of materials between a supplier and JMBS.

2. Contact persons

The responsible Purchaser is a contact person in case packaging topics for particular component. Leader of Suppliers' Development is responsible for a contact with a supplier regarding packaging adjustment and development as well as requirements in this procedure.

3. Principles of packaging selection

Packaging should always be selected based on economic and ecological aspects. All packaging must meet legal and regulatory requirements (including local requirements applicable in the country to which the shipment is sent) and have a possibly minimal impact on contamination of the environment.

No matter what type of material is chosen, it must fulfil the following criteria:

- it cannot compromise the quality of delivered components in any way;
- components should be packed and placed on the pallet in the most effective way;
- components should be transported in a safe manner;
- components should be packed in such a way that would ensure a safe and effortless unloading at the supplier's site.

4. Environmental regulations on packaging

A supplier of JMBS is obliged to reduce the amount and negative environmental impact of the substances used for production of packaging as well as of generated packaging waste by limiting the volume and weight of packaging to the necessary minimum required to fulfil the function of packaging and ensure safety of the product taking into account JMBS's expectations.

A supplier of JMBS is obliged to reduce the amount and negative environmental impact of the substances used for production of packaging as well as of generated packaging waste by making sure that:

- packaging does not contain harmful substances in quantities that pose threat to the product, the environment or human health;
- the maximum sum of the content of heavy metals (lead, cadmium, mercury and hexavalent chromium) in the packaging does not exceed 100 mg/kg, excluding the package defined in regulations.

A supplier of JMBS is obliged to deliver products in packaging that is designed and made in such a way that enables its multiple use and subsequent recycling or at least recycling if multiple use is not possible or other than recycling form of recovery if recycling is not possible.

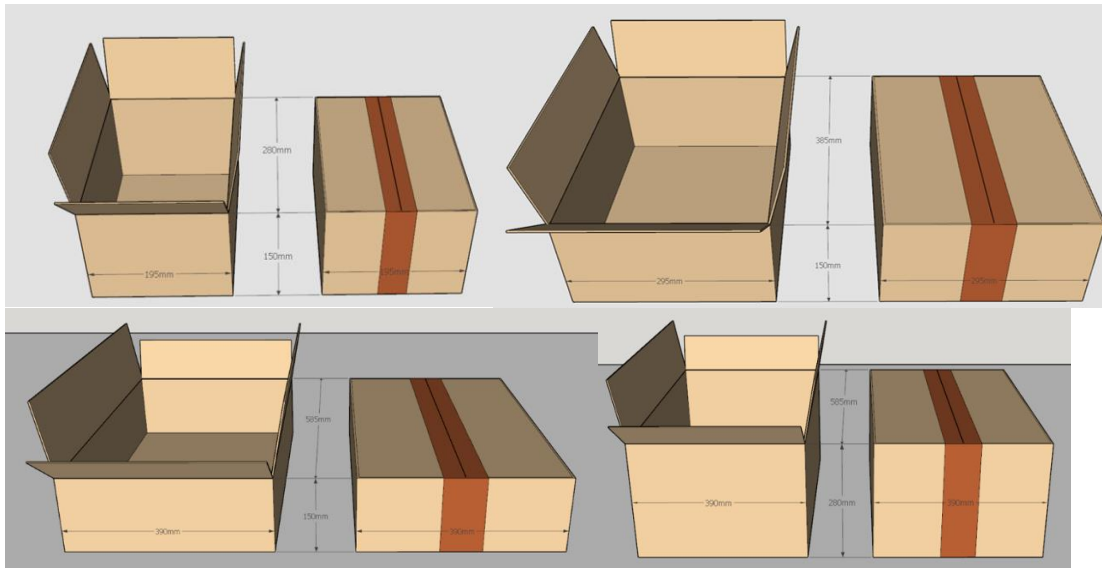
5. Disposable packaging specification

Packaging should meet the requirements referred to in the points above. The material can be arranged in layers provided that subsequent layers do not impact the quality of the components in lower layers.

The quality of the packaging must ensure that the requirements concerning carrying capacity and additional load are met. The maximum gross weight of a single packaging / carton box should not exceed 15 kg.

6. Disposable packaging standards

Sizes of acceptable cardboard packaging.



7. Conditions concerning returnable packaging

If possible, returnable containers of KLT type should be used for transportation of goods. To ensure long life-span, returnable packaging should be handled with caution and should not be used for purposes for which it is not designed.

8. Returnable packaging standards

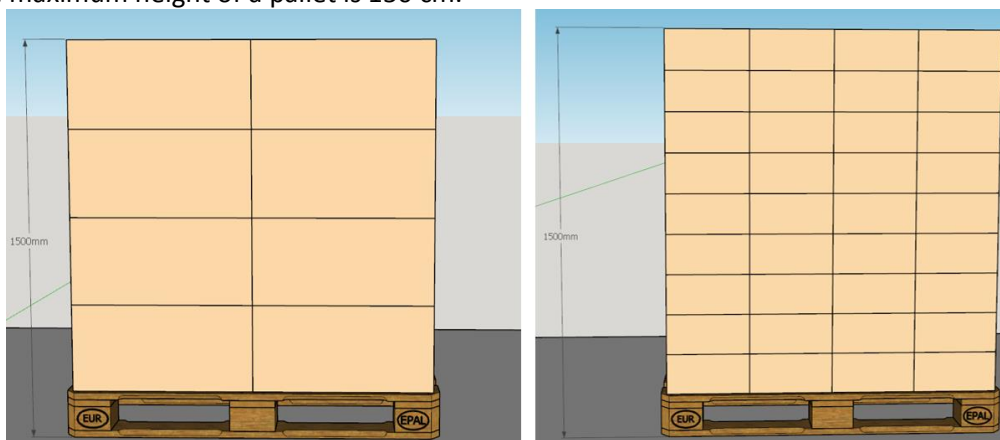
Generally, returnable packaging is selected individually for the production line that is designed.

9. Maximum weight/height

The material should be delivered in packaging placed on a pallet of 120x80 cm, and packaging should not project beyond the outline of the pallet.

The maximum weight of a pallet is 500 kg (exception is pallets with links whose weight together with the pallet cannot exceed 1,000 kg)

The maximum height of a pallet is 150 cm.



10. Pallets

A pallet should meet EPAL requirements.

If pallets must not be stacked, they must be marked with the label "DO NOT STACK".

11. Avoidance of oversize packaging

It is obligatory to comply with the basic dimensions of a pallet, and oversize packaging should be avoided. In the case of non-compliance with the above, we will have to reject the delivery or charge the costs of repacking of the goods.

12. Safe transport unit (packaging)

The packaging should be combined on a pallet into a transport unit that is secured with a cover and fastened across using a plastic tape.

For environmental reasons, constricting is only allowed in exceptional cases upon JMBS's approval. Proper securing of the goods with a plastic tape.



13. Mixed pallets

One packaging cannot contain more than one type of components.

It is permissible to store packages of different components on one pallet, but they must then be appropriately marked (collective label, individual label).

14. Delivery

The selection of the packaging and securing of a package should guarantee a safe transport of goods without damage to the components.

14.1. Special types of packaging

Special types of packaging that were not mentioned in packing specification or packing instructions must be approved by JMBS Purchasing Department

14.2. Individual arrangements

Individual arrangements with JMBS Purchasing Department always take precedence over these general packing specifications.

15. Identification of packed goods

15.1. Marking and labelling of packaging

An easily identifiable label showing a 5-digit material number as assigned by JMBS and the number of products in the package should be affixed to all packaging. The labels should be placed in such a way that ensures their visibility on the pallet from each of the outer sides. If the material is packed into 1-4 carton boxes per layer, the labels should be placed in such a way that ensures their visibility on the shorter sides of the pallet. If there are more than 4 carton boxes on a pallet, the labels should be placed in such a way that ensures their visibility on the wider sides of the pallet.

The labels should meet Odette or VDA 4902 v. 4 standards

All packaging, both outer and inner, should have an easily identifiable label.

An example of a picture of a proper marking of packaging with labels.
Shorter side:



Wider side:



A label should contain the following data:

- Product number as used by JMBS
- A short description of the product (e.g. plastic casings)
- The quantity of material contained in the package along with the measurement unit (e.g. piece, kg, etc.)
- Date of the material production
- Expiry date (if applicable)

Moreover, JMBS recommends all suppliers switching to QRC coding standard.

15.2. Example of the model of a label

VDA standard:

¹ Receiver Johnson Matthey Battery Systems Sp. z o.o.		² Dock Gate 22	⁵ Net Weight [kg] 220	
³ Advice Note No. 005500245423 			⁶ Gross Weight [kg] 245	
			⁷ No. of boxes 50	
⁸ JMBS P/N 16996 		⁹ Supplier Address Gliwice, Grzegorza 2go 22		
¹⁰ Quantity 50 		¹¹ Unit pcs	¹² Supplier P/N 123456 	
¹³ Component Description Cell holder left (0275007678)				
¹⁴ Supplier Number 985485751 		¹⁵ Engineering Change		¹⁶ Date 16.09.2069
¹⁷ Serial No. 7568456754		¹⁸ Batch No. 3,45345E+11		

¹⁹ Receiver (Footer) Johnson Matthey Battery Systems Sp. z o.o., Address: ul. Einsteina 36, 44-109 Gliwice, Poland

Explanation:

Position number on VDA label	Number description
1	Receiver
2	Dock-Gate
3	Advice Note No
4	Supplier Address
5	Net Weight
6	Gross Weight
7	Number of Boxes
8	JMBS P/N
9	Quantity
10	Component Description
11	Supplier P/N
12	Supplier Number
13	Date
14	Engineering Change
15	Serial No.
16	Batch / Lot No.
17	Supplier Address (Footer)

16. Identification of the components

A supplier must identify all the components that have been packed, if the components are packed into additional packaging such as bags, rolls, etc. They should have labels with product number as used by JMBS and the number of components contained in it.

17. Delivery note

The delivery should contain a delivery note in the form of a shipping document containing: Product numbers, quantities of the individual products, individual number of the document to identify the delivery, type and quantity of packaging, date of dispatch and Purchase Order number (PO nr). Delivery note (DN) should be delivered along with the shipment, and placed in such a way that ensures its accessibility without tearing/opening the package with the goods.

18. Approval of packaging

All selected packaging must be approved by JMBS Purchasing Department. As a part of approval, the Purchasing Department obtains a consent from OPS (Warehouse + Process) and Quality (Delivery Quality Assurance) departments.

Possible packaging or/and delivery samples (so-called packing sample) should be discussed with the Leader of Suppliers' Development.

For that purpose, the packaging data sheet below should be used.

The sheet must be sent to the JMBS Purchasing Department stamped / signed in a pdf file or in the original version of Excel file.

Supplier Number in JMBS system		Filled by JMBS responsible Receiver		Packaging sheet <small>JMBS number filled out</small>		JM Johnson Matthey <small>Inspiring science, enhancing life</small>	
Supplier to fill it out:							
Supplier Name		Collector (person/ country, etc.)		JMBS Part Number		Weight (kg) (place if)	
City, code - address		Delivery address		Material description		Packaging mode: <input checked="" type="checkbox"/> Returnable <input type="checkbox"/> One-way	
Contact person		E-mail		Material description		Quantity in the box	
Telephone		Fax number		Material description		SCD Type <input type="checkbox"/> Common box	
Photo from the packaging (Detailed)							
Single Packaging (empty and opened):		Full pallet		Material in the Box			
Photo 1		Photo 2		Photo 3			
Supplier comment (detailed description (packaging) in aspect of packaging material, dimensions)		Supplier comment (detailed description)		Supplier comment (detailed description)			
VDA LABEL VDA Label (pallet or/Barcode) VDA KLT marking label (or Barcode) Comment for label mistakes / (Suppliers):							
The containers are marked with a label VDA-8922 for characterizing (Dimensions: 220 x 148 mm). The main goods trailer is fixed to the container lid, in order to guarantee a residue-free removal.							
Every cardboard is marked with labels VDA-8922 for characterizing (Dimensions: 220 x 170 mm). The labels are printing in the cardboard which is provided for this purpose. In order to avoid the loss of the labels during Transport and in order to avoid the loss of the labels during Transport and							
Declaration approval Supplier approval Date _____ Signature of responsible in Sales _____		JMBS approval Date _____ Signature of responsible in Purchasing _____		IMPORTANT NOTES 1. Supplier deliveries must comply with "Packaging Manual for JMBS Suppliers" 2. JMBS authorization does not exempt the supplier from their responsibility to deliver parts free of damage or corrosion. 3. Supplier shall deliver the parts according to approved packaging spec, otherwise will be charged for all claims related to non-compliance. 4. Shipping labels and components labels must meet JMBS labelling requirements			

The need for possible packaging samples and / or sample of delivery (the so-called packaging trial) should be discussed with the Supplier Development Leader.