

# General shipping and packaging instructions for suppliers of sonnen GmbH

# Index

- 1. Purpose of general shipping and packaging regulations
- 1.2. Principle
- 1.3. Goods Receiving
- 2. Load carriers / packaging
- 2.1. Definition of different packaging / load carriers
- 2.2. Package labelling
- 2.2.1. Initial sample inspection documents
- 2.2.2. Serial numbers
- 2.3. Mixed pallets
- 3.Transport
- 3.1. Load securing
- 3.2. Transport of dangerous goods
- 3.3.1. Delivery note
- 3.3.2. Waybill
- 3.4.1 shipments outside the EU
- 3.4.2 customs issues
- 4. Individual packaging regulations
- 4.1 Metal parts/assemblies
- 4.2 Electronic assemblies
- 4.2.1 Open Frame electronic assemblies
- 4.2.2 Electronic assemblies in a closed housing
- 4.3 Cables
- 4.4 Battery modules

# **Change history**

Version:	Explanation	Editor	Date
1	Inserting a change history	RH	20.01.2020
2	Revision of the general shipping and packing instructions	Fasse/ Hoffmann/ Schneider/ Raaf	17.09.2021



# **1.** Purpose of general shipping and packaging regulations

Through these shipping and packaging instructions, we want to make all suppliers aware of our requirements and their responsibilities.

It is intended to serve as a simple and practical guideline that enables a trouble-free material flow between the suppliers and sonnen GmbH (sonnen).

Non-compliance with the specifications of these general shipping and packaging regulations may trigger a complaint and thus also have a negative effect on the supplier rating.

sonnen reserves the right to refuse acceptance of deliveries that do not comply with these shipping and packaging instructions. Costs incurred due to the complaint, e.g. expenses for the preparation of the complaint, if applicable production downtime costs due to non-availability of components, which are directly related to the non-acceptance of the defective delivery, may be charged to the Supplier.

Any deviations from these shipping and packaging instructions must be expressly agreed in writing by the Supplier with sonnen.

Furthermore, sonnen reserves the right to agree item-specific shipping and packaging regulations with the Supplier in writing.

## 1.2. Principle

Only exchangeable or recyclable packaging shall be

approved. Care shall be taken to ensure that the waste management objectives of of sonnen and the environmental legislation with the following priorities complied with become:

### 1. Avoidance

Sufficient goods protection with minimal use of packaging materials (Volume and weight) **2. Reduction** 

Use and continuous improvement of recyclable packaging and materials

### 3. Recycling

Environmentally compatible, unmixed, and recyclable materials are to be used. Materials for all types of packaging and filling materials for the use

### 4. Stackable

All pallets of goods delivered should be stackable twice

### 5. ESD-Protection

Electronic assemblies must be delivered in an ESD-compatible manner

### 6. Cleanliness

Materials (semi-finished products, purchased and trading goods) must always be delivered dry, clean and free of grease and dust



# 1.3. Goods Receiving

Unloading trucks with standardized fork-lifts must be ensured.

Basically all load carriers must be both be able to be loaded and unloaded from the side and also allow rear loading and unloading. Mainly unloaded only via the ramp

In order to guarantee a trouble-free process, deliveries with more than 5 pallets must always be advised at least 2 working days in advance.

Notifications are only to be sent by e-mail and exclusively to "Wareneingang@sonnen.de". Sonnen reserves the right to temporarily shift individual deliveries to our external warehouses and to postpone truck deliveries on a daily basis.

Goods Receiving is open for the following timelines:

### Monday to Thursday: 08:00 until 15:00 o´clock Friday: 08:00 until 13:00 o´clock

# 2. Load carriers / packaging

In principle, only deliveries with euro pallets and wire mesh boxes that are in perfect and exchangeable condition will be accepted. The flat and grid box pallets must meet the quality requirements of the "European Pallet Association (EPAL)". )". In order to be able to guarantee high-bay storage capability, no damaged loading equipment may be used.

Pallet loads must be adequately protected against damage and dirt as well as environmental influences (e.g. stretching, strapping), whereby this must be taken into account especially for the upper layers (e.g. use of cover pallets, paper protection layers, corrugated cardboard above and below). Edge protection brackets must be used when using strapping.

The items are to be put together on the pallet without protrusions to form a compact, secure transport unit.

This ensures safe handling during transport.

Handling by means of industrial trucks must be guaranteed.

For example, the necessary space between the pallet feet when securing the loading unit must not be impaired.

Individually agreed sonnen packaging regulations are mandatory (point 4.).

If the agreed packaging is not adhered to, sonnen reserves the right to charge the supplier with handling and repacking costs.

Packaging materials must comply with the European environmental protection guidelines with regard to avoiding environmental damage, optimal material utilization, recycling and disposal.

When the materials are delivered by air, sea or rail, the packaging guidelines must be followed.



# 2.1. Definition of different packaging / load carriers

### **EPAL pallet:**

Typically, the reusable transport pallet is meant with the dimensions 1200 mm  $\times$  800 mm  $\times$  144 mm (length  $\times$  width  $\times$  height) and a weight of 20 to 24 kg (depending on the wood moisture). The EPAL pallet is UIC standardized and complies with the regulations of the European Pallet Association (EPAL).

#### **One-way pallets:**

Disposable pallets are only intended for one transport route and are disposed of after this. Disposable packaging is procured by the supplier, & the following criteria must be observed:

- Easy handling (both by hand and with forklifts)
- They must be stackable
- They must be recyclable

All single-use packaging (e.g. single-use pallets, cardboard boxes) must be clearly and visibly labeled with standardized symbols (DIN 6120 and ISPM15/IPPC) recognized by the waste disposal industry, insofar as this is technically feasible.

#### Meshbox pallet:

A meshbox pallet is a loading device consisting of a steel frame and mesh construction. Four feet enable the pallet box to be picked up from all four sides using a forklift. This is also known as the Eurogitterbox and is the only one standardized by EPAL and approved as an exchange pallet in the European pallet pool.

#### **Cardboard box:**

When using disposable packaging / cardboard boxes, the following basic dimensions must be obtained (length x width):

- 600 mm x 400 mm
- 400 mm x 300 mm
- 300 mm x 200 mm
- 200 mm x 150 mm



Measures in mm	EPAL pallet (UIC 435-2)	One-way pallet (ISPM15/IPPC)	Meshbox pallet (DIN 15155/8)
Length	1200	1200	1240
Width	800	800	835
Height	144	specific	970
Max. height	1200	1200	970
Max. load weight in kg	1000	1000	1000
Info	The load must not exc pallet.	eed the base area of the	Ability to stack must be guaranteed

# 2.2. Package labelling

Each package must be labeled with the sonnen order number, sonnen article number, article name, revision status, quantity and unit of measure.

Labeling of the packaging unit (e.g. 50x screws type X in a box) is required.

The above necessary information is to be visualized according to VDA standard.

## 2.2.1. Initial sample inspection documents

Initial sample inspection documents must be attached to the material or visibly to the outside of its direct packaging.

Loss of any test documents on the transport route must be avoided.

## **2.2.2 Serial numbers**

Serial numbers of the assemblies contained in an outer packaging must be clearly visible, legible and scannable from the outside.

This must be possible without further repackaging/handling in the goods receipt process.

The serial numbers must be protected from transport and environmental influences.

Serial numbers must be transmitted to the goods receipt via e-mail to <u>Wareneingang@sonnen.de</u> before delivery.



# 2.3. Mixed pallets

For small quantities per article, delivery in mixed pallets is possible. However, the individual article types are to be packed and labeled according to type.

## 2.4 Pendulum packaging

Pendulum packaging must always be protected, stored and transported against environmental influences, transport damage and contamination. Only pendulum packaging that is in perfect condition may be used for delivery.

# **3.Transport**

## 3.1. Load securing

The goods must be packed securely for transport and handed over to the carrier. According to legal requirements, all groups of people involved in the loading, both directly and indirectly, (driver, shipper, sender, carrier) are responsible for ensuring that loads are properly secured. Transporting by sea, the shipper/consignor is obliged to comply with the UN Convention on Ship-Safety-regulations "SOLAS". Special loading and unloading regulations must be announced to sonnen in good time. In the event of damage in transit, the supplier and the forwarder will be immediately informed in writing by sonnen. The damage is documented on the waybill

## **3.2.** Transport of dangerous goods

The transportation of dangerous goods - especially Lithium-ion-batteries and cells - are clearly regulated by several laws. Therefore, there are subject to the transport regulations, depending on the respective mode of transport (truck, sea, rail, air).

According to the IATA/IMDG/ADR - the regulations for the transport of dangerous goods must be observed. The supplier is liable for all damage resulting from non-compliance with legal regulations. As the distributor of dangerous goods, the supplier is responsible for the classification / classification, permissible mode of transport and transport authorization. Corresponding information must be reported to sonnen when the offer is made. As the shipper or sender, the supplier must observe the applicable regulations for the transport of dangerous goods. Required data sheets, approval notices etc. must be made available to the carrier and sonnen in good time before dispatch.

## 3.3.1. Delivery note

At least one delivery note must be enclosed with every delivery. The delivery note must always represent



an exact replica of the goods delivered. In the case of partial deliveries, it is not permitted to list the entire order on the delivery note and to subsequently deliver part of the goods later without a delivery note. If several orders are delivered with one delivery, several delivery notes are also necessary. The delivery note must be attached to the goods in a clearly visible manner and must be protected against mechanical and weather-related influences. In addition to legal aspects, the following information must be listed on the delivery note:

- sonnen order number with barcode/ QR code
- sonnen order position with barcode/ QR code
- sonnen article number with barcode/ QR code
- Number of pieces (actual delivery quantity)
- Supplier details (name, address, telephone, clerk, etc.)
- Revision status

## 3.3.2. Waybill

A freight note from the freight forwarder must also be enclosed with each delivery. The following information must be given on waybills.

- sonnen-order number
- Delivery receipt number (s)
- Number of packages (number of cartons, number of pallets, etc.)

For international shipments, (air, sea and rail or trucking freight) the supplier is obliged to submit sonnen all relevant shipping documents completed correctly and in timely fashion. If the shipped goods are subject an import/export permission, all documents must be also available for sonnen in time.

Furthermore, sonnen accepts only surrender/telex release or express bill of lading documents.

## **3.4.1 shipments outside the EU**

If the supplier sends shipments from a non-EU country to sonnen, they are obliged to announce the shipment, in accordance to point 3.3.2, at the customs department of sonnen before the shipment arrives in Germany. The following documents must be available:

- Invoice
- Delivery note / packing list
- Air waybill or bill of lading
- if necessary, certificate of origin/approvals



If the above-mentioned documents were not dispatched on time, the supplier shall be liable for any demurrage and storage charges. In addition, the forwarder / supplier is obliged to deliver the consignment to the named location in accordance with the agreed Incoterm®. Shipments that have not been cleared by customs cannot be stored by sonnen.

If sonnen requires further documents for the intended use of the products, the further import or export or the lawful use, the Supplier shall be obliged to prepare these documents as soon as possible and forward them to sonnen.

## **3.4.2 customs issues**

Should questions or problems arise regarding customs matters, the supplier is obliged to resolve these as far as possible with sonnen's customs department before dispatch. If a third party carries out customs clearance (outside the DDP business) without the prior approval of sonnen, the supplier must bear all costs arising from this. Special agreements are possible.

# 4. Individual packaging regulations

### 4.1 Metal parts/assemblies

In principle, the transport units must be stackable. The sheet metal parts must be distributed on the transport unit in the best possible way. Wedging of the parts is not permitted. Each part must be removable without damage.

In order to prevent damage to painted components/assemblies during transport, storage and/or removal, they must be packed properly and in an environmentally friendly manner (see point 2).

### **4.2 Electronic assemblies**

Electronic assemblies must be delivered in ESD-safe packaging. Apart from that, clause 2 applies without exception, in particular clause 2.2.2.

### 4.2.1 Open Frame Electronic Assemblies

- assembled boards **without** closed housing (e.g. Donau, Spree, open frame power supplies...)
- open frame inverter

These electronic assemblies must be delivered in ESD compliant protective packaging that is at least class "D" (dissipative).

The outer packaging for a delivery unit must be shielding. This can be achieved by an outer packaging of class "S" (shielding).



Preferably, a returnable dunnage / pendulum packaging is to be provided which meets these requirements. This requires a written agreement with the supplier and sonnen.

#### 4.2.2 Electronic modules in a closed housing

- do not require special ESD packaging. Point 2 applies here.
Delivery exclusively on EPAL pallets or disposable pallets that meet the criteria from point 2.1.
Maximum packing height of the pallet: <= 180 cm</li>

### 4.3 Cables

Cables should generally be delivered in cardboard boxes from point 2.1 and should also be marked as required in point 2.2.

A carton may weigh a maximum of 15 kilos, explicitly the following packaging units should be delivered:

#### 10/25/50/100/200/400/500

The packaging unit must be agreed in writing with Logistics sonnen and a fixed batch size must be defined for all suppliers.

The cables, if long enough, must be delivered individually rolled. Packaging waste must be avoided here, ideally there is only the box with the cables as content.

### 4.5 Battery modules:

Battery modules are the only group of goods to be exempted from the standardized EPAL dimensions. The stackability of the full pallets is important here; the cardboard packaging must be correspondingly stable. Serial numbers must be attached to the outside without removing the unit and must not be covered by packaging materials (stretch film excluded) (see point 2.2.2).

A list of all serial numbers must be attached to the load on the pallet.

This list, as well as the individual serial numbers, must be protected from transport and storage damage.

In accordance with point 3.2. battery modules must also be packed and declared IATA/IMDG/ADR compliant.



### Example serialnumber list:

Article Number 4000071/Rev.00 upplier Part No. 519110000027			Model Name	sonnenModule 4
		Sup	ulier Pallet No.	72001200004
ten	S/X	Item	S/N	
1	400007180120015058	13	1000 1000 1000	100120014019
2	400007100120018353	14	40000	DA PASS
3	400007100120018373	15	400007	100120018389
4	400007100120016205	16	4000p7	100120018428
5	400007100120016261	17	100007	100120018399
6	400007100120018357	18	1 - 1 - 2 - 1	IA PAS 100120016249
Ţ	40000/100120018385	19	100007	100120016268
8	400007100120016234	20	40000T	DA PASS 100120018421
9	400007350120018364	21	400007	100120018375
10	40000 1001 2001 6272	22	400007	100120018443
11	40000100120018219	23	400007	00120016279
12	400007109120018,897	24		OR PASS