

# **LOGISTICS GUIDELINE**

**MAHLE Behr global**

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## **1 Objectives**

This Logistics Guideline defines the basic requirements a supplier must fulfill in order to maintain a supplier relationship with MAHLE Behr plants. Conformance with these guidelines is mandatory while developing, implementing or executing supply processes.

This Logistics Guideline supplements the current version of MAHLE Behr's Terms and Conditions of Purchase can be found on the MAHLE Homepage. Upon signing the minutes of the contract review meeting or accepting the Letter of Intent or a separate agreement the supplier undertakes to comply with MAHLE Behr's general and specific logistics requirements.

## **2 Information and Communication**

### **2.1 Availability of Contacts**

The supplier shall provide to MAHLE Behr appointed contacts (and their deputies) for logistics issues who are qualified and authorized to make and execute decisions. These contacts must be reachable at all times during MAHLE Behr production times. An emergency contact must be appointed who is available 24 hours a day outside the aforementioned production times.

The supplier shall ensure that information regarding the status of deliveries throughout the supply chain can be obtained at any time. This must also include ensuring the availability of the responsible carrier.

### **2.2 Reporting Obligation**

Any anticipated supply shortages shall be immediately reported to the responsible materials requirements planner at MAHLE Behr.

## **2.3 Electronic Data Interchange in the Customer-Supplier Relationship**

### Classic EDI

Electronic Data Interchange (EDI), generally understood as the electronic exchange of structured business data between information systems, is considered by MAHLE Behr to be a mandatory requirement for efficient collaboration with suppliers. For this reason all suppliers of MAHLE Behr must be capable of electronic data transmission.

Depending on the specific location, the worldwide standard formats VDA, Odette, ANSI X12 or EDIFACT shall be used. The exact definitions of the message formats used by the individual production sites and technical connection possibilities, including contact persons, shall be agreed directly with the respective production sites.

Responsibility for all hardware and software required by the supplier to communicate with MAHLE Behr's IT systems, including adaptations to the supplier's IT systems, lies solely with the supplier. Provision shall be made for an emergency strategy for all EDI solutions.

### Web EDI

If a classic EDI setup cannot be established with required time or at reasonable cost suppliers may use the internet portal WebEDI to communicate with MAHLE Behr as an alternative to EDI. In the WebEDI system the data to be transmitted to business partners (delivery schedules, single purchase orders, etc.) is stored on a web server. The supplier can log in using an individual password and is then able to view, print, or download the stored data in various formats. It is also mandatory to maintain delivery and transport information, create an electronic delivery note and print the corresponding delivery documents.

To obtain technical specifications and start to set-up the EDI / WebEDI connection the supplier shall contact the global MAHLE IT department ([edi-team@mahle.com](mailto:edi-team@mahle.com)).

### Delivery Documents, Delivery and Transport Information

The supplier shall be responsible for the correct preparation of the delivery documents and labels in accordance with the respective standard norms.

The supplier shall send a shipping notification to the receiving MAHLE Behr plant upon dispatch which must contain information about the packaging used in addition to shipment information regarding the production material.

In the event of a missing or defective shipping notification MAHLE Behr reserves the right to invoice the supplier for any additional costs incurred in handling the shipment.

MAHLE Behr continuously strives for an optimization of the logistic processes and expects the participation of our suppliers in innovative solutions.

MAHLE Behr will implement the Global Transport Label in order to streamline material flow processes. If requested by the receiving MAHLE Behr plant the supplier shall changeover to this new standard. If necessary MAHLE Behr will provide a WebApplication to print these labels.

## **3 Capacity Planning and Order Processing**

### **3.1 General Requirements**

MAHLE Behr regularly sends out delivery schedules that must be checked by the supplier for correctness and feasibility. The supplier must also regularly check the quantities released by MAHLE Behr against its available production capacities and those of its sub-suppliers. The supplier shall immediately report any anomalies to the responsible planner at MAHLE Behr. Delivery schedules shall be considered binding unless the supplier objects within a period of 4 working days.

As a rule the suppliers must reserve larger capacities than those stated in the delivery plan. MAHLE Behr expects the supplier to ensure 100% supply reliability within the defined demand fluctuation range. Increases of up to 15% must be feasible at no additional costs.

The dates stated in the delivery schedules (unless stated otherwise) are the dates the products are due to arrive at the respective MAHLE Behr plant. Deviating regulations must agree to and documented in a separate written agreement.

### **3.2 Start-up and Phase-out Control**

The start-up and phase-out scenario shall be agreed between MAHLE Behr and the supplier on a project-specific basis. Nevertheless, MAHLE Behr expects the supplier to demonstrate greater flexibility during the start-up and phase-out phases.

Starting with the first shipment the supplier has to fulfill the agreed logistic concept in regard to packaging, transportation and communication.

During the phase out, MAHLE Behr reserves the right to adjust minimum order quantities to lower material demand. Obsolete material after phase-out should be notified to MAHLE Behr within 4 weeks after last delivery.

### **3.3 Technical Changes and New Products**

The supplier shall contact the MAHLE Behr launch and change management department to coordinate new parts, prototypes, tools and any changes to these. Furthermore, no technical changes may be implemented without the consent of the MAHLE Behr logistics department.

### **3.4 Basic Requirements for Delivery Services**

Agreed delivery deadlines are binding.

The supplier shall document any necessary expedited freight/unscheduled shipments which are caused by the supplier and for which the supplier is responsible stating the order data/information and the reason for the expedited freight along with corrective measures and submit these to the appropriate contact at the MAHLE Behr plant. The supplier shall carry out the corrective measures without delay and any resulting additional costs shall be borne by the supplier.

MAHLE Behr is not obligated to accept shipments arriving prior to the agreed date or partial shipments which have not been agreed. MAHLE Behr reserves the right to place the excess material into storage and to invoice the supplier for any resultant costs incurred. Alternatively, acceptance of the shipment can be refused. This similarly applies in the event that there are any obvious defects in the load carriers and containers.

MAHLE Behr reserves the right to conduct a logistics audit at the suppliers' premises to verify and assess the logistics systems. The purpose of these audits is to achieve sustained improvements in quality, supplier performance, flexibility and cooperation with the supplier.

## **4 Delivery Concepts**

### **4.1 General Requirements**

The delivery concept is based on the specifications issued by MAHLE Behr applicable for each respective region.

The goal is to implement the cost-optimized and secure supply of materials taking into account transportation costs and stock ranges.

### **4.2 Consignment Processing and Bonded Warehouses**

#### Consignment Processing

Consignment processing is generally binding for all MAHLE Behr suppliers. When delivered to a consignment warehouse (internal or external) the supplier shall retain title to these goods until they are removed from this warehouse. Title shall transfer to MAHLE Behr upon removal from the consignment warehouse. Depending on the regional requirements MAHLE Behr's liabilities towards the supplier which arise as a result shall be settled by way of a credit note. Consignment processing is independent from the type of requirements determination, communication of requirements to the supplier and the agreed Incoterm.

This process will be described in a separate consignment agreement between MAHLE Behr and the supplier which agreed before start of deliveries.

### Bonded warehouses

Delivery shall be made to a bonded warehouse stipulated by MAHLE Behr if it is not possible to use a consignment warehouse for fiscal reasons or due to customs law (e.g. if the delivery is coming from overseas). This process will be described in a separate agreement regarding the use of bonded warehouses between MAHLE Behr and the supplier which will be agreed before start of deliveries.

In each respective region it must be clarified in advance whether the bonded warehouse process is applicable.

### **4.3 Incoterms**

MAHLE Behr uses the current valid version of the Incoterms as the basis for delivery terms.

The regional procurement process determines which delivery terms are applicable from the following terms.

#### FCA - Free Carrier (named place)

The supplier ensures that the goods are available on time and are loaded properly. Depending on the terms of the contract the supplier may be also responsible for advising MAHLE Behr's chosen carrier to collect the goods on time and thus is responsible for the delivery to MAHLE Behr being on schedule.

#### DAP - Delivered at Place

The supplier is responsible for the shipment up to the unloading point specified by MAHLE Behr. The supplier is responsible for the goods being delivered to MAHLE Behr on time and bears all transportation costs and risk. In case of DAP deliveries the carrier may only be advised after its capabilities have been verified. Appropriate agreements shall be concluded with carriers in order to ensure the trouble-free transportation of goods.

Incoterms generally do not regulate the transfer of ownership of the goods. The transfer of ownership is agreed in accordance with the regional procurement process applicable in each case.

### **4.4 Customs**

Customs clearance responsibility is assigned per Incoterm definition. The supplier is responsible for correctly preparing the documents required for customs clearance in line with the current legal requirements in each case for importing goods into the recipient country. Any costs or consequential damage resulting from missing or improperly prepared customs documents and/or planning for customs formalities (e.g. preferential entitlement based on appropriate trade agreements) will be charged to the supplier (e.g. duties incurred due to insufficient proof of preferential origin).

#### **4.5 Certificate of Origin and Proof of Preferential Origin**

The supplier is obligated to provide a detailed Certificate of Origin for the delivered goods in accordance with the import regulations if requested by MAHLE Behr. Likewise preferential status shall be confirmed by proof of preferential origin if requested.

## **5 Packaging and Labeling of Goods**

### **5.1 Regulations regarding Transport Containers/Packaging specific to MAHLE Behr**

The supplier is responsible for providing suitable packaging (including inserts) for transport and handling of materials for shipment to the place of delivery. The supplier shall make arrangements to ensure that packaging and filling quantities for each part comply with MAHLE Behr's specifications before the contract is awarded.

The supplier shall also document the packaging concept using standardized documentation and submit this to MAHLE Behr before the contract is awarded.

Regardless of the type of packaging used it shall be guaranteed that:

- Parts are supplied undamaged, necessary protective measures have to be ensured  
Parts are only supplied in clean packaging
- Packaging is stable with respect to condition, shape and volume, and stackability
- Space is used most efficiently in containers
- Packaging is easy to unload using a forklift truck
- Ergonomic requirements (regional) are complied with (for example regarding weight/handling/ease of removing parts)
- Correct identification using standardized labeling is used

When using wooden packaging materials the laws of the recipient country shall be observed (such as the international standard ISPM15 issued by the International Plant Protection Convention (IPPC), for example).

The packaging must not extend beyond the overall dimensions of the pallet.

Cargo shall be secured with plastic strapping. Other methods of protection or securing require the consent of MAHLE Behr (e.g. stretch film, polyethylene cover).

The supplier shall specify suitable alternative packaging if requested by MAHLE Behr and this shall be approved by the receiving MAHLE Behr plant. The dimensions and degree of filling must correspond to the original packaging. The delivery note must specify that alternative packaging has been used.



## **5.2 Identification**

All packages, containers and loading units must be clearly identified by a valid transport label. Transport labels that are according the regional industry standard (e.g. VDA, Odette, ANSI) must be used. These shall be affixed laterally on the packaging; clipboards, map pockets or insert pockets shall be used if available. Self-adhesive labels must not be used on reusable packaging. If there is no suitable fixing point the transport label may be affixed with a maximum of two adhesive points.

When shipping overseas each loading unit and each load carrier shall be affixed with a transport label on two sides (longitudinal side and transverse side) in deviation from the normal identification requirements.

A transport label must be chosen with characteristics which ensure that it can always be read at the place of delivery by machine and humans at all times despite environment influences and transport loads.

Invalid labels on the packaging shall be removed. Regional requirements shall be taken into account.

## **5.3 Returnable Packaging**

MAHLE Behr Group returnable load carriers shall be used as a general rule. Delivery must only be carried out using clean, dry, undamaged and workable packaging. The supplier shall adhere to requirements regarding the internal cleanliness of the packaging.

In the event of non-compliant packaging MAHLE Behr reserves the right to invoice the supplier for any additional costs incurred.

MAHLE Behr and the supplier both undertake to use a perpetual inventory system for the returnable packaging used. Account statements for packaging shall be generated on a monthly basis regarding MAHLE Behr's own returnable packaging and shall be made available to the exchange partner.

These statements must always be checked within 14 days. If no objections have been raised with those responsible at the plant within this time the documented book inventory shall be deemed to be acknowledged.

The supplier shall perform an inventory once per year; shortages at the supplier will be offset at the cost of the supplier.

Returnables dedicated for deliveries to MAHLE Behr subsidiaries must not be used for deliveries to other customers or in circulation with subcontractors.

## 5.4 Disposable Packaging

### Corrugated Cardboard Boxes

The quality of the corrugated cardboard used depends on the material and mode to be transported. MAHLE Behr recommends determining the wall thickness without taking any cushioning material into account. In this case the box and the material must be able to withstand the load. Furthermore the box must be able to be stacked on the transport vehicle or in the warehouse. Only HSC<sup>1</sup> boxes (boxes with removable lids) may be used MAHLE Behr. They must not be additionally secured with adhesive tape. Using disposable packaging based on VDA recommendation 4525 (Standardized Disposable Packaging for Sea Container Applications) / 4530 (Disposable Small Load Carrier System) is recommended.

Links: [VDA 4525 - Standardized Disposable Packaging for Shipping Containers](#)  
[VDA 4530 - Disposable Small Load Carrier System](#)

### Pallets

Chipboard pallets must not be used as packaging material.  
The regional standards of MAHLE Behr's plants shall be observed.

## 5.5 Overseas Packaging

When shipping overseas packaging must be used which satisfies the requirements regarding stackability, transport loads, import regulations for wooden packaging material etc. MAHLE Behr's requirements regarding optimal use of space in shipping containers should be taken into account when planning the size of packaging.

## 5.6 Packaging Recycling and Waste Prevention

Packaging must always be planned with economic and ecological aspects. The waste-economic objectives of the environmental legislation contain corresponding ecological priorities:

- Packaging waste prevention  
Packaging waste to the absolute necessary extent
- Packaging minimization  
Reusable and disposable packaging must be defined according to ecological and economic criteria and only the necessary packaging should be used
- Packaging recycling  
Reusable and disposable packaging must be environmentally compatible
- In order to meet the requirements of the packaging legislations and not to burden the environment unnecessarily, only environmentally compatible materials are to be used.

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<sup>1</sup> HSC = Half Slotted Container

## **6 Contingency Plan**

The supplier is obligated to draw up contingency plans in cases of disruption e.g. in the event of technical defects, capacity bottlenecks, quality problems etc., to initiate the corrective and preventative measures and to agree with MAHLE Behr to minimize impacts on the MAHLE Behr process. The initiator must report the disruption to the appropriate MAHLE Behr plant beforehand without delay. The emergency plan should contain the measures to be taken and the deadlines for rectifying the problem. The emergency plan developed by the supplier must be approved by MAHLE Behr before the first delivery.

The supplier shall undertake all measures to guarantee continued supply. This includes but is not limited to, increased safety stock, flexible production models, overtime, temporary storage in secure warehouse at no additional cost for MAHLE Behr. The contingency plan must be disclosed and feasibility being demonstrated at any time if requested by MAHLE Behr. Supplier needs to adjust contingency plan if deemed insufficient by MAHLE Behr.

## **7 Regional Guidelines**

Regional specifics can be detailed in separate regionally applicable Logistics Guidelines which supplement the global Logistics Guideline. The supplier must therefore take into account and adhere to relevant regionally applicable Logistics Guidelines. These regional Logistics Guidelines can be found on the MAHLE homepage.

## **8 Non-Compliance and Consequences**

In the event of non-compliance MAHLE Behr reserves the right to invoice the supplier for any additional costs incurred. The fees resulting out of non-compliance are listed in the respective regional guideline.