

MAHLE

Driven by performance

Logistics Guideline

of

**Mahle Industrial Thermal Systems
GmbH & Co. KG**



Preface

The basis for a successful cooperation in partnership between you, as the supplier, and Mahle Industrial Thermal Systems Group (hereinafter referred to as MITS) is clear and binding communication.

To safeguard our production, these guidelines have the highest priority with respect to supply logistics. In order to ensure an efficient and smooth-running production process, functioning logistics within agreed rules are essential.

In order to clarify and bindingly regulate our requirements for all parties involved, we have compiled these for you in the present Logistics Guidelines. These guidelines are an integral part of our contractual relationship. We reserve the right to make changes to the guidelines, as necessary. They shall become valid with the posting of the new version on our Internet platform.

Processes are reviewed continuously in the interest of a cooperation in partnership. Through regular audits and process analyses with the supplier, we ensure continuous improvement. MITS reserves the right to request changes to the processes.

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1. General information about logistics

1.1 Purpose

In the present Logistics Guidelines, the basic requirements are defined, which a supplier must fulfill for a supplier relationship with the factories of MITS. It must be observed for the development, design and planning of logistics concepts.

These guidelines describe the requirements for communication systems and binding regulations for delivery to MITS, a logistics partner of MITS or an external unloading site specified by MITS.

The Logistics Guidelines supplement the MITS Terms and Conditions of Purchase.

1.2 Scope

These guidelines are valid for all deliveries to all factories of the company

MAHLE Industrial Thermal Systems GmbH & Co. KG
Heilbronner Straße 380
70469 Stuttgart

Specific special regulations and individual agreements are documented separately.

German law applies.

2. Communication

Requests/inquiries by MITS regarding individual orders, delivery call-off and delivery status must be replied to by the supplier at once.

If the ordered quantities and dates cannot be met, when this is recognized, the supplier has the duty to report this to MITS on the same day to the responsible dispatcher at MITS and document it in written form.

For general information requests by MITS to a supplier, a response is required on the same day. If individual employees of the supplier are absent, it must be ensured that an appropriate substitution policy has been arranged.

For escalation queries, for example, in the case of an imminent supply bottleneck, a response is required within one hour. If the supplier is not yet able to make a conclusive statement at this point in time, the supplier must send the current information status.

MITTS shall be provided with the names of competent, fixed contact persons and their substitutes, for the delivery process. Any change must be communicated.

3. Electronic data interchange

Electronic Data Interchange (EDI) - generally understood as electronic data interchange of structure business data between information systems, is an essential requirement, from the point of view of MITTS, for efficient cooperation with the supplier. For this reason, electronic remote data transfer capability is a requirement for all suppliers of the MITTS Group.

This form of transfer is generally regarded as a requirement for the service to be provided when a contract is awarded.

As an alternative to EDI, suppliers may communicate with MITTS using the WebEDI Internet application. With the WebEDI system, the data (delivery call-off, individual order, etc.) to be sent to the business partners are filed on a web server.

In exceptional cases (special orders, individual orders or if the expense of a remote data transfer connection is not justified on the basis of the scope of supply), the MITTS orders may be transmitted by fax/e-mail.

All hardware and software equipment required by the supplier, as well as the adaptation of the supplier's IT systems, shall be borne by the supplier.

4. Goods delivery and adherence to delivery dates

The supplier undertakes to comply with the delivery dates and quantities of the order or delivery schedule. The delivery data are regarded as arrival dates in the incoming goods department at MITTS.

If the contractor (hereinafter referred to as CN) deviates from this, MITTS is authorized to reject these deliveries and ship them back at the CN's expense or store them at the CN's expense for the time being.

If part of the consignment or the entire goods are not ready on the agreed date, the supplier shall arrange for a special journey to MITTS and coordinate it with the responsible dispatcher, as well as bearing all costs incurred for this.

If a late delivery by the supplier leads to necessary rescheduling of the production process at MITTS, additional costs that may be incurred for the necessary rescheduling,

such as fitting or handling costs will be passed on to the supplier. The rescheduling will be coordinated with the supplier.

If a loss of production occurs at MITS due to a late delivery by the supplier, MITS is authorized to charge the additional expenses. All expenses are understood as loss-of-production costs, which must be proven individually by MITS.

Special cargoes, which have been caused by MITS, are also paid for by MITS. The supplier shall hereby commission a selected service provider of MITS. If this is not possible, the costs incurred shall be coordinated between the supplier and the MITS location and set out in writing.

MITS assesses the adherence to delivery dates and logistics performance in its supplier assessment.

5. Customs handling, origin of goods, declaration on the export restriction

The export clearance is incumbent upon the supplier. All papers and documents that are required for cross-border traffic (particularly preference documents) must be provided by the supplier at its own expense and made accessible to MITS.

If questions or problems should arise on the subject of customs, the supplier undertakes to already clarify these with the Central Customs Department prior to picking up the delivery.

Contact:

Mr. Florian Hafner, Tel.: +49 711 501 42045, E-mail: florian.hafner@mahle.com

For all consequences - particularly with tax and customs claims, including possible consequences of proceedings in accordance with the German Fiscal Code - which we incur from a declaration, which you have issued erroneously, we reserve the right to recourse claims against you.

The supplier undertakes to indicate the export identifier on all delivery notes and bills by position. Upon request by the European/German and American export law (Yes/No), this is comprised of, the European/German export list number (AL) and stating whether it involves goods, which are subject to American export law - the American Export Control Classification Number (ECCN). The statistical product number and the country of origin under commercial law must be documented on the delivery note and the bill in any case.

6. Call-off control, flexibility

The following regulations only relate to the processing of orders, which take place via delivery allocation.

Specific call-off control systems, such as KANBAN, JIT, JIS etc. will be arranged separately on a case-by-case basis.

- The backlog shown is to be delivered as an immediate requirement and relates to the previous delivery allocation. Insofar as differences exist regarding the backlog quantity, the backlog shown by MITS is decisive.
- If additional shipments are en route to MITS, apart from the listed last deliveries, these quantities must be applied to the next due delivery installment.
- MITS issues the production release for the first calendar month of the current delivery call-offs. After the first of the month, the second month automatically becomes a fixed call-off etc. Preliminary material can be dispatched for an additional month. The plan figures, which are shown as a preview, are deemed to be non-binding. MITS has the right to change the scope of the order according to its requirements.
- If MITS has not received the rejection of the order from the supplier within 3 working days, the order shall be deemed as accepted.
- By default, suppliers must prepare for constant quantity increases/reductions of at least 15 % within a lead time of one month, on the basis of average weekly capacity. If MITS places different demands on the supplier's capacity flexibility, this shall be arranged separately.

7. Packaging

You can find the packaging guidelines at

<http://www.mahle.com/de/purchasing/general-guidelines-for-suppliers>

8. Freight concept

8.1 Transport handling

Unless stipulated otherwise, all offers and contracts are issued/concluded by the supplier according to the terms and conditions of delivery “FCA, named location” or “DDU “destination” (according to Incoterms 2000) or “FCA, named location” or “DAP destination” (according to Incoterms 2010). The regulation of the transportation is determined in the form of a Routing Order specified by MITS.

In the case of a forwarder being commissioned by the supplier itself, the carrier is responsible for ensuring that the trucks are equipped according to the legal standard. The carrier ensures that within the scope of service provision, only properly employed drivers are used (particularly in accordance with Sections 7b, c of the GüKG [German Road Haulage Act]).

The load, including the devices for securing the load, must be stowed away and secured such that falling over, rolling back and forth or falling off, and thus damaging of the goods, is ruled out.

The loading of the trucks must take place sorted according to the unloading sites.

The unloading of the trucks with standard industrial trucks at MITS or at another unloading site specified by MITS, must be ensured.

8.2 Shipping damage

The goods must be packed and handed over to the carrier such that they are secure for shipping.

Special loading and unloading terms and conditions, e.g. crane lifting points, must be marked by the supplier and notified to MITS in good time. In the event of shipping damage, the CN and the carrier will be informed in writing by MITS after the goods are received. The damage shall be documented on the bill of lading with appropriate photographs.

MITS has its own transport insurance and waives insurance protection of the goods during shipping. (Waiver/prohibitory customer).

8.3 Temperature and hazardous goods shipments

The regulations for shipping temperature-controlled and hazardous goods shipments must be observed. The supplier is liable for all damages incurred from non-observance of the statutory provisions.

The supplier, as the distributor of hazardous goods, is responsible for the classification, the admissible type of shipping and the shipping permit.

As the loader/dispatcher, the supplier shall observe the applicable regulations for hazardous goods shipments. Packaging may exclusively be used for shipping, which is design-inspected, certified and approved by MITS. Required data sheets, approval notices etc. must be provided to the carrier in good time prior to shipping.

9. Labeling and accompanying documents

In any case, all deliveries shall be labeled, such that all products can be clearly identified. Initial samples and time-sensitive goods shall be labeled separately as such. For goods with a limited storage life, the best before date must be indicated. All invalid markings must be removed.

Special handling instructions (e.g. “protect from moisture”, “do not toppled”) shall also be applied in the form of symbols. Stackability information is required.

Product labels in accordance with VDA Standard 4902 Version 4 shall be used. The product labels must be attached, such that they are clearly visible and must not exceed the dimensions of the packaging. In the following, sample product labels are illustrated, including the detailed field descriptions.

(1) Warenempfänger Fa. Muster KG 00000 Musterstadt		(2) Abbestelle - Lagerort - Vereinigungsachse GRE01	
(3) Lieferschein-Nr (N) 2581752 		(4) Lieferantenanschrift (Kurzname, Werk, PCZ, Ort) Mustermann	
(8) Sach-Nr Kunde (P) 72321698 		(5) Gewicht netto 12	(6) Gewicht brutto 10
(9) Füllmenge (Q) 1 		(7) Anzahl Packstücke 01	
(12) Lieferanten-Nr (V) 4638141 		(10) Bezeichnung Lieferung, Leistung GEBLAESE	
(13) Packstück-Nr (S) 2581752 01 		(11) Sach-Nr. Lieferant (399) 0-123B10-0 	
(17) Mustermann		(13) Datum D 910226	(14) Ankerungsschlüssel A43-275 XL
		(16) Chargen-Nr (R) 4502283287 	

Order number

Fig. 1: Sample Single Label VDA 4902, Version 4

(1) Warenempfänger	(2) Abladestelle - Lagerort - Verwendungsschlüssel G0501 - -	(3) Lieferschein-Nr. (N) 3463
(8) Sach-Nr. Kunde (P) 129024 		
(9) Füllmenge (Q) 1 KG 	(10) Bezeichnung, Lieferung, Leistung BAND	
(12) Lieferanten-Nr. (V) 1234500 	(11) Sach-Nr. Lieferant	
	(13) Datum	(14) Änderungsstand Konstruktion
(15) Packstück-Nr. (S) 037140001 	(16) Chargen-Nr. (H) 4502283287 	Order number

Fig. 2: Sample-KLT-Label for Multipack Boxes (VDA)

The product label must contain the following details:

Field name	Field description	Example
(1) Goods recipient short	Factory + location	Mahle Industrial Thermal Systems GmbH 70469 Stuttgart
(2) Unloading site - Storage site - use key	Unloading site, if specified	Stuttgart factory
(3) Delivery Note No.	Number, which the supplier allocates to the delivery note	LS123456
(4) Supplier address	Address in short form	Sender, Factory, 11111 Delivery town
(5) Net weight	Weight of the package exclusive of load carrier in kg	43 kg
(6) Gross weight	Weight of the package including load carrier in kg	158 kg
(7) Number of packages	Total of all packages handed over to the carrier	5
(8) Customer Item No.	8-digit Mahle ID Number	71234567
(9) Fill quantity	Actual fill quantity of the item number in the package	100 pcs.
(10) Delivery name, service	Name of the goods	Oil box

(11) Supplier Item No.	Supplier's item number	ABC123
(12) Supplier No.	ID Number that Mahle allocates to the supplier	300111
(13) Date	Shipping date of the goods	04.26.2016
(14) Change stats/design	ID Number that the customer allocates to a sampling status	24.04458
(15) Package No.	ID Number that the customer allocates to a package	000001 Europallet
(16) Batch No.	Batch No. is replaced by the order number	4502296446

The product label is slid into the designated card pouch/clamping plate.



Fig.3: Card pouches/clamping plate

If no card pouch/clamping plate is available, the product label must be attached with 4 adhesive dots on each corner. It must be ensured that all details remain visible on the product label.

Alternatively, for load carriers made of steel, a self-adhesive accompanying document pouch must be used on DIN C5 format made of PE film or a wire-clip pouch.



Fig.4: Accompanying document pouch

It is not permitted to glue on an adhesive label. MITS will charge the supplier for costs of removing glued-on labels.

Exception:

For marking the multipack containers, only special self-adhesive labels may be used, which are available from ATE, Z.A. Nord du Val de moder, 67350 Niedermodern, France (Tel. +33 (0)388055040, Fax +33 (0)388055049).

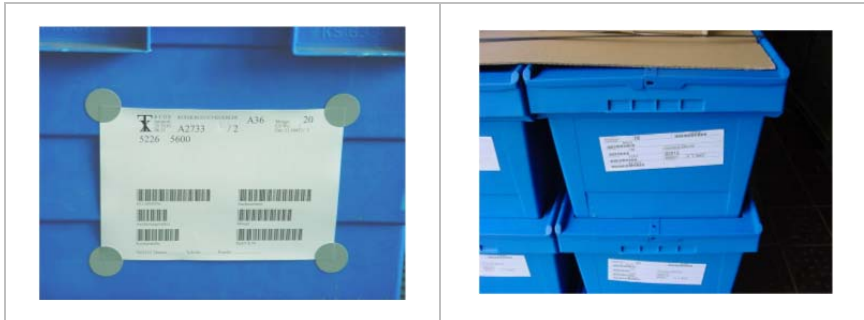


Fig.5: Adhesive dots

Shipping documents (delivery notes, freight documents, export documents, certificates, inspection reports etc.) are to be attached to the packaging unit.

Deliveries without complete paperwork or labeling may be rejected at the supplier's expense or extra costs may be claimed by MITS.

As a general rule, the following accompanying documents are expected

- Delivery note in accordance with DIN 4991 in duplicate and remote data transfer shipping document in accordance with VDA 4912
- Freight order

The driver receives a stamped copy as a confirmation of receipt for the documentation of the delivery. However, the goods are only accepted under reservation.

A sample delivery note is illustrated below. It should be noted that delivery notes without container details cannot be recorded and also cause an incorrect container inventory, which causes difficulties with good receiving and container management and supply.

Therefore, no payment/correct account management can take place.

MITS fundamentally reserves the right to refuse acceptance with missing/incomplete shipping documents or charge extra costs incurred in the form of a handling fee.

DELIVERY NOTE										Page: 1/ 1	
(6) Supplier Supplier Code:			(2) Notes				(3) No.			(4) Dispatch date	
Delivered to Your VAT-reg.no			(8) Freight		(7) Delivery		Invoice				
			franco carriage forward		wagon	forwarder	(8) No.		(9) dated		
					freight	for.veh.					
					express	own.veh.					
		post									
(10) Your ref.		(11) Purch.order no.		Date		(12) Our depart.	(13) Extension	(14) MAHLE order no.			
(15) Shipping method			(16) cor.no.	(21) Method of packing	(22) Dispatch ref.	(23) gross weight KG	net (24)				
			X			0,000	0,000				
(25) Account no. / Customer address							(26) Unloading point				
(27) Item	(28) Part-no.	(29) Description (21) Method of packing (details)			(30) Quantity	(31) Unit	(40) Consignee notes				
							Quantity	+/-	Notes		
(42) Notes			(43) Quantity check			(44) Quality check			(45) Consignee		(46) Invoice verification
Date											
Name											
No.											

10. Logistics quality

10.1 Logistics failure

Non-compliance with the agreed provisions constitutes a failure and will be documented by MITS with an inspection report.

The inspection report will be sent by MITS to the supplier at once for comment. The supplier must comment by no later than on the next working day. MITS may additionally note on the inspection report that an 8D Report is required. In this case, the supplier shall start to process the 8D Report at once.

For the 8D Reports, MITS will specify a digital format, which the supplier must use.

75 minutes will be charged for expenses incurred by preparation of the inspection report and the coordination of immediate logistical measures. The costs will then result from the hourly rate of presently €48/h. Further claims remain unaffected by this.

10.2 Defective parts and missing parts process

For delivery complaints due to defective or flawed parts ("zero-kilometer" parts, not warranty parts), the following measures are performed:

- 1) MITS informs the suppliers in advance, either in written form or verbally
- 2) MITS inspects the goods for qualitative defects and damage in consultation with the supplier for installation capability as a consequence of rework, scrapping or return shipment of the goods
- 3) Based on the supply situation, MITS decides whether a special journey is necessary for the subsequent delivery of missing parts. The costs for this journey are payable by cause

10.3 Flawed deliveries

In the cases listed below, MITS reserves the right to return the goods at the supplier's expense. Alternatively, MITS will arrange for the scrapping of the goods, at the supplier's expense, for the account of the supplier (cf. also Chapter 10.2 Defective parts and missing parts process). Beforehand, MITS will inform the supplier in both cases, either in written form or verbally.

Flawed deliveries may be:

Larger deliveries

A larger delivery exists, if the delivered quantity exceeds the ordered quantity (however, it complies with the delivery note quantity).

Excess deliveries

An excess delivery exists, if the delivered quantity exceeds the delivery note quantity.

Early deliveries

An early delivery exists, if the delivery takes place prior to the specified delivery date.

Incorrect deliveries

An incorrect delivery exists, if different goods are delivered (incorrect items) or goods are unloaded at the incorrect location.

Deliveries without an order

Quality defects

A quality defect exists, if the delivery does not meet the quality standards defined by MITS.

11. Emergency / emergency plan

The supplier's management undertakes to prepare emergency plans in cases of malfunctions, e.g. for technical defects, capacity bottlenecks, quality problems and initiate and coordinate corrective and preventative measures with MITS, such that problems cannot have a sustainable impact on the procedure at MITS. Beforehand, the malfunction must be reported by the perpetrator at once to the appropriate MITS factory.

The emergency plan generally contains measures and deadlines for the rectification of the problem. The emergency concepts developed by the supplier must be agreed with MITS prior to the initial delivery.

MITS also expects measures from its suppliers, which guarantee supply in the above-mentioned exceptional cases. For this, the supplier must keep safety stocks, if necessary, or demonstrate a flexible production model.

The chosen alternative must be plausibly presented during the quality audit and must be disclosed at any time upon request by MITS.

If it transpires that the arranged measures are not sufficient, MITS reserves the right to demand that safety stocks be established.

The supplier undertakes to report possible supply bottlenecks, as well as unforeseen events during shipping to the responsible MITS dispatcher at once and provide a practical solution for the supply problem.

If the supplying of MITS is jeopardized as a consequence of an event (for example, truck accident, loss of production, disaster, or similar), the supplier must directly initiate a delivery from its safety stock. If necessary - after consultation with the responsible MITS dispatchers - a subsequent delivery must then be made in smaller shipping units at the supplier's expense, if this is the only way to avoid a production stop at MITS.

If damage to the parts is only determined by MITS, the supplier must also be able to provide a subsequent delivery from its held safety stock at once, if there is no other way to safely maintain production at MITS.

The supplier shall ensure the supply of all parts, in accordance with the delivery schedule, during its planned business shutdowns/other events/malfunctions that occur in its business in a cost-neutral manner.

12. Changes / final provision

As a general rule, supplemental agreements to the Logistics Guidelines are possible.

The Logistics Guidelines are subject to changes and adaptations. Therefore, version on our website www.mahle.com is always up-to-date and valid. The change status is documented under Point 14. Change documentation.

13. Severability clause

Should individual provisions of this agreement turn out to be legally invalid, this shall not affect the validity of the remaining provisions of this contract. The contracting parties undertake to change the invalid provisions, such that they are legally admissible and thereby come as close as possible to their original commercial purpose. This also applies, if individual provisions are contrary to the stipulations of the EC/EU and/or laws of the respective country.

14. Change documentation

Version	Date	Editor	Description
V 1.5	05.25.2009		Original version
V 1.6	06.25.2010	T. Illg / BI-LO42	Multipack processing and EDI data sheet added
V 1.7	09.10.2010	T. Illg / BI-LO42	Packaging of welding assemblies added
V 2.0	02.08.2011	T. Illg / BI-LO42	Change of company name to Mahle Behr Industry
V 2.1	07.12.2011	T. Illg / BI-LO42	Amendment of incoming goods department opening times
V 2.2	01.11.2013	T. Illg / BI-LO42	Change of company name Freiberg, Appendix 2, Appendix 3
V 2.3	02.04.2014	T. Illg / BI-LO42	Change of company name to MAHLE Industrial Thermal Systems
V 2.4	11.26.2014	T. Illg / ITPL2	Change of opening times Appendix 3
V 2.5	06.10.2015	T. Illg / PT0PL2	Change of logo, reference to Packaging Guidelines
V 2.6	08.03.2016	T. Illg / PTL2	Change to field contents VDA Label 4902, opening times WE Hilbersdorf + Reichenbach, correction of empties processing, correction of changes/final provisions
V 2.7	05.04.2017	T. Illg / PTL2	Dissolution of Reichenbach company
V 2.8	01.01.2018	M. Bea/ PTHA1	Change of formatting, reference to Packaging Guidelines

15. List of contacts

15.1 MITS Plants

15.1.1 MITS Stuttgart, MITS Schwäbisch Hall, Schmitt Logistics

Responsibility	Name	Phone	E-mail
Global Logistics and Logistics Guidelines	Wolfgang Klein	+49 711 501 42190	wolfgang.klein@mahle.com

15.1.2 MITS Reichenbach, Mylau

Responsibility	Name	Phone	E-mail
Plant Logistics	Markus Hendel	+49 711 501 42688	markus.hendel@mahle.com

15.1.3 MITS Freiberg

Responsibility	Name	Phone	E-mail
Plant Logistics	Ulf Tost	+49 711 501 42816	ulf.tost@mahle.com

Appendix 1: Incoming Goods Department and Opening Times

Company	Unloading Site	Opening Times
MAHLE Industrial Thermal Systems GmbH & Co. KG	Mausenstr. 3 70469 Stuttgart	Monday - Thursday 7:00 a.m. - 2:30 p.m. Friday 7:00 a.m. - 12:00 p.m.
	Dr. Manfred-Behr-Straße 1 74523 Schwäbisch Hall	Monday - Thursday 7:30 a.m. - 3:30 p.m. Friday 7:30 a.m. - 3:00 p.m.
	Schmitt Logistik Mahle I.T.S. Dept. In den Datzenäcker 4 74541 Vellberg	Monday - Friday 7:00 a.m. - 3:30 p.m.
	Gewerbering 2 08468 Heinsdorfergrund	Monday - Thursday 6:00 a.m. - 3:00 p.m. Friday 6:00 a.m. - 12:00 p.m.
	Ernst-Thälmann-Straße 27 08499 Mylau	Monday - Friday 6:00 a.m. - 2:00 p.m.
	Ahornstraße 8 09627 Bobritzsch-Hilbersdorf	Monday - Friday 7:00 a.m. - 3:00 p.m.