



# **Supplier Guideline**

## (Lieferantenhandbuch)

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## Definition of terms

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Container:	A container is a tool for the transportation, wrapping or protection of goods, i.e. a pallet, cage box, cover plate, crate, etc.
Batch:	In production, a batch refers to the totality of units which are created, manufactured or packaged under the same conditions.
Individual part	An individual part is a technically described object which cannot be disassembled in a non-destructive manner. At ZEISS, each individual part that is relevant to production is assigned a unique material number. One or multiple instances of an individual part may be included in various modules or SETs/KITs.
Module:	A module is a defined pre-assembled scope consisting of several SETs and/or individual parts. Like the individual part, a module is also assigned its own material number.
Returnable packaging:	Returnable packaging is designed to be used multiple times and is put back into the packaging cycle after it is used. Returnable packaging is also referred to as returnable containers on the following pages.
Serial number	A serial number is a unique number used to label products so that they can be tracked.
SET/KIT:	A SET/KIT consists of several externally manufactured components. This component cluster has one or several joint properties, e.g. inflow via the same cleaning service provider or supplier. All components of the SET/KIT are transported and stored in a container. Each individual component of the SET/KIT is packaged in film.
Packaging:	Packaging can take the form of single-use materials (e.g. film used for the delivery of cleaned goods or for the protection of parts) or reusable packaging (e.g. reusable containers or inserts).
Part protection:	Part protection takes the form of single-use composite materials which are not permanently attached to the component and that are necessary to protect the part in the transport container (e.g. film for the delivery of clean parts, foam, air cushioning material, etc.).



## 1 Objective and scope of the Supplier Manual

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ZEISS Sparte Semiconductor Manufacturing Technology, hereinafter referred to as ZEISS, covers key processes in the manufacture of microchips within the semiconductor industry.

A good and efficient collaboration with our suppliers based on partnership is indispensable to enable us to offer our customers innovative and high-quality solutions. For this purpose, ZEISS works closely with a worldwide network of suppliers to jointly meet the ever-growing market requirements for quality, flexibility and competitiveness and thus achieve continuous improvement in its processes.

The present Supplier Manual provides a general description of the aspects essential to this end, as well as the requirements resulting from these aspects. This is intended to serve as a guide for you as a supplier and as a common foundation for good collaboration between you and ZEISS. If the information provided in this manual contradicts what has been laid out in your agreements or contracts with ZEISS (see item 4.2), the agreements and contracts shall take precedence.

This manual, as well as additional information for suppliers, can be found at <https://www.zeiss.de> under Contact > ZEISS Suppliers > Supplier Area > Documents for Suppliers > Carl Zeiss SMT GmbH.

## 2 Sustainability and responsibility

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In addition to economic and ecological factors, social factors are also considered in the selection of, and collaboration with, suppliers. This is because ZEISS can meet its customers' expectations regarding sustainability and responsibility only if the suppliers also adhere to environmental and social standards and take their own part in ensuring sustainable development.

## 3 Collaboration foundations

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Competent, efficient and standardized communication between ZEISS and its suppliers is the basis for successful collaboration. Adhering to agreed arrangements and providing information about relevant changes immediately are essential components of positive collaboration.

### 3.1 ZEISS contact

Your ZEISS contact (materials controller / purchaser) is listed in your order.

### 3.2 Supplier contact

The supplier must provide ZEISS with the names and contact information of all persons responsible for supervising the entire supply chain (the email addresses, phone numbers and fax numbers of contacts, representatives and superiors).



## **4 Purchasing / Supply chain management**

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### **4.1 General Purchasing Terms and Conditions**

The General Purchasing Terms and Conditions of ZEISS shall apply to all deliveries made to and services performed for ZEISS by the supplier, to the extent that other arrangements were not expressly made between ZEISS and the supplier.

The current version of our Purchasing Terms and Conditions can be found in the company information on our website or can be requested separately on demand.

### **4.2 Contracts / Agreements**

For close collaboration with its suppliers, ZEISS relies on basic agreements which must be concluded in writing before establishing a business relationship. These include the following agreements:

- Nondisclosure agreement (NDA)
- Framework agreement
- Supplier self-assessment/profile via Supplier Portal (invitation by responsible purchaser)
- Quality assurance agreement (QAA)
- WEB-EDI user agreement

Depending on the material or service category to be supplied and the type of collaboration involved, it may be necessary to conclude further agreements in writing. These may include the following agreements:

- Purchase agreement
- Project agreement
- Modularization agreement
- N-tier agreement
- Logistics agreement
- Consignment contract
- Specific agreements for services and employee leasing
- Maintenance and service agreement
- Tool rental contract

The above contracts are not applicable to all suppliers and must be reviewed and coordinated with your responsible purchaser on a case-by-case basis.



### **4.3 Electronic data exchange**

During the order process, ZEISS aims to exchange information with its suppliers electronically (EDI/WEB-EDI).

The Supplier Portal is used for document exchange between ZEISS and its suppliers. Here, interfaces and media disruptions are minimized, processes are simplified and shortened, and document exchange is performed more reliably, more safely and in a more environmentally friendly manner. Via the Supplier Portal, documents and data which up to now have primarily been transmitted in paper form are now exchanged between ZEISS and the supplier in electronic form. Application of the Supplier Portal is conducted in several steps and includes the exchange of orders, changes in orders performed by ZEISS and order confirmations submitted by the suppliers.

The cost-free connection to the Supplier Portal is performed via Web-EDI (web based electronic data interchange) and the operating principle is as follows:

Orders generated by ZEISS and changes in orders are submitted to the portal. The supplier is informed about the receipt of, or changes to, the order by email and can enter the portal via his/her general login information and open and check the order process. It is possible to enter all information relevant to ZEISS and send a confirmation to ZEISS in just a few steps by simply entering the delivery deadline and the order confirmation number. The data transmitted by the supplier are automatically sent directly to the SAP system of ZEISS, and the respective order initiator is informed concerning any changes to the order.

As a supplement to the order process, the following modules are available in the Supplier Portal:

- RFQ/digital bidding
- Document transfer/WebFTP
- Document exchange
- Vendor Managed Inventory (VMI)
- Complaint handling/special releases

It is also possible to connect using an EDI interface. In this case, the supplier shall incur the connection costs.

If information is exchanged via email, ZEISS will use TLS encryption (transport layer security) or end-to-end encryption with digital certificates (PGP or S/MIME) if the information is confidential.

For exchanging large amounts of data, additional tools (e.g. Brainloop) can be used.

The supplier must use the communication options specified here in order to ensure the safe exchange of data between both parties.



#### **4.4 Supplier management / evaluation**

ZEISS regularly conducts supplier evaluations based on the quality of the goods delivered and services rendered by the supplier; among other things, these evaluations are also considered when selecting suppliers and when considering further collaboration with the supplier.

The supplier evaluation is also the basis for the joint determination of objectives with the supplier in order to achieve continuous improvement. If these objectives are not achieved, and depending on the case in point, a supplier development program may be agreed in order to ensure that the supplier's planned delivery performance is achieved; alternatively, the volume of deliveries may be reduced or the supplier may even be black-listed.

The evaluation of all suppliers is based on the specified supplier-related logistics and quality data (hard facts).

- Adherence to deadlines
- Adherence to quantities
- VMI
- Complaint quota
- ppm

In the case of suppliers with the status of "Managed Supplier" within our SUCCESS program, criteria such as QM systems, health and safety/environmental management systems, logistics, price level, technology and commercial requirements (soft facts) will also be evaluated.

#### **4.5 The SUCCESS supplier management program**

ZEISS implements and develops suppliers according to the needs of the company using the SUCCESS supplier management program. The program takes into account current and future requirements and develops the suppliers accordingly. The goal here is to establish and maintain long-term partnerships.

#### **4.6 Supplier onboarding**

A potential partnership with ZEISS begins with ZEISS inviting the supplier to register itself in the Supplier Portal. This is where you create and manage your supplier profile using defined questionnaires. The more detail you provide in your supplier profile, the easier it will be for ZEISS to evaluate it. Once approved, your profile will become visible to all ZEISS departments, providing you with the opportunity to present your company across the entire ZEISS Group.





## 5 Logistics process elements

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### 5.1 Procurement types for goods deliveries

Goods are ordered by ZEISS using the following types of procurement:

#### **Individual order**

Individual orders make up the main share of all procurement types. In this context, the operative procurement process is performed via material scheduling. Various standard delivery types (see 5.3) are possible.

#### **Contract processing**

Within the framework of contract processing, the supplier is provided with the material for processing, in addition to the order. Once the service contract has been fulfilled, or the services have been rendered, the supplier shall deliver the ordered material to ZEISS.

#### **Consignment**

For the delivery of regularly required parts, a consignment stock concept can be employed upon agreement with ZEISS. The supplier will maintain a consignment stock with a designated service provider or at a ZEISS facility. In the case of appropriation by the warehouse, the goods are posted to consignment stores. The goods remain the supplier's property until a transfer posting occurs upon withdrawal. Then the credit memo is generated and paid. The material is removed in accordance with the FIFO principle (first in/first out).

A German tax number is required for EU suppliers. A tax number is not required for non-EU suppliers, since the customs duties on their goods have already been paid in full.

Consignment concept requirements:

- Supplier is able to deliver on short notice
- Shuttle transport is arranged and performed regularly
- No significant quality issues
- Empty containers are transported to the supplier regularly and put back into the consignment cycle

The entire consignment process is specified in a separate agreement between ZEISS and the qualified supplier.

### 5.2 Works and services

Works and services are commissioned by ZEISS by means of individual orders on the basis of specifications and service descriptions. For services which are to be performed on a recurring basis, a suitable framework agreement must first be concluded. In the case of services performed on ZEISS premises, the relevant rules, in particular those laid out in the Occupational Health and Safety Manual (OHSM), are to be observed.



### **5.3 Standard delivery types**

The following delivery types are currently available at ZEISS (for more detailed information, see Definition of terms):

- 1) Individual parts
- 2) Module
- 3) SET/KIT

### **5.4 Forecast**

Suppliers can request a non-binding forecast (up to 18 months) from ZEISS. Upon receiving the forecast, the supplier reviews it and reports any potential capacity bottlenecks to ZEISS immediately.

If significant changes are made to the production schedule, separate information will be provided by ZEISS. If production delays such as these occur, the supplier will receive a new deadline for the rendering of its services.

### **5.5 Order processing**

The supplier will be informed of ZEISS' needs via the agreed control concept in the form of an order.

Upon receiving the order, the supplier checks it for completeness, accuracy and plausibility, e.g.:

- Supplier name
- Part number
- Quantity
- Deadline
- Comparison of the version number on the drawing in the order with the version number of the currently valid drawing

If there are abnormalities, the ZEISS materials controller / purchaser is to be informed immediately.

On this basis, the supplier ensures that:

- Its sub-suppliers deliver the primary material accordingly
- It has enough production capacity for the provided demand forecast
- The deliveries are made to ZEISS on time

To this end, the supplier shall track orders internally on an ongoing basis and be able to provide information at any time regarding the status of production. The supplier shall also ensure that its sub-suppliers provide transparent order tracking.

Changes to replenishment times are to be communicated to the responsible ZEISS materials controllers in good time.

The supplier shall submit invoices to the client in the form of a PDF file via email to [invoice@zeiss.com](mailto:invoice@zeiss.com) once the goods have been received by the client.



## **5.6 Traceability**

The supplier must ensure that the products it delivers are traceable. The traceability system is to be presented to ZEISS during contract negotiations or in technical consultations and must be agreed upon with ZEISS. To ensure that the goods can be traced by ZEISS, they are to be clearly marked in accordance with the currently applicable ZEISS specifications.

### **5.6.1 Serial number**

A serial number requirement may be necessary for process-related or technical reasons and must be agreed upon between the supplier and ZEISS. The serial number must appear on the product label and the delivery note in accordance with the requirements laid out in the currently applicable labeling specification.

### **5.6.2 Batch number**

A batch number requirement may be necessary for process-related or technical reasons and must be agreed upon between the supplier and ZEISS. The batch number must appear on the product label and the delivery note in accordance with the requirements laid out in the currently applicable labeling specification.

## **5.7 Replacement part availability, maintenance and repair**

ZEISS expects the supplier to guarantee repairs, maintenance and replacement part availability for all rendered services for at least 10 years after the services are rendered, without limitation.

## **5.8 Communication and information flow**

### **5.8.1 Order confirmation**

If ZEISS requests an order confirmation, the supplier shall send the confirmation within three working days in accordance with the general terms and conditions. All changes to the order must be confirmed by means of a new order confirmation.

### **5.8.2 Overdue orders (supply backlog) and dunning process**

The supplier must immediately and proactively inform ZEISS if it expects to miss the delivery deadline. The supplier will be notified by ZEISS of overdue deliveries.

Regardless of the notice, the supplier will be considered to be late with the delivery once the agreed calendar date or determined period of time has passed.

### **5.8.3 Supply bottlenecks**

If the supplier recognizes that a delivery deadline or a delivery quantity it has agreed upon with ZEISS cannot be adhered to (e.g. because of technical issues, capacity bottlenecks, quality issues, etc.), it must proactively inform the respective materials controller / purchaser.

This information is to be provided immediately along with the reasons for the delay, its expected duration and impact, and measures to resolve the delay are to be taken immediately.



Express shipping and special transport generally require the consent of the materials controller / purchaser. The costs of the special transport are to be incurred by the party responsible for its need.

## **5.9 Customs and export control**

The supplier is obligated in any event to comply with the foreign trade regulations (these include in particular export control and customs regulations) that are applicable in the country of delivery, or as the case may be, in its domicile, and where applicable, the requirements of the United States of America. The supplier shall identify the corresponding classification (export list item, number of the European dual-use list, or export control classification number) and indicate the applicable statistical product number (HS Code) and the country of origin in all the documentation (delivery note, invoice, etc.) accompanying the services required for export approval or subject to US (re)export requirements. If the owed services involve technologies in terms of technical knowledge in the form of drawings, CAD data models, analyses or comparable records, which are subject to US export control regulations (EAE, ITAR), the European Dual Use Ordinance or Export Control List, the Supplier must point this out in writing to the Client before concluding the Framework Agreement.

## **5.10 Hazardous substances**

It must be ensured that the applicable requirements and laws are adhered to, and the necessary accompanying documents are present (mandatory datasheet), during acceptance, unloading and loading of hazardous goods and water-polluting substances.

## **5.11 Packaging**

Transport packaging must adhere to the requirements of the currently applicable packaging specification. In addition to these general requirements, ZEISS may also define item-specific requirements, in particular with regard to component contamination (see specification for component cleanliness).

## **5.12 Labeling**

### **5.12.1 Goods labeling**

The applicable requirements for labeling goods, and in particular the requirements of the currently applicable labeling specification for labels for packaging and delivery, are to be observed. Attached labels must be clearly visible and easy to reach so that they can be scanned.

### **5.12.2 Labeling and specifications for deliveries to ZEISS**

The supplier is responsible for properly preparing delivery documents. It shall ensure that all required information and data for transport logistics is provided complete and free of errors in the delivery documents.

The carrier must be given a shipping order and, if applicable, export documents.



Moreover, the requirements for preparing and attaching delivery notes defined in the currently applicable labeling specification must be adhered to.

## **5.13 Transport**

### **5.13.1 Incoterms**

The Incoterms agreed upon during the procurement process shall apply.

### **5.13.2 Transport conditions**

Special transport condition requirements, such as the transport of temperature and/or shock sensitive components, will be defined as needed by ZEISS during the transport and handling process and will be documented in the form of a packaging data sheet (see packaging specification [MU3]).

### **5.13.3 Unloading**

Goods are in general unloaded from the rear. If goods need to be unloaded from the side, this needs to be agreed upon with the respective materials controller.

### **5.13.4 Goods delivery**

The supplier must deliver on time and in the agreed quantities. The deadlines specified in the order are to be understood as the dates upon which the goods are received by ZEISS. The supplier must take the transport time into consideration in its scheduling, regardless of the agreed Incoterms.

Goods must be delivered to the delivery address/delivery location specified for each order item. If the order contains different delivery locations, a separate delivery note must be created for each location.

The contact persons and, if applicable, additional special delivery requirements for each ZEISS location are available under the following link:

<https://www.zeiss.de/corporate/zeiss-lieferanten/warensendungen-an-zeiss.html#ansprechpartner>

### **5.13.5 Labeling rush goods**

To ensure that rush goods can be identified, they must be labeled with a notice in accordance with the normal commercial labeling practices of courier/express/parcel service providers and carriers.



## 6 Supplier quality

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### 6.1 Contracts / Agreements

ZEISS expects its suppliers to have a Quality Management system in place (hereinafter called a "QM system") the content of which complies with the requirements of ISO 9001 (as amended).

### 6.2 Process control

Quality assurance in the production area must be ensured by means of continuous measurements and the use of statistical methods (e.g. SPC). The manufacturing and testing processes must be defined in a process plan and submitted to ZEISS upon request. The quality management system must be demonstrably focused on the "zero errors" objective.

The supplier shall ensure, via its own quality assurance measures, that the specifications, drawings and addressed standards are correctly complied and ensured by means of process-related inspections. Ship-to-stock (STS) delivery shall be agreed separately as part of a quality assurance agreement.

### 6.3 Complaint / concession process (special releases)

If the supplier determines that the product or process deviates from the specifications, the supplier must immediately notify ZEISS (purchaser) of the deviation by means of a written concession request and obtain the further written disposal (release, rework, scrap) after consulting with ZEISS. All deliveries must be clearly and unambiguously marked. A copy of the toleration request signed by ZEISS must be enclosed with the shipment.

If ZEISS determines that the product deviates from the specifications, the supplier will be informed of the complaint in accordance with the criticality of the deviation via a 3D, 5D or 8D report and will be asked to provide a statement.

### 6.4 Change requests

The supplier must inform ZEISS in writing in a timely manner of planned changes and a written change request must be submitted to ZEISS. The completed change request must be sent to the responsible buyer. If ZEISS does not consent to the change request in writing, the supplier is not authorized to make the change.

The results of the change process shall be binding upon the Parties only if they are documented in writing and signed by the duly authorized representatives for either Party.

It initially does not matter if the change request involves an error correction, modification or an extension. "Change" as defined in this document means any change, particularly in the following areas (see also QAA):

design/drawing changes

process changes



modifications to the product

changes in the production method

changes that could affect the form, function, performance, service life, usability, reliability or further processability of the product

changes to materials, substances and auxiliary materials

changes in the composition of the materials, substances and auxiliary materials

changes in formulations

replacement of or changes to purchased parts

changes in inspections, tests and measuring procedures

replacement of or changes in suppliers and/or subcontractors

replacement of or changes to the machines or systems required to manufacture the product

changes in or relocation of the production site

## **6.5 Environmental requirements**

The development of products and production procedures must be aimed at using only materials (incl. chemicals), technologies and equipment of which only minor environmental impact can be expected (if this is technically possible and economically justifiable). In particular, the conservative use of resources is to be considered, and it is expected that the requirements of the international environmental management standard ISO 14001 will be implemented.

Environmentally compatible product design is also focused on reusability and the possibility of the product being taken back at the end of its service life.

If hazardous materials – materials hazardous to the environment, or water pollutants – are used, the supplier must clarify whether environmental permits are required.

Proper disposal or recycling must be ensured.

## **6.6 RoHS**

The objective of the European RoHS (Restriction of Hazardous Substances) is to ban the use of problematic components in electronic equipment.

The substance ban in accordance with the current RoHS must be complied with. Conformity must be confirmed to Zeiss, e.g. through the CE declaration of conformity or the declaration of incorporation, by the first delivery at the latest.

In the case of incomplete RoHS compatibility, a list with the non-conforming components must be enclosed, stating the deadline for achieving RoHS conformity.



## **6.7 REACH regulation**

The REACH regulation contains prohibitions of "substances of very high concern" (SVHC). A REACH declaration of conformity must be sent to ZEISS before the first delivery. If limits are exceeded, the exact material designation (CAS number) and weight proportion must be disclosed to ZEISS.

## **7 Applicable documents**

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All specifications mentioned here (labeling specification - component identification requirements in the material flow; logistics / packing specification; and cleaning specifications) can be requested from ZEISS and made available to the supplier, if they have not been already. ZEISS will inform the supplier of changes to these specifications. Please use the currently applicable version of the specification.