Revision 03

Page 1 von 7

# TITLE: QUALITY ASSURANCE GUIDELINES

# INTRODUCTION

Dear supplier,

Constantly increasing customer expectations, global competition and cost pressure require the constant improvement of all products and services, as well as all processes and company procedures.

Customer satisfaction through quality and reliability in all aspects, a high level of innovation and global orientation are decisive factors for the success of Semsysco as a supplier of complex systems for the international semiconductor industry.

We receive the materials and components used for our products from our suppliers worldwide. The performance of our partners contributes decisively to our joint business success.

The "zero defect strategy" is a mandatory requirement, which can only be achieved and secured through the joint efforts of Semsysco and our suppliers.

Failure prevention instead of failure detection and continuous improvements in the entire process chain are indispensable requirements which we must and want to fulfil with the active support of our suppliers. Further standardization in the common supply chain will have to increase also in the future, so that we're able to continue to operate globally and to consolidate and further extend our market and technological lead.

SEMSYSCO assumes that the requirements described in this QA-Guidelines are known and that you as a supplier recognize them, fully take them into account, comply with them and also ensure their implementation in your supply chain.

With kind regards,

**Dominik Reiter** 

**Quality Manager** 

Revision 03

Page 2 von 7

## CONTENT

## **GENERAL REQUIREMENTS**

- 1. Score of application
- 2. Quality responsibility
- 3. Quality objectives
- 4. Management systems
- 5. Audits
- 6. Supplier evaluation
- 7. Personnel
- 8. Customer specific requirements
- 9. Contingency plan
- 10. Notification of defects
- 11. Complaints
- 12. Retention period

# PROJECT REQUIREMENTS

- 13. Feasibility study
- 14. Communication
- 15. Project planning
- 16. Inspection planning
- 17. Testing and measuring equipment
- 18. Status purchased parts
- 19. Packaging materials
- 20. Product or process changes
- 21. Special releases

Revision 03

Page 3 von 7

# **GENERAL REQUIREMENTS**

## 1. Score of application

The QA-Guidelines apply in addition to the provisions of the purchase contract with the supplier. Regional or project-specific agreements with suppliers may, depending on product or market requirements, concretize or supplement these general requirements and take precedence over them.

## 2. Quality responsibility

The responsibility for planning and realization of all activities to fulfil the SEMSYSCO requirements lies with the supplier. He is fully responsible for the quality of the product or material manufactured and delivered by him, including the services and deliveries of subcontractors.

With the announcement of this QA-Guidelines, SEMSYSCO's quality representatives are entitled to agree with the supplier on the measures necessary for quality capability and to continuously check the fulfilment with the guideline.

## 3. Quality objectives

Within the framework of contract fulfilment, the supplier committed to develop and consistently implement the "zero defect strategy" and to implement all necessary measures to achieve this quality objective.

## 4. Management systems

An effective quality management system, according to ISO 9001, is aimed for a long-term and successful cooperation with SEMSYSCO.

Similarly, an environmental management system (ISO 14001), an energy management system (ISO 50001) and an occupational health and safety system (ISO 45001) should be established in the long term.

The effectiveness of the QM-system must be proven at least by the following points:

- Continuous and verifiable improvement of processes, procedures, and products
- Improving the product quality
- Improvement of the delivery performance
- Effectiveness and efficiency at the implementation of corrective measures
- Improving communication
- Effective project management

The expiration of a certificate without planned recertification, must be communicated to SEMSYSCO, at least three months before the expiration date. The information about the withdrawal of a certificate must be sent to SEMSYSO without being asked.

## 5. Audits

If requested by SEMSYSCO and agreed with the supplier in advance, SEMSYSCO can audit fully affected products, processes, and parts of the affected QM management system. The audit can be carried out as a system, process or product audit and must be agreed in time before the planned execution. In the interest of cooperation, the supplier will be informed in advance, affected persons, especially contact persons, will be determined and all audit relevant information required for the organization of the audit will be exchanged.

Revision 03

Page 4 von 7

On the occasion of an audit the supplier is obliged to grant SEMSYSCO insight into the following areas:

- All manufacturing processes concerned
- All affected and influencing processes
- All quality assurance measures
- All organizational units concerned
- All documentation carried out within the quality management system

## 6. Supplier evaluation

SEMSYSCO evaluates the performance of suppliers at least once a year and monitors process quality by means of audits.

#### Evaluation criteria:

- On time delivery
- Quantity accuracy
- Number of complaints
- PPM
- Pricing
- Customer service
- QMS status
- Audit results

#### Classification:

- A Supplier ... Preferred supplier
- B Supplier ... Actions to improve delivery performance necessary
- C Supplier ... Blocked for new orders; Actions to improve delivery performance necessary

In case of a "C-classification" SEMSYSCO reserves the right to take special measures in coordination with the supplier. These can be a 100% inspection at the supplier's premises, inspections by external companies at the expense of the supplier, blocking of the supplier for new orders until the termination of the supply relationship with SEMSYSCO.

#### 7. Personnel

All employees (including temporary employees) with influence on product conformity and customer satisfaction must have the appropriate competencies and skills according to their area of responsibility. For employees with influence on the fulfilment of legal and official regulations, the supplier must have the necessary qualification certificates or the corresponding proof of on-the-job training available.

Employees with quality responsibility must know the consequences of errors (impact on SEMSYSCO and its customers).

## 8. Customer specific requirements

With each accepted order the supplier must implement the customer specific requirements of the respective SEMSYSCO customer, for which the delivered material or part is needed. The currently valid version of the customer's rules and regulations shall apply.

Applicable customer specific requirements will be communicated when placing the order, if not mentioned in the technical specifications.

Revision 03

Page 5 von 7

## 9. Contingency plan

The supplier must draw up contingency plans to maintain supplies in case of one of the following events:

- Failure of essential production facilities
- Interruption of supply of externally provided products, processes, and services
- Recurrent natural disasters
- Fire
- Interruption of supply systems
- Labour shortages
- Missing packaging
- Infrastructure disruptions (transport routes)

#### 10. Notification of defects

The period for the notification of defects (notice of defects) is fixed between the contractual partners at 14 days after receipt of the goods. Should this not be possible in the specified time due to unforeseeable circumstances, the quality control will be carried out by setting a reasonable grace period. Warranty claims regarding unrecognizable and/or hidden defects shall remain valid beyond this period.

## 11. Complaints

The Supplier has qualified personnel with the ability to apply problem solving methods quickly and continuously using factual data.

After the receipt of a complaint by SEMSYSCO, fault elimination measures must be initiated immediately, documented, and submitted in structured form in a timely manner.

If requested by SEMSYSCO, an 8D report must be submitted.

The 8D-report is provided by SEMSYSCO and must be used by the supplier as well, unless otherwise agreed.

The following deadlines must be observed for an 8D-report:

- Immediate measures (3D report) must be reported formless to SEMSYSCO within one working day at the latest.
- A preliminary 4D-report must be handed over to SEMSYSCO within two working days.
- An updated 8D-report, including the long-term corrective actions must be sent to SEMSYSCO within ten working days. In case the implementation of the corrective actions takes more than one month, a progress report, in the form of an updated 8D report, is due.
- A completed 8D report will be sent after confirmation of the effectiveness of the corrective actions.

The choice of the corrective measures to be implemented is left to the supplier, however, personal measures in the form of instructions, training and instruction are not accepted unless otherwise agreed. Corrective and preventive measures must always be implemented at product, process, or system level.

The complaint is only considered to be closed when SEMSYSCO accepts the feedback or the 8D report of the supplier and closes the complaint.

In the case of a justified complaint, SEMSYSCO reserves the right to claim a fee of 250,00 €, regardless of any failure costs / additional expenses incurred.

Revision 03

Page 6 von 7

#### 12. Retention period

The Supplier shall specify retention periods for documents and records which are based on the general statutory provisions.

SEMSYSCO demands a minimum retention period of ten years for all process and quality relevant specification and proof documents, against the background of the limitation periods of product liability claims.

## PROJECT REQUIREMENTS

## 13. Feasibility study

The supplier carries out feasibility studies as an essential part of his quality planning and evaluates the producibility of the requested product and the fulfilment of the specification by contributing his know-how together with the construction, production and sub-suppliers and if necessary, with the support of SEMSYSCO. This analysis also includes the non-product specific, economical and processable manufacturability (laws, procedures, materials, tolerances, parts, and features).

#### 14. Communication

The supplier provides qualified personnel for technical support in the context of discussions at customers' premises, in-house or at SEMSYSCO.

#### 15. Project planning

The supplier carries out, if required, a project planning, which guarantees based on the dates communicated by SEMSYSCO, a schedule and quality-conform process. The project plan must be presented to SEMSYSCO on request.

Deviations from the schedule must be communicated immediately to the respective SEMSYSCO project manager, supplier engineer or buyer.

## 16. Inspection planning

Based on the product specifications, the supplier must draw up a suitable inspection plan, which shows all the characteristics to be inspected with the associated inspection equipment and parameters.

Random sample inspections are permitted after coordination with SEMSYSCO.

Features to be checked or "check dimensions" can be found in the SEMSYSCO drawings and are marked as follows:

| XX | = check dimension

Test reports for "check dimensions" must contain at least the following information:

- Part name
- Part nr.
- Serial nr. (if applicable)
- Amount of measured/ checked parts
- Check dimension nr. / XX
- Used inspection equipment
- Tolerance/ parameters, according to specification
- Measured values/ Result of the test
- Date of the inspection
- Confirmation of the auditor

Revision 03

Page 7 von 7

The test protocols of the performed tests of "Check dimensions" must be enclosed with the deliveries or the delivery documents without being asked.

During planning, the expenditure for the performance of test activities as well as the training of the test personnel must be taken into account.

#### 17. Testing and measuring equipment

All testing and measuring equipment used by the supplier must be verifiably calibrated, verified or both.

Calibration must be carried out against national or international standards and can be carried out by external organizations (testing and calibration bodies) or on the supplier's own responsibility with appropriate means and expertise. Corresponding documents must be sent to SEMSYSCO as proof on request.

The test gauges provided by SEMSYSCO are property of SEMSYSCO and must not be changed or damaged.

If check gauges are used for the measurement of "check dimensions", they must be indicated on the respective protocol as used measuring equipment.

If the provided check gauges are damaged and are no longer suitable for the measuring purpose or are declared as unusable (e.g. due to changes in specifications) the supplier must report this to SEMSYSCO.

The measuring equipment must be suitable for the purpose and degree of accuracy of the monitoring and measuring activity. Measuring equipment must be marked according to its status (usability) and protected against changes and damages.

### 18. Status purchased parts

If the supplier places orders with subcontractors, the requirements of this QA-Guidelines must be implemented analogously along the supply chain. All other customer-specific, legal, and official features must also be passed on.

A list of subcontractors must be provided on request.

The use of sub-contractors capable of providing quality must be guaranteed. Development programs must be defined in case of non-compliance with the requirements.

#### 19. Packaging materials

The supplier is obliged to take back commercial packaging materials free of charge on request of SEMSYSCO according to the EU directive on packaging and packaging waste. This concerns wooden and plastic pallets as well as transport boxes made of wood, metal, and plastic. The timely removal must be carried out in mutual agreement.

## 20. Product or process changes

Product or process changes are subject to approval and must be reported to SEMSYSCO.

#### 21. Special releases

In case of deviations from the specification, a written special release by SEMSYSCO must be obtained before delivery. Without written special release the delivery is not allowed.

All deliveries, which are based on a special release, must have additional markings on all load carriers.