

# Quality Assurance Guideline for Suppliers QSL

Mass Production Products (Version 06/21)

Mandatory Agreement



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**BOSCH**

# Quality Assurance Guideline for Suppliers QSL (Quality Assurance Agreement)

Mass Production Products (Version 06/2004)

## Mandatory Agreement

**Robert Bosch GmbH**  
Robert-Bosch-Platz 1, D-70839 Gerlingen, Germany

– referred to as „BOSCH“ –

and

**SUPPLIER**

– referred to as „SUPPLIER“ –

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# Quality Assurance Guideline for Suppliers QSL (Quality Assurance Agreement)

## Preamble

This Agreement is an integral part of the delivery agreement with BOSCH. It shall apply correspondingly to the business relation between the SUPPLIER and companies within the BOSCH Group.

The subject of this Agreement is all products delivered by the SUPPLIER.

This Quality Assurance Agreement consists of mandatory requirements for the SUPPLIER. Individual quality assurance activities will be agreed by the BOSCH business divisions or plants and the SUPPLIER in an Individual Quality Agreement.

## 1 Supplier's Quality Management System

The SUPPLIER agrees to introduce and maintain a quality management system based on the International Standards ISO 9000 ff. with the obligation to set a zero-defect goal and to continuously improve his performance.

In addition, sector-specific requirements (e.g. ISO/TS 16949) of the individual BOSCH divisions apply for the quality management system (also refer to § 1 Individual Agreement).

## 2 Subsupplier's Quality Management System

The SUPPLIER also requires his subsuppliers to introduce and maintain a quality management system based on the International Standards ISO 9000 ff. with the obligation also for subsuppliers to also set a zero-defect goal and to continuously improve their performance.

BOSCH may demand documented evidence from the SUPPLIER showing the effectiveness of the quality management system utilized by his subsuppliers.

In the event quality problems should arise, the SUPPLIER shall enable BOSCH to conduct an audit at his subsuppliers.

## 3 Audits

The SUPPLIER shall authorize BOSCH to determine through audits whether his quality assurance activities meet the requirements of BOSCH.

After advance notification, an audit can be conducted as a system, process or product audit (also refer to § 4 Individual Agreement). The SUPPLIER shall support even short-term audit date requests.

The SUPPLIER shall grant BOSCH – and its customers, to the extent necessary – access to all plant areas, test departments, warehouses and adjoining areas, as well as access to quality-relevant documents. Reasonable restrictions imposed by the SUPPLIER to safeguard business secrets will be accepted.

BOSCH shall communicate the result of this audit to the SUPPLIER. If BOSCH considers corrective actions to be needed, then the SUPPLIER agrees to immediately prepare an action plan and implement it on schedule. The SUPPLIER shall notify BOSCH of all progress made.

## 4 Information and Documentation

If it becomes evident that agreements reached such as quality characteristics, schedules or delivered quantities cannot be met, the SUPPLIER shall notify BOSCH immediately. The SUPPLIER shall also notify BOSCH immediately of any deviations detected after delivery. To support a rapid solution, the SUPPLIER shall disclose all necessary data and facts.

The SUPPLIER agrees to seek approval of BOSCH prior to

- changing the production methods, sequence and materials (also at subsuppliers)
- changing of subsuppliers
- changing test methods/equipment
- relocating production sites
- relocating production equipment at the same site

and to furnish the quality documentation agreed upon in this connection.

The first three deliveries to each BOSCH site after SOP and after changes listed above must be identified in the delivery papers/package slips (also refer to § 2 Individual Agreement).

All changes made on the product and in the pro-

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cess chain shall be documented by the SUPPLIER in a product history, and shall be submitted to BOSCH upon request.

The SUPPLIER must have procedures for control of documents and data, and shall implement them effectively. This includes documents of external origin, such as standards and customer drawings, to the extent needed.

Documents must be retained for at least 7 years. Documents with special archiving must be retained for at least 15 years.

Records of incoming inspection (concerning purchased parts and other raw materials from subsuppliers), reliability and endurance testing, end of line testing and defect analysis, if applicable, must be retained by the SUPPLIER at least 24 months. The SUPPLIER shall grant BOSCH the right to inspect records upon request. In individual cases, BOSCH may require a longer retention period.

### **5 Agreements on Product History Documentation**

#### **5.1 Development, Planning and Release**

If the order placed with the SUPPLIER includes development tasks, the requirements shall be set forth in writing by the signing parties to the Agreement, e.g. in the form of specifications. The SUPPLIER agrees to conduct project management starting with the planning phase of products, processes and other cross functional tasks in the form of quality management plans, and to grant BOSCH the right of inspection upon request.

During contract review, the SUPPLIER shall examine all technical documentation, such as specifications, drawings, parts lists, CAD data, for feasibility upon receipt; the SUPPLIER shall notify BOSCH promptly of any defects and risks as well as improvement possibilities identified.

During the development phase the SUPPLIER shall apply suitable preventive methods of quality planning, such as a manufacturing feasibility analysis, reliability studies, FMEA, etc. The SUPPLIER shall take into account experience (pro-

cess flows, process data, capability studies, etc.) from similar projects.

Characteristics with special archiving requirements shall be determined by BOSCH and the SUPPLIER.

The SUPPLIER shall coordinate and document the manufacturing and test conditions with BOSCH for prototypes and pre-production parts. The goal is to build prototypes and pre-production parts under conditions similar to mass production.

For all characteristics the SUPPLIER shall perform process planning (work plans, test plans, operating supplies, tooling, machinery, etc.). For function and process critical characteristics the SUPPLIER shall review the suitability of the manufacturing facilities according to statistical criteria and shall document the results. Product quality is monitored with periodic audits.

Prior to starting mass production, the SUPPLIER shall submit initial samples of the product built under mass production conditions in agreed quantities and on schedule (also refer to § 5.2 Individual Agreement). Mass production may not be started until it is released by BOSCH.

#### **5.2 Mass Production, Product Identification and Traceability**

In the case of process disruptions and quality deviations, the SUPPLIER shall analyze the causes, shall initiate improvement measures and review their effectiveness.

If, in exceptional cases, the SUPPLIER is unable to supply products conforming to the specification, he must obtain a concession from BOSCH prior to delivery (also refer to § 5 Individual Agreement).

The SUPPLIER agrees to implement comments and ideas from BOSCH to improve product quality by modifying production and quality assurance activities, to the extent possible.

The SUPPLIER agrees to identify the products, parts and the packaging in accordance with agreements reached with BOSCH. He must ensure

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that identification of the packaged products will also remain legible during shipping and storage.

The SUPPLIER agrees to ensure the traceability of the products supplied by him. Measures must be instituted to ensure that if a defect is detected, the defective parts/products/batches, etc., are traceable and contained.

If BOSCH makes production and test equipment available to the SUPPLIER, especially equipment and fixtures related to deliveries, then they must be labeled as BOSCH property. The SUPPLIER is responsible for protecting this property from damage and ensuring proper function, maintenance and repair.

### 5.3 Delivery, Incoming Inspection

The SUPPLIER shall deliver products in suitable shipping containers – approved by BOSCH if this was agreed – in order to prevent damage and quality impairments, e.g. contamination, corrosion, chemical reactions (also refer to § 2 Individual Agreement).

BOSCH shall limit incoming inspection to externally apparent shipping damage and to confirmation of the quantity and part number of the ordered products, at least according to the shipping papers. Discrepancies are reported without delay.

The SUPPLIER must adapt his quality management system and his quality assurance activities to this limited incoming inspection.

### 5.4 Complaints, Corrective Actions

The delivered products are inspected by BOSCH in the normal course of business, and the SUPPLIER shall be notified promptly of any defects detected in the process. To this extent the SUPPLIER waives his objection to a delayed notification of defect.

The SUPPLIER then analyzes the defects without delay, with support from BOSCH to the extent necessary and possible.

Agreed quantities of the defective parts shall be returned to the SUPPLIER. He agrees to analyze each deviation and to notify BOSCH promptly of

the cause of the deviation, initiated corrective and preventive measures, as well as their effectiveness (also refer to § 5.1 and § 5.4 Individual Agreement).

If the supply of components not conforming to specifications should threaten to cause a production interruption at BOSCH or its customers, the SUPPLIER, in consultation with BOSCH, must seek a remedy through suitable immediate actions for which the SUPPLIER is responsible (substitute deliveries, sorting, rework, special shifts, rush shipment, etc.).

## 6 Quality Targets

The SUPPLIER is committed in the same way as BOSCH towards its customers to the zero-defect goal in business with BOSCH. If the zero-defect goal is not attainable in the short term, BOSCH, together with the SUPPLIER, shall set temporary upper limits for defect rates as an interim goal. The SUPPLIER shall propose and agree with BOSCH on improvement actions. If the defect rate is below the upper limit, this does not release the SUPPLIER from his responsibility to process all complaints and to proceed with continuous improvement activities.

The SUPPLIER's liability for defects or compensation claims due to defective deliveries is not affected by this Agreement.

## 7 Environmental Protection

The SUPPLIER commits himself to comply with all legal regulations regarding the environment, health and occupational safety, and to strive to avoid all negative effects on humans and environment by an adequate organization and realization of environmental protection in the company. For this, the implementation and further development of an Environmental Management System (EMS) according to ISO 14001 is expected. The BOSCH Standard N 2580 "Prohibition and Declaration of Substances" (Internet: [www.bosch.com](http://www.bosch.com)) is part of each delivery agreement.

BOSCH reserves the right to assess the level of implementation in the course of audits (also refer to § 3).

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### 8 Final Terms

Modifications and additions to this Agreement must be made in writing.

If terms of this Agreement should be entirely or partially invalid, then the applicability of the remaining terms is not affected; in this case, the

partners will agree on applicable terms that as closely as possible fulfill the commercial intent of the invalid terms. This also applies accordingly to possible omissions.

This Agreement is subject to German law excluding the rules on conflicts of laws. Place of jurisdiction is Stuttgart.

Gerlingen, 25 June 2004

City \_\_\_\_\_

Date \_\_\_\_\_



Robert Bosch GmbH  
Dr. M. Möllendorf  
Executive Vice President  
Corporate Quality Management



Robert Bosch GmbH  
Dr. U. Eichler  
President  
Corporate Sector Purchasing

SUPPLIER  
Company stamp