

# Quality Guidelines for Suppliers QGL 1

of Schunk Sintermetalltechnik, Gießen (hereafter SST)

## 1. Introduction

We strive for a cooperative, fair and long-term relationship to our suppliers.

We expect the following from our suppliers:

- fair prices
- consistent high-quality with a goal of „zero-defects“
- dependability in meeting delivery deadlines and schedules
- quantity reliability
- flexibility
- good communication,  
preferably in German, or alternatively in English
- problem solving through know-how, creativity and service.

The supplier shall comply with all statutory and governmental regulations and expressly undertakes to abide by relevant legal provisions and rules pertaining to environmental protection, workplace safety, accident prevention, and transport, plant and equipment safety.

The supplier is wholly responsible for the quality of the services rendered and the goods supplied.

The supplier shall ensure this quality through **controled** processes, series-accompanying inspections, **requalifications** and through its management system and shall, if appropriate or necessary, provide evidence thereof.

Orders may make reference to technical regulations which may also contain corresponding quality characteristics.

These may include the following :

- ⇒ drawings
- ⇒ purchase specifications
- ⇒ requirements specifications
- ⇒ references to applicable standards
- ⇒ product specifications and quality guidelines.

The supplier is to be a participant in the technical exchange and cooperation service for those technical regulations which are applicable to it. The supplier is to ensure that it manufactures in compliance with applicable technical and legal regulations at all times.

Furthermore, the Quality Guidelines of SST (QGL1) as well as any additional quality-assurance agreements (QAA) which may have been concluded contain specified requirements which the quality-management system of the supplier must meet.

## 2. Quality-Management System

The production of products at a reliably and guaranteed high level of quality requires an effective quality-management system.

SST strives to work with suppliers that can document at least one certification in accordance with ISO 9001.

From our suppliers we expect commitment and an orientation of the organization towards the goal of zero-defects as well as continuous development of the management system in the direction of ISO/TS 16949.

We require adequately qualified personnel to be employed for providing the goods and services that we order.

We also expect the quality-management system of a not-yet certified supplier to be described in a quality manual. Preferably, the QM documentation should be adapted to pertinent standards. The following standards are recommended for establishing a quality-management system:

- ⇒ VDA (German Association of the Automotive Industry)  
quality-management series
- ⇒ DIN EN ISO 9001 in its most current version
- ⇒ ISO/TS 16949 in its most current version
- ⇒ [Guidelines of the AIAG regarding:  
Production Part Approval Process; Advanced Product Quality Planning;  
Measurement System Analysis,  
Statistical Process Control and Potential Failure Mode and Effect Analysis.](#)

## 3. Initial Sampling

The supplier shall conduct first-sample inspections on the basis of VDA or PPAP Level 3. The documentation is to be done in German or English.

The following occasions require the provision of initial samples:

- new part
- new supplier
- changes in specifications
- changes in production conditions
- new production location
- long break in production of the product (> 3 years).

Samples must be manufactured under serial-production conditions. Any deviations from the specifications must be clarified with SST. The inspection results are to be calculated, recorded and published in accordance with applicable technical regulations. The inspection variables and values used and calculated are to be identical to those in the accompanying documents and listed under the same number as in the First-Sample Inspection Report.

For criteria that are not subject to a 100% inspection rate, the supplier shall document provisional process capability (minimum of  $Pp_k > 1.67$ ) for the characteristics that are to be specified with the submission of the initial sample.

The sample batch size for all criteria that are not subject to a 100% inspection rate shall be at least 50 parts.

The sample consignment is to be clearly marked with the label „Initial Sample“.

SST will give notice of the result of the initial sampling and shall, in the event of a positive assessment, grant approval for serial production. With the start of serial production and delivery, the procedure / process sequence chosen for the underlying initial sample shall become a binding part of the agreed quality standards. Changes shall only be permissible with the written consent of SST.

[The supplier shall conduct requalifications and shall provide documentation upon request.](#)

#### **4. Incoming-Goods Inspection at Schunk Sintermetalltechnik GmbH**

The supplier shall conduct its inspections in such a way that a technical incoming- goods inspection at SST can be omitted.

SST shall conduct an inspection for transport and packaging damage as well as for correct quantity. As a rule, no further inspections will be carried out.

If, however, incoming inspections are carried out, then they shall be on an event-related basis according to the „skip-lot“ method.

The scope of this inspection will be determined in consideration of further processing and function of the products being inspected.

If defective or non-conforming parts are discovered, the supplier shall be issued a notice of defects and, if necessary, a reference sample as well.

An approval of deliveries does not release the supplier from its responsibility for the function and reliability of its products with regard to technical specifications and generally accepted standards of engineering.

Defects which are not discovered until later processing stages at SST or at SST's customers shall also result in official complaint.

In the event of a complaint, the supplier shall determine the cause of the defect and shall take

measures to ensure a permanent remedy. The results of the examination shall be made known to SST, preferably in the form of an 8-D report. The Purchasing Department of SST shall be in charge of scheduling deadlines.

If the supplier is not able to correct the defects by the following delivery, then it shall immediately notify the SST Purchasing and Quality Departments thereof and suspend all further deliveries until further notice.

Products with authorized non-conformities are to be shipped separately to SST, and the shipping documents are to contain corresponding references.

## **5. Quality Assurance in Serial Production**

### **5.1 Process Capability**

In order to manufacture products with assured quality, process capability (minimum of CPk > 1.33) must be established. In the event of insufficient process capability or special demands being placed on the product, a full inspection must be carried out.

The supplier shall provide evidence of process capability for the characteristics agreed upon by means of statistical methods. Deliveries which were produced using the same production method are to be labeled by the supplier with batch numbers.

### **5.2 Certificates**

Upon request the supplier shall issue certificates (e.g. „3.1 Factory Test Certificates“ in accordance with EN 10204) which are to accompany deliveries. This shall also apply to tests and inspections that the supplier or its sub-suppliers carry out themselves.

### **5.3 Testing Equipment**

The supplier shall be equipped with all necessary testing equipment so as to allow the inspection of all quality characteristics that are specified in the technical documents.

In the case of specialized testing equipment, it is advisable to consult the customer and coordinate the use of equivalent systems. When selecting or designing systems, the supplier is to ensure that the testing equipment is capable of registering and recording the required characteristics. Likewise, this system must ensure the labeling, documentation and inspection cycles of the testing equipment.

### **5.4 Shipping**

The supplier shall use such packaging material so as to prevent the occurrence of transport and/or corrosion damage.

Reusable / recycleable packaging materials are to be given preference.  
Special packaging requirements are to be found in the order documents and observed.

Each packaging unit must be given an externally-visible labeling which identifies the material number and quantity. Additional requirements such as batch number, manufacturing date or inspection notices will be separately specified in the order documents.

## 6.0 Information and Labeling Requirements in the Event of Product Changes and/or Deviations

Unless otherwise specified, suppliers are required to inform SST of product changes and/or deviations from specifications.

In this regard SST is to be notified in such a timely manner so as to allow a formal approval process.

Prior to changes of the following:

- production methods, materials or vendor parts for the products;
- methods or equipment for testing and inspecting the products;
- quality-assurance measures;
- production capacities (contractions as well as expansions);
- production or processing locations;
- suppliers or
- the corporate structure of the supplier or its membership in a corporate group,

the supplier will inform SST early enough to allow for the coordination and implementation of any necessary measures (such as qualification / customer approval /adaptation of data sets etc.).

After product changes shipments may not be made until SST has been informed, consent to the specifications has been granted and SST has issued its approval.

The first shipment after product changes have been made is to be clearly and conspicuously marked as such.

If product deviations are discovered, the supplier can apply for a deviation authorization from the SST Quality Manager using appropriately substantiating documents.

If such authorization is granted, it shall be limited in quantity and/or duration unless otherwise specified. All deliveries with deviation authorizations must contain corresponding notices in the shipping documents.

The cause of the deviation is to be determined immediately and corrective measures are to be taken and monitored as to their effectiveness.

The supplier is just as obligated to provide a conspicuous and clear labeling of goods delivered and notifying SST in cases in which deviations occur in its production sequence which require unscheduled measures such as additional work steps or the repetition of work steps already carried out.

## 7. Documentation

The supplier is to keep records of which allow the documentation of any and all quality-assurance measures undertaken between the time of the placing of the order up to the delivery of the finished good being delivered. The archiving period for such records shall be at least five years.

In the case of parts which require documentation, the supplier is obligated to carry out the documentation. The basis for this is VDA publication „Documentation – Guidelines for Documenting and Archiving Quality Requirements“. The archiving period shall be at least 15 years.

The documentation must be done in such a manner as to allow the assessment of diligence used in providing the products should this be required (exonerating evidence).

## 8. Supplier Evaluation

SST reserves the right to carry out supplier evaluations based VDA and/or other criteria to the extent that these are reasonable and sensible. The basis for these evaluations shall be incoming goods received and notifications of defects. Other possible criteria include the following: quality, kind of or severity of deficiencies occurring, adherence to delivery schedules and meeting of deadlines, accuracy of quantities delivered, price level, pricing behavior, flexibility, communication, innovation, environmental philosophy and energy efficiency. Furthermore, SST reserves the right to carry out audits at the supplier's facilities upon prior consultation with the supplier. The supplier shall support SST with such audits by providing qualified personnel to assist.

## 9. Confidentiality Obligation with Assurance of Property Rights

In the course of negotiations and informative discussions carried out for the purpose of collaboration or reaching supply agreements with SST, the supplier shall receive access to information about SST's business secrets.

The supplier hereby undertakes to not make any information received from SST, such as information about machines and equipment, raw materials, semi-finished goods, auxiliary materials and finished goods, plans, drawings or know-how used or any other document - irrelevant of how the supplier gained such information- accessible to third parties and to only use such information within the scope and confines of the agreements mentioned above. This shall obligation shall also be legally binding on any legal successors of the supplier. The only exceptions to this policy are information and documents that are customarily given to customers within the course of offers and orders.

Moreover, the supplier undertakes to neither utilize the information received itself, regardless of the type of information, nor to allow the utilization of the information by third parties, unless written consent by SST has been granted.

This obligation regarding the confidentiality and utilization of such information shall also continue after the completion of the collaboration or upon the failure to conclude an agreement

as mentioned above to the extent that SST does not grant written consent to give access to such information, documents and the like to specified third parties, government agencies or other enterprises.

The supplier furthermore undertakes to ensure that all persons in its company or through it who receive such information or who could receive such information, regardless of the nature of the information, in connection with collaboration with SST, are subject to these obligations regarding confidentiality and utilization.

Finally, the supplier assumes liability that SST does not violate any patents or property rights of third parties, in Germany or abroad, through the sale of or use of or integration of the products delivered into its own products; the supplier shall indemnify SST from the damage claims of third parties.

If these obligations are violated, the supplier undertakes to compensate SST for any damages incurred.

## **10. General Purchasing Terms and Conditions**

In the event of breach of contract, notifications of defects, warranties and liability, the General Purchasing Terms and conditions of Shunk Sintermetalltechnik GmbH, which can be viewed at [www.schunk-group.com](http://www.schunk-group.com) shall apply.