



Quality Guidelines for Suppliers (QGS)

1 Introduction

We, K2 Systems GmbH, maintain a partnership-based, open, and fair collaboration with you as our supplier. Our joint goal is to ensure customer satisfaction and achieve our corporate objectives.

This guide serves as a reference and outlines our expectations for cooperation – from product development through incoming goods inspection and beyond. The “beyond” includes ESG criteria that are very important to us, such as the Code of Conduct, available at <https://k2-systems.com/code-of-conduct>.

We aim to achieve high-quality standards together. To that end, you need to have an appropriate quality management system (e.g., DIN EN ISO 9001), which serves as a shared guiding principle.

Your upstream suppliers should develop their QM systems accordingly.

2 Product Development and Introduction

During the product development and introduction phase, technical exchanges between you and us take place. We support you with our extensive technical experience.

In joint meetings, we define and discuss the required product specifications regarding functionality and technical feasibility.

If certain features prove to be unfeasible, both parties strive to find a suitable solution. This can be achieved, for example, by adjusting production tolerances, using appropriate fixtures, considering available manufacturing processes, or by design modifications of the components or products.

3 Quality Planning

High delivery quality is based on careful production, supported by robust in-process inspections and incoming/outgoing goods inspections. These help avoid and detect errors at an early stage.

Especially important are the functionally relevant inspection dimensions and the documented technical requirements specified in production drawings or purchase order texts.

Before the initial sampling, we offer the opportunity to coordinate with our quality assurance team to clarify critical quality requirements and ensure an optimal sampling process.



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4 Initial Sampling

Series approval is granted based on samples taken from the serial production process and corresponding documentation.

The prerequisites and required documents for a smooth approval process can be found at <https://k2-systems.com/en/downloads-supplier-documents/>.

Product approval is a fundamental requirement for supplying our company. Deliveries without written approval from K2 are not permitted. Please note that a purchase order or call-off alone does not constitute approval.

5 Deviation Request

In case of any deviations (e.g., geometric, chemical, physical, or functional), a deviation request must be submitted if the affected products are to be delivered. The relevant form can be downloaded at <https://k2-systems.com/en/downloads-supplier-documents/>.

Please complete the interactive form fully, sign it digitally, and send it in its original format to quality@k2-systems.de.

We will carefully review your request upon receipt. Deviation approval will only be granted if:

- The deviation(s) are described in detail and evaluated for impact,
- The root cause(s) are clearly identified,
- Corrective actions have been defined.

The deviation approval is valid for a limited period or defined quantity. Note: If the defined time or quantity is exceeded, we must reject the delivery. Further shipments are only allowed with an expressly granted extension.

For transparency, please enclose the approved deviation request with each affected delivery and its delivery note. In case of rejection, you will receive a written explanation.



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6 Performance Monitoring

6.1 Handling Defects

Delivery quality is an objective performance indicator. We distinguish between two types of defects:

- **Logistical defects**, arising from logistical handling.
- **Product-related defects**, related to the product or its packaging.

These are weighted differently and influence both supplier evaluations and the awarding of new projects.

Our aim is to learn from defects, resolve them efficiently, identify optimization potential, and prevent recurrence. We seek to strengthen our collaboration with you through partnership-based solutions for long-term success.

6.1.1 Defect Rate Calculation

$$\frac{\text{number of logistical defects}}{\text{total number of deliveries}} \times 100 = \text{logistical defect rate [\%]}$$

$$\frac{\text{number of product-related defects}}{\text{total number of deliveries}} \times 100 = \text{product-related defect rate [\%]}$$

$$\frac{\text{logistical defect rate} + \text{product-related defect rate}}{\text{total number of deliveries}} \times 100 = \text{overall defect rate [\%]}$$

Complaint rates are tracked monthly and analyzed internally. A significant increase may require intensified collaboration (see Section 6.6).

For the supplier evaluation, the defect rate from the previous year is considered. If the partnership is less than 12 months old, a shorter timeframe is used.



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6.2 Supplier Evaluation

The supplier evaluation helps derive strategies for the future development of our business relationship. The evaluation is conducted annually by the purchasing department.

Evaluation criteria include so-called hard facts and soft facts such as price & cost, delivery times, quality, cooperation & service, and sustainability & social responsibility. Based on these, we classify you as follows:

- **Preferred** – consistently high rating, no restrictions for new projects
- **Accepted** – moderately good rating, improvement measures required
- **Restricted** – poor rating, improvement required before new project assignment
- **Blocked** – unacceptable rating, no improvement despite extensive measures

6.3 Defect Handling Process

6.3.1 Procedure and Processing Time for Logistical Errors

The issue should be addressed by you within one working day. Your response must include complete written documentation. All communication takes place via email to einkauf@k2-systems.de.

6.3.2 Procedure and Processing Time for Product-related defects

Depending on the type of defect, you will receive a **complaint report**. Communication is via email to quality@k2-systems.de.

Depending on the error category, you will receive a complaint report from us. All written communication is conducted via email to quality@k2-systems.de.

If, from your perspective, the complaint is not justified, the reason for the rejection must be clearly documented in the complaint report and returned to us.

Complaint processing follows the **"1-3-14 Rule"**:

- **Within 1 working day**, suitable immediate actions must be taken to prevent further deliveries of defective products. Any circulating stock must be immediately quarantined and inspected. To avoid delivery shortages, we reserve the right to perform or outsource rework or sorting—after prior cost approval (see section 6.4). The immediate actions taken must be documented in the complaint report and emailed back to us within one working day.
- **Within 3 working days**, we expect a root cause analysis of the error and a plan or initiation of corrective actions. These must be documented in the complaint report and submitted to us.
- **Within 14 working days**, corrective measures should be fully and sustainably implemented. The final, completed, and signed complaint report must be returned to us within this timeframe.



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6.4 Stock Inspection and Rework

If a stock inspection becomes necessary, the following procedures are available:

- **Return to Supplier**
The affected goods will be blocked and returned to you for inspection. The value of the goods, along with all associated logistics and administrative costs, will be charged to you.
- **Re-inspection by K2**
The affected goods will be blocked and remain at our facility. Inspection and, if necessary, rework will be carried out by our team. Any inspection, rework, logistics, and administrative costs will be charged to you.
- **Re-inspection by You at K2**
The affected goods will be blocked and remain at our facility. Inspection and/or rework will be carried out by your staff with a K2 representative on site. All logistics and administrative costs will be charged to you.
- **Re-inspection at Our Customer's Site**
The affected goods will be blocked and remain with our customer. After prior cost approval, we will arrange or commission stock inspection at the customer's site. The resulting inspection, rework, logistics, and administrative costs will be charged to you.

The choice of the appropriate procedure and prior cost approval must always be coordinated with our responsible quality management representative and the designated purchasing specialist.

6.5 Quality Costs

We reserve the right to charge you for all costs incurred during defect resolution. Additionally, we will charge a processing fee of €150 for each complaint related to a repeat defect or in the case of multiple complaints overall.

In cases of deviations related to loading and packaging, we reserve the right to charge a flat fee of €400 to cover the resulting administrative and operational efforts.

All incurred quality-related costs will be documented in a debit note and sent to you upon completion of the case.



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6.6 Escalation

You will receive ongoing feedback regarding your performance—either from your purchasing or quality management contact.

In cases that significantly affect product approval, delivery quality, delivery timelines, or overall cooperation, team leads, department leads, and if necessary, senior management from both sides will be involved.

Our main objective is to achieve sustainable quality improvement through constructive and solution-oriented collaboration.

7 Final Note

Quality is one of the keys to long-term success and sustainable business relationships. By following the requirements and processes described in this guideline, you make a significant contribution to customer satisfaction and continuous improvement.

We value your cooperation and your commitment to high-quality standards. Let us work together to further optimize our processes and develop innovative, customer-focused solutions.

If you have any questions or suggestions, please do not hesitate to contact us—because quality is created through dialogue.

We look forward to a successful partnership.

K2 Systems GmbH