

Quality guidelines

RW Rohrabchnitte GmbH

Feld-Vorstmann-Straße 3
56170 Bendorf
Tel: 02622/9255 0
Fax: 02622/9255 18

*Quality guidelines for quality management
of production material*

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Quality guidelines

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Quality guidelines

1. Preamble

1.1 Scope of validity

These quality guidelines are valid for all goods and outsourced processes which are ordered or required from RW Rohrabschnitte GmbH.

It is assumed that the supplier fulfills the requirements. Any existing discrepancy to this guideline must be commented on quotation.

1.2 To our suppliers

As a supplier you are our partner. These quality guidelines should help us to pursue our quality planning to ensure undisturbed supplier relations with RW Rohrabschnitte GmbH.

The quality of your deliveries has an immediate impact on our products therefore you must aim for impeccable deliveries as agreed upon during the negotiations of the contract. This also applies for deliveries from your subcontractor.

An effective Quality Management System of minimum DIN EN ISO 9001 is mandatory to ensure deliveries are according to the requirements of RW Rohrabschnitte GmbH. A certification according to IATF 16949 is preferred. This Quality Management System should detect faults and deviations on time and remove the source quickly and for good.

RW Rohrabschnitte GmbH reserves the right to audit products, processes and quality management system.

This present guideline is part of our terms and conditions of purchasing and is in addition to the terms of the purchase contract.

Quality guidelines

2. Contract review

In the context of accepting the order the supplier reviews the contract which includes the following:

- Ensuring the producibility
- To adhere to deadlines
- To adhere to the quality requirements
- Completeness and clearness of the order

In case of any uncertainties with these requirements the supplier has to inform RW Rohrabschnitte GmbH before the order is accepted.

3. Quality planning

To guarantee a flawless and consistent product quality the following measures should be applied:

- Process capability study and machine capability study (PFU/MFU)
- Statistical process control (SPC)
- scheduled services and maintenance on production equipment
- Control of measuring and monitoring devices
- Documentation and evaluation of incoming goods, manufacturing and final inspection
- weak-point analysis
- Failure mode and effect analysis (FMEA)
- Environment Protection during process

The application of these measures should generally be carried out in one's own interest.

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4. Verification

4.1. General

The supplier has to make sure all quality relevant characteristics are properly verified.

The inspection intervals and the scope of inspection depend on the process capability. Inspections which are requested in technical documents are exempted. Any changes of these scopes of inspections are subject to a written approval of RW Rohrabschnitte GmbH.

4.2 in-process inspection

Critical and important quality characteristics have to be monitored and documented continuously during manufacturing.

Minimum requirements for capability indices:

CpK \geq 1,33

Cmk \geq 1,67

In case deviations are detected the reason must be identified, removed and recorded for corrective measures. These records are to be used for process improvements.

4.3. Final inspection

The supplier has to ensure that all delivered products fulfill the quality specifications.

For this purpose the type and extent of the capability process or specifications are depending on necessary final inspections.

4.4 special tests

Inspections that go beyond the usual serial inspections are special tests. These are i.e. material analysis, loading test and similar proceedings.

If such inspections are requested from the supplier i.e. the initial samples must be manufactured tested under serial production conditions.

The test results need to be recorded and retained for min. 15 years.

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4.5 non-conforming products

If Units or batches have been identified to be defective they have to be blocked immediately. And be marked separate from other stock. RW Rohrschnitte GmbH has to be notified.

4.6 rectifications

If products have been changed the supplier has to make sure that the amendments have no adverse effect on the quality of the product. (Tensile strength, measurements, corrosion, chemical composition)

If a rectification has changed the products RW Rohrschnitte GmbH has to approve the product.

4.7 Subcontractor

If the supplier assigns the order to a subcontractor, the supplier has to take care that these quality guidelines are implemented by the subcontractor. In case the subcontractor changes refer to point 8 "initial samples" in these guidelines.

4.8 Documentation

The supplier has to record the results of the tests. The safekeeping of the records of min. 5 years after the last delivery of supplier is essential.

For products with legal documentation requirements i.e. safety parts the statutory provisions should be adhered to. The archiving obligation for these products is 20 years.

The documentation is procured so that the traceability is clearly evident and accessible at all times.

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5. Shipping

The supplier chooses the packaging for the products. It is compulsory that the products are protected from damage, contamination, and adverse weather conditions. It may be necessary to pay heed to specific packing instructions.

All packages should have a label which is affixed and visible without having to rearrange the packing units.

6. Technical documents and amendments

Technical documents are forwarded to the supplier via the exchange service of RW Rohrabchnitte GmbH. The supplier makes sure that all relevant departments receive the valid documents and all invalid documents are collected. The supplier has to inform the subcontractor in the same manner.

A written approval from RW Rohrabchnitte GmbH is necessary if the supplier changes his own documents with an impact on the product. This approval is to be retained for proof.

7. Product audit

The supplier assures that valid specifications are fulfilled with regular product audits. The results of the product audits including the initiated measures are to be recorded

8. Initial Samples

Initial samples are products made and tested under series production conditions.

Reasons for initial sampling are:

- new products
- the use of new machinery
- changed technique
- the relocation of production
- Interruption in the supply for more than 1 Year
- after the supplier has changed a subcontractor

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The quantity of initial samples is indicated on the order.

The sample shipment is to be marked with „initial samples“. For the initial sample inspection report the forms according to VDA are to be used.

9. Environment protection

The supplier is committed to protect the environment and defines it in the company policy.

The environmental management system of the supplier has to comply with the national environment protection law.

The environmental pollution that occur when manufacturing should be reduced continuously and if possible removed according to the EU-eco-regulation.
The emphasis is on:

- Environmental sound disposal of rubbish (waste separation)
- Economical material usage
- Reduction of water consumption (water treatment)
- Reducing emission
- Recycling
- waste prevention
- use of environmental sound of packaging

10. Complaint

In principle the supplier has to answer complaints with the help of the 8D schema.

Here applies the following schedule:

- steps 1-4 within 2 working days (or as specified)
- steps 5-8 within 8 days

If the deadlines permitted cannot be met the supplier has to submit RW Rohrabschnitte GmbH a written statement.

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11. CIP

The supplier should review his development and implementation of measures geared to achieving continuous improvement of the processes.

RW Rohrabschnitte GmbH may request CIP-actions of individual processes which concern the own products.



Andreas Busch

General Manager



Armin Stork

Technical Manager