

0.1 Purpose

With this QAA the requirements of AS9100 are implemented.

If the supplier cannot meet one or more of these requirements, he must notify the Granacher GmbH Purchasing Department in writing in order to obtain appropriate exclusions.

0.2 Scope of application

This QAA applies to Ewald Granacher GmbH & Co. KG Präzisionstechnik, suppliers and their subcontractors.

The edition of the QAA valid at the time of the respective order shall apply Agreement (QAA) of Granacher GmbH is part of the orders placed and is therefore binding for all suppliers.

0.3 Terms / Abbreviations

QM	Quality Management
QAA	Quality Assurance Agreement
FAI	First Article Inspection
FMEA	Failure Mode and Effects Analysis

0.4 Responsibilities

Supplier:	Implementation of the requirements of this QAA
Purchasing:	Binding contractual partner of the supplier
QM:	Evaluation of suppliers - quality capability and verification of the practical implementation of special order-related quality- requirements.

1.) Purchase information for the product to be procured:

The configuration of the product or service to be delivered by the supplier to Granacher GmbH is described:

- through documents (drawing, data records, material test certificates, etc.)
- additional requirements mentioned in the order
- deviations from the documents specified in the order
- general standards or sets of rules, e.g. AS, EN, DIN, DVS, VDE, etc.

If supplier recognizes requirements not specified in the Granacher GmbH processing, but which are necessary for the specified or intended use as far as known, supplier shall notify Granacher GmbH of such requirements.

2.) Requirements related to the approval of product, process, procedures and equipment

The supplier shall check the order documents of Granacher GmbH to ensure that he can safely implement the requirements and that all deliveries and services provided by him correspond to the requirements as per order. He must plan and execute the production and service provision under controlled conditions.

Procedures, processes, production facilities, tools, programs and equipment must be qualified and released prior to their use and must be maintained and tested at certain intervals in accordance with procedural instructions.

The supplier shall carry out and document a suitable work planning in order to be able to prove the required work sequences and treatment processes. The planned production sequence shall be established by an initial sample inspection at the latest and may not be changed thereafter without the consent of Granacher GmbH.

In order to control remedial measures for risks and to safeguard possible sources of error, the supplier will use suitable state-of-the-art methods (e.g. FMEA, Fault Tree Analysis, etc.).

Technical equipment and documentation necessary for work processes must be clarified before the order is placed. The supplier shall implement appropriate fallback solutions, emergency plans and capacity safeguards. Consumer goods and consumables such as water, compressed air, electricity and chemical products must be monitored and controlled to the extent that they affect the quality of the product. Manufacturing and testing procedures must be verifiably documented and approved as planned or otherwise.

The product must be packaged in such a way that it cannot be damaged on delivery. If necessary, the product must be protected from damage by environmental impacts. If storage time limits have to be observed, this must be pointed out and the manufacturing date of the product must be indicated.

3.) Requirements for the qualification of personnel

Staff performing activities affecting product quality must have appropriate skills and experience. Appropriate records of training, skills and experience shall be maintained.

The technical equipment must be maintained and adjusted by qualified employees.

The persons employed for the special processes must be verifiably qualified for this.

In addition, it must be ensured that the personnel are informed about the contribution to product or service conformity, the contribution to product safety and the importance of ethical behaviour.

4.) Requirements for the quality management system

The supplier maintains a quality management system according to EN ISO 9100, but at least according to EN ISO 9001, which is certified by an accredited certification institute.

If these requirements are no longer applicable (e.g. due to withdrawal of the certificate), the purchasing department of Granacher must be informed immediately.

5.) Designation or exact identification and the respective editions of specifications, drawings, process requirements, test instructions and other applicable technical data

All documents and records must be marked and controlled with regard to their issue status and possible changes.

The current versions must be available for the execution of the work.

It must be ensured that documents remain easily readable and easily recognizable.

Records must be easily retrievable and accessible to the Granacher GmbH and the authorities for evaluation.

6.) Requirements for testing, examination, inspection and related instructions

The supplier shall subject his deliveries and services to a factory inspection (incoming goods, production, process and final inspection) and remedy any defects found in the process.

For drawing parts, the Granacher GmbH reserves the right to request a quality management plan if the quality management of the Granacher GmbH considers it necessary.

The supplier will carry out a suitable inspection planning (technical and scheduling).

Any tests carried out shall be documented by the inspector at a suitable place and date. The Granacher GmbH shall be allowed to participate upon request.

The supplier shall use suitable testing and measuring equipment and shall systematically verify compliance with the permissible tolerances of the testing and measuring equipment (calibration).

If there are special quality requirements by the customers of the Granacher GmbH which are important for the ordered performance of the supplier, these will be stated before the order and must be taken into account by the supplier.

7.) Requirements for first article parts

The First Article Inspection (FAI) is carried out according to AS 9102.

The purpose of the initial sample is to provide evidence that all technical design and specification requirements are correctly understood, assigned, verified and documented and that a process-safe series production is achieved.

An FAI shall be performed if required in the purchase order.

An FAI for drawing parts/specification parts shall be performed during the initial production. Deviations from this are to be regulated in the order / contract. A new FAI is required in the event of major changes to processes, tools or programs and in the event of an interruption of the delivery period of more than one year or in the event of relocation of the production facility.

If required, the FAI planning must be coordinated with the Granacher GmbH. The Granacher GmbH must then be informed two weeks before the FAI begins in order to allow her to participate.

FAI minimum requirements are:

- Inspection of the product against the drawing documents (e.g. material certificate)
- Verification of special processes (e.g. welding, soldering, gluing, heat treatment, surface treatment, etc.) e.g. by destructive / non-destructive testing
- Validation of jigs / gauges and product-specific tools (e.g. special keys, contour cutters, adapters, etc.) and verification by test reports.
- Validation of test- and application software for the production process (CNC and measuring programs).

8.) Requirements concerning the supplier's notification of defective products and arrangements for the approval of defective parts of the supplier by Granacher GmbH

Supplier shall take suitable measures to prevent the delivery of rejected or not repaired and rejected services to Granacher GmbH, either directly or indirectly.

Should it nevertheless become necessary to deliver deviating parts, this may only be done with a deviation approval by Granacher GmbH. This must be enclosed with the delivery in question.

Supplier shall take appropriate precautions to prevent the use and marketing of counterfeit parts.

9.) Requirements for notifying the Granacher GmbH of changes to the product and/or process definition and, where necessary, obtaining approval of the Granacher GmbH

Changes of the supplier to product or process definitions require the written consent of the Granacher GmbH. This applies in particular to all changes after execution of an FAI.

Deviations from the documents require a written approval.

10.) Right of access of Granacher GmbH, their customers, as well as the aviation authorities to all facilities related to the order and the corresponding records

The supplier grants Granacher GmbH and its customers as well as regulatory agencies, e.g. LBA, the right to convince themselves of the effectiveness of the supplier's quality assurance system on site and to participate in tests of the subjects of performance.

In the event of faults occurring, the supplier undertakes to actively cooperate in rectifying the fault and to make all necessary documents available for inspection without delay, if requested.

11.) Requirements for the supplier or service provider regarding the forwarding of the respective requirements of the procurement documents, including key features, if required, to subordinate suppliers

If supplier intends to relocate the order in part or in whole or to have it subcontracted, this shall require the consent of Granacher GmbH. In the event of subcontracting, Supplier shall also be obliged to pass on to the subcontractor all requirements placed on it.

When selecting subcontractors, the supplier must use the external suppliers specified or approved by Granacher GmbH, including those for procedures.

Supplier shall install and perform appropriate controls at direct or subsequent subcontractors, as well as at its own facilities, to ensure that the requirements of this QAA are met and to prevent the use of counterfeit parts.

At regular intervals, the supplier must evaluate the delivery performance of the external supplier, including processes, products and services and the punctual delivery performance. Verification measures regarding externally provided processes, products and services must be carried out in accordance with the identified risks. This shall include inspection or periodic review, as applicable, where there is a high risk of non-conformance, including the presence of counterfeit parts.

If verification activities are delegated to subcontractors, the requirements and extent of the delegation must be documented in writing by the supplier and monitored regularly.

When accepting products from the supplier, the supplier shall ensure that recognized statistical methods are used where applicable.

The supplier must ensure that his subcontractors only use the sources of supply approved by the customer for special processes.

12.) Confidentiality requirements

The supplier shall use all documents and knowledge received in connection with this agreement only for the purposes of this agreement and shall keep them secret from third parties with the same care as corresponding own documents and knowledge, if the other partner designates them as confidential or has an obvious interest in keeping them secret.

This obligation does not apply to documents and knowledge that are generally known or were already known to the partner at the time of receipt without the partner being obliged to maintain secrecy.

13.) Requirements for documentation

Traceability is required for all parts / services supplied, i.e. the product development process, the use or whereabouts of a product must be traceable by means of suitable records and, if necessary, part labelling.

All materials must be able to be documented and assigned at any time and without doubt with appropriate material test certificates.

It must be possible to prove the conformity of the product with the requirements at any time.

As a rule, the documentation must be available 30 years after delivery of the last part. This concerns the production order / running card, test reports, FAI's, factory certificates of all materials, measurement reports, delivery bills. Before destroying the documents and records, the supplier shall inform the Granacher GmbH and obtain a release for this.

Granacher reserves the right to adapt the QAA at any time due to customer or legal requirements. The supplier will be informed about the changes. The valid edition of the QAA is available on the homepage of Granacher GmbH at any time.

-----, -----

Place, Date

Company stamp / Signature
(supplier)

-----, -----

Place, Date

Company stamp / Signature
(Granacher GmbH & Co. KG)