Quality Assurance Agreement (QAA)

Version 5.0

between

ERDRICH Umformtechnik GmbH,

Site: Reiersbacher Str. 34, 77871 Renchen-Ulm;

Site: Über der Gebind 2, 99610 Sömmerda-Orlishausen;

and

Erdrich Umformtechnik s.r.o,

Červený dvůr 1130/39, 79401 Krnov

(hereinafter referred to as "Erdrich")

(the respective ordering site or respective ordering company is hereinafter referred to as "customer")

and

(hereinafter referred to as "supplier ")

Table of contents

1. Introduction

The products from Erdrich are used throughout the world in the automotive business.
Erdrich's importance and position on the global market depend to a great extent on the quality of the products.
The parts, materials, etc. and services provided by the supplier are integrated into the products from Erdrich.
The quality of the supplier's delivery and service has a direct impact on Erdrich's products.
Therefore, the supplier is required to maintain the goal of zero-defects and to optimize its products continuously.

This Quality Assurance Agreement (hereinafter referred to as "QAA") is designed to contribute to implementing a mutual quality and environmental strategy between the Erdrich Group (hereinafter referred to as "Erdrich") and its suppliers.

2. Area of application

This QAA specifies the quality and environmental requirements for all deliveries and services in the prototype, pre-series and series phases and spare parts supply (hereinafter referred to as "deliveries") provided by the supplier during its term for Erdrich.

3. Principles of quality and environmental management

3.1 Quality management

The supplier is responsible for the quality of the deliveries it provides to Erdrich. Therefore, it must have a quality management system in place suitable for the automotive business.
Thus, the supplier is required to maintain and continuously apply a quality management system that is certified at least according to DIN EN ISO 9001 (most recent version).
The requirements of the DIN EN ISO 9001 are a prerequisite and will, therefore, not be further defined in this QAA.

The supplier must ensure that its quality management system also comprises the so-called automotive minimum requirements described below in this QAA.

The supplier will continually improve its quality management system towards the requirements of IATF 16949 (respectively most recent version).

3.2 Environmental management

Erdrich expects its suppliers to demonstrate environmental awareness by exercising the utmost care with respect to the environment. It is recommended that an environmental management system is introduced, and in the best-case scenario, it should be certified according to ISO 14001.

The supplier is required to implement sustainable resource management.

4. Quality management system and its processes

4.1 Product and process conformity

The products from Erdrich are used all around the world.
Materials, parts, etc. used in the production provided by the supplier and the processes used for production must comply with all applicable legislation and government regulations (especially regarding environmental protection and safety).

4.2 Management of product-safety related products and processes according to IATF 16949

The supplier is required to have all of the processes for the management of product-safety related products and manufacturing processes in place stipulated in the IATF 16949 (respectively most recent version).

4.3 Product safety & conformity representative

The supplier appoints a product safety & conformity representative (PSCR) responsible for implementing the requirements specified in this QAA and who is available as a contact person for Erdrich.

5. Corporate responsibility

The ten principles of the United Nations Global Compact Initiative must be actively implemented. For more information see https://www.unglobalcompact.org/what-is-gc/mission/principles.

6. Actions to handle risks and opportunities

6.1 Risk analysis

The supplier must use suitable preventive risk analyses. The minimal requirements are carrying out a manufacturing feasibility analysis (see Section 8.1.1) and creating product FMEAs and process FMEAs.

6.2 Contingency plans

The supplier is required to create contingency plans (for both company-related and product-related). Each contingency plan must establish all measures that enable the supplier to maintain product supply even in case of an emergency.
Each contingency plan must illustrate the possible events that could lead to an emergency such as machinery defects, labor shortages, information security, interruption from sub-suppliers, power outages, etc. including the required contingency measures.
Each contingency plan must be reviewed for effectiveness and, if necessary, revised annually. The contingency plans must be submitted to Erdrich upon request.

7. Documentation and record retention requirements

The supplier must maintain records related to all of the quality assurance measures (hereinafter referred to as “documentation”) defined in this agreement.

This documentation and initial samples, prototype parts, and reference samples must be retained for a period of 15 years after the series production has ended (see VDA Volume 1).
Longer retention periods are recommended, considering the limitation periods for product liability claims.
The supplier will allow Erdrich to access this documentation upon request.

8. Product and process quality

8.1 Product and process development

8.1.1 Assessment of the manufacturing feasibility

Upon receipt, the supplier must review all technical documents such as specifications, drawings, etc. (hereinafter referred to as “technical documents”) provided by Erdrich in connection with an inquiry, order, and/or a development or supply contract. The supplier must contact Erdrich immediately if the product requirements defined in the technical documents cannot be realized or contain descriptions that are incorrect, unclear, or incomplete.

The supplier must create a manufacturing feasibility analysis according to IATF 16949 (respective most recent version). In doing so, the supplier must review the manufacturing feasibility of the product and/or process in a multidisciplinary team based on the provided technical documents. The analysis also includes the study of the economic and process capability of the manufacturing feasibility and the required capacity and resources.

The manufacturing feasibility analysis is a prerequisite for the placement of a contract/order.
The result of the manufacturing feasibility analysis must be documented. Feedback is provided with the form “Manufacturing Feasibility Analysis” (see www.erdrich.de -> Suppliers).
By submitting an offer to Erdrich, the supplier confirms the product's technical feasibility for which a quotation was requested.

8.1.2 Special characteristics

Special characteristics require special consideration since deviations to these characteristics can impact product safety, life time, assembly capability, function or quality of subsequent manufacturing steps and legal provisions.

Special characteristics are specified by Erdrich. If specifications are missing for the special characteristics, the supplier must independently select the product and process characteristics that are expedient for the product quality and process assurance. These result from the risk analyses conducted by the supplier, e.g., from product and/or process FMEAs.
The supplier must identify the respective special characteristics in all relevant product and process documents (e.g., drawings, FMEAs, risk analyses, test and production control plans, work instructions, material test certificates, labels in case of D-characteristics), and must pay particular attention to them and monitor them in all relevant planning steps.

Special characteristics must be statistically monitored. Provided there are no other specifications, the capability ratings, according to IATF 16949 (respective most recent version), apply.

8.1.3 Prototype program

For prototype parts, a prototype test report must be submitted with each delivery and in case of changes (index/part number).
For prototypes and pre-series parts, the manufacturing and test conditions must be coordinated between Erdrich and the supplier and documented. The objective is to manufacture the parts under conditions that most closely resemble the actual series conditions.

8.1.4 Product approval process (production process and product approval)

Production process and product approval procedure

The supplier must establish, implement, and maintain a production process and product approval procedure conforming to requirements defined by Erdrich. The production process and product approval is carried out based on the production process and product approval procedure (PPA) of the VDA Volume 2 in the respective most recent version or according to the production parts acceptance procedure PPAP of the AIAG.
A series delivery may only take place following a production process and product approval from Erdrich.
The production process and product approval does not release the supplier from the duty to deliver products that are free from defects and, in particular, products that comply with the drawing specifications. In particular, Erdrich is authorized to issue a complaint at a later date for deviations to specifications that were not determined at the time of the production process and product approval.

Initial sampling

Initial samples must be manufactured under serial conditions (machine, system, operating resources, test equipment, series machining conditions) for the production process and product approval procedure.
Erdrich will define the sampling requirements and the number of initial samples to be manufactured and tested.
The manufacturing and test conditions must be coordinated between Erdrich and the supplier. The supplier must document the compliance of these conditions. The test results of all defined characteristics must be documented in an initial sample test report.
All external laboratories used must be accredited according to ISO / IEC 17025 (or nationally-comparable).
The initial samples must be delivered according to the order documents. These parts must be clearly labeled as initial samples and contain information on the manufacturing site.
Assemblies, including the individual parts, manufactured according to an Erdrich/customer design, must undergo an initial sample inspection and submitted to Erdrich.

Initial sample documentation

The initial sample documentation must be delivered at the same time as the initial samples. Initial samples for which no initial sample documentation is submitted cannot be processed; consequently, they will be rejected.
In case of deviations, the supplier must obtain written approval from Erdrich prior to delivery and include it with the initial sample documentation. Erdrich will not process initial samples that indicate a deviation for which there is no deviation approval.

Initial samples according to data records

Measurements must be conducted according to the valid 2D/3D data model. The number of measuring points must be selected, ensuring that all geometric data is reliably defined. Details of the model and measurement must be agreed upon with the responsible quality project manager (QPM) from Erdrich.

Material data recording
The material data recording is a component of the initial sampling. The data entry is carried out in the international material data system (IMDS).

Process acceptance
The supplier conducts a process acceptance upon request by Erdrich (if necessary, including Run@Rate). Erdrich is authorized to accompany the process acceptance and the Run@Rate procedure.

8.2 Product and process quality assurance

8.2.1 Production control plan (PCP)

The supplier must establish a production control plan (hereinafter referred to as “PCP”). The PCP is a planning tool and must derive from the FMEA. All special characteristics that are quality-relevant and defined by Erdrich must be included in the PCP. The creation of the PCP takes place in a multidisciplinary team and comprises the incoming goods inspection, initial, intermediate, and last part tests and re-qualification tests.
Initial part tests are conducted with each new manufacturing order; last part tests must be conducted at the end of an order. The results and experiences of similar processes and products must be taken into account in the PCP. The PCP must be created for the pre-series and series phase. The supplier must also generate a PCP for the prototype construction, if requested by Erdrich. The process suitability must be verified for all test and measurement types defined in the PCP and for all test and measurement systems listed in the PCP. For this purpose, measurement system analyses must be conducted at least for all of the critical and special characteristics according to the standard procedures of the AIAG or VDA and submitted within the scope of the PPA or PPAP.

8.2.2 Total Productive Maintenance (TPM)
The supplier must develop, introduce and maintain an effectively planned total system for the predictive and preventive maintenance (TPM) of machines and equipment with the following minimum requirements:

- planned maintenance activities;
- packaging and protection of the equipment, tools and measuring devices;
- availability of the spare parts for the most significant manufacturing equipment;
- documentation, evaluation and improvement of the maintenance objectives.

8.2.3 Management of production tooling and manufacturing, test, and measuring equipment
The supplier must carry out the tests with calibrated, suitable, and reliable measuring instruments that must be designed to ensure that all contractual quality characteristics can be tested. The test equipment must be monitored in defined intervals to ensure they are in working order and ready to use at all times.

The supplier must calibrate all test, measuring, and production equipment in regular and suitable intervals; this calibration must be verified. If such calibration is outsourced to external calibration companies, verification of these companies' accreditation is required.

The supplier is required to verify that Erdrich-owned or Erdrich customer-owned tools, manufacturing equipment, and test/inspection equipment are permanently marked in a visible location so that the ownership and application of each item can be determined.

8.2.4 Identification and traceability
By applying suitable production identification measures, the supplier guarantees the traceability and seamless proof of quality for all materials, manufacturing processes, and products. This includes compliance with the FIFO principle in the entire delivery chain.
Traceability must be designed so that if faults or defects are detected, it is possible to localize the faulty or defective products within one workday to at least the corresponding cargo carrier.

8.2.5 Re-qualification test
If not otherwise agreed, the supplier must verify a re-qualification once a year, corresponding to the original initial sampling scope mentioned above. The re-qualification is to be recorded as a component of tests in the PCP.

The supplier conducts a re-qualification automatically and provides the documentation to Erdrich upon request.

8.2.6 Process monitoring using CQI assessments

If the supplier provides CQI-relevant services, the supplier is required to comply with the requirements of the AIAG regarding the evaluation of technical processes through annual “CQI Assessments” (Continuous Quality Improvement) at its facility and within the delivery chain. The results of the respective updated CQI assessments must be made available automatically to Erdrich in the form of a cover sheet.

8.2.7 Change management

The trigger matrix applicable for the PPA procedure in VDA Volume 2 (hereinafter referred to as “trigger matrix”) applies.
In case of changes according to the trigger matrix (hereinafter referred to as “change”), a (new) manufacturing feasibility analysis and
initial sampling according to Clause 8.1.1 and Clause 8.1.4 are required.
An intended change must be promptly indicated prior to the scheduled implementation date. A change may only be implemented following prior approval from Erdrich.

8.2.8 Deviation permit

The supplier may only provide Erdrich with products that do not have any quality deviations. Only in exceptional cases may products be delivered to Erdrich with quality deviations. The prerequisite is that the respective Erdrich plant has issued the supplier a delivery release in the form of a deviation approval prior to the delivery.
If products with quality deviations have already been delivered to Erdrich, the supplier must inform Erdrich immediately of such deliveries in writing.
The cause for the deviation must be analyzed, improvement measures must be initiated, and their effectiveness must be reviewed.
The deviation approval must be indicated on the delivery papers. The cargo carriers must be identified accordingly.
A deviation permit issued by Erdrich does not release the supplier from liability.

8.3 Control of externally provided processes, products, and services

The supplier is responsible for the quality of its purchased deliveries and services and the development of its suppliers, sub-contractors, and service providers (hereinafter summarized as “sub-suppliers”).
The supplier must conclude agreements with its sub-suppliers according to this QAA to ensure the consistency of the quality measures and systems.
The supplier is required to verify the effectiveness of the quality systems of its sub-suppliers and must incorporate a “second party” audit process in its supplier management.
Erdrich can request verifications from the supplier confirming that the supplier has verified the effectiveness of the quality management system at its sub-suppliers.
If quality problems occur that can be traced back to the sub-suppliers, the supplier is required to arrange an audit at the sub-supplier for Erdrich.
The supplier is liable for the negligence and the intent of its vicarious agents and its sub-suppliers and sub-contractors as well as for its own negligence or intent.

9. Performance evaluation

9.1 Statistical process control

The supplier must analyze its processes and process procedures continuously, conduct suitable corrective actions, maintain and improve the process capability, and meet all requirements for a zero-error demand.
Process capability studies serve as a standard for the quality capability of the processes. The supplier must introduce suitable assurance measures for all special characteristics and, if applicable, further agreed-upon test characteristics and provide them to Erdrich upon request.
Provided Erdrich does not have any further higher-level requirements, the following limits apply as verification for the process capability:

- Machine capability: CmK ≥ 1.67
- Preliminary process capability: PpK ≥ 1.67
- Long-term process capability: CpK ≥ 1.33 with continuous improvement.

Machine capability studies must be carried out within the scope of the sampling. The supplier documents the process capability in the current series and provides it to Erdrich upon request.
The capabilities are determined according the Erdrich specification based on either the VDA Volume 4 or AIAG handbook SPC. Requirements deviating from the process capability or process capability index will be agreed upon separately.
If the process capability cannot be maintained, the supplier must immediately notify Erdrich and carry out 100% inspections to prevent defective parts from being delivered.

9.2 Internal Audit

The supplier must have an internal audit process in place. This process must comprise the development and implementation of an internal audit program covering the entire QM system, including the performance of QM system audits, process audits in the production and product audits.

9.3 Audit at supplier

Erdrich is authorized to determine whether the supplier maintains the agreed-upon quality assurance systems using a product and process audit. Audits are carried out following prior notification and consultation.
The supplier must grant the employees of Erdrich, at ordinary hours of business, the right to access its premises as well as the right to inspect the quality-related documents and the information necessary with regard to the deliveries.
The supplier agrees to allow Erdrich-customers to participate in such an audit.
Audits conducted by Erdrich do not release the supplier from its responsibility to provide Erdrich with deliveries free from defects.
Erdrich informs the supplier of the audit results. If Erdrich deems that requirements are necessary, the supplier must create an action plan within the period set forth by Erdrich and implement this action plan accordingly.
The supplier is required to agree on appropriate provisions with its sub-contractors, to audit its subcontractors, and to ensure that Erdrich may participate in an audit of a supplier in cases which justify such involvement.

10. Incoming goods inspection and actions to be taken in case of complaints and defects

10.1 Incoming goods inspection

The supplier is required to carry out an incoming goods inspection. This inspection should be carried out according to the agreed-upon inspection plans.
After the goods are received, Erdrich inspects all products on a random basis for identity and quantity (through comparison of packaging markings and delivery documentation with the order) and externally visible transport damages. Further inspection obligations do not exist. Erdrich notifies the supplier immediately of any detected defects. In this respect, the supplier waives the objection of a delayed complaint.

10.2 Actions to be taken in case of complaints and defects

Each time a product is found to be defective, a complaint will be created through a test report.
After receiving the complaint, the supplier must notify Erdrich, in the form of an 8D report, of all actions (e.g., immediate actions, mid-term and long-term corrective actions). Provided no other specifications are documented, a 3D report must be sent to Erdrich within 24 hours after receiving the complaint. The final 8D report must be submitted at the latest after 10 working days.

When carrying out the cause analysis, the supplier applies suitable methods (e.g., Ishikawa cause and effect diagram, 5-Why, No trouble found (NTF) according to the VDA version Defective Part Analysis Field). The supplier is responsible for monitoring the effectiveness of mid- and long-term actions. The fault that has occurred must be reevaluated in the FMEA process. The PCP must be revised accordingly. Erdrich reserves the right to review the effectiveness.

11. Term / written form / applicable law / place of jurisdiction

This QAA is valid indefinitely. Each party is entitled to terminate this QAA by submitting with a notice of 12 months to the end of the calendar year. A notice of termination must be in writing.
The termination of this QAA does not affect the continuation of the validity of the contracts, framework orders, nominations, etc. concluded under this QAA between the parties. The provisions of this QAA continue to apply to such agreements until the end of their respective terms. If the supplier begins work during the term of this QAA that is relevant for a later series order (e.g., development work, product and process revisions, etc.), the provisions of this QAA also apply to this order that was issued later in respect to the series.

If a provision of this agreement should be invalid, the effectiveness of the remaining provisions of this agreement will not be affected. The parties are required to replace any invalid provisions with supplemental agreements that most closely satisfy the economical result of the invalid provision.
Any changes or amendments to this QAA must be in written form. This also applies to this written clause.
The place of jurisdiction for disputes related to this QAA is the Erdrich business headquarters.
This QAA is subject to the laws of the Federal Republic of Germany. The United Nations Convention on Contracts for the International Sale of Goods from 04/11/1980 is not applicable.

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Place, date

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Company stamp, signature
- Erdrich -

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Place, date

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Company stamp, signature
- Supplier -