

Date: 23.10.2017

## Quality Assurance Agreement



# Quality Assurance Agreement

between MT Aerospace AG  
(hereinafter referred to as "Client")

and

its Supplier  
(hereinafter referred to as "Supplier")

**Supplier:**

**Client:**

MT Aerospace AG

\_\_\_\_\_  
Supplier name

\_\_\_\_\_  
Supplier number (internal)

\_\_\_\_\_  
City

\_\_\_\_\_  
Date

\_\_\_\_\_  
City

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

Amendment: \_\_\_\_\_

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# 1 General Information

## Purpose and Area of Application

This Quality Assurance Agreement (hereinafter referred to as QAA) is the legally binding stipulation of the technical and organizational framework conditions between the Client and the Supplier in relation to all deliveries to the Client.

The choice of a particular Supplier essentially depends on the Supplier's quality capabilities. The Supplier is exclusively responsible for the quality of the supplied products / service(s) performed.

The QAA is a fixed component of the Client's purchasing content and it augments the stipulations of the order and the standards, regulations, technical documentation and customer-specific requirements related to the object of the order. Legal or contractual rights of the Client are not subsequently restricted or changed through the acknowledgement of any documentation or written notifications from the Supplier within the framework of this agreement.

This QAA applies for all products to be supplied and processes to be carried out. Applicable legal or contractual regulations (especially order, contract and frame contract) apply prior ranking to this QAA.

The primary objectives are the safety of aviation, aerospace and the satisfaction of our customers.

Only by working with our Suppliers it is possible to comply with the requirements of our customers and government and legal stipulations, as well as to guarantee the fulfillment of the quality standards that apply throughout our company. This also means that, working together with the Client, the Supplier consistently improves its products and processes in order to further develop its quality standards.

The conclusion of this QAA is an indispensable step for the joint future business relations between the Client and the Supplier.

In general, the terminology according to the ISO 9000 family applies in the absence of explicit provisions to the contrary.

## **2 Quality Management System**

### **2.1 Requirements on the Quality Management System**

The Supplier must be capable of verifying valid certification for the duration of the business relationship between the Supplier and the Client. The certification process must have been conducted by an accredited certification organization.

Certification in accordance with ISO 9001 is required for classification as a qualified Supplier for the Client.

For development and production operations companies certified in accordance with EN 9100 will be privileged.

The Supplier's management must obligate the company to the continuous improvement of its quality and products. Its QMS must be designed to recognize risks, avoid errors by means of analyses and to identify and remove the sources of errors.

In exceptional cases special agreements can be made with the Client.

### **2.2 Updating Certifications**

The Supplier must present its certificates to the Client's Purchasing Department and must provide notification that such have been updated without delay after expiration or in the event of the cancellation of a certificate. An invalid or cancelled certificate can result in the Supplier being excluded from the list of qualified Suppliers.

### **2.3 Inspection of the Quality Management System**

The Supplier's quality management system will be evaluated by the supplier quality assurance of the Client.

The Client has the right following timely notification and agreed appointment with the Supplier to inspect the Supplier's compliance with the customer requirements. In this regard the Client reserves the right to execute acceptances and monitoring (audits) of the Supplier at its discretion (on demand after acknowledge of a non-disclosure agreement). This does not release the Supplier from its quality obligations. In the event of significant quality defects an inspection can be conducted immediately. The Supplier must grant the Client's employees as the circumstances require also accompanied by customers as well as the appropriate official authorities access to the product-related areas of all facilities and to all product specific and quality-related documents. In case of quality problems due to a supplier of the Supplier the Client has the right and possibility to perform an audit at this supplier.

### **2.4 Supplier Evaluation**

Each Supplier underlies the Supplier Evaluation. The criteria are as follows:

- On time and on quantity deliveries
- Order confirmation within a maximum of 10 work days
- Supply of certificate with delivery of goods or in front by e-mail
- Statement on control reports in case of complaints within a maximum of 10 work days

In case of negative Supplier Evaluation the Client will ask for actions to improve performance which have to be defined and implemented immediately. In case of absence of the improvement of a critical Supplier performance a blockage as qualified Supplier can take place which means a blockage of further orders.

### **3 Procedures**

#### **3.1 General Information**

In accordance with the documentation agreed in writing, the Supplier has the full responsibility for the flawless execution of the products and services it supplies to the Client. The supplier ensures the compliance to this QAA. This applies also for the orders of the supplier.

A manufacturing feasibility analysis is to be executed in a verifiable manner within the framework of the offer preparation. The manufacturing feasibility analysis ascertains if the orders are realizable regarding the demanded quality and cost objectives and the date of delivery (including first article delivery date). For drawing parts the manufacturing feasibility has to be confirmed on the drawing of the Client. Risks regarding the manufacturing of the product have to be analyzed, recorded and reduced due to appropriate actions. All open points must be clarified before the offer is submitted. This must be repeated in the event that changes are made to the product.

The advisory activities undertaken by the Client's employees do not release the Supplier from compliance with all of the obligations emerging from the contracts between the Supplier and the contractor.

Staff has to be trained for the processes they perform. For special production or inspection processes the supplier has to take care for the needed special qualifications.

#### **3.2 Component Class**

Products for aviation are divided into three component classes. These classes describe the criticality of the product in the event of failure.

Class 1. Human life could be endangered in the event of failure, for example as a result of an aircraft crash.

Class 2. Severe impairment of the aircraft. A safe landing is however still possible at all times.

Class 3. No hazardous or severe impairments of the aircraft in the event of failure.

Comparable classifications apply for space components (e.g. "critical part" is equal to Class 1). The classifications are mentioned on the order or on the drawings.

For Class 1 parts a production plan has to be issued and provided to the Client for approval before production. After release of the First Article the production plan is unchangeable. Changes of the productions plan after the released first article report have to be agreed by the customer.

#### **3.3 Supplier Planning and Deadline Compliance**

For the purpose of coordination of the production and assurance of delivery ability and constant quality the Supplier will create for all products to be delivered a written (documents don't have to be provided to the Client):

- Production Plan
- Inspection Plan

- Procurement Plan

These plans are to specify responsibilities and deadlines. The resources for the processes have to be determined and kept available. The responsibilities and competences needs to regulated. The supplier ensures that only qualified staff will be installed. The staff has to be trained for the processes and needed special qualifications have to be gained. The supplier has to ensure that the staff is aware of their contribution to the product and service conformity, product safety and the importance of ethical behavior.

### 3.4 Technical Documentation

By providing order confirmation the Supplier confirms:

- that all of the technical documents specified in the order is on hand
- that all of the departments affected by the technical documents have access
- that all of the documents have been understood
- that all of the items in the order can be produced in accordance with the Client's specifications.

Production and inspection documentation must be capable of being clearly allocated to a specific delivery. Process parameters must be recorded and archived appropriately for the purpose of reproducibility.

All inspection documents must bear the signatures of the persons authorized for such. The original documentation remains with the Supplier. Specific quality records have to be provided to the Client if the Client so requires.

Customer requirements stipulated in the order are to be fulfilled in addition to this Quality Assurance Agreement.

### 3.5 Procurement

The Supplier is responsible for the selection, release and reliability of its subcontractors. If required by the Client, raw materials for production parts and processes may only be procured from subcontractors approved by the Client. Their purchase from alternative subcontractors requires in these cases the Client's prior acceptance.

The Supplier may only select subcontractors who are at least certified in accordance with ISO 9001. In exceptional cases special agreements can be made with the Client.

The Supplier must ensure that the documents required to process an order is on hand with the Supplier and its subcontractors. These documents have to be in the valid issue according the order.

The Client reserves the right to conduct audits or technical discussions together with the Supplier with its subcontractors in case of problems or for the purpose of control/approval of critical processes. The Supplier is obligated to facilitate such inspections of the subcontractors, if necessary by contractual agreement with them. The Supplier is nevertheless not released from its responsibility to the Client for the subcontractors as a result of this.

### 3.6 First Article Inspection

A first article is a representative unit from the first production run of a new part or a new component produced completely with standard operational materials and the standard conditions in

accordance with approved drawings. The first article serves as verification that the production process, the production documentation and the tools are appropriate for producing parts and components correspond with the requirements. This process must be repeated as soon as changes are implemented which suspend the original results (e.g. technical changes, changes in the production process, changes of the tools, inspection methods which have an impact on fit, form or function), on request to the Client or after more than 2 years production stop. For changes, new parts or production stops due to the Client the first article request will be added to the order.

Supply material provided to the Supplier by subcontractors must be approved by the Supplier, e.g. by means of FAI. The Supplier must be able to provide verifications of this at any time upon request by the Client.

FAI samples have to be completely inspected and documented according to the corresponding drawing and/or the associated specifications and standards regarding all properties (e.g. dimensions, materials) in accordance with EN 9102. This includes the production and inspection documentation, process data and parameter, material certificate and production plan. The production plan contains all of the steps of the manufacturing process. Details of the production steps must be able to be viewed upon request.

Each product must undergo an FAI samples test with the exception of standard and catalogue parts.

Should the Supplier cause the necessity of a change in the production process, then the FAI must be repeated at no charge to the Client.

The FAI samples are to be supplied to the Client together with the initial samples test report on the agreed date. The FAI samples must be clearly designated as such. The template for the FAI test report can be downloaded on the Client's website.

The knowledge which is needed to gain conformity has to be determined, documented and kept available.

### **3.7 Inspections**

#### **For incoming goods department:**

Purchased goods must be subject of an incoming goods inspection. The materials/parts must be traceable by certificates and the certificates must be archived. On the basis of a risk assessment of the parts a process for validation of the properties in the certificate for critical parts must exist. The Supplier must ensure that counterfeit parts (not authorized copies, imitations, alternate or modified part which is with intent presented as the original part) will be identified and scrapped.

In the case of material or part provision from the Client a visual inspection regarding damages and abnormalities as well as a control with the purpose of the identification of these provided parts must be conducted.

#### **For Manufacturing:**

Depending on production procedures (e.g. heat treatment, casting, forging), the product test must be augmented by monitoring of the key characteristics (characteristics with important influence on fit, form function, performance, life time or producibility). The provision of products or services have to be performed under controlled conditions. Process stability must be proved and recorded based on fixed process parameters and tolerances.

#### **For outgoing goods department:**

Test properties, test scopes and test procedures required in the technical documentation are binding. A change requires the written permission of the Client. Testing frequencies are to be established with use of statistical methods in such a way that the Supplier can comply with its

quality regulations (in case that such is not stipulated by the Client). Interface and/or welding surfaces marked in the drawings must be checked separately before delivery.

Should a test result indicate defective products of this batch then the defective products must be sorted out. All remaining accessible stocks (including warehouse stocks at the premises of the Client and its customer) must be checked regarding this issue if this didn't happened before. The subsequent batch must undergo inspection regarding this failure to ensure that the cause of the defect has been eliminated. The Client must be notified immediately.

For aircraft parts an approval in accordance with EN 4179 must be on hand for non-destructive inspections. If this is not the case then a mutually agreeable solution must be found with the Client's Level 3 inspector.

### **3.8 Changes**

A prior written approval by the Client is required for the Supplier to make changes, e.g. to production facility, machines, components, production and test procedures, production parameters, coolants and lubricants, tools, preservatives or similar features. This contains also transfers of work to supplier. The Supplier is obligated to notify the Client of such changes as early as possible and without delay. This includes also the processes of suppliers of the supplier. In such cases the FAI samples process must be conducted again. The scope must be agreed with the Client.

In the event of the relocation of production facilities or machinery the Client's Purchasing Department must be notified in writing prior to the actual change.

The Supplier must maintain the information regarding the implementation dates of changes.

The Supplier is still obligated to comply with the delivery deadline of the approved products despite the notification of changes.

### **3.9 Test Materials and Test Equipment**

Systematic, planned calibration and monitoring / administration must be used to ensure that only test equipment are applied for inspection which are sufficiently precise, reliable and applicable pursuant to their technical specification. These is the base for a correct assessment of the measurement results of a product property or a process parameter.

A system for regular inspection must be verified which ensures that defective and expired test equipment is recognized. This also applies for production tools and equipment which are used as test equipment. The Supplier is obligated to maintain verifications of this and to present them upon request. The test materials used by the Supplier must be suitable and capable for the planned inspections. Verification must also be maintained regarding calibrations that have been carried out.

Records of the calibrations have to be available. The used test equipment has to be documented in the process documentation.

### **3.10 Defective Products**

#### **General Information**

The Supplier ensures that only products are shipped which correspond with the technical requirements of the order.

The contractual and legal rights regarding liability for defects remain unchanged.



The Supplier must notify the Client of Defective products via Supplier deviation Report (an example is mentioned in the appendix or also available at <http://www.mt-aerospace.de/downloads-en.html>) and retain such defective products until receipt of a written decision by the Client. At the Client's decision, the Supplier must remove defective products from the process, sort them, re-work them or scrap them. The scrapping must be in a documented way and in a manner that the parts are destroyed irrevocable.

Products with approved deviations must be labeled separately and packaging units must contain corresponding instructions. The template for this is contained in the Appendix or can be downloaded from the Client's website. The Client reserves the right to stipulate the documents for the handling of the defective products. Following approval of the deviation by the Client, the Supplier must refer to the deviation approval in the test certificate and include a copy of the deviation approval with the delivery. The Client's approval of a deviation or the acceptance of defective products does not constitute the loss by the Client of existing rights or legal recourse.

### **Information to the Client**

The Supplier must notify the Client's Purchasing Department without delay in case the Supplier discovers deviations which could also appear in deliveries that have already been shipped. This notification obligation also applies if the products in question have already been delivered and accepted.

If the Supplier is unable to eliminate the deviations by the next delivery, then the Supplier must notify the Client's Purchasing Department of such without delay and stop every additional delivery until receipt of instructions to the contrary.

The Supplier must document corrective and preventative actions. The documentation of such actions must be maintained for review upon request.

### **Control Reports**

In control reports the Client documents non conformances and the usage decisions regarding defective products and informs the Supplier about this. The Supplier must implement the requirements stipulated in the control report and notify the Client's Purchasing Department in writing regarding the requested rework or corrective actions (e.g. 8D report) that have been undertaken.

## **3.11 Rework**

The Supplier must ensure, if necessary following consultation with the Client, that rework and corrective measures conducted on its products do not have any adverse effects (e.g. in regard to the dimensions, function, stability, service life).

Rework work which changes the properties of the product or causes deviations from the technical documentation or the frozen production conditions – including the planned rework work procedure – requires the approval of the Client. This also applies for subcontractors. This approval must be providing in writing prior to the rework. This does not release the Supplier from its responsibility for the quality of the product.

## **3.12 Complaints**

If defects are claimed by the Client the Supplier must eliminate these defects without delay.

The inspections conducted at the Supplier's premises by employees of the Client or external persons appointed by the Client do not apply as acceptances in the legal sense. The Client can

still assert warranty claims and other claims on basis of improper delivery after an inspection conducted by such a person.

### **3.13 Transport**

If the Client provides packaging and / or protective facilities then they are to be used for internal transport and, if required, also in processing and in return delivery. Any packaging regulations specified in this regard must be complied with.

If the Client does not stipulate any special packaging requirements, then the Supplier is responsible for packaging the products to be delivered in packaging that will protect them from damages, corrosion, the intrusion of foreign particles into the product, impermissible levels of vibration, humidity, electrostatic discharges (ESD) or confusions / mixtures of batches or other dangers. The expiry date is to be clearly displayed on the packaging if it is applicable.

The Supplier ensures that the required technical and commercial accompanying papers are contained within the scope of delivery. The delivery only applies as fully complete when all of the accompanying papers specified above were sent to the Client. Extended workbenches have to acknowledge the conform work by sign the work order of MT. The certificates can be transmitted together with the delivery or sent per email to [werkszeugnis@mt-aerospace.de](mailto:werkszeugnis@mt-aerospace.de). For this purpose the order number, the position and the part/material have to be stated in the subject of the email.

The products and / or their transport container(s) must be labeled in such a way that they can be clearly identified and confusions or mixtures can be avoided. Batch separations must be strictly complied with. Ordered sample material has to be mentioned on the delivery note as a separate item and must be packed properly attached to the ordered product.

### **3.14 Storage Time Limits for Documents and Test Results**

#### **Non-Aviation Parts**

The storage limits for records is 10 years if nothing to the contrary has been agreed. On demand documents regarding the processes and controls have to be available for the customer.

#### **Aviation Parts**

The storage time limits are at least 25 years for components or parts for aviation equipment components. Afterwards an additional approval by the Client is needed for the destruction of the documentation. On demand documents regarding the processes and controls have to be available for the customer.

### **3.15 Correspondence**

Correspondence is fundamentally to be conducted through the Client's Purchasing Department.

### **3.16 Information Obligations**

The Supplier must notify the Client without delay in the event that materials required for the manufacture of products ordered by the Client are no longer available or it is foreseeable that they will no longer be available.

The Supplier must notify the Client without delay in the event that materials and chemicals which have been ordered within the last 2 years are to be discontinued. The Supplier has to implement a process to identify possible obsolescence.

If risks of a discontinuity of products or a lack of availability are known or identified the Supplier has to inform the Client without delay.

Suppliers for aircraft materials or parts have to notify major non conformances in the certification audit and the containment actions to the customer.

### **3.17 REACH Regulation**

The Supplier has to check the parts and materials regarding the content of substances restricted by the REACH Regulation. The Client has to be informed about these substances (acc. EG Regulation 1907-2006).

In case of first delivery of hazardous material the supplier must supply a safety data sheet. If the safety data sheet is subject to changes by the Supplier, the sheet must be delivered again or be sent to [MSDS@mt-aerospace.de](mailto:MSDS@mt-aerospace.de).

## **4 Contract Duration and Closing Remarks**

The validity of this agreement is unlimited. It can be terminated by written declaration upon notice of 6 months to the end of the year. The validity of orders and agreements with this QAA remains unaffected from the termination. The regulations of the QAA remain valid and must be respected until the end of the orders and contracts. In the case of violation of essential provisions of this agreement by the Supplier, the Client can terminate current supply contracts after unsuccessful warning without notice.

The termination of the QAA leads to a revaluation of the business relationship and usually to a blockage as qualified supplier.

Changes and complements require written form. If some provisions of this agreement are completely or partially invalid, the validity of the remaining provisions remains unaffected. In this case the partners will agree on a valid provision most closely to the economic purpose of the invalid provision.

## **5 Normative References**

EN 9100	Quality management systems – Requirements on aviation, space flight and defense organizations
EN 9102	Aviation and space flight – Quality management systems – Initial samples test
EN 9110	Quality management systems – Requirements for aviation maintenance operations
EN 9120	Quality management systems – Requirements for aviation, space flight and defense dealers and storage facility operators
EN 9130	Aviation and space flight – Quality management systems – Documentation storage
ISO 9001	Quality management systems – Requirements

## Appendix

Form: Labeling for deviating components

Lieferant / Supplier: .....		Tel.:..... Fax:..... E-Mail:.....
<b>ABWEICHUNG / NON CONFORMANCE REPORT</b>		
<b>ACHTUNG</b>	MT Material- und Seriennummer / MT Part no. and serial number: .....	
	MT Bestellnummer / MT Order no. .....	
<b>ATTENTION</b>	MT Teile Bezeichnung / MT Part Description .....	
	Datum / Date: .....	
Achtung: Jedes abweichende Bauteil ist mit diesem Formular zu kennzeichnen! Attention: Each non-conformance unit has to be labeled with this form		

Form: Labeling for First Articles (FAI):

Lieferant / Supplier: .....		Tel.:..... Fax:..... E-Mail:.....
<b>First Article / FAI / Erstmuster</b>		
<b>ACHTUNG</b>	MT Material- und Seriennummer / MT Part no. and serial number: .....	
	MT Bestellnummer / MT Order no. .....	
<b>ATTENTION</b>	MT Teile Bezeichnung / MT Part Description .....	
	Datum / Date: .....	
Achtung: FAI Teil ist mit diesem Formular zu kennzeichnen! Attention: Each FAI Part has to be labeled with this form		

Form: Voluntary disclosure by the Supplier in the event of component defects

# NCR

No.:

Error description			
Supplier no. / name			
Purchase order no.			
Material no. / drawing no.			
Non-conforming quantity			
Containment (To be completed within 24hrs)			
Ref.	Action	Start Date	Complete Date
1			
2			
3			
4			
Root Cause (To be completed within 14 days)			
Identify Potential Causes (Ishikawa)			
MATERIALS	MAN	ENVIRONMENT	
<div style="border: 1px solid black; width: 100%; height: 80px;"></div>	<div style="border: 1px solid black; width: 100%; height: 80px;"></div>	<div style="border: 1px solid black; width: 100%; height: 80px;"></div>	
<div style="border: 1px solid black; width: 100%; height: 80px;"></div>	<div style="border: 1px solid black; width: 100%; height: 80px;"></div>	<div style="border: 1px solid black; width: 100%; height: 80px;"></div>	
METHOD	MACHINES	MEASUREMENT	
Why's Analysis			
	Symptom 1	Symptom 2	Symptom 3
Why?			
Why?			
Why?			
Why?			
Corrective Action			
Action	Target Date	Complete Date	
Qualitätsbeauftragter Lieferant / Name quality officer supplier / name		Datum / Unterschrift date / sign	