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## 1.0 Purpose

- Avoidance of systematic errors
- Ensure that drawing and specification requirements are complied with under series conditions.
- Avoidance of deviations and reworking during series production
- Proof of quality capability of the supplier/manufacturer
- Proof that all processes, tools and equipment used for series
   Production at the manufacturer's premises ensure the required
   Product quality
- Creation of a first articles within the framework of product production as a reference in the
  event of deviations from the serial part (this has to be coordinated with the respective
  project organisation, as well as the permanent purchase)
- Release decision for series production



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### 2.0 Scope

This document and the procedures described therein shall be binding on all suppliers of RLS BU TAC.

## 3.0 Responsibilities

The responsibility department of content is Supplier Quality Assurance.

## 4.0 Terms, definitions and abbreviations

QAC quality assurance conditions

RLS Rheinmetall Landsysteme GmbH

FAI First Article Inspection

FAI-Lev FAI level (=submission level)

### 5.0 Description

First articles are basically parts that are manufactured with standard production equipment under series conditions, but prior to the start of serial production.

### 5.1 Documentation of first articles

The FAI report shall include all the characteristics and characteristics specified in the drawing documents, as well as all specified characteristics and characteristics affecting the following characteristics:

- Function
- Dimensions (100% check)
- Interchangeability
- Production and assembly conditions
- Special processes

When it comes to material detection, it is essential to pay attention to the REACH Regulation! When RLS has already approved a first



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article for the purchased part, at least the evaluated first article inspection report (with name of the releaser) must be presented.

### 5.2 Production documentation

The supplier undertakes to set up and maintain an appropriate documentationsystem to prove the legally-prescribed or contractually agreed quality of the deliveries. This system is used to manage and maintain material certificates, production and testing instructions, predefined plant standards, first article inspection reports, and other relevant documents.

## 5.3 Description and procedure of First article inspection (FAI)

The supplier must carry out, document and document an appropriate FAI on each article commissioned by RLS the results over the parts life cycle.

Of which Excluded are DIN and standard parts, as well as designated catalogue parts.

In principle, the supplier must plan and carry out the initial sample tests in such a way that all properties required by RLS are fully proven by the supplier.

The FAI must be traceable to the first sample without any gaps.

The following documents obtain for QSB 206,208 &209, please look at the attached applicable documents:

- cover sheet
- list of contents

The first article presentation can be performed in 3 stages (see QSB/QAC codes in orders):



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#### FAI-Lev 1 (QSB 206):

The Execution of the first article inspection and the approval takes by the supplier. The approval is based on the FAI results.

Simultaneously with the delivery of the cover page is released if the result is positive. It is done no more feedback / approval from RLS.

RLS reserves the right to request and verify the evidence of FAI performed if necessary.

### FAI-Lev 2 (QSB 208):

The Execution of the FAI takes by the supplier. The complete documentation must be followed by the first article delivered to RLS.

The release is carried out by RLS.Only hereafter the serial delivery to take place!

The responsbility to carry out initial sample tests the supplier, without exception.

## FAI-Lev 3 (QSB 209):

The Execution of the FAI takes by RLS together with the supplier. The complete documentation must be followed by the first article delivered to RLS.

The responsible FAI manager of RLS plans together with the supplier the scope and the date for the ordered FAI-Lev 3.

The initial sample inspection can be carried out by RLS on site or at the supplier's premises.

The release is carried out by RLS. Only after this the serial delivery has to take place!

#### Attention!

If one or more order items with QSB code 208 or 209 are listed in the purchase order, the supplier must inform RLS immediately.

The supplier sends an e-mail to the address: RLS-FAI@rheinmetall.com

The e-mail must contain the following information:

- RLS Order / Order No.
- Order items with QSB code 208 or 209
- Contact person and contact details of the supplier



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The responsibility for carrying out FAI is borne by the supplier without exception. In general, RLS, however, enforces the FAI if necessary and additionally carry out a product and process audit, after consultation with the supplier.

The results will be reported to the RLS in a FAI report (See 5.) from which the fulfilment of all required

Characteristics.

If no FAI presentation is detected in the event of technical changes by RLS, the first article documentation or request for changes remains exclusively with the supplier, except for the cover page and approved applications for a declaration of removal. No presentation!

First articles and their load carriers are unambiguous and suitable by means of tags, labels or similar, loseable and waterproof to mark it. Minimum content is:

- Notification "FIRST ARTICLE" or "ERSTMUSTER"
- Material number (drawing number if different)
- Revision (Index)
- Order number
- Designation
- Serial number

The delivery of the documentation must be encased in printed form with the component. Waterproof, e.g. in suitable protective films and losers!

If the documentation does not arrive at RLS within two weeks of the start of the first article, the first article will be due to lack of documentation and returned for a fee.

First article deliveries are clearly indicated on the delivery note RLS Order No. as a first article.

RLS reserves the right to carry out counter-checks upon receipt of the first samples and the complete first sample documents.

Depending on the Result, the corresponding decision is then made with a grade:

- approved
- approved with conditions
- rejected
- rejected new samples required



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### 5.4 Behaviour in the event of deviations and changes

Deviations from the characteristics agreed in the valid technical documents must be made in good time before the FAI to the responsible RLS purchasing department by means of an application for special allowance (AQAP 2070). A Involvement of the responsible employees from the quality department expressly intended by the supplier.

Only after approval of the deviation may the first article with signed special release be sent to RLS. If deviations are detected during the RLS counter-check, the first articles shall be returned to the supplier. The first article inspection is considered failed and must thus be repeated.

### 5.5 criteria for the implementation of delta FAI's

Product changes affecting:

Product changes affecting: Geometry, assemblability, function, material properties, software,

- Customer requirements & intended use
- Production relocation/site change
- Change in production processes
- Change in process parameters

### 5.6 criteria for the implemenation of re-sampling

Please follow the attached criterias:

- After interruption of production for a longer period (>24 months)
- Reason-related (complaints or deviations with previous FAI)
- FAI rejection with new FAI samples

RLS has to be informed before such changes are made!

### 5.7 Basic information for deliveries of electronic assemblies

In the case of electronic assemblies, the supplier undertakes to carry out tests on the delivery item in accordance with IPC-A-610 Class 3 (acceptance criteria for electronic assemblies).

Certificates are to be enclosed with the delivery.