

SUPPLIER QUALITY SYSTEM REQUIREMENTS

CAGE Code S3344
Reference LQA-002(E)
Revision E
Date 06.09.2010
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Form Instructions for Suppliers

1. Purpose

This document describes the forms which RUAG suppliers must use for documentation and communication of the qualification and conformity status of the commissioned products or quality management system.

2. Application

The document applies to RUAG suppliers, if such a requirement has been agreed in the contract or purchase order.

3. Terms and abbreviations

None.

CREATED BY:		APPROVED BY:		CONTROL:
Date	Sign	Date	Sign	Revision service provides for registered owners only
08.09.2010	i.A. hody	09.09.2010	see	Source:
Name P. Kaufmann, RAQMC		Name E. Seegers, RCBE		<input checked="" type="checkbox"/> Intranet <input type="checkbox"/> SAP <input type="checkbox"/> Others

4. Procedure

4.1. Related document and forms

Document/Form No.	Document title	Purpose	Section
FRM-6010-006(D_E_F)	Quality Certificate	Supplier adds this document to each delivery. This certificate confirms the conformity of the delivered products with the defined requirements of the technical documents and the purchase order.	4.2.1
FRM-7020-032(E)	First Article Inspection Report (FAIR)	Used by the supplier for documentation of the first article inspection of parts and/or assemblies (or equivalent form)	4.2.2
FRM-8040-008(E)	Improvement Request (IR)	Used by RUAG for ordering corrective action from suppliers if deliveries do not conform. The supplier is requested to submit a formal reply to RUAG within a maximum of 30 working days.	4.2.3

4.2. Forms

4.2.1. Quality Certificate FRM-6010-006

QUALITÄTSATTEST		QUALITY CERTIFICATE		CERTIFICAT-QUALITÉ	
				Ref Nr. Ref No. No. Réf. _____	
Kunde Customer Client	RUAG	Lieferant Supplier Fournisseur	_____		
Bestellung resp. Vertrag Nr. Order or contract No. Commande ou Contrat no		_____		vom dated du _____	
Bezeichnung des Lieferartikels Designation of supplied article Designation de l'article livré _____					
Material Nr. Material No. Matériel no _____					
Part Nr. Part No. Part no _____					
Zeichnungsnummer Drawing No. Dessin no _____					
Materialspezifikation Specification of material Spécification de matériau _____					
Gelieferte Menge Quantity supplied Quantité livrée _____					
Serie-, Batch- oder Los-Nr. Series, batch or lot No. Serie, batch ou no du lot _____					
Lieferschein Nr. Delivery note No. Bon de livraison no		_____		vom dated du _____	
RUAG Wareneingangs Nr. RUAG receipt No. RUAG réception no		(nur für Beistellmaterial) (provided material only) (seulement matériel fourni)			
Konzession Nr. / FM Concession No. / NC Report Concession no _____					
Weitere QS-Beilagen Other QA-enclosures Autres Documentations Contrôle-Qualité _____					
Wir bestätigen, dass das oben aufgeführte Material geprüft wurde und ausser den obenstehend aufgeführten Fehlermeldungen den Auftragsanforderungen, Spezifikationen, Zeichnungen sowie gültigen Normen und Vorschriften in jeder Hinsicht entspricht. We herewith confirm that the above material has been tested and except for the mentioned nonconformity reports was found to be in full conformity with specifications, drawings as well as current standards and requirements. Nous certifions que la fourniture énumérée ci-dessus a été examinée et que sauf exception ou rapports de déféctuosité aux exigences du contrat elle répond sous tous ses aspects aux spécifications aux plans ainsi qu'aux normes et règlement en vigueur s'y rapportant.					
Ort Place Lieu	Datum Date Date	Visum / Funktion Visa / position Visa / fonction	Q Verantwortlicher Quality assurance manager Assurance Qualité		
_____	_____	_____	_____		

SAMPLE

Vorlage: FRM-6010-006(D,E,F) 23.08.2009
 Date: Dokument 1

RUAG Schweiz AG

Grundlage: LQA-002

Fill out instruction (Fields which are to handle by the supplier)

Field Name	Required Entry
Ref No.	Supplier references quality certificate
Customer	Fill in the corresponding RUAG division
Supplier	Name of the supplier
Order or contract no.	Corresponding order or contract to the delivery
Designation of supplied article	Name of delivered article
Material no.	RUAG material number
Part no.	Number of part
Drawing no.	Number of drawing
Specification of material	Specification for manufacturing the part
Quantity supplied	Number of delivered articles
Series, batch or lot no.	Lot number of produced material
Delivery note no.	Number of delivery note
RUAG receipt no. (for provided material only)	RUAG Incoming number of provided material
Concession no. / NC report	Number of quality note or concession

4.2.2. First article inspection report (FAIR)

4.2.2.1. General

The RUAG form FRM-7020-032(E) should be used to document the results of the FAI. This document and forms are based on AS/EN9102.

Each field in the forms is designated with a unique reference number. Each field is also identified as:

- (R) Required: This is mandatory information.
- (CR) Conditionally required: This field must be completed when applicable (i.e., when there exists a customer requirement, then this field must be filled in).
- (O) Optional: This field is provided for convenience.

Forms other than those contained in the appendix may be used; however they must contain all "Required" and "Conditionally Required" information and have the same field reference numbers.

All forms shall be completed electronically. Continuation sheets will be generated automatically, if required. All forms shall be completed in English or in a language specified by RUAG.

Supplier to provide the supplement document submitted along the FAI which may be required by RUAG or RUAG's customer e.g. balloon drawings, NCR report etc.

4.2.2.2. Characteristic Accountability

Each design characteristic shall be verified during FAI and the results shall be recorded. Every design characteristic shall have its own unique characteristic number.

- Notes:**
- Reference characteristics may be omitted from the FAI
 - Use more than one line if needed for any characteristic.
 - Characteristics not measurable in the final product shall be verified during the manufacturing process (as long as they are not affected by subsequent operations) or by destructive means.
 - Characteristic verified at the detail level may be referenced in the assembly-level FAIR.

4.2.2.3. Record of results

Results from inspection of design characteristics shall be expressed in quantitative terms (variables data) when a design characteristic is expressed by numerical limits. The results in the units specified on the drawing or specification shall be recorded, unless otherwise specified by RUAG.

Attribute Data (e.g., go/no-go) may be used if no inspection technique resulting in variables data is feasible. Attribute data is permitted when the design characteristic does not specify numerical limits (e.g., break all sharp edges). It is also permitted where qualified tooling is consistently used as a check feature and a go/no-go feature has been established for the specific characteristic.

4.2.2.4. Control and Retention of Records

FAI records shall be treated as document control and be kept for a certain period per Q1800E clause in (LQA-001(E)) or as defined by RUAG's customer whichever longer must be accounted for.

Field	Type	Field Name	Entry
1.	(R)	Part Number	Number of the part (FAI part).
2.	(R)	Part Name	Name of the part as shown on the drawing.
3.	(CR)	Serial number	Serial number of the part.
4.	(O)	FAI Report Number	Reference number that identifies the FAI. This may be an internal report number.
5.	(CR)	Part Revision Level	Latest part revision that affects the part being first article inspected, if there is no revision enter --- Note: The latest drawing revision (Field 7) does not always affect all parts contained on a drawing.
6.	(CR)	Drawing Number	Drawing number associated with the FAI part
7.	(CR)	Drawing Revision Level	Revision level of the engineering drawing. If there is no revision enter---
8.	(CR)	Additional Changes	Provide reference number(s) of any changes that are incorporated in the product but not reflected in referenced drawing/part revision level (e.g., change in design, engineering changes, manufacturing changes, deviation or exclusion from certain drawing requirement, or Part Issue No. etc.).
9.	(R)	Manufacturing Process Ref.	A Reference number that provides traceability to the manufacturing record of the FAI part (e.g., router number, manufacturing plan number, etc.).
10.	(R)	Organization Name	Name of the supplier performing this FAI.
11.	(O)	Supplier Code	Unique number given by RUAG, if applicable.
12.	(O)	P.O. Number	Customer Purchase Order number, if applicable or required.
13.	(R)	Detail FAI Assembly FAI	Check as appropriate.
14.	(R)	Full FAI Partial FAI	Check as appropriate. For a partial FAI, provide the baseline part number (including revision level) to which this partial FAI is performed and the reason for it. For example, changes in design, process, manufacturing location, etc.
15, 16, 17 and 18: This section is required only if the part number in field 1 is an assembly requiring lower level parts to be installed into the assembly.			
15.	(CR)	Part Number	Detail or next level sub-assembly part number to be included in the assembly.
16.	(CR)	Part Name	Part name for the part number of field 15 as shown on the drawing.
17.	(CR)	FAI Serial Number	Serial number for the part number of field 15, when applicable.
18.	(O)	FAI Report Number	FAI report number for the detail or next level sub-assembly part number of field 15.

Field	Type	Field Name	Entry
19.	(R)	Signature	<p>Name and signature of the person who prepared FAI Form. Also check appropriate box if this FAI is complete concerning non-conformances.</p> <p>Note: The signature on this form certifies the following two things:</p> <ol style="list-style-type: none">1) that all characteristics are accounted for, meet drawing requirement or are properly documented for disposition.2) if this FAI is complete concerning non-conformance. Check as appropriate
20.	(R)	Date	Date when this FAI report is prepared.
21.	(O)	Reviewed By	Name of the person from the supplier who approved FAI report.
22.	(O)	Date	Date when the FAI report is approved.
23.	(O)	Customer Approval	This field is used by RUAG or its customer to record approval if required.
24.	(O)	Date	Date customer approved this FAI form.

Field	Type	Field Name	Entry
1.	(R)	Part Number	Number of the part (FAI part).
2.	(R)	Part Name	Name of the part as shown on the drawing.
3.	(CR)	Serial number	Serial number of the part.
4.	(O)	FAI Report Number	Reference number that identifies the FAI. This may be an internal report number.
5.	(CR)	Material or Process Name	Name of material or process including the paint and part marking medium.
6.	(CR)	Specification Number	Material or process specification number (include permitted alternates, if used), class, and material form (e.g., sheet, bar, etc.). Include all "Make From" materials that are incorporated into the FAI part. For raw materials, include all materials that are incorporated into the FAI part, (e.g., weld/braze filler materials, etc.), and standard catalogue hardware (e.g., AN, MS fasteners); but do not include processing materials such as acid etchants.
7.	(O)	Code	From RUAG required code for material or process listing, when required.
8.	(CR)	Special Process Supplier Code	From RUAG given code of the organization performing special process(es) or supplying material, as applicable.
9.	(CR)	Customer Approval Verification (Yes/No/NA)	Indicate if the special process or material source is approved by RUAG or its customer. Write N/A if no approval is required.
10.	(CR)	Certificate of Conformance Number	Number of the certificate (e.g., special process completion certification, raw material test report number, standard catalogue hardware compliance report number, traceability number).
11.	(CR)	Functional Test Procedure Number	Functional test procedure number called out as design requirement.
12.	(CR)	Acceptance report number, if applicable	Reference of the function test certification indicating that test requirements have been met.
13.	(O)	Comments	Comments as applicable.
14.	(R)	Prepared by	Name of the person who prepared this form.
15.	(R)	Date	Date when this form was completed.

Field	Type	Field Name	Entry
1.	(R)	Part Number	Number of the part (FAI part).
2.	(R)	Part Name	Name of the part as shown on the drawing.
3.	(CR)	Serial number	Serial number of the part.
4.	(O)	FAI Report Number	Reference number that identifies the FAI. This may be an internal report number.
5.	(R)	Characteristic Number	Unique assigned number for each design characteristic.
6.	(CR)	Reference Location	Location of the design characteristic (e.g., drawing zone (page number and section), specification, etc.).
7.	(CR)	Characteristic Designator	Characteristic type (e.g., key, flight safety, critical, major, etc.), if applicable.
8.	(R)	Requirement	Specified requirement for the design characteristic (e.g., drawing dimensional characteristics with nominal and tolerances included, drawing notes, specification requirements, etc.).
9.	(R)	Results	<p>List measurement(s) obtained for the design characteristics.</p> <ul style="list-style-type: none"> • For multiple characteristics list each characteristic as individual values or list once with the minimum and maximum of measured values attained. If a characteristic is found to be non-conforming then that characteristic must be listed separately with the measured value noted. • If a design requirement requires verification testing, then the actual results will be recorded on the form. If a laboratory report or certificate of test is included in the FAIR, then these results need not be written on the form, record the reference number in this field. The laboratory report or certificate of test must show specific values for requirements and actual results. • For metallurgical characteristics with visual verification requirement that are rated against standard photographs, list the photo number of the closest comparison. A statement of conformance is acceptable (record the reference number in this field). • For processes that require verification per design characteristic, include statement of compliance (e.g., certification of compliance, verification indicator such as "accept", etc.). • For part marking, ensure that marking is legible, correct in content and size and properly located, per applicable specification.

Field	Type	Field Name	Entry
10.	(CR)	Designed Tooling	If a specially designed tooling (including NC programming) is used as a media of inspection, record the tool identification number.
11.	(CR)	Non-Conformance Number	Non-conformance document reference number if the characteristic is found to be non-conforming.
12.	(R)	Prepared By	Name of the person who prepared this form.
13.	(R)	Date	Date when this form was completed.
14.	(O)	Optional Fields	Reserve.

4.2.3. Improvement Request (IR) FRM-8040-008

RUAG	IMPROVEMENT REQUEST (IR) / 8D-REPORT	Reference Date Page 1 of 1
Evaluation Type	Origin Reference	
Type of Improvement	Supplier Name	
Category	SAP No.	
AV for IR	City	
	Copy	
Statement/Request	Issuer/Supervisor	Date
D1 Establish AV/Team / D2 Describe the Problem / D3 Define and Implement Immediate Corrective Action		
D4 Root Cause Analysis		
D5 Define Corrective Actions	Date Effectivity	
D6 Planned Date	Corrective Action Plan and Current Status	Responsibility Actual Date
Confirmation of Completion by	Date/Signature	
Documents		
D7 Prevent of Problem Recurrence / D8 Verify Effectiveness of Corrective Action		
Effectiveness verified	at	by Signature
IR closed	at	by Signature

SAMPLE

Fill out instruction (Fields which are to handle by the supplier)

Field Name	Required Entry
Establish AV/Team (D1)	Establish a team for working on the 8D report.
Describe the problem (D2)	Detailed description of the problem.
Define and Implement Immediate Corrective Action (D3)	Accomplished actions were taken to contain the problem and Stop it from continuing. If you were making bad parts, what did you do to stop making bad parts and what did you do about the bad parts you made? Add ional it is to assure, with the extension of the problems and the action taken, that no other hardware is affected and that all affected hardware is identified.
Root Cause Analysis (D4)	<p>The last logical cause in the chain and the fundamental systematic change necessary to prevent a recurrence. Tools to assist in identifying causes include the 5 Whys or a Fishbone diagram.</p> <p>The effect to products, which do not fulfil a requirement due to the cause. That can be a requirement of the contract, design or specification as well as a general practice as implied condition which is expected as implied condition.</p>
Define Corrective Actions (D5)	<p>Preventive actions after the direct contribution and root causes have been identified. There is no single right answer. The solution should be chosen on its effectiveness, feasibility, suitability to the company, and the company's budget. Solutions should not be rushed into. Rushing in can cause many additional problems. It's best to think about alternatives before choosing a solution. It is also important to correct the process from a long term perspective instead of focusing on the short term. If the solution is only focused on the short term, then there is no point in performing a corrective action.</p> <p>Note: Determining solution effectiveness is an essential element of corrective action. Failure to reevaluate effectiveness of the action taken encourages no sustaining corrective action, which can be very costly. There need to be quantifiable measurements that can be related to the problem to show that it has been corrected.</p>
Date of effectivity	Date when all actions are effective in preventing recurrence.
Planned Date (D6)	Due date for finishing the 8D report.
Documents	Documents which serve the objective proof, so that the conversion of the preventive corrective actions can be examined and that these actions effectively prevent the recurrence of the deviation.
Prevent of Problem Recurrence (D7)	Detailed description how to avoid a problem recurrence in the future.
Verify Effectiveness of Corrective Action (D8)	Verify effectiveness of corrective action by customer.

5. Templates

FRM-6010-006(D_E_F) Quality Certificate
 FRM-7020-032(E) First Article Inspection Report (FAIR)
 FRM-8040-008(E) Improvement Request (IR)

MODIFICATIONS

REV	PAGE	CHAPTER	EXPLANATION	DATE	SIGN
C	all	all	New Forms and instructions	20.09.2005	Mat
D	2 - 6, 8	4.1, 4.2.1.4 4.2.1.5 -6	Add related document Add sub topic Minor updates to clarify some fill out instructions	14.04.2009	Knp
E	all	all	Including FRM-6010-006(D_E_F) Updates for FRM-8040-008(E) Adapt to new organisation of RUAG Schweiz AG	06.09.2010	Knp