



Your Partner for Electronic Manufacturing Services & Logistics Support

REQUIREMENTS MANUAL SUPPLIERS

MAY 2024

SUPPLIER REQUIREMENTS MANUAL

Reference	SP01-F-010-E
Purpose	To inform suppliers of RAMI Swiss's specific requirements To describe the rules to be applied by RAMI Swiss suppliers
Scope of application	This manual applies exclusively to products delivered by the supplier on the basis of orders received and accepted from RAMI Swiss
Version	A - MAY 2024

Approved by:

Signatures			
Name:	Philippe BIEHLMANN	Mireille BAHTIRI	Laetitia ZUNINO
Role:	Supply Chain Manager	Supplier Quality Technician	Quality Manager

1. QUALITY ASSURANCE AND DOCUMENTATION

1. The products must meet the agreed quality (description, specifications, technical sheets, drawings, samples, standards). The specifications may be found in the order documents. In the event of changes to the index versions or levels in subsequent orders, the supplier must request from the purchaser the updated documents concerning the versions or levels, insofar as they have not been forwarded to the supplier.

If the description submitted by the purchaser is manifestly erroneous, confused or incomplete, the supplier must notify the purchaser in writing.

1. The supplier undertakes to deploy a quality management system at all times in accordance with ISO 9001. The supplier must manufacture products in accordance with the rules of this quality management system and perform checks when goods are received, at intermediate stages and when the goods leave the factory. Valid certificates should be forwarded to the RAMI Swiss Quality Department at the following email address: quality@ramiswiss.ch.
2. If the supplier purchases means of production, inspection instruments, software, services, materials or other preliminary services from subcontractors as part of the product manufacture or quality assurance, they must then be integrated into the supplier's quality management system in accordance with the contract, or the supplier itself must guarantee the quality of the preliminary services.

3. The supplier must keep records to prove that the aforementioned quality assurance measures have been carried out, in particular with regard to inspection results. Such records and any product samples must be preserved in a safe place and in a clearly organised manner, as shown in the table below. The supplier must allow the purchaser to consult the records and any samples to the extent needed and provide the latter with copies. The documentation that accompanies the delivery or that must be preserved by the supplier shall include the following at minimum:

Documentation	Type / data medium	Retention period	
Inspection report first item (approval before production start)	Inspection report in accordance with drawing requirements	15 years	Once only. To be supplied on first delivery.
FAI report (if applicable)	Form EN 9102	15 years	Once only. To be supplied on first delivery.
(*) COC = Certificate of Compliance	Declaration of conformity by the supplier of the product supplied	15 years	To be supplied with each delivery
COC Raw material	Declaration of conformity (certificate 3.1: EN 10204 for metal products)	15 years	To be supplied with each delivery
COC Surface treatment (if applicable)	Declaration of conformity	15 years	To be supplied with each delivery
COC Heat treatment (if applicable)	Declaration of conformity	15 years	To be supplied with each delivery
Delivery note	/	6 years	To be supplied with each delivery
Production data files	Work orders, traceability,...	15 years	To be retained by the supplier
Product modification data files	/	15 years	To be retained by the supplier
Final check: measurement and test report	As per the supplier's practices	15 years	On request, if necessary
Test and dimensional check data files	/	15 years	To be retained by the supplier
Internal audit reports	/	15 years	/

(*) This declaration of conformity must be issued with each delivery; it may appear on the delivery note or be attached as an accompanying document. The declaration must show that the requirements of the drawings and other order documents have been met.

The declaration of conformity (COC) must include the following information:

- Name and address of supplier
- Date of issue of the COC
- RAMI Swiss order number
- Supplier's P/N, RAMI Swiss P/N
- Description of the component
- REV of the drawing (if applicable)
- S/N (if applicable)
- Manufacturer traceability: batch number / date code (if applicable)
- Expiry date (consumables)
- Country of origin
- Quantity delivered
- If the distributor, the name of the manufacturer must be stated
- Title, name and signature of the manufacturer/distributor authorising the release of the components

2. SUPPLIER EVALUATION – COMPLAINTS – EXCEPTIONS

2.1 Agreement on quality objectives

The supplier evaluation criteria will be communicated to the supplier on request.

2.2 Supplier's manufacturing checks

The supplier must choose its checking methods in such a way as to ensure that deliveries are carried out in accordance with orders. Care must be taken to avoid incorrect deliveries, errors in the number of items and goods with obvious quality defects. The choice of verification procedures and systems rests with the supplier.

By methodically planning checks and checking tools, the supplier must ensure that all the characteristics essential to quality are taken into account and that the scope of checks or verification procedures to be applied are appropriate.

2.3 Complaints about non-conformity

Unless otherwise agreed, complaints submitted by the person in charge of supplier quality should generally be processed in the form of 8D reports.

Unless otherwise stipulated, a complaint process must be completed within:

- 3 working days with a 3D report,
- 15 working days with a 5D report,
- and 25 working days with an 8D report.

If this proves impossible for the supplier, the latter must give the person in charge of supplier quality a deadline for sending the full 8D report and also provide him/her with an interim report. The supplier is responsible for verifying the effectiveness of the measures taken within a reasonable time frame. The 8D report must be sent to the person in charge of supplier quality by email.

The supplier must confirm receipt of the complaint or the returned goods.

To ensure that the remedial measures taken are effective, the person in charge of supplier quality may require special measures, such as 100% checks of subsequent deliveries.

2.4 Non-compliant products

If the supplier cannot guarantee the quality agreed in the order documents (description, specifications, technical sheets, drawings, samples, standards or other agreement), it must immediately inform the person in charge of supplier quality and the purchaser in writing. The same applies to any discrepancies of which the supplier becomes aware after delivery.

2.5 Exception

Any request for an exceptional exemption must be submitted before the delivery concerned. If samples need to be sent, this must be communicated in advance. If the exemption is granted (in the form of a signed exemption form containing a description of the discrepancy and an indication of the associated risks), the delivery can go ahead. This does not affect the warranty.

The products in question must be delivered separately, with the products and delivery note marked accordingly.

3. Supplier's obligations to provide proof and information

1. The supplier must allow the purchaser, at reasonable intervals (generally every year), to ensure that the quality assurance measures outlined in this manual are being performed. With this in mind, the supplier must ensure appropriate access to its facilities, having agreed an appointment in advance and instructed a qualified member of staff to accompany RAMI Swiss employees during this visit. The supplier can refuse access to confidential manufacturing processes and other industrial secrets.

RAMI Swiss reserves the right to audit products, processes and/or systems. RAMI Swiss customers may also take part where appropriate.

2. If the supplier plans a change in manufacturing processes, materials or supplier parts for the products, a relocation of certain production sites, or a change in product checking procedures/systems or other quality assurance measures, it must inform the purchaser in writing sufficiently in advance, but no less than three months before the planned change, so that the latter can consider whether this change is liable to have negative effects. Changes to conformity, form and function may only be made with the written agreement of the purchaser.

If product withdrawals are planned, the purchaser must be informed in writing no less than three months before this occurrence or, in the case of raw material withdrawals, as soon as the supplier becomes aware of the withdrawal.

3. In the case of parts from suppliers used in the manufacture of the items to be delivered, the supplier undertakes to put in place an obsolescence management system.
4. The supplier undertakes to implement a process dedicated to parts liable or proven to be counterfeit.
5. The supplier must ensure (by means of marking the items to be delivered or, if such marking is impossible or inappropriate, by means of other suitable measures) that in the event of a defect in the items to be delivered, the other products likely to be affected can immediately be identified. The supplier must inform the purchaser of its marking system or any other measure so that the latter can make its own findings within the necessary limits. In particular, the supplier must allocate purchased materials, which are significant in terms of quality and used to manufacture the items to be delivered, to corresponding production batches.

4. Logistics specifications

1. Every delivery must be accompanied by a delivery note containing, at minimum, the following information:
 - Part number
 - Description of item
 - Drawing number and index
 - Order number
 - Production batch, date code (if applicable)
 - Quantity / number of items
 - Delivery note number
 - Issue date
 - Weight and packaging
 - Incoterms
 - Other information defined in a quality requirement.

2. The packaging units delivered must be identified by labels containing, at minimum, the following information:
 - RAMI Swiss part number / supplier part number / manufacturer part number(s) (if different from supplier)
 - Description of item
 - Revision or index
 - Batch number, date code (if applicable)
 - Expiry date
 - Quantity / number of items
 - MSL level (applies only to delivery of electronic components)

3. If the delivery consists of multiple packaging units (overwrapping), the unit containing the delivery note must be marked specifically, or the delivery note must be attached to the outside. In addition, in the event of overwrapping, specific marking must be used to identify the number of packaging units making up a delivery.

4. Overwrapped units must be packaged by category and batch. Alternatively, a packing plan must be enclosed. Packaging units containing electronic components must be supplied with protection against electrostatic discharge.

5. For health and safety reasons, the weight of the individual packaging units to be handled must not exceed 15 kg.
6. Finished parts must be adequately protected to prevent damage during handling and shipping. The seller is responsible for determining the packaging method that provides adequate protection during shipment, storage and transport, while complying with the following specific instructions.
7. Coated parts must be packaged in such a way as to prevent tarnishing and corrosion.
8. Rubber items (manufactured according to customer drawings) must be packed in bags complying with MIL-PRF-131H, type I, class 2. Every bag must be sealed and marked with a label identifying the part (P/N, quantity, production batch number, expiry date according to the customer's specifications or MIL-HDBK-695).

Standard rubber parts (unless otherwise required by the contract) must be packed separately in a bag. The supplier must adopt good commercial practices for conservation. Every bag must be marked with a label identifying the part (P/N, quantity, batch number, expiry date according to MIL-HDBK-695 specifications).
9. Metal parts must be packed according to their shape, weight and volume.
10. Printed circuit boards (PCBs) must be packed in bags sealed using a soldering machine.

Each package must be identified as follows:

- RAMI Swiss P/N, supplier P/N
- Order number
- Batch number, date code
- Quantity
- Expiry date

In the case of rigid-flex PCBs, the item must be supported by a rigid part to prevent it from bending or being damaged.

11. Boxes and packaging containing wooden components must meet the requirements of ISPM standard no. 15 (International Standards for Phytosanitary Measures).

12. The delivery address indicated in the order must be observed for the delivery of goods. It may differ from the billing address.

13. The following provisions apply specifically to suppliers of printed circuit boards:

13.1 X-outs are tolerated, subject to the following conditions:

A delivery batch may contain no more than 5% X-out PCBs.

A panel may contain a maximum of:

- 0 X-out PCBs (panels of 2-3 PCBs)
- 1 X-out PCB (panels of 4-6 PCBs)
- 20% X-out PCBs (panels of 7+ PCBs)

Panels containing X-out PCBs must be delivered separately from those 100% compliant. These packaging units must be identified using the designation "X-out PCBs". The number of X-out PCBs must be stated on the packaging unit label.

13.2 X-out PCBs must be marked as follows:

The X-out marking on each printed circuit board must be done using a black permanent felt-tip pen (quick-drying and with strong opacity) on sides A and B, on the markings provided for this purpose (over the entire surface).

13.3 The PCBs must be accompanied by the following documents:

A – **COC - manufacturer's certificate of conformity**. Each COC must include the following information:

- Manufacturer's name
- RAMI Swiss order number
- RAMI Swiss part number
- Drawing revision
- Batch number, date code
- Quantity sent

B – Base material COC

C – Solder mask COC

D – Measurement report containing the results of all tests and checks performed:

- Mechanical and dimensional reports
- Visual test report
- Electrical test report
- Impedance check test report (if required)
- Coating thickness (gold and silver coatings only)
- Metallographic microsection test report
- Brazability test report
- Misregistration report (PCB core only)
- Production report

5. Agreement specific to service providers and subcontractors

1. Service providers and subcontractors must ensure that employees providing the service or subcontracted work possess the requisite skills. Proof of competence must be provided to the purchaser if requested.
2. Services must be performed in accordance with the purchaser's quality management processes if so requested.

6. Other specific agreements

- 1.1 The supplier undertakes to apply the regulations of European Directive 2011/65/EU (RoHS) of 8 June 2011 to products supplied in the same way as if it were subject to the rules of the European legal area, and in particular to comply with the prohibition on substances set out therein.

1.2 The supplier undertakes to apply Regulation (EC) 1907/2006 (REACH) (<https://echa.europa.eu/>) to the products supplied. In this case, the following obligations shall apply in particular:

- Substance prohibitions shall be observed.
(<https://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>)
- The list of candidate substances shall be taken into account.
(<https://echa.europa.eu/web/guest/candidate-list-table>)
- If items delivered contain hazardous substances, a safety data sheet must be made available to the purchaser without prompting and kept up-to-date. All updates must be communicated to the purchaser without prompting.

1.3 The supplier undertakes, under its own responsibility, to keep abreast of developments in the standards and their annexes and to make deliveries in accordance with the standards in force at the time.

7. Quality assurance manager

The supplier must appoint a quality assurance manager with the necessary skills to coordinate the implementation of this manual, take or initiate the requisite decisions in this respect, and provide explanations. Any change of quality assurance manager is immediately notifiable in writing.