

1. Purpose

This document defines the quality requirements for Quadrant Avionics (QAL) Purchase Orders. The requirements stipulated in this document shall constitute a contractual obligation on behalf of suppliers unless otherwise specified in the Purchase Order. In this way QAL aims to prevent nonconformities, maximise on-time delivery, and provide evidence of control with an excellent level of customer service.

Companies included on the Approved Suppliers list shall automatically be approved for supply of goods and services to QAL in accordance with the supplier's own scope of approval.

If the supplier has any concerns about the requirements, they should contact QAL prior to performing any work. All correspondence shall be in writing.

All statements preceded by a bullet point are mandatory requirements.

2. Supplier Approval Policy

QAL aims to provide its customers with products and services which meet or exceed their requirements. QAL can only achieve this by using reliable and trustworthy suppliers with a firm commitment to quality. QAL will only select suppliers who fully accept responsibility for the quality of the products and services they supply and can demonstrate this through the quality management systems they operate, delivery performance and the quality of their products and services.

Acceptance of a QAL contract or Purchase Order implies acceptance of the requirements of this document.

QAL maintains a database of approved suppliers who meet, and continue to meet, the requirements stipulated in this document. Unsatisfactory supplier performance may result in removal from the database.

QAL shall systematically review all suppliers for their continued ability to meet the requirements of this document.

Objective evidence of the suppliers compliance, either by submittal of requested evidence, or evidence of a third party accreditation, may be acceptable for the purpose of re-survey, but will not preclude the use of on-site evaluations or other review methods. QAL at its discretion may honour second and third party AS9100 / ISO 9001 audits, provided that the scope of the audit performed by the second or third party correlates with the type of product being delivered to QAL. QAL reserves the right to perform additional assessments if deemed necessary.

3. General Quality Requirements

- The supplier, through an arranged visit, shall afford the right of access to QAL, its customers, and the CAA/EASA or MoD representatives (as the regulatory body) to verify that the purchased product / service conforms to QAL specified requirements at the suppliers' premises.
- The supplier shall have an organisation with defined responsibilities for personnel engaged in work affecting quality. There shall be a member of management assigned responsible for quality with sufficient staff and resources to ensure that the requirements of this standard are maintained regardless of other responsibilities.
- QAL must be notified in writing of any changes in Company ownership, senior management, and organisation structure or quality representative.
- The supplier must ensure that the requirements of this standard are met and that the products and services supplied to QAL conform to the specified requirements.
- The suppliers' system shall demonstrate both recognition of the quality requirements of the order and an organised approach to satisfy these requirements by ensuring that quality requirements are defined and implemented throughout all phases of the order process.
- The supplier is not permitted to sub-contract any work in support of a QAL contract or purchase order without written approval. QAL shall have the right to review and audit any proposed second tier suppliers prior to acceptance of the sub-contracting arrangement.

4. Material Supply and Receipt

QAL will, when required, supply raw materials for parts manufactured to drawings supplied. Should any discrepancies exist between material specifications supplied and the requirements of the drawings it must not be automatically assumed that the material supplied is an approved alternative. Reference must be made to the Quality Manager, or his nominated representative, for clarification.

By prior agreement only with QAL, the supplier may be permitted to use material of his own supply or alternatively ordered material may be delivered directly to the supplier from the material supplier. These arrangements will be defined in the purchase order.

- QAL requires all suppliers release documents to make reference to:-
 - The Materials Specification used
 - The Material Heat Treatment condition
 - The incoming Release Document No. for the material
- All items received from an Approved Stockist must be accompanied by its original approved documentation, or a certified true copy.
- Goods supplied to the supplier are supplied only for work carried out against QAL purchase orders. The goods must be stored in a suitable Bonded Stores area, labelled and segregated to ensure that it is used only for QAL product
- Any goods that are supplied by QAL which are damaged, lost or unsuitable for use must be recorded and reported to the applicable QAL Purchasing Department and should be stored in a quarantine store.
- All goods intended for use in QAL products shall be verified upon receipt that it is correctly identified and received in an undamaged condition.

5. Product Manufacture, Control, Identification and Traceability

The supplier is required to have a procedure for identifying the product at all stages of manufacture, inspection and shipping.

- Full traceability back to raw materials must be possible for each batch, with Certificates of Conformity (or an applicable Release Certificate) being supplied from all second tier suppliers, for their goods. Suppliers must provide a Certificate of Conformity with each batch. This is a mandatory requirement.
- The product must be clearly identified throughout the manufacturing process to indicate the inspection and test status (i.e. awaiting inspection, serviceable or unserviceable). Products of different inspection and test status must be clearly segregated.
- The position of identification markings, including inspection marking and the method by which they are applied are shown on the relevant drawings. It is also essential that where the individual identity of the part has to be preserved during manufacture, a system exists to ensure the transference of marking from one surface to another as the part progresses.
- The supplier will have suitable procedures to ensure that all personnel affecting quality are competent, and able to carry out their duties. Personnel shall be suitably qualified based on appropriate education, experience and training. Training Records shall be clearly maintained to identify individual's responsibilities and authorisations.
- Suppliers who handle product containing electronic components must have suitable procedures to minimise the risk of ESD. This includes the use of suitable packaging and delivery methods to ensure the product arrives at QAL premises in good condition.

6. Inspection and Test

Where appropriate, QAL will provide the supplier with special tools, fixtures or interchangeability gauges. The supplier is expected to provide all standard equipment.

- The supplier is responsible for maintaining and periodically checking all equipment loaned by QAL and returning it in good condition on the completion of the order.
- The supplier must have sufficient and adequate inspection, measuring and test equipment to verify that the product conforms to specifications.
- Each piece of test equipment must be uniquely identified and be calibrated to standards that are traceable to national standards.
- Each item of equipment must have a record of frequency of calibration, check method and result.
- Before final acceptance of parts, assemblies or components on which concessions have been granted the supplier's quality organisation must ensure that the concession number is marked on the items adjacent to the Part No. prefixed by the symbol 'C'. The method of marking must be the same as for the identification marking shown on the relevant drawing.

7. Process Monitoring and Control

- The supplier shall conduct planned quality audits to verify the correct operation of procedures and the effectiveness of their quality system. Records of these audits should be retained.

8. Corrective Actions / Rejection Notes

- The supplier shall maintain documented procedures for corrective actions to prevent the recurrence of non-conforming product and for ensuring that the actions are effective. The procedures shall include 100% inspection while the causes are investigated and the corrective actions implemented.
- The supplier must have procedures to control non-conforming product and to prevent inadvertent use. This shall include methods for identifying, segregating, evaluating, documenting and disposal / rectification. Repaired or reworked product shall be re-inspected to verify conformity and shall be clearly labelled as repaired or reworked.
- In the event of corrective action being required by a supplier, QAL shall issue a Rejection Note. This form must be actioned within 10 working days of receipt. The supplier must formally advise QAL of the causes, actions being taken and implementation date.
- Supplies of parts with insufficient or incorrect release documentation will be rejected. The purchase order number must be quoted on release certificates to ensure correct acceptance of goods.
- QAL requires that all supplies shall comply with their order/drawing or specification requirements and failure to satisfy these requirements normally involves rejection. However, in certain circumstances, the suppliers' quality organisation may be authorised by QAL concession action to accept parts which, although they fail to meet the stipulated requirements, are considered serviceable.
- Application for concessions must be submitted to the Quality Manager at QAL. Concession forms are available by direct request to the Quality Department.
- Suppliers shall not scrap non-conforming product made from QAL supplied material or parts without written authority from the Quality Department.

9. Quality Records and Document Control

- The supplier will maintain a documented procedure to ensure controlled distribution of all documents relating to the requirements of this Procedure.
- All obsolete documents must be removed from circulation.
- The control and issue of purchase orders, drawings and specifications issued by QAL shall be covered by this procedure, which shall ensure that these documents are available to the quality organisation and are kept confidential and in a controlled manner.
- All inspection records are to be kept and maintained as required in a dry secure store area away from hazards and in such a way as to minimise the risk of fire damage. Records are to be kept for no less than 7 years from the date of issue of the related Certificate of Conformance or Authorised Release Certificate.
- Data that is considered essential for continuing airworthiness should be kept throughout the operation life of the product, part or appliance. Any such data must not be destroyed during or after this period without prior written approval from QAL.

Examples of this data are:

Work Record Cards
Release Notes
Concessions/ Production Permits
Certification Records
Test Results/ Reports

10. Release and Delivery Requirements

- All supplies provided to QAL must be conveyed under cover of a release certificate in accordance with the requirements of the QAL Purchase Order.
- The release certificates must correctly define the supplies to which they relate, together with endorsements to cover processes such as heat treatment, non-destructive testing, pressure testing etc., which have been carried out together with test reports as appropriate.
- Release Certificates from suppliers shall bear the following (or similar) printed certification:

“It is certified that the goods listed hereon have been inspected and tested and, unless otherwise stated, conform to the full requirements of the order. Furthermore, the raw materials and/or parts used have been obtained from approved sources supported by Release Notes/Certificates.”
- Suppliers holding EASA/CAA approval including Part 145 and Part 21 must supply documents as appropriate in accordance with current regulations, e.g. EASA Form 1.
- When returning supplies previously rejected by QAL, the supplier must indicate on the accompanying release certificates whether the supplies have been re-worked, repaired or returned without action.
- The supplier will have suitable procedures to ensure that all products are stored, packaged, handled and delivered in a suitable manner to prevent loss, damage or deterioration.
- Hazardous product, product with limited shelf life and product with special storage or handling instructions must be clearly marked on each container to indicate the restrictions or limitations of use.