



ICG PURCHASE ORDER QUALITY CLAUSES

Q1 – Certificate of Conformance (COC)

All Items must be accompanied by a COC issued by the seller, certifying that all materials, processes and finished items supplied under the PO conform to the applicable specifications. In the case that seller is not the manufacturer, a copy of manufacturer COC should be provided as well. Test and inspection data shall be kept on file by the seller and be available for review, on request for a period of at least 4 years after final delivery on the PO.

Q2 – Raw Material Certification

Certificate of Conformance on raw materials: Your certificate of conformance shall contain manufacturer's identification of raw materials by process batch, heat, lot, type and class.

Q3 – Test & Measurement Data

In addition to certification, your records containing actual measurements taken shall be submitted as part of this purchase order. Your records shall include that your measuring & test equipment used during inspection and test have been fully calibrated in conformance to the requirements of MIL-STD-45662. (or ISO 17025 if Q12 is imposed on the PO)

Q4 – Inspection and Test Records

Inspection and test records including processes and calibration shall be maintained for a period of no less than twelve (12) years unless otherwise specified in our purchase order. Supplier is required to notify Island Components Group of nonconforming product, notify of changes to product, processes, suppliers, or manufacturing facilities. Supplier must receive nonconforming product disposition approvals from the Island Components Group.

Q5 – Defense Priority Rating

This is a rated order certified for national defense use, and you are required to follow all the provisions of the defense priorities and allocations system regulation (15 CFR, Part 700).

Q6 – Source Inspection

All work performed under this PO is subject to ICG and or ICG customer inspection or test at the Seller site prior to shipment. ICG and or ICG Customer representatives may elect to perform tests on a random basis and may elect to perform up to 100% inspection. The seller shall provide test inspection and test facilities for ICG and or ICG customer to verify conformance. The seller shall notify ICG no less than 14 working days prior to the scheduled inspection.

Q7 – Government Source Inspection

Government inspection is required prior to shipment from your plant. Upon receipt of this order promptly notify the government representative who normally services your plant so that appropriate planning for government inspection can be accomplished; or on receipt of this order, promptly furnish a copy to the government representative who normally services your plant. If you have no government representative, notify the nearest Army, Navy, Air Force, or Defense Supply Agency inspection office. In the event the representative or office cannot be located, our purchasing agent should be notified immediately.

Q8 – First Article Inspection (FAI)

FAI in accordance with AS9102 is required prior to delivery of the first production unit to demonstrate compliance with the requirements of the PO and referenced specifications. Seller with the participation of ICG and or ICG customer shall perform the FAI. The seller shall notify ICG no less than 14 working days prior to the scheduled inspection.

Q9 – Workmanship Standards

Compliance to one or more of the following workmanship standards is required on this PO.

- Q9A- IPC 600 Class 3
- Q9B- IPC 610 Class 3
- Q9C- IPC 620 Class 3
- Q9D- J-STD-001

Q10 – ISO 9001 Quality System Requirement

The supplier is required to conform to ISO 9001:2015 quality management system.

Q11 – AS9100 Quality System Requirement

The supplier is required to conform to AS9100D quality management system.

Q12 – ISO/IEC 17025:2005 Requirement

The supplier is required to conform to ISO/IEC 17025:2005, General Requirements for the competence of testing and calibration laboratories.

Q13 – Chemical & Physical Analysis

A copy of the sellers test report containing quantitative results of chemical and/or physical analysis is required with each lot (as applicable).

Q14 – NADCAP Certification

All parts to be delivered or incorporated into items deliverable to ICG under this PO, must be performed by NADCAP certified plating facilities.

Q15 – Dimensional Test Data

A copy of the sellers test report containing quantitative results of all dimensional measurements is required with each lot.

Q16 – Limited Shelf-Life Material

The seller shall provide with the COC, the date of manufacture, expiration date, permissible shelf life, lot or batch number, storage temperature and any other pertinent information relating to the shelf life of the item supplied. The above shall also appear on the labels of the individual items or containers. The materials shall not exceed 25% of the total shelf life at time of shipment.

Q17 – Material Safety Data Sheets

The seller shall provide a copy of the MSDS with every shipment that pertains to chemicals and Hazmat products.

Q18 – Ultrasonic Testing

Ultrasonic testing in accordance with AMS-STD-2154 and AMS 2631 is required for items to be delivered on this PO.

Q19 – Change Approval Required

Seller shall not make any changes to the, quality, process, materials, facility location or any other change that could jeopardize the integrity of the product being delivered on the PO without the prior consent of ICG. ICG reserves the right to impose additional First Article requirements for any change that it deems as critical.

Q21 – Leaded Material

The seller shall provide ONLY leaded (non-RoHS) materials for this purchase order.

Q22 – RoHS Compliant Material

The seller shall provide ONLY RoHS compliant materials for this purchase order.



ICG PURCHASE ORDER QUALITY CLAUSES

Q23 – Attribute Data

The supplier shall provide attribute data (Go/No-Go) for each lot delivered showing conformance of all inspections and/or tests specified by the applicable drawings, specifications, or supplier's acceptance test procedure as approved by ICG. This data shall be included with each shipment of product.

Q24 – Variable Data

The supplier shall provide variable data (measured values) for each item delivered showing conformance of all inspections and/or tests specified by the applicable drawings, specifications, or supplier's acceptance test procedure as approved by ICG.

Q25 - NONCONFORMING PRODUCT NOTIFICATION

Supplier shall promptly notify ICG when nonconforming product has been produced prior to and/or after delivery. Formal failure analysis, containment, and root cause with corrective action responses shall be required.

Q26 - ESD (FULL COMPLIANCE)

The Supplier shall implement an Electrostatic Discharge Control program that meets the requirements of MIL-STD-1686. Implementation may be audited in accordance with MIL-HDBK-263 (Appendix K) and MIL-STD-129 Marking for Shipment and Storage.

Q27 – ESD (PARTIAL COMPLIANCE)

The supplier shall comply with MIL-STD-129 Marking for Shipment and Storage and paragraphs 5.1 and 5.3 through 5.10 of MIL-STD-1686.

Q28 – ESD PACKAGING

Products susceptible to damage from static electricity shall be packaged in tubes, tape & reel, or containers constructed of waterproof, electrostatic protective, static dissipative material with no talc, or residues that would inhibit solder ability or contaminate leads or finish of product. Connector products shall be protected with static shielding dust caps. When static shielding caps are not available for the product, selection of specific packaging material shall be the responsibility of the supplier providing aforementioned requirements.

Q29 – PC BOARD MANUFACTURING

All printed circuit fabricated by the Supplier shall meet the requirements of IPC 6012 Class 3 or IPC 6018 Class3, or requirements specified on the ICG drawing. Acceptability of printed boards shall be in accordance with IPC-A-600.

Q30 – VARIATION MANAGEMENT OF KCs

The following requirements are applicable to Key Characteristics if identified on ICG drawings:

- * Supplier shall develop and maintain a Variation Management Program in accordance with AS9103.
- * Supplier procedures shall include Process Control procedure (PCP) detailing how key characteristics are manufactured, critical process steps identified, and how variation shall be analyzed, evaluated, and method controlled. Supplier shall submit a PCP to ICP Quality for approval prior to manufacture of parts.
- * Supplier shall submit to ICG, control charts, histograms and/or other analytical charts. Supplier shall provide evidence of analysis of data and actions taken in response to identified variations, outside of established statistical control limits
- * Supplier shall flow down to sub tier suppliers the applicable requirements in the purchase order, including key

characteristics, when the control; of key characteristics are a requirement of this order.

Q31 – KEY CHARACTERISTICS

Where key characteristics are defined on provided drawings, specifications, or Purchase Order, the supplier will assure that a variation management process is in place per AS9103 that assures a minimum Cpk of 1.33. (100% INSPECTED)

Q31 – FOREIGN OBJECT DEBRIS

The supplier shall employ appropriate housekeeping practices to assure timely removal of residue/debris generated, if any, during manufacturing operations and/or normal daily tasks. Sellers shall determine if sensitive areas that may have a high probability for introduction of Foreign Objects Debris/Damage should have special emphasis controls in place appropriate for the manufacturing environment.

Q32 – PRESERVATION, AND PACKAGING REQUIREMENTS

Unless otherwise stated on the PO/contract, the items on this order shall be marked, packed, packaged and preserved to assure adequate protection from deterioration and physical damage due to material handling or shipment. Marking shall be legible and the material shall be free of nicks, dents, gouges, scratches and undue oxidation. Parts subject to oxidation shall be packaged with a suitable preservation or an oxidation inhibiting paper such as non-rust paper. Springs shall be packaged to preclude entanglement. When required by the purchase order and/or referenced documents, the supplier shall utilize customer specified bar code labels and pack and package supplies to specific packing and packaging specifications.

Q33 - SPECIAL PROCESS CONTROL

Special processes are those yielding products which cannot be evaluated for conformance to requirements through inspection or non-destructive testing. These include welding, plating, heat treating, anodizing, glass or shot peening, printed circuit board fabrication, dry film lubricant application, etc. The Supplier shall, as a minimum, demonstrate a degree of control over these processes to provide assurance that specifications are complied with. As applicable, the Supplier shall provide adequate training for personnel, certifications where required and destructive testing of samples and detailed procedures (AND BE CUSTOMER APPROVED WHEN APPLICABLE). Upon request, copies of special process procedures and certifications shall be supplied to ICG. If the Supplier uses facilities other than his own, that facility is subject to the same conditions stated herein. All certifications supplied as objective evidence must indicate the name and location of the facility performing each special process.

Q34 - DOMESTIC SPECIALTY METALS

If a U.S. Government Contract number is called out on the face of the purchase order, the supplier shall only use raw materials that are IAW DFAR Clause 252.225-7014, "Preference for Domestic Specialty Metals, Alt 1." Metals must have been melted in the United States, its outlying areas, or a qualifying country listed in DFARS 225.872-1. These instructions must be flowed down to all sub-tier suppliers. Compliance certification shall be made available to ICG upon request.



ICG PURCHASE ORDER QUALITY CLAUSES

Q35 – GOOD WORKMANSHIP

Shall be, unless otherwise specified on PO or Drawing:

Finished Surfaces Cosmetics

- Paint coverage on surfaces will be uniform, including adjacent materials of assemblies
- Finished surfaces will be free of defects including chips, scrapes, or other damage

Mill Steps, Tooling, and Chatter

- Tool marks on as-milled surfaces will be free of defects including burrs, chatter, tool gauges, and will meet surface roughness specifications.
- Clearly indicated critical surfaces will be free of mill steps and marks across the entire surface.
- Milled surfaces will meet surface roughness specifications.

Chips, Burrs, and Sharp Edges

- All exposed edges will be free of burrs, sharp edges, and metal slivers.
- Foreign Object Debris (FOD)
- Surfaces will be free of cutting fluid, metal chips, foreign objects, and other debris.
- Threads
- Threads will be fully formed and cut to specified size and class according to provided drawings.
- Threads will be free of defects, notable damage, and contamination.

Plated Surfaces

- Plated surfaces will be uniform, including adjacent surfaces of assemblies.
- Plated surfaces will be free of machining marks, scratches, pits, protrusions, or any visible bare metal.
- Some minor defects may be permissible in certain situations if they do not compromise the protective finish.

Weld Joints

- Weld joints will be finished as specified in the weld callouts of the provided part drawing.
- Welds without specific requirements will be cleaned to remove slag or other surface contamination.
- If required, weld joints will not be painted until the welding has been completed and the weld has passed inspection.

Countersinks

- Countersinks shall be round and made to print specifications and allow the proper designed fit with the mating screw.
- Countersinks will be free of burrs, chatter, or other tooling defects.

Painted Surfaces

- Painted surfaces shall be consistent and continuous in the finish.
- Painted surfaces shall be free of visible machining marks, scratches, abrasions, dust particles, fisheyes, orange peel, or bare metal.
- Painted surfaces should be reviewed against this standard at a distance of 18" at 1X magnification.

Minor Dimension may use an AQL sample size as C=0 1.0

First Article are required if the product has not been made or received in more than 2 years from the last shipment.

Critical Dimension must be inspected 100%.
Major Dimension must be inspected 100%