

Quality Assurance Clauses



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STANDARD PURCHASE ORDER QUALITY CONTROL ATTACHMENT

The requirements of these clauses, and any procedures or reports executed in implementation therefore, with their terms and conditions become an integral part of the Purchase Order to the extent specified in the Purchase Order. These requirements supplement but do not supersede the presently existing Purchase Order Terms and conditions.

Compliance with the requirements of these clauses does not relieve the seller of his responsibility for furnishing material and services which fully comply with applicable Drawings and Specifications, nor does it guarantee acceptance of material and services by Fancort Industries, Inc (Fancort).

In addition, compliance does not relieve the seller's obligation to meet the scheduled delivery dates as specified on Fancort Purchase Order. If Seller becomes aware of any circumstances that are likely to give rise to a delay in promised delivery date, the Seller shall immediately notify their Fancort Purchasing agent, in writing, stating the reason for the delay and the new time for delivery (no later than 48 hours before the promised date).

Applicable clauses are designated on the Fancort Purchase Order by applicable clause number. All reports, test data and/or objective evidence shall be sent to Fancort Attn: Purchasing Agent or QA Department, unless otherwise specified on the Purchase Order.



QAC-001 Export / Import Control

Fancort requires that the Seller maintains full compliance with the U.S. Government export/import laws and regulations including the U.S. Department of State, Directorate of Defense Trade Controls (DDTC), International Traffic in Arms Regulations (ITAR) and the U.S. Department of Commerce, Bureau of Industry and Security (BIS), Export Administration Regulations (EAR) throughout the entire fulfillment period of this PO, as may be applicable.

The Seller shall be solely responsible, and shall release, indemnify, and hold harmless (which for purposes of this requirement shall include, without limitation, Fancort's officers, employees, and agents) from and against any and all claims, demands, losses, damages, defense costs, or liability of any kind, which may arise out of, or are in any manner connected with the protection of any controlled technical data or defense articles provided to Seller by Fancort to assist in the manufacture of a defense article or provision of a defense service.

The release of this data by the Seller to a Foreign Person employee or its transfer to another Foreign Person for the purpose of Off-Shore Procurement is defined as an export (ITAR 22 CFR Parts 120.17 and 124.13 and EAR 15 CFR Part 734.2(b) (2) (ii) and Supplements 1 and 2 or Part 774) and shall be subject to the licensing requirements of the ITAR and EAR, as applicable.

Seller shall not deliver product directly to Fancort via international drop shipment without Fancort's prior written approval.

QAC-002 Surveillance

- Seller must allow the Fancort representative and/or Fancort's customer representative access to his facility.
- Access to any areas which involve proprietary processes or intellectual property will require an agreed to arrangement between the Buyer and the Seller.
- The US Government has the right to inspect, at any reasonable time, any or all of the work performed on US Government contracts.

QAC-003 Government Source Inspection

- Government Source Inspection (GSI) is required prior to shipment of product from your plant
- Immediately notify government representative that GSI has been invoked, upon receipt of the order
- In the event that the government office or representative cannot be located, the Fancort must be notified, immediately
- Evidence of GSI must accompany each shipment

QAC-004 Fancort Source Inspection

- Fancort Source Inspection is required prior to shipment of product from your plant
- The Source Inspection (SI) performed may include witnessing of Final Acceptance Testing, Final Acceptance Inspection and/or review of supporting in-process records
- Notify the Fancort seven (7) days in advance of items ready for source inspection



QAC-005 Flow-down

If the supplier uses facilities other than their own, that facility is subject to and shall adhere to the same conditions of the Fancort Purchase Order. All certifications submitted, as objective evidence must indicate the name and location(s) of the facility providing the service/material.

Objective evidence of all inspection/ tests used to verify or demonstrate compliance with applicable specifications must be available for review and retained as specified in the [Federal Acquisition Regulation \(FAR\), section 4.703](#), unless specified differently in the Fancort contract.

Fancort reserves the right to require failure analysis on any or all failures that may occur that are associated with the item(s) delivered on this P.O.

Seller shall flow down the applicable clauses of this document to sub-tier suppliers for this PO.

QAC-006 Quality System Requirements

The supplier's Quality Management System, at a minimum, shall address the following ISO family requirements:

1. A current, documented Quality System Manual shall be in place
2. Control of Documented Information
3. Control of Monitoring and Measuring Equipment
4. Control of External Providers
5. Control of Production and Service
6. Control of Non-conforming Product
7. Corrective Action

QAC-007 Controlled Manufacturing Process

- A manufacturing process map (flowchart) must be provided to Fancort, for review and approval, at least thirty (30) days prior to start of initial production.
- The process map shall contain sequential procurement, fabrication, processing, sub-contracting, inspection and test steps.
- The submitted process map may require iteration, to capture additional definition of critical process variables.
- Upon approval of supplier's process map, the supplier shall control all manufacturing, processing, testing and inspections as stated in the documented plan.
- Changes to the approved manufacturing process map and/or defined variables, must be immediately communicated to Fancort.
- Submitted changes to the manufacturing process map may require additional auditing, qualification and/or submittal of a delta F.A.I. to address the critical characteristics affected.

Supplier process is subject to audit by Fancort Quality Assurance



QAC-008 Special Process Control

Special Processes are those that produce part features that require destructive testing to verify conformity.

- Suppliers engaged in special processes (example: soldering, brazing, welding, etching, plating, casting, heat treating) shall have in place procedures to support special processes.
- Supplier must have approved methods on file supporting acceptance of special processes (example: magnetic particle inspection, dye penetrant inspection, radiographic inspection).
- Test results and process certifications are on file at your facility or your supplier's facility and are available for review by Fancort.
- Supplier shall maintain a control system for all special process sub-tier suppliers ensuring all processes are documented and controlled.

Supplier shall ensure that all personnel performing such processes as welding, soldering and Non-destructive Evaluation or Testing are certified in accordance with the specifications contained on the drawings and purchase orders. Supplier shall also ensure the associated equipment used is certified as appropriate.

QAC-009 Material Process Control

The supplier shall have on file at their facility or at their supplier's facility inspection reports per the applicable specification for the materials shipped under this order.

This is to certify that all items noted are in conformance with the contract, drawings, specifications, and other applicable documentation that all process certifications, chemical and physical test reports, are on file at your facility or your supplier's facility and are available for review by Fancort.

QAC-010 Foreign Object Control

Supplier shall maintain a foreign object control program with a documented and current plan assuring work is accomplished in a manner preventing foreign objects or materials from entering and remaining in deliverable items.

Supplier shall provide foreign object control training to employees performing operations on Fancort's products.

Maintenance of the work area and control of tools, parts and material shall preclude the risk of foreign object debris (FOD). As such, tooling, jigs, fixtures, and test or handling equipment shall be maintained in a state of cleanliness and repair to prevent foreign object damage (FOD).

Prior to closing inaccessible or obscured areas and compartments during assembly, the supplier shall inspect for foreign objects/materials as part of in-process inspection operations.

The supplier shall document and investigate all FOD incidents assuring elimination of the root cause.

Fancort shall have the right to perform inspections, verification and FOD control program audits at supplier's facility to assure program documentation and effectiveness.

Supplier shall flow down requirements as required to their suppliers to ensure compliance to this requirement



QAC-011 Referenced Document Revisions

Unless otherwise specified, all specifications and standards referenced as part of the PO shall be the latest issue in effect at the time of PO placement. In the event a military/industry standard or specification is canceled or superseded, the superseding document should be used. If no superseding document is cited or known, the latest revision prior to cancellation should be used.

QAC-012 Changes

- Seller shall not make any changes in (i) material(s), (ii) design, (iii) manufacturing source(s), (iv) process(es), (v) tooling, (vi) equipment, (vii) equipment/tooling/product software, etc. which can potentially affect the fit, form, function, reliability, safety, or maintainability of the item or services on this PO without the prior notification (within 48-hours of the event) and approval of Fancort.
- Additionally, Seller shall notify Fancort of (i) any changes in its quality management representative or quality leadership, (ii) any adverse changes to Seller's quality system or product accreditations/approvals (e.g., expired, withdrawn, suspended, downgraded) or stature, (iii) any certification body or regulatory agency findings/nonconformances classified as "Major", "Significant" or similar, (iv) any changes of senior management, (v) any changes in company ownership, (vi) any significant manufacturing / production infrastructure changes, including expansions, contractions, and relocations, and (vii) the curtailment/discontinuance of manufacturing operations or product/services not being continuously available for purchase.
- Execution of order in advance of Buyer approval shall be at the Seller's sole risk.

QAC-013 Material Traceability

- Components (Electrical, Electronic, and Mechanical). All components used on this PO shall be traceable to the original manufacturer's lot or date codes and supporting approval documentation (e.g., PO's & certificates of conformance). This also applies to test data and reports, as specified in the applicable PO, contract or specification. The Seller shall be able to trace these components to all delivered items.
- General. The Seller shall establish and maintain a system for documenting the history of item from receipt of raw material through all stages of manufacture, inspection, test, and shipment by such means as a lot number, date code, or serial number control. The means used shall relate the item to the particular lot of raw material, manufacturing process, specification, drawing, heat number, cure date, etc., to provide a complete history traceable to Seller's records and data. Seller shall furnish the lot, date code, serial number, or other traceable identification with each shipment.

QAC-014 Serial Numbers

- Supplier shall assign individual serial numbers to each item shipped under this order.
- Duplication of serial numbers shall not be allowed.
- Serial numbers will be applied in accordance with drawing and/or specification.

All supplier data shall be identified by serial number.

QAC-015 Lot Control

Supplier shall assign a lot control number to each manufactured lot under this order. Lot consists of a quantity of items manufactured during an uninterrupted period.



QAC-016 Acceptance Test Procedures

Supplier to submit a copy of their acceptance test procedure thirty (30) days, prior to use, for Fancort QA approval.

- Procedure should include data sheets for recording all results,
- Procedure shall identify all test equipment to be used for acceptance.
- Procedure to include calibration data sheet listing equipment used, calibration date and expiration date.

Once Acceptance Test Procedure has been approved for the part number, the requirement for ATP has been satisfied for future purchases of this part number, unless a revision change is made to the documentation. Supplier is obligated to notify Fancort of any changes made to the approved ATP.

QAC-017 Qualification Testing

Qualification tests shall be performed on the first system produced by a supplier who has not previously completed Qualification Testing.

- The tests shall consist of all required testing conducted in accordance with the applicable item specification.
- The supplier shall provide Fancort with a reproducible, signed copy of a Qualification report documenting all test results and certifications as required in the item specification.

The design Qualification test shall be performed on a unit as nearly identical as possible in design to units produced through the remainder of the contract.

QAC-018 Test Specimen

- Supplier shall submit with this shipment test specimens specific to the process being performed.
- All specimens, whether weldment pieces, test bars, optical coatings or painted finishes shall be in accordance with procurement specifications, drawings and/or documents referenced in the purchase order.

Supplier shall submit test data/test reports identifying material and/or requirements.

QAC-019 Tool Proofing

Dimensional part samples from tooling to be used for production shall be furnished to and approved by the Fancort prior to fabrication of production parts.

For multi-cavity molds or dies, samples shall be provided from each cavity and the cavity shall be identified. Production parts fabricated in advance of Buyer approval shall be at the Seller's risk.

QAC-020 Software Release

The supplier shall provide a document which contains the following:

- A description of the release or change to the software (release notes)
- Validation checksum or equivalent
- Date of release
- Item identification number (part number)

When software is delivered electronically (i.e. FTP site, etc), the Supplier shall provide email notification to Fancort Purchasing Agent or QA Department.



QAC-021 First Article Inspection/Test

First Article Acceptance is required for the part number supplied.

The supplier shall submit a reproducible, signed copy of a First Article Report stating recorded inspection and test variable data for all characteristics, requirements, and parameters. The Supplier shall record all measurable characteristics (i.e., drawing dimension, tolerance, measured dimension, electrical tests, etc.), including a verification of drawing notes. This report shall document acceptance of each measurable characteristic and comply with AS9102, current revision. The supplier shall also provide applicable raw material and special process certifications. Once a First Article Report has been supplied for the part number, the requirement for First Article Inspection has been satisfied for future purchases of this part number, unless:

- The part is purchased from a new supplier
- There has been a break in production of greater than two (2) years
- The physical location of the production processes has changed.

QAC-022 Test Data

Supplier to provide results of all final acceptance tests performed to determine acceptability of each part delivered. NOTE: A Certificate of Conformance does not satisfy the requirements of this code.

Test data shall include:

- Fancort part number and revision
- Fancort Purchase Order number
- Supplier part number (if applicable)
- Date of test(s) performed
- Traceability information (Serial Number(s), Date code(s), Lot Number(s), etc.)
- Identity of person that performed the test
- Acceptance criteria used
- Results of tests performed
- Supporting documentation.

QAC-023 Dimensional Inspection Data

Supplier to provide results of inspection performed to determine acceptability of each part delivered. NOTE: A Certificate of Conformance does not satisfy the requirements of this code.

Inspection results shall include:

- Fancort part number and revision
- Fancort Purchase Order number
- Supplier part number (if applicable)
- Date of test(s) performed
- Traceability information (Serial Number(s), Date code(s), Lot Number(s), etc.)
- Identity of person that performed the inspection(s)
- AQL used for each requirement
- Acceptance criteria used
- Results of inspection(s) performed



QAC-024 Zero Based Sampling Plan

Seller's sampling plans employed shall be in accordance with established military or industry consensus standards. Seller should employ zero acceptance number (c=0) or often referred to as accept-on-zero (AOZ) sampling techniques. The use of statistically valid sampling plans does not relieve Seller of Seller's sole obligation to provide 100% defect-free items at no increase in price, cost, or fee to Fancort. Quality Records are to be retained by Supplier and available for review by Fancort when required. Retention time shall be 10 years.

Inspection by attributes or variables conforming to ANSI/ASQC Z1.4 or ANSI/ASQC Z1.9, current revision, using a sampling plan of AQL 1.0% Level II or an approved alternate.

QAC-025 Monitoring and Measuring Equipment

Processes and parameters must be monitored and measured. All equipment utilized for monitoring and measuring, including but not limited to product acceptance, must be calibrated.

QAC-026 Certificate of Conformance

A certificate of conformance shall be supplied with each shipment of material supplied against this Purchase Order. The certificate shall certify that the material meets all applicable Fancort specification requirements or military/industrial specification requirements. Certification shall contain the following at minimum:

- Fancort part number and revision
- Fancort Purchase Order number
- Supplier part number (if applicable)
- Traceability information (Serial Number(s), Date code(s), Lot Number(s), etc.)
- Supplier's QA rep. approval with typed name, signature, title, and date.

Supplier shall perform inspection, as necessary, to determine the acceptability of all articles under this Order. The applicable material test results, process certifications and inspection records shall be available upon Fancort request.

QAC-027 Certificate Of Conformance from QPL Approved Manufacturer

Material used for this order must be provided from a supplier on the Government's Published QPL.

- A certificate of conformance from the manufacturer shall be supplied with each shipment of material supplied against this Purchase Order.

The certificate shall be signed and dated by the responsible manufacturer representative and shall certify that the material meets all applicable specification requirements or military/industrial specification requirements.

QAC-028 Records of Material Properties

- Supplier shall provide original mill chemical/physical test reports.
- Reports must comply with and identify the material specification listed on the Purchase Order.
- Reports must be reviewed and approved by Supplier's Quality representative.

All reports must have Quality Rep's signature, title and date of approval.



QAC-029 Records of Heat Treatment

- Supplier to provide oven heat treat charts and data reports.
- Test reports must have a Quality representative's signature, title, and date.

Heat treat must be performed in accordance with procurement specification documents referenced on the Purchase Order.

QAC-030 Prohibition of Hexavalent Chromium

Seller shall fully understand and comply with Defense Federal Acquisition Regulation (DFAR) 252.223-7008 regarding the prohibition of hexavalent chromium for the product/service being provided by the Seller to the Fancort.

QAC-031 Mercury Exclusion

Each shipment of supplies furnished for this Order shall contain no metallic mercury or mercury compounds. The supplier shall take reasonable steps to be sure that mercury contamination does not occur during the manufacturing process, testing or inspection.

QAC-032 Registration, Evaluation, Authorization and Restriction of Chemical (REACH)

Seller shall fully understand and comply with the European Community (EC) regulation (EC 1907/2006 and successor amendments/modifications) Registration, Evaluation, Authorization and Restriction of Chemical (REACH) for the product/service being provided by the Seller to the Fancort. Upon Fancort's request, the Seller must provide to Fancort's satisfactory supporting evidence, as solely determined by Fancort, demonstrating Seller's compliance with their obligations with regards to REACH.

QAC-033 Restriction of Hazardous Substances Directive (RoHS)

Seller shall fully understand and comply with the European Directive (2002/95/EC and successor amendments/modifications) on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (commonly referred to as the Restriction of Hazardous Substances Directive or RoHS) for the product/service being provided by the Seller to the Fancort.

QAC-034 Hazardous Material

The vendor is to supply, with order, Safety Data Sheets. These sheets will detail all potential hazards involved with using and handling this product, including storage and disposal. The Safety Data Sheets will detail methods of safely using this product.

QAC-035 Anodizing

Unless otherwise specified, after performing anodizing per MIL-A-8625, AMS 2482, MIL-A-63576 or any other aluminum anodizing specification, apply touch-up chemical conversion coating to rack marks per MIL-DTL-5541, Type 1, Class 1A, using Alodine 1132 or equivalent.



QAC-036 Limited-Life Items.

- Supplier to identify manufacture/cure date and expiration date on each item in shipment.
- Shelf life must exceed 75% of total shelf life at time of receipt at Fancort.

QAC-37 Electrostatic Discharge (ESD) Protection

Components and assemblies, which are susceptible to electrostatic discharge damage, shall be handled and packaged to prevent ESD damage utilizing MIL-STD-1686, ANSI/ESD S20.20, or EIA/JEDEC JESD625 as a guideline or Fancort acceptable equivalent. ESD protective containers shall be marked as containing ESD sensitive devices.

QAC-038 Packaging Requirements

All items must be adequately preserved, packaged, handled, and contained to prevent deterioration and damage during shipment.

Damage during transit may be the responsibility of the supplier if inadequate packing is identified as a contributing cause.

Each lot or batch shall, as far as is practicable, consist of units of product of a single type, grade, class, size, and composition, manufactured under essentially the same conditions and at essentially the same time.

When shipping multiple lots of a Purchase Order line item, Seller shall segregate the multiple lots of the same part number. In cases where this is not achievable, lots shall appropriately identified within the shipment.

Unique Packaging. Unique packaging, when required, shall be in effect as cited on the PO. Contact Fancort if further clarification is required.

Hazardous Material. Any Hazardous Material on this PO shall be properly packaged and labeled per appropriate U.S. Federal regulation(s). The Seller is solely responsible to ensure that all U.S. Federal regulations are met.



QAC-039 Suspect Counterfeit/Counterfeit/Substandard/Unapproved Parts/Items

Only new and authentic materials shall be used in products delivered to Fancort. No Suspect Counterfeit/Counterfeit/Substandard/Unapproved Parts/Items (hereinafter may collectively be only referred to as either Suspect Counterfeit Parts/Items, Counterfeit Parts/Items, Substandard Parts/Items, and/or Unapproved Parts/Items; and the terms parts and items shall be interpreted as being synonymous and interchangeable) shall be contained within the delivered item.

All items shall be guaranteed to meet the original manufacturer's or government/industry/regulatory/statutory full specifications, inclusive of being authorized or qualified (e.g., listed on the Qualified Product List (QPL), Qualified Manufacturer List (QML), Fancort drawing/specification, or possessing Federal Aviation Authority (FAA) Parts Manufacturer Approval (PMA) or Technical Standard Order Authorization (TSOA), etc.) to manufacture or provide such item(s), when required. Fasteners shall be compliant to the Fastener Quality Act (FQA), Public Law 101-592 and successor amendments.

If Suspect Counterfeit/Counterfeit/Substandard/Unapproved Parts/Items are furnished under this PO and are found in any of the goods delivered hereunder, such items will be impounded by Fancort. The Seller shall promptly replace such with items acceptable to Fancort, and the Seller shall be liable for all costs relating to the removal and replacement of said items as specified in the purchase order requirements or Seller's insurance policies. Fancort reserves all contractual rights and remedies to address grievances and detrimental impacts caused by suspect/counterfeit parts and may, at Fancort's sole discretion, report such to law enforcement agencies, and/or third-party monitoring or reporting entities.

All occurrences of Suspect Counterfeit and/or Counterfeit Parts/Items encountered by Seller or Seller's sub tiers in fulfillment of the Order shall be immediately reported in writing (within 1 business day) by Seller to Fancort. All occurrences of Suspect Counterfeit and/or Counterfeit Parts/Items encountered by Seller or Seller's sub tiers, exclusive of items provided by Fancort (e.g., cosigned items), shall be reported by Seller (or applicable sub tier) in a timely manner to both the Electronics Resellers Association International (ERAI) at www.eraf.com and the Government-Industry Data Exchange Program (GIDEP) at www.gidep.org. Objective evidence of report submissions to ERAI and GIDEP shall be provided by Seller (or applicable sub tier) to Fancort, upon request, at no increase in price, cost, or fee to Fancort.

QAC-040 Franchised (Authorized) Distributors of Connectors and Active and Passive Components

- Seller warrants that OCM/OEM authorizing franchise documentation covering the specific connector, or active or passive electronic component being provided by Seller to Fancort is on file at Seller and is available within 1 business day to Fancort upon Fancort's' request, at no increase in price, cost or fee to Fancort.
- Seller shall contact Fancort in the event that the original OEM/OCM C of C and unbroken traceability documentation to the OEM/OCM is not available.
- Certification and traceability requirements shall be included with each shipment as specified herein.



QAC-041 Independent (Broker or Non-Franchised) Distributors of Connectors and Active and Passive Components

All inspecting and testing shall be performed to the original manufacturer’s specifications and parameters. Recorded evidence of all testing performed shall be included with each shipment.

Component Type		Required Inspection / Testing	
Actives	Passives & Connectors	Lot Sample Size*	Inspection/Test
Required	Required	100%	Visual Microscopy Inspection of all parts in the order under 10X minimum magnification
Required	Not Required	100%	X-Ray Inspection
Not Required	Required	100%	X-Ray inspection for non-glass diodes and tantalum capacitors only
Required	Required	2	XRF/RoHS (2 parts per lot date code)
Required	Required	2	Resistance to Solvents testing
Required	Required	2	Heated Solvent Testing (Dynasolve Immersion)
Required	Required	2	Scrape Testing
Required	Required	2	Solderability Testing per IPC/EIA J-STD-002
Required	Not Required	2	De-Lid, Die Penetrate, Die Verification
Required	Required	1	Scanning Electron Microscopy
Not Required	Required	1% AQL, Level II	Applicable electrical testing (resistance, capacitance, continuity)

All samples to be used in inspection/testing shall be taken at random from the homogenous lot (i.e., same OCM/OEM, same part number, and same OCM/OEM date code/lot number) of material that will be delivered. Lot acceptance shall be based on Ac = 0; Re = 1.

QAC-042 Cable and Harness Assemblies

Unless otherwise specified by the P.O. or Fancort released specifications, IPC/WHMA-A-620, Class 2 applies.

QAC-043 Circuit Card Assemblies

Unless otherwise specified by the P.O. or Fancort released specifications:

- Soldering shall be in accordance with the requirements of J-STD-001 Class 2.
- [IPC-A-610 Class 2](#) shall be the inspection criteria.

QAC-044 PRINTED WIRING (CIRCUIT) BOARDS

Unless otherwise specified by the P.O. or Fancort released specifications:

Printed circuit board assemblies shall conform to the requirements of IPC-2221 and IPC-2222, Class 2, Level C. Acceptance of assemblies shall be per IPC-A-610, Class 2.

Printed circuit boards shall conform to the requirements of IPC-2221 and IPC-2222, Class 2, Level C and shall be manufactured in compliance to IPC-6011 and IPC-6012, Class 2. Acceptance of boards shall be per IPC-A-600, Class 2.



QAC-045 Solder/Solderability of Parts

- A. Electronic and Circuit Card Assemblies. Unless otherwise authorized in writing by Fancort, the following shall apply. Electronic and electronic circuit card assemblies (CCA) shall be soldered to the requirements of IPC J-STD-001, Class 2, or Fancort acceptable equivalent as applicable to this PO. The Seller shall implement and maintain a system that includes adequate process controls to assure conformance to the soldering, cleanliness, acceptance, material handling, storage, and shipping requirements. CCA's containing hidden solder joints (e.g., Ball Grid Arrays (BGA's)) shall be 100% X-Ray inspected. The tin content of any constituent element (e.g., plating or finish, part, assembly, solder, etc.), regardless whether internally or externally, shall not exceed 97 percent tin and shall be alloyed with a minimum of 3 percent lead, by mass. The item shall meet the cleanliness requirements of IPC J-STD-001. Rework, if required, shall be per IPC-7711/7721 Class 3.
- B. Component & PCB Solderability. The Seller (manufacturer or distributor) shall ensure that all parts: leads, lugs, terminal, wires, and terminations cited on this PO shall meet the component solder requirements of IPC J-STD-001, and the solderability requirements of IPC J-STD-002 or Fancort acceptable equivalent, and Printed Circuit Boards shall meet the solderability requirements of IPC J-STD-003 or Fancort acceptable equivalent.
- C. Pre-Tinning. Component leads or the like shall be tinned per IPC J-STD-006 and properly cleaned to remove flux residue. Leads shall meet the solderability requirements of IPC J-STD-002, or Fancort acceptable equivalent.
- D. Solderability Test Samples. To assure the solderability of plated parts are acceptable, Seller shall furnish with each shipment a minimum of two samples from the same lot, which have been subjected to the solderability test of J-STD-003 or Fancort acceptable equivalent.
- E. Fluxes, Solder and Solder Paste. Fluxes, solder alloys, and solder pastes shall meet the following IPC J-STD requirements: J-STD-004 for Fluxes, J-STD-005 for Solder Pastes, and J-STD-006 for Solder Alloys, or Fancort acceptable equivalent.
- F. Under Plating & Solder Coating Test Coupons. Test coupons shall be furnished by the Seller for under plating (qty. 2) and solder coating (qty. 2) with each lot supplied as specified on the drawing(s) and /or specification(s) cited on the PO.



QAC-046 Non-Conforming Materials

- Seller shall maintain an effective and positive system for controlling NCM, including procedures for the identification, documentation, evaluation, segregation, and disposition of NCM. If at any time, the Seller suspects or determines nonconforming material or may have been shipped to the Fancort, the Seller agrees to notify the Fancort within 48-hours of identification.
 - Seller's Material Review Authority shall not extend to "Repair" or "Use-As-Is" dispositions for supplier published characteristics or Fancort specified requirements. Rework of nonconforming supplier published characteristics or Buyer-specified requirements shall be in accordance documented procedures and shall require re-inspection prior to shipment.
 - "Repair" is defined as the reprocessing of a nonconforming Buyer-specified characteristic to reduce, but not completely eliminate, the nonconformance. The purpose of a repair is to bring the nonconforming characteristic(s) into an acceptable usable condition. "Rework" is defined as the reprocessing to make a nonconforming characteristic completely conform to the drawing, specification, or PO requirements. "Repair" is distinguished from "Rework" in that the item after repair still does not completely conform to the applicable drawing, specification, or PO requirements.
 - The Seller shall not ship, nor will the Fancort accept, nonconforming or repaired items, unless authorized in writing, in advance, by Fancort. Fancort approved nonconforming or repaired items shall be identified on the applicable Certification provided with the shipment.
- "Scrap" shall be adequately controlled and positively identified to prevent inadvertent re-entry into the Seller's process or supply chain.

QAC-047 Failure Analysis / Corrective Action Reporting

Prior to proceeding with repair, the supplier shall provide Fancort with a written failure analysis and corrective action report which details:

- Fancort part number, name and revision
- Fancort Purchase Order number
- Supplier part number (if applicable)
- Serial number(s) (if applicable)
- Root Cause(s)
- List of parts required to repair item(s);
- Quoted Cost to complete the repair;
- Specific and contributory causes of failure;
- Corrective action taken to preclude recurrence and effectivity by date or serial number of corrective action;
- Signature and title of Supplier's Quality Representative approving the failure analysis report.

All replaced material shall be identified as Fancort property and controlled until notice of disposition.

QAC-048 Corrective Action

When requested, Supplier is obligated to perform a Root Cause/Corrective Action investigation for non-conforming material detected at Fancort and to furnish a written response within 15 days.



QAC-049 Calibration Services

- Vendor's inspection, measuring, and test equipment services shall have a calibration system in compliance with the requirements of MIL-STD-45662A, ISO 10012, ANSI/NCSL Z540, or ISO17025.
- Calibration procedures shall be maintained which provide sufficient information for periodic calibration of equipment. Calibrations shall be per the original equipment manufacturers specifications or of greater accuracy.
- Software programs, scripts, stored memory data, or the like, shall be left in the "as-received" state, and any additions, deletions, or changes from this "as-received" state requires the prior written authorization from Fancort.
- At Fancort's sole discretion, the vendor may be held liable for any such unauthorized changes.
- Vendor shall be solely responsible for returning items in the same condition (or better in the case of a repair) as originally provided by Fancort at no increase in price, cost, or fee to Fancort, including, but is not limited to, the physical and operating condition of the item, inclusive of software programs, scripts, or the like that may be contained therein.
- Calibrated devices will be identified with a calibration sticker that includes the current calibration status, calibration due date, device identification number and initials of person performing the calibration.

QAC-050 Certificate of Calibration

- For equipment calibrated by third party laboratories, these shall be returned with a certificate of calibration showing the status of the calibration, as well as the condition the equipment was found in and as left (e.g., "defective," "out of tolerance", "in tolerance", etc.), temperature and humidity conditions during calibration.

Such certificates must also have the identification of any standards used by the calibration house, and their serial numbers, allowing for traceability to NIST.