



Quality Assurance Terms and Conditions

ROHS COMPLIANCE:

The material supplied against this purchase order must be compliant with ROHS directives and must be suitable for "no lead" manufacturing processes.

Printed Circuit Board Finish: Immersion Gold

Q01 Approval of Supplier Changes

When Specified on Individual Purchase Orders Brandywine Communications requires mandatory written approval for any change to suppliers product or service

Q02 Source Inspection

Brandywine Communications reserves the right to inspect any and/or all work on this Purchase Order at the supplier's facility. The supplier will be notified in advance of shipping date if Brandywine Communications source inspection is required

Q03 Quality Program Requirements

The Seller shall have developed and maintain a quality program in accordance with ISO9001 requirements

Q04 Customer Source Inspection

Brandywine Communications Customer reserves the right to inspect any and/or all work on this Purchase Order at the supplier's facility. The supplier will be notified of shipping date if Customer source is required.

Q05 Product Assurance Inspection

The supplier shall have in place and utilize adequately documented processes, controls and an inspection system to consistently deliver product conforming to this Contract/Purchase Order.

Minimum requirements include

1. Safety
2. Training/Certification
3. Record Retention
4. Traceability
5. Procurement Control
6. Manufacturing, fabrication, process control
7. Metrology Control
8. Stamp Control
9. Non-conforming product control.

The supplier's system may be subject to an initial survey and approval by Brandywine Communications. Subsequent surveys or audits may be conducted before or after issuance of a Purchase Order. The supplier shall be notified of deficiencies and shall follow-up and ensure that deficiencies are promptly corrected. Corrective action shall be subject to review and approval by Brandywine Communications' Quality Assurance.

Q06 Quality/Inspection System Requirements

The seller shall have developed and maintain an inspection system in accordance with ISO 9001 requirements.

Q07 Non-Conforming Documentation

Any deviation to Brandywine Communications' requirements set forth in this Purchase Order shall be documented and submitted to Brandywine Communications for disposition prior to product shipment from supplier's facility.

Q08 Metrology/Accuracy

All test and measurement equipment used in the performance of this Purchase Order shall be certified against a standard having greater accuracy. Random and systematic error in any article or material measurement process shall not exceed 10% of the tolerance of the parameter being measured.

Q09 Raw Material Certification

Three legible copies of the material certification as furnished by the raw material supplier shall accompany each shipment.

Q10 Chemical Test Reports

Materials furnished in fulfillment of this order must be accompanied by copies of certified test reports of the chemical properties of the material.

Q11 Physical Test Reports

Materials furnished in fulfillment of this order must be accompanied by copies of certified test reports of the physical properties of the material.

Q12 Certification of Compliance

The seller shall include with each shipment copies of a certifying statement that attests to the seller's compliance with all the requirements of the Purchase Order. The certificate shall be signed by an authorized representative of the supplier.

Q13 Process/Processor

Manufacturing and inspection processes and procedures used in the performance of this Purchase Order must be accomplished by process sources and procedures approved by Brandywine Communications and Brandywine Communications' Customers.

Q14 Special Process Approval

Special process suppliers are responsible for compliance to the applicable specifications, including customer special process approval, whether the operation is performed within their facility or by subcontractors.

Q15 Right of Entry/Customer Access

Access to your facility (documents, personnel, equipment, material and facilities) shall be made available to Brandywine Communications, its customers and regulatory agencies, to determine and verify the quality of the work, records, and material.

Q16 Subcontracting Work

Seller is prohibited from subcontracting any portion of the work to be performed as specified in this Purchase Order, unless authorized by the buyer in writing.

Q17 Records

Seller shall maintain records of manufacturing and traceability of materials used in the fabrication of the product produced in fulfillment of this Purchase Order. The records shall be maintained for a period of 10 years after completion of the Purchase Order and be made available for review to the buyer upon request. After 10 year period, Brandywine Communications shall have first opportunity to determine course of action in regards to the records (Discard records, ship records to Brandywine Communications, or retention by supplier for an additional period).

For those distributors who systems mandate 7 year record retention, Brandywine Communications shall first opportunity to determine course of action in regards to the records (As indicated in paragraph above).

Q18 Serialization

Each item furnished on this Purchase Order will be identified with a non-recurring serial number. Where the size of the item prohibits identification, the serial number will be marked on an identification tag or label and be securely attached to each item.

Q19 Packaging

1. Packaging shall be in accordance with ASTM D3951-98(2004)
2. All equipment supplied under this purchase order must be supplied in new packaging material
3. Loose fill packaging may not be used

Q20 ESD Sensitive Devices

All unit packs shall be marked with the ESD sensitive devices attention label prescribed by ASTM D 5445. The label shall include the ESD sensitive device symbol (triangle and reaching hand), the words "ATTENTION STATIC SENSITIVE DEVICES," and the statement "HANDLE ONLY AT STATIC SAFE WORK STATIONS." The symbol and lettering on the label shall be marked in black on a yellow background.

Q21 Specialty Metals

Pursuant to DFARS 252.225-7014, specialty metals incorporated in articles delivered to Brandywine Communications must be: (1) melted in the United States, its possessions or Puerto Rico; (2) melted in a "qualifying country" as defined in DFARS 225.872-1; or, (3) incorporated in an article manufactured in a "qualifying country."

Q22 Calibration

The supplier shall provide and maintain a calibration system that meets at least one of the following requirements, as currently amended, in the performance of this contract.

MIL-STD-45662A "Calibration System Requirements"

ISO 10012-1 "Quality Assurance Requirements for Measuring Equipment"

ANSI/NCSL Z540-1 "American National Standard for Calibration"

Q23 ITAR

The supplier shall adhere to the ITAR compliance requirements for performing work or service involving ITAR compliance. In accordance with ITAR 22 C.F.R 120-130 International Traffic in Arms Regulation, all documents identified as ITAR controlled shall be identified, maintained in Document Control and segregated from non-ITAR documents. Documents identified as ITAR controlled shall be viewed only by a U.S. PERSON. A U.S. PERSON means an entity that is: a U.S. Citizen or a Legal Resident, or a U.S. organization incorporated to do business in the United States.

Q24 First Article Inspection

Each item furnished on this purchase order shall adhere to AS9102 Aerospace First Article report requirement and deliverable report.

Q25 Material Substitution Prohibition

A. Unauthorized Material Substitution (General)

Unauthorized material substitutions are not permitted on Buyer's goods.

Unauthorized material substitution includes any deviation from the engineering definition of a raw material. Engineering definition includes Buyer design drawing and applicable specifications, product specification, form, size, shape, chemistry, melt method, origin, temper/condition, product testing or surface finish. Alternate materials specified in the engineering definition (and often described as approved material substitutions therein) DO NOT constitute unauthorized material substitution.

Contact Buyer's Authorized Procurement Representative for details regarding deviations to authorized materials. Seller agrees and understands that such deviations only apply to this purchase order, and only as indicated in the Buyer's authorized document.

B. Metallic Materials (Specific)

Temper or Condition Conversion.

Unless specifically authorized by the engineering definition, conversion of a raw material (i.e. heat treat to change the temper or condition of the material) constitutes material substitution of the condition provided by the manufacturer.

Metallic Raw Materials

Buyer's engineering drawings may refer to obsolete or superseded specifications covering several forms, thicknesses, widths etc. of the alloy or alloys. The required characteristics of these materials are defined not only by the objective test standards of the specification, but by the processes/methods by which this final form is achieved. These requirements are often captured in the definitions of the required material forms, and may not be explicitly called out in the detailed requirements. The raw material certification results from both the process used to make it and the tests to verify basic properties. Seller shall ensure that metallic materials covered by current or obsolete/superseded specifications are produced using the standard industry practices designed strictly for the production of stock to the specified thickness, diameter, width or cross sectional area, achieved by thermo-mechanical processing or casting process. Chemical, electrochemical and mechanical methods used for the removal of surface scale or contamination, or the production of the required surface finish, in accordance with the material specification are acceptable. Raw material must not be re-certified with respect to thickness, diameter, width or cross-sectional area or product form. Machining or cutting of thicker product or other product form shall not be supplied in lieu of specified product unless specifically authorized by the buyer. Raw material certifications for material or parts shall reflect the form and size of the raw material as originally manufactured by the raw material producer.

C. Specification Supersession

For government specifications and standards cancelled after June 1994, Seller and subcontractors at all tiers shall use the last active revision of the cancelled specification and standard until an acceptable replacement is included in the requirements of this Contract. Contact the Buyers Authorized Procurement Representative in the event of any inconsistency in applicable specification or standard.

D. Reports (Full Pedigree from melt to final product)

Raw material certifications shall show clear traceability to the manufacturer(s) of the raw material including ingot source, all thermo-mechanical processing (i.e. forging, rolling, drawing, etc.) heat treatment, chemical processing and inspections as required by applicable raw material specification requirements.

E. Chain of Custody (Disguising of intermediate ownership)

Supplier shall not disguise the pedigree of material or chain of ownership by removal of previous suppliers name, nomenclature, or identification.

F. The substance of this Quality Clause shall be flowed in all subcontracts and purchase orders at every tier.