



PURCHASE QUALITY CLAUSES

1.0 SCOPE

The following Quality codes/Clauses are a requirement of the procurement when specified by letter/number (Q1 – Qxx) as applicable, on the Purchase Order for all Suppliers/Subcontracts, for materials, supplies and services that become part of an end item including test/measurement equipment and tooling.

Q1. Quality System Requirements General: The Supplier shall maintain an inspection system acceptable to Ridge and shall offer for acceptance only those items that have been inspected in accordance with the system and were found to be in conformity with all drawing, specification, materials and other purchase requirements. The Supplier shall prepare and maintain records of evidence of the inspection and results for a minimum of seven years unless otherwise indicated on the purchase order. The system shall be subject to review and approval by Ridge.

Q2. Quality System Requirements ISO Level: The Supplier shall maintain a Quality Management System in compliance with **ISO 9001**. Compliance with the provisions of this clause in no way relieves the seller of the final responsibility to furnish acceptable materials or services as specified herein. This system shall be subject to review and approval by Ridge.

Q3. Quality System Requirements Aerospace Level: The Supplier shall provide and maintain a system that complies with **AS9100**. Compliance with the provisions of this clause in no way relieves the Supplier of the final responsibility to furnish acceptable supplies or services as specified herein. This system shall be subject to review and approval by Ridge.

Q4. Material and Process Conformance: The Supplier shall submit with each shipment a legible Certificate of Compliance (CoC) signed by an Authorized Representative, certifying that all items/materials furnished to Ridge are in conformance with the applicable requirements of the subcontract/ purchase order, drawings/specification and that supporting documentation, to include inspection/test reports, are on file and available to Ridge or their customer upon request. The CoC shall include the following as minimum:

- a. Part Number and Revision Level
- b. Specification Number and Revision Level
- c. Purchase Order Number
- d. Quantity
- e. Serial Number, when applicable
- f. Signature and Date of Authorized Representative

If the Supplier is not the manufacturer of an item, certifications must be traceable to and contain a copy of the certification from the manufacturer.

Q5. Acceptance at Destination: All articles delivered under this purchase order/subcontract are subject to final acceptance at destination. Failure to comply fully with all requirements indicated on this purchase order/subcontract may be cause for rejection of shipments and delay payment of Supplier's invoice.

Q6. Physical and Chemical Test Reports: A copy of the actual physical and/or chemical test reports for each lot, batch or heat are required with the delivery of the product covered by this purchase order. These reports shall be validated for conformance to specification requirements and signed by an authorized representative of the agency performing the tests.

Q7. Raw Test Specimens: Items/material under this purchase order shall be accompanied by raw material test specimens. Specimens shall be submitted with the initial shipment from each lot or processing batch of items to be delivered under this order.

Q8. Inspection / Test Data: A copy of final inspection/test data for all units shall accompany shipments made against this order. Data sheets shall be identified with, as a minimum, Seller's name, purchase order number, part number, revision level, and date of tests. Characteristics being tested shall be identified by name of test, applicable drawing or specification paragraph, inspection test limits, and method of testing along with results of the tests.



PURCHASE QUALITY CLAUSES

- Q9. Inspection Reports:** Inspection reports are required with the delivery of the product covered by this purchase order/subcontract. The reports shall include actual dimensional data for all characteristics, including drawing note requirements. The reports shall reference the part number, name, revision level, serial number (as required) and the purchase order/subcontract number. The reports shall show the lot and sample size and the acceptance/rejection status of all dimensional data.
- Q10. Special Process Conformance:** All special processes performed either by the supplier or their subcontractor must be approved by Ridge Engineering Inc. and/or accredited by the National Aerospace and Defense Contractors Accreditation Program (NADCAP). All relevant drawing and purchase order specifications must be included within the flow down requirements to the processing subcontractors. Where specifications require dimensional results for validation, objective evidence must be supplied. No attribute, pass/fail results or general certificates of conformance will be accepted. Certificates must provide reference to the applicable specification being performed.
- Q11. Special Process Approval:** Supplier shall have on file available for review, certifications/qualifications of special processes performed by personnel. Special processes are defined as an operation performed on an item where the operation is not readily conducive to being inspected subsequent to its conclusion. Special processes such as soldering, welding, heat treating, electro and electro-less plating, brazing, anodizing, chemical films and non-destructive testing shall require Ridge's prior approval of processes, procedures and personnel, as applicable, prior to the fabrication processes under this purchase order/subcontract. Supplier shall certify special process specification compliance and maintain objective evidence thereof.
- Q12. Change in Process:** The Supplier shall notify Ridge if there has been a significant product or process change related to the items in the purchase order specification or quality management system. The supplier Quality Assurance Manager will contact the Ridge Quality Manager in writing of the change. The supplier agrees to provide information pertaining to product quality with the change. Ridge Quality Assurance will review and approve the change, as required.
- Q13. Flow-Down Requirements:** The supplier shall flow down the purchasing document quality requirements to any and all sub-tier suppliers used in the performance of this purchase order. This may include key characteristics, special quality, material, process or other controls imposed on this purchase order.
- Q14. Record Retention:** The Supplier/Subcontractor and sub-tier suppliers are responsible for the identification and maintenance of quality system records relating to this purchase order. Ridge Engineering, Inc., its customers and applicable regulatory authorities reserve the right to access these records. The records shall be maintained in a manner that allows them to be readily retrievable and prevent damage. All records shall be maintained for a period of seven years, unless specified otherwise.
- Q15. Nonconforming Material:** The Supplier or sub-tier supplier shall provide a process for the identification, segregation and disposition of nonconforming product. Ridge shall be notified of nonconforming product. Nonconforming materials shall not be submitted to Ridge without written approval from Ridge Quality Management and Procurement. Requests for authorization to ship nonconforming material shall be addressed in writing to the authorizing Procurement agent at Ridge Engineering, Inc.
- Q16. Right of Access:** During the performance of this purchase order/subcontract Ridge representatives, or Ridge's customer or regulatory authorities reserve the right to visit the supplier's facility to monitor the items being manufactured for Ridge. The Supplier's quality system, inspection and manufacturing processes and all applicable records are subject to review to verify compliance to purchase order requirements. Customer inspection prior to shipment is not required unless otherwise notified by Ridge. Advance notice of such visits will be made to avoid conflicts in shipment schedule.
- Q17. Ridge Source Inspection:** Source inspection shall be conducted at the Supplier's facility or where designated on this purchase order/subcontract prior to shipment. The supplier shall provide at least 3 days prior notice to Ridge's Buyer of date that acceptance is required. Acceptance of product at source is considered preliminary. Final acceptance will be at Ridge or ultimate customer's destination. Supplier is required to provide all requisite equipment, records, reports, etc. to facilitate the work of Ridge's inspector, and to verify any physical specifications as requested in the course of the inspection.



PURCHASE QUALITY CLAUSES

Q18. Government Source Inspection: Government source inspection is required prior to shipment from your facility. Upon receipt of this order, promptly notify the Government Representative who normally services your facility so that appropriate planning for Government Inspection can be accomplished. In the event the representative or office cannot be located, contact the authorizing Ridge Buyer immediately. A reproducible copy of Government Source Inspection shall be submitted with each shipment.

Q19. Calibration System/Services: Supplier's calibration system shall comply with the applicable requirements of ISO 10012-1, ISO17205 or ANSI/NCSL Z540-1. The system shall be subject to review and approval by a Ridge Quality Assurance Representative. Seller of calibration services shall provide certification that such services were accomplished utilizing standards traceable to the National Institute of Standards and Technology (NIST).

Q19A. Calibration Certificate: The Supplier shall furnish a certificate attesting that the calibration of each item of measurement/test equipment being delivered on this order is traceable to NIST. The calibration certificate must be long form and include the calculations of measurement uncertainty. Under the scope of accreditation, the certificate must meet the specific criteria listed in ANS/ISO/IEC 17025, clauses 5.10.2 and 5.10.4 and remaining sub-clauses of 5.10 as applicable.

Q20. First Article Inspection: The Supplier/Subcontractor shall create or select a first article inspection sample, and perform a complete AS9102 First Article Inspection Report to all drawing requirements. The AS9102 First Article Inspection Report shall be submitted and approved by Quality prior to acceptance of supplier's product. The part the First Article Inspection was performed on shall be appropriately identified in the delivery.

Q21. Ridge First Article Sample Inspection: Items produced under this purchase order are subject to the approval of a First Article sample at Ridge Engineering, Inc. Supplier should deliver one sample, (or more as requested) which represents in all aspects the items to be delivered, and await approval before shipping the remainder of the order. Manufacture of the remainder prior to First Article Approval is at the risk of the Supplier.

Q22. Delegation: There may be instances where Ridge does not possess the required measurement and/or test equipment to verify product conformance. In these instances, Ridge will delegate the verification activities to the supplier. The delegation of these activities will be defined in the purchase order. A register of these delegations will be maintained by Ridge.

Q23. Shelf Life & Material Safety Data Sheet: Seller shall identify all materials and articles, which have definite characteristics of quality degradation with age and/or environment. Seller shall furnish shelf life information in accordance with Ridge Engineering Purchase Order requirements including manufacturer expiration information on each container shipped. When environment is a factor in determining useful life, the identification shall include the storage conditions (temperature, humidity, etc.) required for achieving stated shelf life. **Ridge will not accept items where the remaining shelf life does not meet customer order requirements.**

Q24. Material Safety Data Sheets (MSDS): MSDS shall be included in each shipment of materials or chemicals that contain hazardous materials or require special attention for safe handling.

Q25. Foreign Object Damage (FOD) Prevention: The Seller shall maintain a FOD control program assuring work is accomplished in a manner preventing foreign objects or material from entering and remaining in deliverable items. Maintenance/cleanliness of the work area and control of tools, parts, and material shall preclude the risk of FOD contamination.

Q26. Statistical Process Control (SPC): Supplier shall establish and maintain a SPC program to control the quality level of product under this purchase order. The seller's program documentation shall include objective evidence of continuous product conformance to requirements and be available for review by Ridge or Ridge's customer upon request.

Q27. Key Characteristics (KC) Inspection Data: Drawing attributes identified as key characteristics shall demonstrate a process capability of 1.33Cpk or be inspected 100% (all KCs on each part). The supplier shall have documented evidence on file which supports the process capability of 1.33 or greater, or the actual inspection/test data



PURCHASE QUALITY CLAUSES

as verification of conformance to the drawing KC. Inspection report data shall be identified to each specific part, by the use of serial numbers, or tags/ labels, that identify a unique inspection report number to each individual part. Copies of the inspection reports are to be delivered with each shipment unless otherwise stated in the purchase order.

Q28. No Change Clause: Seller shall make no change in manufacturing or assembly processes or source of supply or outsource to any sub-tier suppliers after approval of the first production end-item without the written approval of the Buyer.

Q29. Packaging and Shipping: Unless otherwise specified, Packaging shall be done in accordance with best commercial practices to preclude damage/deterioration/foreign debris contamination and movement under normal handling/shipping conditions. Product/materials with MSDS limited shelf-life and storage requirements shall be handled in accordance with manufacturers instructions.

Q30. DPAS Rating: This order is issued under a US Government Department of Defense prime or subcontract. Seller shall follow provisions of the Defense Priorities and Allocation Systems regulation (15 CFR Part 700) and the regulations of identified clauses set forth in the Federal Acquisition Regulations (FAR) or DOD FAR (DFARS) in effect on the date of this order are incorporated herein by reference, it being understood that as used therein, the terms "Government" and "Contracting Officer" shall be deemed to mean Buyer, "Contractor" Seller, and "Contract" this Purchase Order or Subcontract. The identified requirements also apply to the seller's sub-tier suppliers and subcontractors.

Q31. DFARS Specialty Metals: Specialty metals are defined in DFARS 252.225-7009 and shall be in compliance with DFARS 225.003(10). Seller warrants and shall provide for each furnished item containing Specialty Metals evidence of compliance, including flow down to all sub-tier suppliers, manufacturer certified documents including Lot number traceability and material test reports for Specialty Metals used stating and/or supporting compliance to the applicable DFARS clause/s 252.225-7008, -7009, -7010, -7014 ALT 1 and/or -7016.

Q32. Workmanship Requirements for Electrical and Electronic Assemblies: The supplier shall maintain the requirements of standard IPC-A-620 (current revision) "Requirements and Acceptance for Cable and Wire Harness Assemblies" for the indicated classification. Class 2 – Dedicated Service Electronic Products.

Q33. ESD: All ESD sensitive items shall be handled, packaged and identified in accordance with ANSI/ESD – S541 or best commercial practices.

Q34. Fraud and Falsification: This purchase order and activities hereunder are within the jurisdiction of the Department of Energy and/or the Navy. Any knowing and willful act to falsify, conceal, or alter a material fact, or any false fraudulent, or fictitious statement or representation, in connection with the performance of work under this order may be punishable in accordance with applicable Federal statutes.

a) Seller agrees that all employees engaged in the performance of this purchase order will be, if they have not been previously, informed in writing, prior to their commencing performance of work under this purchase order that there is a risk of Federal criminal penalties associated with any falsification, concealment, or misrepresentation, in connection with work performed under this purchase order.

b) The Seller agrees that a signed statement shall be, if it has not been previously obtained from said employees prior to their commencing performance of work under this purchase order, that they have been so informed. Such statements shall be retained by the Seller for at least three years after final payment under this order. An acceptable form for such a written statement is substantially as follows: ***"This company / division/ department/ branch performs work under contracts which are within the jurisdiction of departments of the United States Government. Some of the work performed under these contracts affects the national security of the United States and the requirements of these contracts are: c) designed to ensure that essential attributes of the work are carefully checked or inspected and that records accurately reflect the results of all work. Any falsification, concealment or alteration of any material fact, or any false, fraudulent or fictitious statement or representation in connection with the work under any contract within the jurisdiction of the Government is not only prohibited by company policy, but may also be punishable under Federal Law. Please acknowledge by your signature that you have read and understand the above."***



PURCHASE QUALITY CLAUSES

d) Seller must also agree to include the following statement preprinted (or otherwise permanently affixed) on each manufacturing, inspection, or test record used in conjunction with the subject subcontract.

NOTE: The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal Statute.

e) Seller shall include all provisions of this Article, including this sentence in all sub-tier contracts under this order. Any inability or unwillingness of a sub-tier supplier to comply with this provision should be documented in writing and submitted to the Prime Contractor.

f) Seller shall advise Buyer promptly upon identification of any potential or actual fraud and falsification incidents pertaining to this order and occurring either within its own organization or within its sub-tier(s) organization.

Seller must also agree to include the following statement **preprinted** on each manufacturing inspection or test record used in conjunction with the subject subcontract:

The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under Federal Statute. Seller shall include all provisions of this Article including this sentence in all lower-tier contracts under this Purchase Order. Any inability or unwillingness of a sub-tier supplier to comply with this provision should be documented in writing and submitted to the Prime Contractor.