**Quality Clause BHM 8.4.3**

1. **Frequently Asked Questions**

Visit [FAQ](https://www.bowheadsupport.com/bhm-supplier-faq/)for additional clarifications.

1. **Quality Performance Monitoring**

In accordance with AS9100:2016 requirements, Bowhead monitors and evaluates Supplier performance based on their ability to deliver products or services in accordance with Bowhead’s Quality and On-Time Delivery (OTD) Key Performance Indicators (KPIs).

Quality metrics are calculated by each order received and include validation of required paperwork and conformance to PO requirements.

On-Time Delivery metrics are calculated based on whether the goods/services are received on or before the Purchase Order’s contractual due date.

1. **Quality System Requirements**

Supplier shall establish and maintain a Quality System acceptable to Bowhead, for the goods and/or services purchased under this purchase order. At a minimum, the supplier's Quality System must meet the requirements of ISO9001. The supplier’s loss of certification or failure to notify Bowhead of their loss of certification could result in being disqualified as a Bowhead Supplier.

1. **Record Retention**

Suppliers shall retain quality records for minimum of ten (10) years from the date of shipment unless a longer period is otherwise specified. If original records are not maintained, the method for transferring original records to electronic images, shall comply with FAR 21, subpart 4.7.

Quality records include the following non-exhaustive list:

* Approved Certificates of Conformity
* Test Reports
* Raw Material Certifications
* Special Process Certifications
* First Article Inspection Reports (FAIR)
* Route Cards/Travelers
* Calibration Records

This data shall be made available to Bowhead upon request, at no extra charge. Records shall be appropriately identified in accordance with customer, regulatory and Supplier defined requirements. Storage facilities shall provide environmental conditions to prevent record deterioration, damage, and loss. Records in storage shall be protected from unauthorized access. The nature of the information in the records, as well as their format, dictates the method by which they shall be destroyed. When records contain sensitive information (such as design detail, proprietary info, ITAR restricted info, etc.), they shall be disposed by irreversible destruction methods such as shredding, or “erasure”/reformatting for electronic/magnetic media.

1. **Calibration System**

Calibration of measuring and test equipment used for product acceptance shall be traceable to established international or national measurement standards (e.g., BSI, NIST, UKAS, etc.). Procedures for periodic calibration, certification, maintenance of tools and equipment, and an out of calibration action plan. The action plan shall contain, at a minimum, item identification (model, manufacturer, and serial number), found condition (including span/range and accuracy), date condition found, date of previous calibration, notification details, and any other pertinent measurement details.

1. **Inspection System**

Suppliers shall develop inspection procedures and maintain inspection records. Records shall include evidence of inspection for all attributes (e.g. first article inspection, acceptance test data) of products / processes supplied to Bowhead, show the product has been inspected and/or tested during all stages of manufacturing, identify the name of the individual who certified the results, and include the results of the inspections and tests where applicable.

1. **Travelers**

Suppliers shall maintain a traveler, router, process flow sheet, or equivalent control mechanism that directs procedures appropriate for quality control and configuration control through all stages of production.

1. **Nonconforming Product**

Suppliers shall ensure that nonconforming products are identified, segregated, and properly dispositioned as required per Supplier’s procedures. Only product that conforms to specified requirements shall be shipped to Bowhead.

1. **Nonconformances Affecting Shipped Products**

Suppliers are required to notify the Bowhead Buyer within 24 business hours of discovering any nonconformance that exists or is suspected of existing on hardware that has previously been shipped to Bowhead. This notification shall include the following information:

* Affected part number(s), process(es) and name(s)
* Description of the nonconforming condition and the affected requirement (Both requirement and actual condition)
* Quantities, dates, purchase orders, and destination of delivered shipments.
* Lots, batch numbers, serial numbers, or date codes of the affected lot (as applicable)
1. **Statistical Techniques**

Suppliers are responsible for understanding and reducing variation within processes and are encouraged to use control-charting techniques. When control charting is not performed, sample inspection of all attributes shall be performed to ANSI/ASQ Z1.4 (MIL-STD-105), Level II, 1.0 AQL, c = 0, or an equivalent plan approved by Bowhead. Suppliers using sample inspection plans, including Bowhead approved plans, are not relieved from the responsibility for all attributes on the part/assembly.

1. **Special Processes**

Bowhead retains approval authority for the use of special processes by the Supplier and its sub-tier Suppliers. The use of a Bowhead approved special process does not relieve the Supplier from responsibility to furnish acceptable supplies. Bowhead defines a special process as any process where the resulting output cannot be verified by subsequent monitoring and measurement. The following special processes include, but are not limited to plating operations, soldering, chemical processing, chemical cleaning, nondestructive testing, welding/brazing, CARC painting, other specialty coatings.

1. **Supplier Control**

Suppliers, including dealers and distributors, are responsible for ensuring that the applicable requirements of this purchase order are imposed on lower tier procurements for raw material, components or process services being used in the manufacture of products or services being provided.

1. **Prohibited Sources**

Bowhead suppliers and/or sub-tier Suppliers are prohibited from using any source listed on the US government Excluded Parties List System (EPLS) (ref. [https://www.sam.gov](https://www.sam.gov/)) in the production of products to be delivered to Bowhead.

1. **Counterfeit Parts Prevention**

The supplier shall have a program in place to prevent the delivery of counterfeit parts and materials to Bowhead. All parts, materials and assemblies (electrical, mechanical, raw material) included in the hardware delivered to Bowhead shall be procured directly from the Original Component Manufacturer (OCM) / Original Equipment Manufacturer (OEMs), or from the OCM/OEM authorized distributor. If it is determined in a specific instance that this is not possible, a nonconformance shall be submitted to the Bowhead buyer within five (5) working days of this determination. The supplier is responsible for the flow down of this requirement to its sub-tier contractors and their compliance to it. Further guidance on counterfeit parts avoidance can be found in SAE documents AS5553 (Electronics) and AS6174 (Material) ([http://www.sae.org](http://www.sae.org/)).

1. **Right of Entry**

Representatives of Bowhead, Bowhead’s customer, and other regulatory authorities shall have access to supplier’s facility and all other facilities involved in the fulfillment of the purchase order, where they shall have access to all procedures, practices, processes, associated documents, and records related to quality assurance, quality control, and configuration control. The Supplier shall notify the Bowhead Buyer in writing to any significant facility or organizational changes such as company name, location, or senior quality management. Any change of location by the Supplier shall require a full first article inspection on these parts. Bowhead reserves the right to determine and verify quality of work, records, and material. Such visits shall not preclude subsequent rejection of product and do not absolve the Supplier of its product integrity responsibilities. Bowhead reserves the right to audit for conformance to all requirements.

1. **Traceability & Product Identification**

Supplier shall ensure that individual articles are shipped. If the supplier ships multiple different materials and lots in the same shipment, the supplier must ensure that all materials are identified and individually wrapped/segregated, and lots are clearly identified at all times. Records for articles shall indicate the Bowhead part number (as listed on the Purchase Order), in addition to or instead of the manufacturer part number), revision level, lot number and if applicable the serial number and associated detailed information. Records for materials shall indicate type, applicable serial numbers, lot numbers, heat numbers, batch, date code, cure date, etc. Material or articles furnished by Bowhead for outside operations must remain identifiable by the Bowhead supplied lot or serial number. This number must be recorded on all applicable Supplier paperwork.

Supplier shall maintain a method of item traceability that ensures tracking of the supply chain back to the manufacturer of all electrical, electronic, and electromechanical parts included in assemblies and subassemblies being delivered per this order. This traceability method shall clearly identify the name and location of all the supply chain intermediaries from the manufacturer to the direct source of the product for the Supplier and shall include the manufacturer’s batch identification for the item(s) such as date codes, lot codes, serializations, or other batch identification.

Supplier shall maintain a method of item traceability that ensures tracking of the supply chain back to the manufacturer of all electrical, electronic, and electromechanical parts included in assemblies and subassemblies being delivered per this order. This traceability method shall clearly identify the name and location of all the supply chain intermediaries from the manufacturer to the direct source of the product for the Supplier and shall include the manufacturer’s batch identification for the item(s) such as date codes, lot codes, serializations, or other batch identification.

1. **Certificate of Conformance**

The Certificate of Conformance (C of C) shall be supplied with the product to Bowhead. The Certificate of Conformance is a quality record that shall include the Bowhead part number (as listed on the Purchase Order) and drawing revision referenced on the Purchase Order (when applicable). The C of C must include Military, Federal, or Industry specification number (when applicable) and reference any documents that approve deviation (Bowhead approved Request for Variance) from the initial Purchase Order. Additionally, the C of C must include the purchase order number, quantity, serial numbers (if applicable), manufacturer’s name and authorized representative signature.

In addition, the Supplier shall be able to furnish certifications on their source(s) of supply that could include items such as special processes, serial numbers, lot numbers, heat numbers, batch, date code and cure dates and Qualified Products List approval status as applicable. All test and/or conformance documents shall be maintained by the Supplier and made available to Bowhead upon request.

1. **First Article Inspection**

If invoked on the Purchase Order, Supplier shall provide a First Article Inspection Report (FAIR). The report may be supplied in Supplier format.

The Bowhead Buyer must be notified in writing prior to any changes in product, manufacturing location, or process with notification describing the proposed change(s). Bowhead Quality reserves the right to approve the product, manufacturing location or the process change prior to product delivery to Bowhead. If the change(s) affect any of the existing approved first article inspection report characteristics, the Supplier may also be required to submit a new full, or delta, First Article Inspection Report.

Sub-Tier Suppliers must be approved by Bowhead. The Supplier, Supplier’s process or location of the Supplier that provided sub-tier process or component may not change without Bowhead’s prior written approval and may require a new full, or delta, FAI to validate the change.

FAI C of C’s shall be provided for all sub-level, piece part components and material certifications with traceability to the OEM. The FAI C of C’s shall also certify that Special Processes meet the requirements of the technical data package and/or Bowhead purchase order. Material certifications shall include traceability to the raw material.

1. **Responsibility for Conformance**

Acceptance of product shall not be used as evidence of effective control of quality by the Supplier and shall not absolve the Supplier of responsibility for acceptable products nor preclude subsequent rejection by Bowhead customers.

1. **Industry Specifications and Standards**

For all Military, Federal, and Industry specifications and standards, the Supplier shall comply with the revision in effect at the time the Bowhead purchase order is issued. Bowhead reserves the right to request a different revision if specified on the purchase order.

1. **Training**

Suppliers shall ensure all personnel performing activities on Bowhead product have been suitably trained per Supplier’s procedures or to Industry standards if applicable. Personnel performing assigned tasks must be qualified based on appropriate education, training, and/or experience. The Supplier shall ensure that training records are maintained and available upon request.

**Handling, Packing, & Preservation**

It is the responsibility of the Supplier to ensure that the packaging is adequate to protect the components from damage during transportation, handling, and storage. Additional protection may be required for corrosion and ElectroStatic Discharge, as applicable. Packaging containers shall be appropriate for the size, weight, and fragility of the components being packed.

1. **Bowhead reserves the right to require and request evidence of ensuring supplier personnel are aware of:**
* their contribution to product or service conformity
* their contribution to product safety
* the importance of ethical behavior
1. **Other than OEM Authorized Distributors**

The Supplier shall establish and implement test and inspections necessary to assure the authenticity of purchased product, including:

* OEM traceability and documentation verification, and
* Visual inspection

Tests and inspections shall be performed in accordance with clearly delineated accept/reject criteria. The seller shall prepare and provide to Bowhead Manufacturing records evidencing tests and inspections performed and conformance of the product to specified acceptance criteria.

Tests and inspections shall be performed by persons that have been trained and qualified concerning types and means of parts counterfeiting and how to conduct effective product authentication.

*BHM-QLTY-30-017 (8.4.3) V6*