Supplier Quality Requirements

Refer to Purchase Order (PO) line items for applicable quality codes

Note: When invoked, codes Q5, Q6, Q8, Q11, Q12, Q13, Q13a, Q14 Q14a, Q14b, Q14c, Q15a, Q18a, and Q21 require OQE, showing compliance to the requirement, included in the certification package.

Code	Requirement
Q1	**General Quality Requirements** Parts and processes shall be manufactured and/or processed to the current revision of the listed specification(s), standard(s), and drawing unless otherwise specified. It is the supplier's responsibility to procure the required revision of the indicated specification. Objective Quality Evidence (OQE), as defined by the supplier's QMS, such as FAI's, Dimensional Inspection Reports, Test Reports and Certifications, including chemical and/or physical reports identifiable to the raw materials used in the performance of this PO, shall be maintained by the seller in controlled conditions for a minimum of (10) years from completion of PO. Additional record requirements stated within the PO will take precedence. BN shall be notified of any nonconforming processes that may have affected delivered product quality, such as inspection equipment out of tolerance, special process specification noncompliance, etc. within 48 hours of discovery. Supplier shall notify BN of any change to QMS status, including but not limited to 3rd party registration (new certification, renewal, expiration, loss, etc.), change in Head of Quality, and noncompliance to ISO9001/AS9100 system, as applicable. Part substitutions that are not approved by the drawing or specification are not authorized unless a Procurement Representative has approved them in writing. The Supplier must notify the Procurement Representative of any end of life, obsolete or fit form or function issues. The supplier is responsible for flowing down all applicable requirements in the purchasing documents to sub-tier suppliers, including, but not limited to, key characteristics, critical items and special requirements as applicable in Barber-Nichols' purchasing documents when required.
Q2	**Quality System Requirements** The seller shall work to and maintain a written Quality Management System (QMS) that complies with ISO9001, AS9100, AS9120, or other equivalent QMS appropriate to the product and acceptable to Barber Nichols.
Q3	**Certified Quality System Requirements** The seller shall work to and maintain a written Quality system that is certified by a 3rd party to ISO9001 or AS9100.
Q4	**Material Traceability** Traceability is defined as a positive means of identifying material to its Objective Quality Evidence (OQE). All parts and raw materials shall be traceable throughout the manufacturing process. A record of the traceability shall be maintained.
Q5	**Raw Material & Processing Certification Reports Required** All certifications must state the specification and revision the material was produced to. Raw material certifications shall include chemical and physical properties as actual values (not ranges). Reports must be traceable to the foundry/mill and include batch number, heat

	number, lot number, forging serial number if applicable, and be traceable to material delivered. All reports are required with shipment and must be legible.
Q6	**Control of Unique Heat Lots** Raw material heat treated to change properties must be uniquely re-identified. Parts shall be marked with heat lot to maintain positive identification. Heat lots shall be noted on all processing certifications to maintain traceability of the heat lot through all operations.
Q7	**Counterfeit Parts** Counterfeit parts protection program required.
Q8	**Special Processing Certifications Required** Processes must be performed to the specification and revision called out in the purchase order documentation. Certifications must contain an unequivocal statement of conformance to the specification and revision defined by the PO. Traceability to the PO, PO line number, and serial number (when applicable) must be captured on certification.
Q9	**NADCAP Certified Special Processors Required** Special processes as defined by NADCAP (including but not limited to welding, brazing, heat treating, plating, coating, and non-destructive testing) shall be performed by NADCAP certified suppliers. See www.eauditnet.com.
Q10	**BN Approved Special Processes Required** Special processes (including but not limited to welding, brazing, heat treating, plating, coating, and non-destructive testing) shall be approved by BN.
Q11	**US Origin Materials & Parts required** Reference supplemental DFARS and FARs document
Q12	**Specialty Metal** Any specialty metal, as defined in DFARS 252.225-7008, delivered under this contract shall be melted or produced in the United States or its outlying areas. Country of origin OQE must be included with the raw material data package.
Q13	**Shelf-Life Items** Any shelf-life limited items must be identified by date of manufacture and date of expiration. Life limited items must have greater than 75% of their life remaining upon receipt.
Q13a	**Shelf-Life Report Required** At a minimum, shelf-life reports shall contain batch/lot #, manufacture date, and expiration date.
Q14	**Dimensional Inspection Report Required**
Q14a	**Sampling** Inspection lot sampling is allowed to ANSI/ASQC Z1.4, AQL 1.0 with C=0, at the minimum. 100% inspection of dimensional features required. Reference BNQF-1958.
Q14b	**100% Inspection** A dimensional inspection report of all dimensions and features contained within the drawing on 100% of parts is required.
Q14c	**Critical Dimensions** 100% inspection of dimensions and features identified as critical within the drawing is required. 100% lot inspection required. Supplier to provide inspection report for each part, traceable to the part inspected.
Q15	**First Article Inspection Process Required per AS9102**
Q15a	**First Article Inspection Report Required** First article inspection report required per AS9102. Part(s) and report must be approved by Barber-Nichols before shipment.

Q16	**Calibrated Equipment** All inspection and tests must be performed using calibrated equipment. Calibration systems must meet or exceed ISO 17025, ISO 10012, or ANSI/NCSL Z540 (current revision) and must be traceable to N.I.S.T. or national standards.
Q17	**Non-Conformances** Any non-conformances found must be identified and approved in writing by Barber Nichols prior to shipment. All non-conformances must be noted on the CofC.BN shall be notified of any suspect parts or lots already shipped within 48 hours of discovery.
Q18	**Mercury Free Processing** Products delivered under this purchase order must be mercury free.
Q18a	**Mercury Free Certification Statement Required** Products delivered under this purchase order must be mercury free. A statement of compliance to this requirement must be documented on the Certificate of Conformance.
Q19	**Foreign Object Damage/Debris** Foreign Object Damage/Debris protection program required.
Q20	**Electrostatic Discharge Control Program** Suppliers must have a documented electrostatic discharge program.
Q21	**Certificate of Conformance Required** A "Certificate of Conformance" shall include, at a minimum: 1) A signature or controlled electronic approval by an authorized company representative; 2) Traceability of the statement to a single BN Purchase Order; 3) Traceability to the applicable line number(s) of the BN Purchase Order; and, 4) A specific statement of conformance to any specifications described by the PO or referenced documents (for example, military specifications, ANSI specifications, Barber-Nichols product specifications, and/or Buyer drawings). For any drawings or specifications that are revision controlled, the Certificate of Conformance will include the revision used by the Seller. The certificate of conformance should be signed and released by the direct supplier to the Buyer, or by the original manufacturer of the product. This statement of conformance must be unequivocal, and must not include statements to the effect, "To the best of our knowledge."
Q22	**Attached FARS/DFARS are made part of this order**
Q23	**SUBSAFE Level I (SSL1)** SUBSAFE Level I quality controls required. This part/material has been identified as SUBSAFE Level I and shall meet the marking, control and traceability requirements of NAVSEA 0948-LP-045-7010 appendix P.
Q24	**Government source inspection** DCMA source inspection may be invoked. Upon release of this PO, BNI will copy the local (Denver, CO) office of DCMA with this Order. The Seller is required to notify their local DCMA office upon receipt of this Order and send a copy of this notification to Barber Nichols. The local DCMA office will coordinate directly with the Seller for any required inspections and/or documentation review. FAR Clause 52.246-2 is invoked on this PO.
Q25	**Government Furnished Property** The material on this PO is Government Furnished Property (GFP) and shall be handled with care and segregated from other material. The supplier may be subject to liability for the lost and/or damaged GFP. Suppliers in possession of GFP are subject to periodic review of their GFP control system.