



# Orion Supplier Quality Codes

**Q-1 Quality Management Systems** – Suppliers/Processors shall remain compliant to and maintain active applicable AS9100/ISO9001/NADCAP certifications. (Note: AS9120 is acceptable for distributors; ISO 17025 is acceptable for material test and calibration laboratories).

Suppliers/Processors that do not maintain an active certification to AS9100/ISO9001/NADCAP will be assessed and approved by Orion and must maintain documented procedures, available in the English language, which address the following:

1. Identification and Traceability
2. Control of Nonconforming Material
3. Control of Customer Property
4. Process Control
5. Measurement and Monitoring of Product
6. Training
7. Preservation of Product
8. Control of Quality Records
9. Internal Audit
10. Contract / Purchase Order Review

**Q-2 Notification of Changes** – Suppliers shall promptly notify Orion Industries of any changes in management representative, facility location, status of the quality management system, or processes affecting product.

**Q-3 Certificate of Conformance** – Certificates of conformance must accompany each shipment for materials, hardware, and outside processes. The COC must include a statement that the product conforms to all engineering and purchase order requirements and state all applicable processes and material specifications with revision levels. The COC will reference the Orion purchase order number. When an Orion work order number is available the COC will also reference the applicable work order.

**Q-3A Raw Material Certifications** – A material certification shall accompany each shipment. The certificate must state that the material supplied meets the applicable specifications and must specify the revision level of the material specification. Certifications for material supplied by Orion Industries will be maintained by Orion Industries and is not subject to this clause. Certified physical and chemical test reports will be provided when specified by engineering requirements or the purchase order.

**Q-3B Hardware Certifications** – Distributors of hardware are required to include both a certificate of conformance from the distributor and copies of the original manufacturer certifications. Hardware certifications must state all applicable specifications and revision levels. Certifications for hardware

supplied by Orion Industries will be maintained by Orion Industries and is not subject to this clause. Certified physical and chemical test reports will be provided when specified by engineering requirements or the purchase order.

**Q-3C Electronic Component Certifications** – Distributors of electronic components are required to provide full supply chain traceability (certificates of conformance) and have verification that they are traceable to OCM\OEM; OCM\OEM authorized distributor, or authorized reseller that identifies the name and location of all the supply chain intermediaries from the part manufacturer to the direct source of the product. Supply chain traceability is defined as name and location of all supply chain intermediaries for all procurement lots, and date of all intermediate purchases from the part manufacturer to the direct source of the parts or materials for the supplier. Supply chain traceability is required for all parts or materials unless identified otherwise on the purchase order.

Certifications shall include at a minimum:

1. Manufacturer name and address
2. Manufacturer part number
3. Batch identification for the item such as date codes, lot codes, serializations, or another batch identification
4. Signature or stamp with the title of seller's authorized personnel signing the certificate
5. Certification to testing specification and revision level that parts are certified to

Electronic certifications must state all applicable specifications and revision levels. Certifications for electronics supplied by Orion Industries will be maintained by Orion Industries and is not subject to this clause. Certified physical and chemical test reports will be provided when specified by engineering requirements or the purchase order.

**Q-4 Shelf Life** – The manufacturing and applicable expiration date must be noted on each individual container and/or certification as applicable. All products must have a minimum of 6 months shelf life remaining upon receipt at Orion Industries.

**Q-5 First Article** – Supplier shall perform First Article Inspection in accordance with AS9102 on all supplied product. AS9102 forms are available from Orion Industries upon request. First Article Inspection reports are to be supplied with the production shipment for all first article parts. Upon acceptance of the first article, the supplier shall make no changes to the method of manufacture, equipment used, materials, or processes which may affect interchangeability, function, dimensions, performance, or finishes. All changes must be approved in writing by Orion Industries Quality Assurance or Planning Department.

**Q-6 Source inspection** – Source inspection is required by Orion Industries Quality Assurance. Supplier must contact the Orion Industries Quality Assurance prior to all shipments to Orion Industries.

**Q-7 Statistical Process Control** – Statistical process control is required and shall be implemented on this order as defined by Quality Assurance. The supplier-processor shall contact the Orion

Industries Quality Assurance prior to manufacturing to arrange a meeting to define the required characteristics affected.

**Q-8 In-Process Inspection** – In process inspection is required by Orion Industries. When this is required, the specific inspection point(s) in the process will be specified on the Purchase Order. The Supplier-processor shall contact Orion Industries and hold the material for in-process inspection by Orion Industries Quality Assurance.

**Q-9 Protection against Contamination or Damage** – On all parts, the surface must have a protective sleeve or equivalent protection. The parts must be boxed, banded, or shipped in a manner that will ensure no damage will occur. External threads must have special protection against damage.

**Q-10 Right of Entry** – Orion Industries, its customers and regulatory authorities shall have right of access to all facilities and review all processes, subcontractors, contracted parts, procedures, and records related to this order.

**Q-11 Subcontracting without Written Approval** – Subcontracting all or substantially all of the order without written consent of Orion Industries Quality Assurance and Purchasing is prohibited.

**Q-12 Orion Industries Supplied Drawings and Specifications** – All engineering drawings and specifications provided by Orion Industries are Orion Industries property and must be returned with the order.

**Q-13 Quality Records** – The Supplier-processor shall maintain record identification, evidence of changes, preservation, availability, accessibility, and protection from access by unauthorized persons. Supplier-processor shall retain quality records for a minimum of the calendar year plus ten (10) years from shipment of last part and dispose proprietary and sensitive records in a manner that protects them.

**Q-14 Revision Control** – Unless otherwise specified, latest revision applies on all listed specifications, drawings, process requirements, inspection/verification instructions and other relevant technical data.

**Q-15 Supplier-Processor Non-Conforming Product/Process Notification** - Supplier-processor must notify Orion Industries of nonconforming product or process failures within 3 days to include notification of any non-conforming product that may have shipped. Arrangements must be made to allow for Orion Industries to disposition all non-conforming products.

**Q-16 Supplier-Processor Request for Deviation on Product/Process** - The supplier-processor agrees not to make any change in materials, services, parts, or design details which would affect products or parts or any components thereof with regard to:

- a) part number identification
- b) physical or functional interchangeability
- c) repair and overhaul procedures, processes and material changes which affect

these procedures without prior written approval from Orion Industries.

Written authorization must be obtained from Orion Industries prior to any deviations with regards to internal process changes and any requirements stated on the Purchase Order, drawing, specification or other requirements that are known but not stated.

**Q-17 Flow Down Requirements** - The Supplier-processor shall flow down all applicable document and specification revisions, changes, departures, and requirements to their sub-tier suppliers-processors. (Ref: Orion website/Orion Quality/Boeing D1-4426 Approved Processes). Where DPD/MBD requirements are indicated, the supplier-processor will ensure that the requirements of D6-51991 or equivalent documents are referenced. Where special processing requirements are indicated, the supplier-processor will ensure that the requirements of D1-4426 are referenced. The Supplier-processor shall inspect or otherwise verify that all materials and or parts thereof, including those procured or furnished by subcontractors comply with the requirements of Orion Industries purchase order prior to shipment to Orion Industries.

**Q-18 NADCAP Approval** – Certifications must include evidence of NADCAP approval for heat treating. Finish house only: certifications must include evidence of NADCAP approval for chemical processing.

**Q-19 ITAR Requirements** – IMPORTANT/CONFIDENTIAL: This PO (and any drawings and/or attachments accompanying it) **may** contain confidential information, including information protected by United States Government. The information is intended only for the use of the intended recipient(s). Delivery of this PO to anyone other than the intended recipient(s) is not intended to waive any privilege or otherwise detract from the confidentiality of the PO. If you are not the intended recipient, or if this PO has been addressed to you in error, do not read, disclose, reproduce, distribute, disseminate or otherwise use this information, rather, please promptly notify the sender by phone or e-mail, and then destroy all copies of the PO and its attachments, if any.

All Suppliers – Processors of raw materials or services are required to comply with ITAR regulations as stated in 22 CFR §§120-130.

**Q-20 Manufacturing Facility Location**-Supplier is required to notify Orion of changes in manufacturing facility location. Upon review of the proposed changes, Orion may require additional information and approval prior to processing Orion product at the new location.

**Q-21 Counterfeit Parts**-Supplier shall put into place a documented program to avoid, detect, mitigate, and disposition counterfeit parts and materials. Suppliers should utilize and reference AS6174 for guidance. Suppliers shall also flow down counterfeit parts programs requirements to their sub- tiers, especially but not limited to:

- Electronic parts suppliers
- Raw material suppliers
- Distributors

**Q-22 Foreign Object Damage Control Program (FOD)**-The supplier shall establish, document, and maintain a program to control and eliminated FOD and/or contamination during the supplier's

manufacturing, assembly, test, inspection, packaging, and shipping operations. When applicable, the supplier's FOD control program shall include controls to preclude FOD or contamination at the supplier's sub-tier sources. The FOD control program shall satisfy the requirements of AS9146. The following basic elements shall be included in the supplier's FOD control program.

- FOD prevention training
- Manufacturing planning consideration for FOD prevention
- Work sequencing
- Cleanliness of work area
- Control of tools, personal items, fasteners, scrap, etc.
- Protection from FOD during handling, packaging, and shipping
- Periodic (At least annually) evaluation of the FOD control program for effectiveness

**Q-23 Validation of Raw Material Test Reports**-When the supplier utilizes test reports to accept supplier purchased raw material, the following requirements apply:

- Test reports shall be checked 100% against supplier's requirements and applicable specifications
- Supplier shall periodically validate test reports for raw material accepted on the periodic, scheduled tests of raw material samples. Schedules for frequency of test will be established by supplier based on historical performance of the raw material supplier.
- Supplier shall retain test reports provided by the raw material supplier, as well as supplier's validation test results as quality records traceable to the conformance of product supplied.

**Q-24 Notification and Right of Access Requirements**- It is the seller's responsibility to notify Orion through documented methods of changes relating to product, process, approvals, qualifications, name, and location change. In addition, the seller must obtain written approval from Orion prior to transferring significant work, requested design changes and significant changes in manufacturing conditions. Orion, their customers, and regulatory agencies have the right to access all facilities and records pertaining to this.

**Q-25 Conflict Minerals**-Seller shall ensure that all materials and hardware are free of all conflict minerals as defined by the CFSI. Orion will under no circumstances accept product containing conflict minerals in any form. Seller is responsible to maintain adequate traceability to ensure that all products are free of conflict minerals and to provide supporting documentation upon request.

**Q-26 FAA-PMA Markings**-Seller hereby acknowledges that the parts and/or materials being shipped under this order are intended for use under Boeing's Federal Aviation Administration (FAA) issued Production Certificate 700 and no articles (or constituent parts thereof) or accompanying

paperwork (e.g., packages, shippers, etc.) contain any Federal Aviation Administration-Parts Manufacturer Approval (FAA-PMA) markings."

**Q-27 Ensuring that persons are aware of their contribution to product or service conformity; their contribution to product safety; the importance of ethical behavior.**

Supplier must be committed to the highest standards of ethics and business conduct. Supplier must comply with the law, honor commitments, act in good faith, and be accountable. Supplier must strive to maintain full compliance with all laws and regulations applicable to the operation of the business and customer relationships. Supplier must not offer, promise, authorize, or provide, directly or indirectly, anything of value (including business gifts or courtesies) with the intent or effect of inducing anyone to engage in unfair business practices. Supplier will avoid involvement in activities that may be perceived as a conflict-of-interest. Supplier will respect the legitimate proprietary rights and intellectual property rights of customers and Suppliers and take proper care to protect sensitive information, including confidential, proprietary, and personal information.

Supplier will support product safety by ensuring robust management of special requirements, critical items and key characteristics. If there are concerns with respect to product safety, Supplier will communicate them to Orion. If there is a concern at the Supplier's

premises with respect to safety during the manufacture of the product, Supplier will notify its own employees of the concern and whenever possible, mitigate the concern.

Supplier will ensure that employees and people working on its behalf are aware of:

- Their contribution to product or service conformity
- Their contribution to product safety
- The importance of ethical behavior

**Q-28 Supplier Quality Performance**-Orion will monitor supplier quality and delivery performance and may request additional information or corrective action of performance is found to be unacceptable.

**Q-29 Boeing Form X31764**-Seller shall comply with the requirements of Boeing Form X31764 ([http://www.boeing.com/boeing-suppliers/05\\_01\\_2018\\_%20x31764.pdf](http://www.boeing.com/boeing-suppliers/05_01_2018_%20x31764.pdf)) "Boeing Quality Purchasing Data Requirements". Supplier shall flow-down X31764 requirements to all material, equipment, information, and service providers integrated into deliverable products and services provided to the seller by the seller's first tier supply contracts and the seller's sub-tier contracts.

**Q-30 Calibration Laboratory Requirements**- Supplier's calibration system shall be compliant to applicable prevailing industry requirements in accordance with ISO 17025 - General requirements for the competence of testing and calibration laboratories, ISO 10012 – Quality Assurance Requirements for measuring equipment, and/or American National Standard Institute (ANSI) Z540 – General Requirements for calibration Laboratories and Measuring and Test Equipment standards.

Calibrations shall be performed by the Supplier using standards of known accuracy which are traceable to the National Institute of Standards and technology (N.I.S.T.).

Certificates and reports provided to Orion for the calibrations accomplished by the Supplier in the performance of this PO shall include:

- environmental conditions at the time of calibration
- statement of uncertainty
- statement attesting to measurement traceability and to the fact that calibration services were performed in compliance with one or more of the following: ISO 10012, ANSI/NC SL Z540, or ANSI/ISO/IEC 17025.

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Verify revision online <https://orionworks.org/aerospace/suppliers/>