

The following Purchase Order Quality Clauses shall apply to all Goods furnished by Supplier to Cadence Aerospace, LLC (hereinafter referred to as "Cadence"). Updates to these Quality Clauses will be available at: [http://www.cadenceaerospace.com/products/supply\\_chain\\_management.html](http://www.cadenceaerospace.com/products/supply_chain_management.html).

**A) Right of Entry** – Cadence, the Cadence customer, the customers' customer and regulatory agencies shall be allowed the Right of entry to determine and verify the quality of work, records and material at any place, including the plant of the subcontractor.

**B) Quality Standards Requirements Flow down** – Subcontractors shall have a quality and calibration systems meeting one of the following requirements as applicable: AS91xx , D6/82479 Addendum 1, and/or AC7004 (all at the latest revisions). Supplier will be approved by the specific Cadence site, following their internal procedure of approving Suppliers. If after initial evaluation and approval of subcontractors by Cadence, the subcontractors quality system and/or calibration system fall below the as applicable requirements of AS9100, D6/82479 Addendum 1, and/or AC7004, the subcontractor must notify Cadence in writing before processing or shipping any product to Cadence. Supplier shall flow down to all subsequent sub tier suppliers all applicable requirements included in Cadence's purchase order, including key characteristics where required. Cadence reserves the right to approve suppliers outside of the quality and calibration systems, on a case by case basis.

**1) AS9100** - Subcontractors certified to AS9100 shall flow down the requirements of AS9100, Section 8.4.3.m to their sub-tier suppliers, e.g., their contribution to product or service conformity, product safety, and the importance of ethical behavior.

**2) Revocation of Quality Management System Certification** – Suppliers are required to communicate to Cadence's purchasing agent and/or quality manager any change in certification status that results in revocation of their quality management system certification. This communication is required to be performed within 24 hours (Monday through Thursday) or 72 hours (Friday through Sunday) depending on the date of the revocation.

**C) Quality Records** – Suppliers shall maintain quality records, including traceability throughout all stages of manufacturing and those records must remain readily retrievable upon request by Cadence. No quality records shall be destroyed without the written consent of Cadence Quality.

**D) Material Suppliers** – Material supplied against this contract must be purchased from approved sources of the end item users (Cadence's customer).

**E) Materials Receiving Inspection** – Seller certifies that he has performed receiving inspection on purchased materials to ensure compliance with all drawings and specifications, and has test reports and/or raw material certifications on file available for review upon request.

#### **F) Specification Revisions**

**1) Non-Special Process Specification Revisions** - The product being manufactured and/or service being performed must be completed using the following order of precedence: 1) Purchase Order, 2) Engineering Drawing as provided 3) The latest revision. At no time shall any other revisions be used without the express, written permission of an authorized representative of Cadence.

**2) Special Process Specification Revisions** – For Special Processes, contact your buyer for the latest revision.

**G) Approved Processing Sources** – Subcontractors shall use only end item customer approved processing source.

**H) Manufacturing Routings** – Seller certifies that shop travelers/manufacturing work orders will reflect and indicate work requirements, including non-destructive inspection, as evidence by the supplier's quality assurance signature or acceptance stamp, and are on file available for review upon request.

**I) Control of Non-Conforming Product** – Non-conforming products will be segregated, tagged and returned to Cadence along with completed (Seller's) internal non-conformance report. Documented cause and corrective action is required for each non-conformance.

**J) Handling, Packaging, Preservation and Delivery** – The subcontractor shall use appropriate methods of handling, packaging and preservation to prevent damage of product in process and during delivery. Packaging shall be inspected prior to use for signs of deterioration e.g., protruding nails and screws, split wood, splitting seams etc. Additionally, as in accordance with Para X containers shall be inspected for FOD and all debris shall be removed.

**K) Evidence of Inspection** – A qualified representative of the supplier's quality department shall sign and document acceptance status for each shipment as evidence of 100% inspection. Sampling inspection shall not be performed without prior written approval from Cadence and our customer.

**L) First Article Requirements** – A completed First Article Inspection Form per AS9102 shall be provided with the first shipment, and as required, as evidence of 100% inspection of one of each part from the first shipment. Suppliers with contracts that have been novated or assigned to Cadence by their customer shall provide a copy of the first article report matching the current configuration. The preferred method of FAI submittal is through Net Inspect.

**M) Certificate of Compliance (C of C) & Product Documentation/Certifications**– Seller shall certify that all parts which are supplied conform to drawing and purchase order requirements, applicable specifications, finishes, dimensions, etc. and records are

on file subject to examination by Cadence. A Certificate of Compliance shall accompany each shipment and shall reflect all information necessary to identify the product, quantity, current revisions, mill source and any services or processes you have performed. For finish operations the Seller shall report on the Certificate of Conformance the actual thickness of any organic coatings e.g. Prime and Top Coat in addition to or in conjunction with specification requirements. Also, Each material and process specification as called out on the drawing or PO must be specifically documented on the C of C. The C of C must be signed by an authorized representative of the Seller. All documentation received must be legible.

**N) Test Reports** – The original mill or foundry chemical and mechanical test reports for material used in fulfilling this order must be maintained for the calendar year plus a period of ten (10) years from the date of shipment, unless otherwise specified in the Purchase Order or customer flow downs. The heat lot number of each test report must be traceable to the material. Any reprocessed raw material must be traceable to the original mill test report and must include objective evidence of compliance (e.g., mechanical tests) to the materials reprocessed condition. Copies of the test reports must be submitted with each shipment. When Cadence provides material, the supplier must ensure that a statement is included on the shipment certification and/or shipper identifying “Cadence Supplied Material”. All documents must be 100% legible. Records of Fracture Critical parts per 2ZZP00006 will be maintained for a minimum of thirty (30) years.

**O) Traceability / Lot Shipment Requirements** – Lots may not be commingled. Shipments may consist of no more than two (2) manufacturers lots for each part number included in an order. No quantity of a single manufacturer's lot may consist of less than 20 percent of the total quantity per shipment unless otherwise specified on the purchase order. The Seller shall maintain a method of commodity and item level traceability that ensures tracking of the supply chain back to the manufacturer of all materiel being delivered per this order. This traceability method shall clearly identify the name and location of all of the supply chain intermediaries from the manufacturer to the direct source of the materiel for the Seller and shall include the manufacturer's commodity or item level identification for the item(s) such as date codes, lot codes, heat codes, serializations, unique item identifiers, or batch identifications.

- A production lot shall consist of parts that are all the same configuration fabricated under the same conditions, from the same material, processed (including heat treat) together and produced as one continuous run.

- A casting, forging, machined part or sampling lot consists of the same part number, of one alloy, produced using the same processing parameters (including heat treat) and contains a homogeneous heat pour, or same basic material.

- A plating lot (cadmium, anodize, chemical milling, etc.) shall consist of treated articles on the same order, treated under the same conditions, from the same chemical composition, from the same tank.

- A coating lot (paint, dry film lube, etc.) shall be processed as one batch, on the same part, on the same order. A batch is defined as the end product of all of the raw materials mixed or blended in a single or continuous operation.

**P) Product Verification** – Verification by Cadence shall not absolve the Seller of the responsibility to provide acceptable product, nor shall it preclude subsequent rejections by Cadence. In the event that a supplier non-conformance becomes evident by Buyer or any subsequent Customer, the Seller will retain liability for the non-conformance and will be obligated to pay for all direct and indirect costs associated with the non-conformance. The Parties acknowledge that the nature and actual amount of costs associated with a non-conformance are uncertain and difficult to calculate. Therefore, Cadence may choose, in its sole discretion and/or as a pass through from Cadence's customer, to require Seller to pay Cadence liquidated damages. The parties further acknowledge that such payments are not intended as a penalty, but are, in lieu of the actual damages measured by such costs

**Q) Shelf Life** – When services from the supplier include using materials with a limited shelf life, the supplier shall include the expiration date of the materials used and batch identification on the required certifications.

**R) Control of Cadence Property** - Seller shall ensure control of Cadence property, which includes storage, safeguard and recovery, which includes, but is not limited to Tooling, Mylar, NC Programs, Drawings and Cadence Aids. This shall also apply in force to any Customer owned tooling that is provided to the Seller.

**S) Configuration Control** – Seller shall ensure configuration control and conform to the requirements of the individual Cadence site. If the Seller is unsure of these requirements, please contact the Cadence site that issued the Purchase Order.

**T) Tool Calibration Requirements** – Items for calibration shall be calibrated per ANSI/NCSS Z540-1, ISO 10012, ISO 17025, or ANSI/NCSS Z540.3. If Cadence's customer (or end user) requires a specific calibration that requirement must be strictly adhered to.

**U) Counterfeit Materiel** – Seller shall have a counterfeit parts plan per AS6174. Seller's plan shall ensure that only new and authentic materials are used in materiel delivered to Buyer. The Seller may only purchase materiel directly from original manufacturers, manufacturer franchised distributors, or authorized aftermarket manufacturers. Use of materiel that was not provided by these sources is not authorized unless first approved in writing by Buyer. The Seller must present compelling support for its request (e.g., original manufacturer documentation that authenticates traceability of the materiel to the original manufacturer), and include in its request all actions to ensure the materiel thus procured is authentic and conforming.

If suspect/counterfeit materiel is furnished under this purchase agreement, such items shall be impounded. The Seller shall promptly replace such items with items acceptable to the Buyer and the Seller may be liable for all costs relating to impoundment, removal, and replacement. Buyer may turn such items over to Authority Having Jurisdiction for investigation and reserves the right to withhold payment for the suspect items pending the results of the investigation. Any known instances of fraud or attempted fraud shall be documented in writing to Buyer.

**V) Penalties Associated With Fraud** – This purchase order and activities hereunder are within the jurisdiction of the Government. 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 purchase order may be punishable in accordance with applicable legal statutes. Seller employees engaged in the performance of work under this purchase order shall be informed in writing prior to performance of work that there is risk of criminal penalties associated with any falsification, concealment, or misrepresentation in connection with the work performed under this purchase order.

Seller shall include the following statement preprinted on each Certificate of Conformance initiated by the Seller and provided to the Buyer in conjunction with this purchase order:

NOTE: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a crime under Government statute.

Seller shall include all provisions of this contract clause, including this sentence, in all lower tier contracts under this order. Any inability or unwillingness of a lower-tier supplier to comply with this provision should be documented in writing and submitted to Buyer.

**W) Certificate of Conformance and Traceability (CoC/T) (U.S. Department of Defense Contracts)** – This clause is applicable to all contracts for Qualified Products List (QPL) or Qualified Manufacturers List (QML) Controlled Materiel. This clause applies regardless of the point of inspection designated in the contract award. This clause applies both to contracts awarded directly to a manufacturer listed on the applicable QAPL/QML and to its suppliers (e.g., distributors) not listed as approved manufacturers on the applicable QPL/QML.

The materiel supplied must be in strict conformance to the requirements set forth and/or referenced in the item description, including applicable revisions and slash sheets. To ensure this conformance, the contractor must provide a Certificate of Conformance and Traceability (CoC/T) with the information and documentation required by the applicable specification. This documentation must reference the contract number and include a certification signed by the approved QPL/QML manufacturer. In addition, if the materiel is not procured directly from the approved manufacturer, all additional documentation required by the specification must be provided to establish traceability from the QPL/QML manufacturer through delivery to the Government. The CoC/T is required to determine acceptability of the supplies. If the CoC/T is not provided, it is incomplete or otherwise unacceptable, the supplies will be determined not to meet contract requirements and will be rejected.

If the contract requires inspection and acceptance at origin, the contractor shall furnish the original and two copies of the CoC/T to the Government Quality Assurance Representative (QAR) with the items offered for acceptance. The CoC/T must clearly reference the applicable contract number. The contractor shall submit one signed copy to the contracting officer. The second copy shall be retained by the QAR. The original shall be maintained by the contractor.

If the contract requires inspection and acceptance at destination, the contractor shall mail one copy of the CoC/T to the contracting officer upon shipment/delivery. The CoC/T must clearly reference the applicable contract number.

**X) Foreign Object Debris/Damage (FOD) Prevention** - Seller shall maintain a FOD prevention program in accordance with AS9146, Foreign Object Damage (FOD) Prevention and/or National Aerospace Standard NAS-412, Foreign Object Damage/Foreign Object Debris (FOD) Prevention. Seller shall comply with all additional customer flow downs regarding FOD.

Whenever and/or wherever FOD entrapment or foreign objects can migrate, Seller shall ensure that applicable Quality requirements are flowed down to Seller's subcontractors at every tier.

Prior to closing inaccessible or obscured areas and compartments during assembly, Seller shall inspect for foreign objects/materials and ensure no FOD barriers remain embedded, e.g. embedded protective plugs. Seller shall ensure tooling, jigs, fixtures, and test or handling equipment are maintained in a state of cleanliness and repair sufficient to prevent FOD. By delivering Items to Buyer, Seller shall be deemed to have certified to Buyer that such Items are free from any foreign materials that could result in FOD.

**Y) This clause removed at revision M, 11/12/2015**

**Z) Flow down of End Item Customer Quality Requirements** - The current release of following quality documents is required to be adhered to based on the end item customer identified on the Cadence purchase order.

*Company:* Gulfstream Aerospace Corporation  
*Quality Document:* SQAR-9100 (Supplier Quality Assurance Requirements Under an AS9100 Quality System)  
*Location:* Contact your Cadence Purchasing Agent for a current copy.

*Company:* Lockheed Martin Aerospace Corporation  
*Quality Document:* Appendix QX (Supplier Quality Requirements)  
*Location:* <http://www.lockheedmartin.com/us/aeronautics/materialmanagement/scm-quality.html>

*Company:* Northrop Grumman Corporation  
*Quality Document:* SQAR (Supplier Quality Assurance Requirements) & SQAR Supplement for the F-35 Lightning Program. For other programs please contact your Cadence Purchasing Agent.

*Company:* Boeing  
*Seller Requirement:* 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 the accompanying paperwork (e.g., packages, shippers, etc.) contain any Federal Aviation Administration- Parts Manufacturer Approval (FAA-PMA) markings. Suppliers utilizing Digital Data must comply with the requirement of Boeing specification D6-51991

Quality Assurance Standards for Digital Product Definition at Boeing Suppliers. Supplier shall not perform any special tooling fabrication, rework, or repair without Cadence Aerospace approval in accordance with Boeing BDS D950-11059-1 requirements. Location: <http://www.boeing.com/suppliers/quality/D6-82479.pdf>

*Company:* UTAS

*Quality Document:* Please contact your Cadence Purchasing Agent.

*Location:* Please contact your Cadence Purchasing Agent

*Additional Requirement:* Unless otherwise specified, procedures shall be implemented to ensure that eye examinations, including visual acuity and color vision, as applicable, are administered by a medically qualified/trained person to all individuals performing visual inspection, other product acceptance activities and/or M&TE calibration that require visual acuity.

- Intervals shall not exceed one year.
- Individuals shall be tested in at least one eye, either corrected or uncorrected.
- Color Perception testing is required one time only. Individuals shall be capable of adequately distinguishing and differentiating colors used in the method for which certification is required, the process being performed or inspection activity.
- Records shall be retained for each individual.

*Additional Requirement:* Supplier shall prevent and mitigate the use of counterfeit parts. Supplier shall comply with the requirements of AS5553 for electronic components and AS6174 for non-electronic product. Supplier shall request and obtain approval using ASQR-01 Form 3 prior to the use of shipment of material with broken traceability or material provided from a non-authorized supplier.

*Company:* Collins Aerospace (Raytheon Technologies)

*Quality Document:* ASQR-01 Supplier Quality System Requirements

*Location:* <https://www.rtx.com/suppliers/united-technologies-suppliers/united-technologies-asqr>

*Additional Requirement:* Calibration - If using ANSI/NCSS Z540.3, supplier shall implement the requirements using the Handbook for the Interpretation of ANSI/NCSS Z540.3.

*Company:* Airbus SE

*Quality Document:* AP2190 GRAMS – General Requirements for Aerostructure & Material Suppliers

*Location:* <https://www.airbus.com/search.html?q=AP2190>

Boeing Defense, Space, and Security Programs – The requirements of BDS Terms and Condition Clause H900, Section A para 26/D607 shall apply. Certification must state the following: “Material meets all requirements of BDS Terms and Conditions Clause H900 Section A para 26/D607”

For Military Programs – Original mill producer must be of a domestic source unless otherwise listed on the material APL. Any specialty metals under this contract shall be melted in the United States, outlying areas or qualifying countries less certain exceptions as defined in DFARS clause 252.225-7009. This provision includes any subcontractors.

**AA) Qualification of Personnel** - Personnel conducting or performing processes affecting product/service quality as stated per Purchase Order requirements shall be trained, qualified, and determined competent by the supplier/sub-contractor. Evidence of qualifications shall be made available on request.

**AB) Outsourcing** – Supplier will not outsource or transfer any processes, services, or materials without the consent and written authorization from Cadence Aerospace. All purchase order specifications, quality requirements and special requirements will be strictly adhered to.

**AC) Substitutions** – Substitution of any material, hardware, and special processing materials is strictly prohibited. Cadence Aerospace shall inform supplier of any permissible substitutions only after receiving documented customer approval. Material suppliers shall not supply any other material other than that called out on the Purchase Order. Purchase Order must be negotiated and revised for substitutions.

**AD) Application of Acceptance Authority Media** – Seller shall comply with the AS/EN/ISO 9100 requirements and 14CFR Part 21.2 regarding the application of Acceptance Authority Media (AAM) requirements. Seller shall, within its organization and its supply chain, ensure that the use of AAM is clearly defined within its Quality Management System (QMS). Seller shall, upon Cadence Aerospace request, be able to demonstrate evidence of communication to its employees and to its supply chain; use of AAM must be considered as a personal warranty of compliance and conformity. The areas of focus of internal and supply chain assessment shall include but are not limited to:

- **Authority Media Application Errors (i.e Omission, Typos, Legibility, etc.)**
- **Authority Media Application Untimely Use (i.e Documentations is not completed as planned, “Stamp/Sign as you go”, etc.)**
- **Authority Media Application Misrepresentation (i.e uncertified personnel, falsification of documentation, work not performed as planned, etc.)**

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- **Authority Media Application Training Deficiencies (i.e Ethics, Culture awareness, proper use of authority media, etc.)**