
Saab, Inc.
Purchase Order Quality Requirements

The following provisions with their terms and conditions become an integral part and supplement the existing terms and conditions of the Saab, Inc. issued Purchase Order. These specifications and standards are flowed down to Saab, Inc. suppliers as specified on the Purchase Order. Table 1 defines the quality requirements. *Table 2 – Crosswalk of Applicable Quality Requirements by Commodity/Process* provides a map of which quality statements may be applicable, based on the commodity, product, or process being supplied. Specific contract requirements supersede this guidance.

Table 1 – Purchase Order Quality Statements

Code	Quality Statement	Requirement
100	DFARS 252-225: 7009 Restriction on Acquisition of Certain Articles Containing Specialty Metals	Purchased specialty metals and items containing specialty metals shall be in accordance with DFARS 252.225-7009. DFARS 252.225-7009 (Supplement-Oct 2014)
101	Government Source Inspection	Government Source Inspection (GSI) is required prior to shipment from the supplier. Upon receipt of this Purchase Order, promptly notify the government representative who normally services your facility to allow for planning GSI. If a government representative does not normally service the facility, furnish a copy of this Purchase Order to the nearest DCMA representative. In the event the representative or office cannot be located, notify the Saab, Inc. buyer immediately.
200	Quality Management System - General	The seller shall maintain a Quality Management System certified to ISO 9001, AS9100, or be approved by a Saab, Inc. Quality representative.
200.1	Inspection System	The supplier must maintain an inspection system that is acceptable to Saab, Inc. Quality Assurance
200.2	Right of Entry	The supplier's system shall be subject to random audits and approval by Saab, Inc. Quality Assurance at all reasonable times for all shifts and locations in which articles are produced under this Purchase Order.
201	Quality Management System - ISO	The seller shall maintain a Quality Management System certified to ISO 9001.



Saab, Inc.
Purchase Order Quality Requirements

202	Quality Management System - AS9100	The seller shall maintain a Quality Management System certified to AS9100.
203	Commercial Quality System	The supplier is responsible for performing the necessary inspections and tests to substantiate that the supplies or services furnished under this Purchase Order conform to the catalog/COTS requirements.
204	Government Quality Assurance	Government contract quality assurance is required at the supplier's facility. Upon receipt of this Purchase Order (PO), the supplier shall notify the government representative who normally services the plant so that appropriate planning for government quality assurance can be accomplished. Upon receipt of this PO, promptly furnish a copy to the government representative who normally services the facility, or, if none, to the nearest Defense Contract Management Agency office (DCMA). In the event the representative or office cannot be located, notify the Saab, Inc. buyer immediately.
300	Certification of Calibration	A Certificate of Calibration from an ISO17025 or ANSI/NCSL Z540-1 accredited institution traceable to NIST shall be furnished with the shipment for each item.
301	Certificate of Conformance (C of C)	Parts supplied to this Purchase Order (PO) shall be accompanied by a Certificate of Conformance. Certificates must include the following: (1) Saab PO Number, PO Line, Part Number, Revision, Description (2) Traceability Identifier (Examples include: Serial Number, Date Code, Lot/Batch/Heat Number) (3) Quantity Shipped (4) Statement of Work (SOW) document number (if applicable) (5) Approved Request for Deviation/Waiver document number (if applicable) (6) Supplier statement of conformance to purchase order and specification/drawing requirements (7) Date and authorized signature of responsible supplier representative



Saab, Inc.
Purchase Order Quality Requirements

302	Certificate of Physical and/or Chemical Analysis	Each shipment shall include certificate(s) of compliance to material physical and/or chemical properties and shall reference physical properties and/or chemical composition, lot/batch number, list the parameters tested, and the results obtained. Certificate(s) shall be signed by the responsible supplier representative.
303	Special Process (Non-NADCAP) Certification	Each shipment shall include certificate(s) of conformance for special processes (e.g., welding, brazing, plating, and painting) identifying the process, part number, revision, purchase order number, process specification number, identification of process method used, acceptance criteria, and evidence of acceptance. Certifications must reflect applicable document revisions. When parts are serialized, the serial numbers shall appear on the certification(s). Certificate(s) shall be signed by the responsible supplier representative.
304	NADCAP Special Process Certification	Only Special Process suppliers approved by NADCAP (National Aerospace and Defense Contractors Accreditation Program) shall be used. Each shipment shall include, certification(s) identifying the process, part number, revision, purchase order number, process specification number, identification of process method used, acceptance criteria, and evidence of acceptance. Certifications must reflect applicable document revisions. When parts are serialized, the serial numbers shall appear on the certification(s). Certificate(s) shall be signed by the responsible supplier representative.
305	Raw Materials Traceability	All items manufactured under this Purchase Order shall be traceable to the raw materials used. Supplier traceability records shall be made available upon request.
400	Shelf Life	Shelf-life requirements including date of manufacture and useable life shall be marked on each container. Product supplied to Saab, Inc. shall have a minimum of 75% useful shelf life.



Saab, Inc.
Purchase Order Quality Requirements

401	Counterfeit Parts Avoidance	<p>Compliance to DFARs 252.246-7007 "Contractor Counterfeit Electronics Part Detection and Avoidance System", AS5553 "Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition", and AS6174 "Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel" is required. Components and hardware parts shall be procured only through Original Equipment Manufacturers (OEMs) / Original Component Manufacturers (OCMs) or their franchised dealer or distributors.</p> <p>(1) The Supplier shall verify the procurement source and associated certifying paperwork.</p> <p>(2) Appropriate incoming inspection test methods shall be used to detect potential counterfeit parts and materials.</p>
402	Part Obsolescence	<p>(1) On a best effort basis, the supplier agrees to perform an obsolescence analysis upon acceptance of the Saab, Inc. Purchase Order</p> <p>(2) Supplier shall provide End of Life (EOL) notification, within 30 days of discovery, when a component or material is no longer in production by the manufacturer. The purpose is to keep Saab informed of potential component or material obsolescence. The supplier shall provide documentation describing the obsolescence/EOL plan to Saab. This can include a onetime purchase of all EOL type material, the qualification of an alternate supplier/item, or a re-design of the affected assembly.</p>
403	Dimensional Inspection Data	<p>(1) Seller shall provide Dimensional Inspection Data with each shipment for goods furnished under this contract showing conformance with drawing and other contract requirements. Data shall consist of records of actual readings taken during in-process and/or final inspection of each part, with the dimension and its tolerance noted. No out-of-tolerance measurements shall be accepted unless a Saab Supplier Deviation Waiver was processed and accepted by Saab, Inc. Quality Assurance</p> <p>(2) Seller shall identify the contract number, part number, revision number, and when applicable, serial number on each inspection data sheet. Each inspection data sheet shall be signed and dated by the Management Representative responsible for Seller's inspection activity.</p>



Saab, Inc.
Purchase Order Quality Requirements

404.1	First Article Inspection - AS9102	The supplier, in accordance with the latest revision of SAE AS9102, shall conduct a First Article Inspection (FAI). A ballooned drawing identifying each characteristic accompanying form 3 is preferred. A copy of the FAI shall be included with each shipment.
404.2	First Article Inspection - Commercial	A detailed inspection report containing a record of the actual readings on 100% of all characteristics and notes contained on the drawings must be submitted with the first production lot. The item inspected must be individually bagged/tagged/identified.
405.1	Printed Circuit Board/Assembly (PCB/PCBA), Class 2 Workmanship/Acceptability Requirement	The following acceptability criteria shall apply: (1) Printed Circuit Boards (PCB) "unpopulated," shall be in accordance with IPC-A-600, Class 2 (2) Printed Circuit Board Assembly (PCBA) "populated", shall be in accordance with IPC-A-610, Class 2 (3) Requirements for Soldered Electrical and Electronic Assemblies shall be in accordance with ANSI J-STD-001, Class 2
405.2	Printed Circuit Board/Assembly (PCB/PCBA), Class 3 Workmanship/Acceptability Requirement	The following acceptability criteria shall apply: (1) Printed Circuit Boards (PCB) "unpopulated," shall be in accordance with IPC-A-600, Class 3 (2) Printed Circuit Board Assembly (PCBA) "populated", shall be in accordance with IPC-A-610, Class 3 (3) Requirements for Soldered Electrical and Electronic Assemblies shall be in accordance with ANSI J-STD-001, Class 3
407.1	Cable and Wire Harness Assemblies, Class 2 Workmanship/Acceptability Requirement	The following acceptability criteria shall apply: (1) Cable and Wire Harness Assemblies shall be in accordance with IPC/WHMA-A-620, Class 2
407.2	Cable and Wire Harness Assemblies, Class 3 Workmanship/Acceptability Requirement	The following acceptability criteria shall apply: (1) Cable and Wire Harness Assemblies shall be in accordance with IPC/WHMA-A-620, Class 3
408	Saab Source Inspection	Source inspection at the manufacturer's facility will be at the discretion of Saab, Inc. and determined prior to shipment of product. Seller must notify buyer at least 10 calendar days in advance of shipment and provide all required documentation for review. Final Acceptance shall be made at Saab, Inc.
409	Hazard Materials/Safety Data Sheets (SDS)	Prior to shipment to Saab, the supplier shall provide appropriate Safety Data Sheet(s) [SDS] in Global Harmonized System [GHS] format. Additionally, items containing hazardous material(s) listed in Appendix A of FED-STD-313 shall be appropriately labeled.



Saab, Inc.
Purchase Order Quality Requirements

		FED-STD-313 (Assist Quick Search)
410	Electrostatic Discharge Sensitive (ESD)	Components on this Purchase Order are susceptible to damage caused by static electricity and are considered electrostatic discharge sensitive (ESDS). The supplier shall implement an ESD control program in accordance with ANSI/ESD S20.20 or equivalent. Component packaging shall be either conductive or static dissipative and shall identify the components as ESDS.
411	Identification, Preservation, Packaging/Packing and Foreign Object Debris (FOD)	<p>Shipments to Saab, Inc. must be packaged to avoid damage and deterioration and must be shipped to the address specified on the Purchase Order (PO). Packaging shall be in accordance with good commercial practices (Ref: ASTM D3951) unless otherwise specified. The use of foam "peanuts" is discouraged. PWBs shall be individually wrapped to prevent damage during shipment. Each box or container, and packing slip, shall be labeled and have, at a minimum, the following information:</p> <ol style="list-style-type: none"> (1) Part number and revision (2) PO number and line item (3) Quantity (4) Manufacturer's identification <p>The Supplier shall assure that devices, components, and materials delivered under this contract are free of Foreign Object Debris (FOD), and shall employ prevention practices to keep FOD, large or small, from the product and packaging.</p>
412.1	MRB Authority and Supplier Deviation/Waiver Request	The supplier does not have Material Review Board (MRB) authority to accept or repair non-conforming product. Nonconformances on final deliverable product to the purchase order, drawing, specifications, or applicable documents must be submitted to Saab on a Supplier Request for Waiver form (SF-0215) through the Saab Buyer for Quality Engineering approval prior to shipment.
412.2	MRB Authority	Unless otherwise specified on this Purchase Order (PO), Material Review Board (MRB) authority is not delegated to the supplier. All decisions to repair or use-as-is, and all standard repair procedures utilized by the supplier in performance of this PO require approval prior to performance.

Saab, Inc.
Purchase Order Quality Requirements

413	Serialization of Sensor Systems Assemblies	The supplier shall assign serial numbers to each delivered Purchase Order item. Serial numbers shall be marked for each item in a legible, permanent fashion. Serial Numbers shall not be duplicated and shall provide an audit trail to material, fabrication, assembly, inspection, test, and certification documents.
414	Test Reports	Functional and/or qualification test results listing test procedure used, each parameter tested, and actual readings taken during these tests are required with the delivery of the material covered by this Purchase Order. These reports shall include the following information: (1) Part Number (2) Part Revision (3) Traceability Identification (Examples include Serial Number, Date Code, Lot/Batch/Heat Number). The test data shall be maintained by the supplier for a minimum of 10 years, unless otherwise specified.
415	Fiber Optic Inspection	Fiber optic connectors shall be inspected per IPC-A-640 at 200x to 400x magnification, after final assembly and acceptance testing, before shipment. Fiber optic connectors shall be cleaned per IPC-8497-1, such that contaminants that are removable are cleaned from the end face. Clean protective caps shall then be applied. Traceable digital inspection images for each connector on each unit of finished product at no less than 200x magnification shall be provided to Saab, Inc.
416	Prohibited Materials	Items on this purchase order shall conform to RoHS Directive 2011/65/EC.
417	Failure Analysis Reports	Supplier shall provide a failure analysis report identifying the failure mode and potential root causes. These reports shall include the following information: (1) Part Number (2) Part Revision (3) Traceability Identification (Examples include Serial Number, Date Code, Lot/Batch/Heat Number).
418	Customer Problem Report Purchase Orders	Repairs are defined as: Reprocessing of non-conforming product that restores functional conformance only and fails to restore the product to the original product



Saab, Inc.
Purchase Order Quality Requirements

		<p>configuration as detailed in the applicable drawings and specifications.</p> <p>All repairs utilized by the supplier in performance of this Purchase Order require Saab, Inc. approval prior to performance.</p>
--	--	---

Table 2 – Crosswalk of Applicable Quality Requirements by Commodity/Process

Commodity, Product, or Process	Standard Requirements [Code]	Special Requirements [Code]
Calibration Services	300, 411	N/A
Computer Products (hardware/software)	405.x, 407.x, 411	N/A
COTS or Catalog Material	203, 405.x, 407.x, 411	N/A
Customer Problem Reports (CPRs)	301, 303, 405.x, 407.x, 411, 418	N/A
Fabricated Part or Assembly - Saab, Inc. or Customer Design	200.x, 301, 303, 405.x, 407.x, 411, 412.x	101, 204, 302, 404.x, 408
Fabricated Part or Assembly – Supplier Design	200, 301, 303, 405.x, 407.x, 411	101, 204, 302, 404.x, 408
Hazardous Material	203, 409, 411	N/A
Printed Wire Board	200.x, 301, 405.x, 407.x, 411, 412.x	N/A
Printed Wire Assembly	200.x, 301, 405.x, 407.x, 410, 411, 412.x, 413	101, 204, 404.x, 408
Shelf-Life Material	203, 400, 411	N/A