

# **Quality Clauses**

Code	Statement	Definition
100	DFARS 252-225: 7009 Restriction on Acquisition of Certain Articles Containing Specialty Metals	All purchased specialty metals must be in compliance with DFARS 252.225-7009 and are imposed on this purchase order. Specialty metals are defined in this clause as certain steels, titanium, and zirconium-based alloys.
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, so that appropriate planning for (GSI) can be accomplished. If a government representative does not normally service the facility, then furnish a copy of this Purchase Order to the nearest DCMA representative. In the event the representative or office cannot be located, notify the SDAS buyer immediately.
200	Quality Management System	The seller shall maintain a Quality Management System that complies with the requirements of ISO 9001 or a Quality Management System approved by SDAS. Suppliers that are registered by an RAB accredited registrar are preferred.
300	Certification of Calibration	A calibration system certified to ISO17025 and/or ANSI/NCSL Z540-1 must be maintained. Equipment must be traceable to NIST and provides identification of calibration status. A "Certificate of Calibration" traceable to each item shall be furnished with each shipment to SDAS.
301	Certificate of Conformance (C of C)	All parts supplied to this purchase order will be accompanied by a C of C. The C of C will be dated and signed by the responsible supplier representative certifying the supplied parts meet all purchase order, specification/drawing requirements from the buyer. Certificates must include the following:
		(1) SDAS PO Number, PO Line, Part Number, Revision, Description, Serial Numbers and Lot Clauses (if applicable),
		(2) Quantity Shipped
		(3) Statement of Work (SOW) document number (if applicable), and
		(4) Authorized Signature and Date.
		Failure to include the certification with your shipment may classify your product as non-conforming resulting in the return of the material at your expense.
		The following is not required to be present on the C of C, but shall be maintained and made available upon request:
		- Name of approved lower-tier supplier(s) and description(s) of service



		provided (if applicable).  ***For Commercial-Off-The-Shelf (COTS) parts, the supplier standard CofC is acceptable.***
302	Certificate of Physical and/or Chemical Analysis	A Certificate of Physical and/or Chemical Analysis is required and shall reference physical properties and/or chemical composition, lot/batch number, list the parameters tested, and the results obtained. It shall be signed by the Suppliers Authorized Quality Representative, and Representative's title.  ***For Commercial-Off-The-Shelf (COTS) parts, this Quality Clause does not apply.***
303	Special Process Certification	Each shipment of specified product/material must be accompanied by a legible and reproducible copy of a certification, or equivalent, containing special processes completed and the name and title of the authorized representative of the supplier/agency performing any special process. When parts are serialized, the serial numbers must appear on the certification. Special processes are defined as processes that can not be physically or visually verified after processing, i.e., adhesive bonding, brazing, conversion coating, painting, special finishes, heat treating, plating, potting, etc.  ***For Commercial-Off-The-Shelf (COTS) parts, this Quality Clause does not apply.***
304	NADCAP Special Process Certification	Only Special Process suppliers approved by NADCAP (National Aerospace and Defense Contractors Accreditation Program) shall be used. Seller shall include, with each shipment, certification(s) identifying the process, part number, purchase order number, process specification number, identification of process method used acceptance criteria document, and evidence of acceptance. All certifications must reflect applicable document revisions.
305	Raw Materials Traceability	All items manufactured under this PO shall be traceable to the raw materials used. Supplier traceability records shall be made available upon request.
400	Shelf Life	Shelf life requirements for manufacturing/cure date shall be legible on each container and certificate of conformance with a minimum of 75% useful shelf life remaining upon arrival at Saab Sensor System facility.  Material with less than 75% of the total shelf life remaining will not be accepted.
401	Counterfeit Parts Avoidance	Compliance to DFARs 252.246-7007 "Contractor Counterfeit Electronics Part Detection and Avoidance System" is required. This system shall cover electronic components and hardware part markings. Components and hardware parts shall be procured only through Original Equipment Manufacturers (OEMs) / Original Component Manufacturers (OCMs) or their franchised dealer or distributors.  (1) The Supplier shall verify the procurement source and associated certifying paperwork.  (2) Appropriate incoming inspection test methods shall be used to detect potential counterfeit parts and materials.



402	Part Obsolescence	On a best effort basis, the supplier agrees to perform an obsolescence analysis or end of life (EOL) notification when the component or material is no longer in production by the manufacturer. The purpose is to keep SDAS informed of any potential component or material that may become obsolete. The supplier will provide a list describing the obsolescence/EOL issues to the SDAS Buyer. Additionally, the supplier will provide options and recommendations of obsolescence/EOL issues to the SDAS buyer. 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.
403	Dimensional Inspection Data	(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 SDAS Supplier Deviation Waiver was processed and accepted by SDAS Quality Assurance (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.
404	First Article Inspection (FAI) and Delta (DFAI)	[FAI] - First article inspection (AI) shall be conducted by the supplier. The sample shall have been fabricated using the same parts, materials, processes, and location proposed for full production. Reports of acceptable first article inspection shall accompany the first article delivered and shall include all dimensional measurements and results of electrical, mechanical, and non-destructive inspections and tests and shall show that the part meets all requirements. [DFAI] - For subsequent build of product(s), a Delta (FAI), in place of a full FAI, may be utilized based on the SDAS System Engineering Change description and must be authorized by SDAS Quality Engineering.  ***For Commercial-Off-The-Shelf (COTS) parts, this Quality Clause does not apply.***
405.1	Printed Circuit Board (PCB), Workmanship/Acceptability Requirement IPC-A-600, Class 2	Unless otherwise specified on the Sensor System drawing(s), the following acceptability criteria will apply: (1) Printed Circuit Boards (PCB) "unpopulated," shall be in accordance with IPC-A-600, Class 2
405.2	Printed Circuit Board (PCB), Workmanship/Acceptability Requirement IPC-A-600, Class 3	Unless otherwise specified on the SDAS drawing(s), the following acceptability criteria will apply:  (1) Printed Circuit Boards (PCB) "unpopulated", shall be in accordance with IPC-A-600, Class 3
406.1	Printed Circuit Board Assembly (PCBA),	Unless otherwise specified on the SDAS System drawing(s), the following acceptability criteria will apply:



	Workmanship/Acceptability Requirement IPC-A-610, Class 2	(1) Printed Circuit Board Assembly (PCBA) "populated", shall be in accordance with IPC-A-610, Class 2; (2) Requirements for Soldered Electrical and Electronic Assemblies shall be in accordance with ANSI J-STD-001, Class 2
406.2	Printed Circuit Board Assembly (PCBA), Workmanship/Acceptability Requirement IPC-A-610, Class 3	Unless otherwise specified on the SDAS System drawing(s), the following nonconformance's criteria will apply: (1) Printed Circuit Board Assembly (PCBA) "populated," shall be in accordance with IPC-A-610, Class 3; (2) 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, Workmanship/Acceptability Requirement IPC/WHMA -A-620, Class 2	Unless otherwise specified on the SDAS System drawing(s), the following acceptability criteria will 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, Workmanship/Acceptability Requirement IPC/WHMA -A-620, Class 3	Unless otherwise specified on the SDAS System drawing(s), the following acceptability criteria will apply: (1) Cable and Wire Harness Assemblies shall be in accordance with IPC/WHMA-A-620, Class 3
408	Saab Source Inspection (SSSI)	SDAS Source Inspection is required at the manufacturer's/repair facility. Seller must notify buyer within 10 calendar days in advance of proposed quality verification. Evidence of the completed inspection must be shown on the shipping documents. You are required to provide reasonable access for the Source Inspector to any drawings, documents, and inspection equipment at any point in the manufacturing process.  ***For Commercial-Off-The-Shelf (COTS) parts, this Quality Clause does not apply.***
409	Hazard Materials/Safety Data Sheets (SDS)	Prior to shipment to SDAS, the supplier shall provide the appropriate Safety Data Sheet(s) [SDS], where applicable, for any chemical substance that is on the list compiled and published by the Environmental Protection Agency for Hazardous Material, as defined in Appendix A of FED-STD-313
410	Electrostatic Discharge Sensitive (ESD)	Components on this 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 for any activity that designs, tests, inspects, services, manufactures, processes, assembles, installs, packages, labels, or otherwise handles the components. Component packaging shall be either conductive or static dissipative and shall identify the components as ESDS.
411	Identification, Preservation, Packaging/Packing and	All shipments to SDAS must be packaged to avoid damage and deterioration, and must be shipped to the address specified on the PO unless otherwise noted. Packaging and packing shall be in accordance with good commercial



	Foreign Object Debris (FOD)	practices (Ref: ASTM D3951) unless otherwise specified on the PO. Parts shall not be co-mingled unless otherwise specified. Each box or container, and packing slip, shall be labeled and have, at a minimum, the following information: (1) Part number and revision; (2) PO number and line Item; (3) Quantity; (4) Manufacturer's identification. The Supplier shall assure that devises, 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. FOD contamination will be cause for rejection of material.
412	MRB Authority and Supplier Deviation/Waiver Request	The Supplier does not have MRB authority to accept or repair non-conforming product. Any nonconformance's on final deliverable product to the purchase order, drawing, specifications or applicable documents must be submitted on a SDAS Supplier Deviation/Waiver Request through the SDAS Buyer for Quality Engineering approval prior to shipment.
413	Serialization	The supplier shall assign serial numbers to all delivered items. Serial Numbers shall not be duplicated and shall provide an audit trail to all material, fabrication, assembly, inspection, and test documents.
414	Test Reports	Functional and/or qualification test results listing all parameters tested and actual readings taken during these tests are required with the delivery of the material covered by this Purchase Order. These reports shall also reference the part number, revision level, serial number (if required) and Purchase Order number and any other related fabrication, assembly, inspection, and test documents. The test results shall be maintained by the supplier for a minimum of 10 yrs.
415	Fiber Optic Inspection	Fiber optic connectors shall be inspected at 200x to 400x magnification, after final assembly and acceptance testing, before shipment. Fiber optic connectors shall be cleaned, per guidance of IPC-8497-1 or equivalent standard, such that contaminants that are removable are cleaned from the end face. Clean protective caps shall then be applied. Digital inspection images, at no less than 200x, identified by product serial number and connector number, shall be retained on a sample basis from each unit of finished product and provided to Saab upon request.