

# Supplier Quality Manual

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## Scope

This manual defines the minimum requirements for doing and maintaining business with Amphenol Industrial Operations. Suppliers shall ensure that all business is conducted ethically, with consideration for product safety, regulations and conformance.

This document applies to all suppliers that provide products to Amphenol AIO divisions.

#### **Quality Requirements**

Suppliers and their sub tiers are required to be or in process of being compliant with and certified to one of the following regulations:

ISO 9001, AS9100, AS9120, AC7004, ISO/IEC17025, IATF 16949 at a minimum.

Seller shall meet the applicable requirements of the latest revision of the quality standard in effect as of the date of the Request for Proposal (RFP), unless otherwise amended by Buyer and Seller prior to PO issuance.

Sellers's performance expectations are for a cumulative score of 100%.

Quality: Acceptable 90 - 100% Parts Per Million (PPM) scores are calculated by the number of accepted pieces divided by the total pieces received.

Delivery: 98% On-Time to Requirements. Delivery scores are calculated by the number of on-time deliveries. Based on the number of on-time deliveries received and compared to the promise date on your purchase order.

Corrective Actions will be initiated for Quality and Delivery scores not meeting these requirements and must be responded to within 30 business days with objective evidence of corrective action. Exceptions may apply and will be reviewed by SQE.

#### **Shipment Documentation**

All shipment documentation submitted to AIO must be in English unless otherwise specified by the Purchase Order.

Suppliers shall not change the Amphenol drawings, materials, special processes, or Amphenol supplied tooling without written approval by Amphenol Purchasing and Procurement Quality Engineering.

#### **Certificate of Conformance and Certification package requirements**

Seller must:



- a. Provide a Certificate of Conformance ("CoC") to assert the Items contained with the shipment follow all applicable requirements of the PO; and annotate in the delivery package any exceptions, e.g. Supplier Quality Assurance Report ("SQAR"), Variance No., RMA No., etc.
- b. Ensure the CoC is signed by a seller's Quality representative.
- c. Include a copy of the CoC inside the shipping container. Seller to provide required paperwork per the PO including all traceability certifications back to the OEM such as material certifications and special process certifications. The CoC can be a separate document, or it can be included as part of the shipping declaration/packing slip text in separate statement. Supplier shall place CoC/packing slip inside the shipping box with the parts and a copy of the packing slip on the outside of the shipping box.

#### **Quality Records**

Seller shall maintain complete records of the following: a. all manufacturing, inspection, test, CoC, and shipping; and process capability or tooling control, if applicable; and b. all nonconforming material, dispositions, assignable causes, corrective and preventive actions, and effectiveness of corrective actions; and make such records available for at least three (3) years after final payment of this PO or for longer periods if specified elsewhere in this PO; and c. maintain records of all special processes "work" performed and/or procured in accordance with customer requirements at least seven (7) years after final payment of this PO or for longer periods if specified elsewhere in this PO; and d. upon buyer's request, forward a copy of Quality records to buyer.

Records must be stored in an area which meets all local Fire and Life Safety Codes that prevent loss, damage, or deterioration. All data stored by electronic means shall be secure with back-up procedures and audited to verify the integrity of the data.

#### **Business Contingency Plan**

<u>Suppliers must have a business continuity for critical and sole sourced items.</u>

#### **Notification of Changes**

Suppliers shall notify AIO Buyer in writing within 5 business days of any of the following: 1) change in its quality system status; or 2) loss of third party registrar's certification status; or 3) change in seller's quality organization, processes or procedures that are known to affect or could potentially affect conformity or production of any item; or 4) adverse action taken by a US Government entity (e.g. FAA, CAA, OSHA, DoD, EPA, etc.), third party registrar, International Government Agencies, or Nadcap to include, but is not limited to, any of the following a) issuance of any major Level II or Level III Corrective



Action Request associated with Buyer Items, Quality Management System or processes associated with Buyer Items b) issuance of a major finding by a third-party registrar c) suspension of Government Source Inspection.

Seller shall notify the Amphenol Buyer and Amphenol SQE in writing, at least 180 days in advance of any material shortage (manufacturing inability), sale, relocation, or closure of Seller's facility or transfer of manufacturing operations (subject to any legal or regulatory restrictions). Seller shall include the following, as a minimum, in the written notification: a. purpose of the applicable change, b. address of the new location(s), when applicable, c. assessment of actual or potential impact to current POs, d. risk mitigation plan to ensure compliance to existing requirements, e. plan defining the identification, storage, protection, retrieval and retention of records, if applicable, f. master schedule and timeline of applicable change activity, and g. relocation Coordinator/Point of Contact, if applicable

#### **Special Processes**

A process used in manufacturing, construction of infrastructure or maintenance where the conformity of the resulting product cannot be readily, technically, or economically determined without destructive analysis prior to use is referred to as a "Special Process" i.e.: Soldering, Welding, Brazing, Passivation, Plating, Heat-Treat. Approved suppliers shall perform Special Processing only as Customer Directed.

#### **Counterfeit Parts**

The seller shall not deliver Counterfeit Work or Suspect Counterfeit Work to Buyer under this Contract. The seller shall establish and maintain a Counterfeit Prevention and Control Plan (CPCP), using current versions of AS-5553 or AS6174 as content guidelines.

Seller shall only purchase parts/materials directly from Authorized Sources of Supply. Authorized Sources of Supply include: The Original Manufacturer (OM) of the parts/materials, including mills and foundries, and Authorized Aftermarket Manufacturer (AAM) of the parts/materials, their Authorized Suppliers (AS), or suppliers that obtain such parts/materials exclusively from the OM/AAM/AS.

Seller is responsible for the authenticity of all parts/materials provided to Buyer and evidence of authenticity is subject to review by the Buyer and its customer upon request.

#### **Buyer-Certified Materials**

The seller shall establish and maintain controls to prevent the use of non-certified materials when Buyer-certified materials (Customer Approved materials/Products) are required.



## **Notification of suspect counterfeit parts**

Suppliers must notify Amphenol Industrial Operations Quality and Purchasing team of any suspected counterfeit parts that were shipped to Amphenol or are in process within 24 hours of discovery.

#### **GIDEP**

Any supplier that provides products to Amphenol AlO related to government contracts must be registered as a GIDEP member.

#### **Obsolete Parts**

Parts become obsolete when they are no longer manufactured by the original manufacturer (OCM). Suppliers shall have a policy/program in place to control obsolescence. Suppliers shall notify Amphenol Industrial Operations of any part number(s) that Amphenol Industrial Operations has purchased in the past that are now considered obsolete.

#### **Control of Non-Conformance material**

When a nonconformance is discovered, or the Supplier is notified of a discrepancy, the Supplier must take immediate action to determine if the condition exists on any other work-in-process, in all inventory locations at the Supplier's facility, or in prior shipments. Containment action must be taken within 48 hours and documented prior to the next shipment of the part number involved.

#### Calibration

Calibration Seller shall maintain a system for calibration and maintenance of tools, jigs, inspection, and test equipment that is compliant with an industry-recognized standard (e.g. ISO 17025, ISO 10012-1, ANSI Z540).

#### Shelf-Life Items

The supplier shall maintain a documented system for using, storing, and controlling items with limited shelf or storage life. The system shall include a method of identifying and controlling such items to ensure expired items were not used in products shipped to Amphenol and that items shipped met remaining life requirements. Shelf life shall apply per manufacturer expiry date or "use-by" date but not supersede applicable specs. For specific Customer requirements for Shelf Life refer to the Purchase Order or Amphenol's drawing.



#### **Material Reports**

Accompanying each lot, Suppliers of items made from a single material, and suppliers of raw materials shall submit a material report listing physical and chemical properties of the lot(s) in English. Material reports shall only come from a certified lab or the raw material manufacturer. If more than one material comprises the procured item, the supplier shall process and maintain material reports for each material for 10 years with copies provided to Amphenol upon request, unless special PO requirements exist. **All specialty metals shall be in compliant to DFARS.** 

## **Drop Ship Suppliers**

If contract stipulates the shipment is to be made directly to Amphenol's customer, supplier shall submit to Amphenol Procurement Quality the inspection plan to be applied and a proved First Article Inspection Report for each part number to be shipped. Suppliers shall receive written approval from Amphenol Procurement Quality prior to making Drop Shipments. Supplier shall retain inspection records for a minimum of five (5) years. Form AIO-4-QDF-01 will be completed, with any specific requirements as noted above, and approved before the drop ship is approved. Drop ship forms will be maintained by Amphenol Industrial Operations Quality Department.

## **Sub-tier Suppliers**

Suppliers shall flow down to sub-tier suppliers all applicable requirements including Amphenol requirements, requested documentation, critical items and, when defined, Key, Critical and Safety characteristics; for these, suppliers and sub-tier suppliers must have CORE Tools records and be provided along with each shipment.

Sub-tier suppliers shall not change any drawing, process, material, or procedure without prior written approval by Amphenol Industrial Operations, if such drawing, process, material, or procedures were originally approved by Amphenol Industrial Operations. Suppliers are responsible for relaying this information to Amphenol Industrial Operations.

## **Supplier Qualification and Approval**

In order of keep Supplier information and for future acknowledgment, a supplier survey will be sent for new suppliers and at least once a year to all approved suppliers to track the information and improvements of Amphenol Industrial Operations Suppliers (AIO-4-QA16-039). Supplier completion and submission of this form to Amphenol Industrial is mandatory every time it is requested. The omission of this may result in Supplier disqualification.

Supplier performance will be measured according to the following:



## **Supplier Audits**

The supplier's quality system will be evaluated at approximately once a year; such audit will be performed on-site (Supplier location). The purpose of evaluating suppliers is to minimize risks to Amphenol Industrial Operations in regard to:

- Product or service integrity
- Product or service availability
- Financial liability
- Meeting customer commitments

#### **Required Supplier Documentation**

In order to ensure product quality, regulatory compliance, and supply chain transparency, all suppliers must submit the following documents for:

- a. first-time product deliveries,
- b. implementation of any design, material, sub-tier supplier or process change, or
- c. resumption of production after a 48-month inactivity period.

All required documentation must be received, reviewed, and approved prior to product shipment. Failure to comply with this requirement will constitute a non-conformance and may result in, without limitation:

- a. rejection of the product,
- charge-back of all costs incurred by Amphenol Industrial Operations as a result of the non-compliance, including but not limited to inspection, handling, return freight, rework, and administrative processing, and/or
- c. removal from the Approved Supplier List.

By supplying goods or services to Amphenol Industrial Operations, the supplier acknowledges and agrees to these conditions as binding contractual terms.

Mandatory documentation is as follows:

## **Country of Origin (COO) Certificate**

Formal declaration identifying the country where the product or component was manufactured or assembled. Required for customs clearance, trade agreement compliance, and accurate origin tracking.



## First Article Inspection (FAI) Report

Comprehensive inspection report verifying that the initial production run of a part or assembly meets all approved engineering drawings, specifications, and quality requirements. Required upon first delivery, after revisions, or following a 48-month production gap.

The Supplier is responsible for assuring completion of the First Article Inspection Report (FAIR) per AS9102 for all design characteristics generated by the supplier or their subtiers Supplier must ensure that buyer receives FAIR when the following occurs: first time build, revision change, a lapse in production of 24 months, significant process change, or a plant relocation.

First Article Inspection Reports are to be compliant with AS9102.

Material test reports for all materials are to be included in the First Article Inspection Report. If the drawing refers to a lower level drawing whose characteristics were provided by the sub tier Supplier, a First Article shall also be submitted for that part. All samples and reports shall be sent to Amphenol Buyer and SQE.

Amphenol reserves the right to exercise the requirement of additional and/or periodic/repeat FAI requirement on a part number basis to assure continued product conformity. Also, Amphenol reserves the right to validate multiple production lots if needed to determine overall process capability. FAI requirements are governed by the event table listed below.

Event Description	Fair Type Due	Amphenol Quality approval required
New base PN for first time supplied by source	Full	Yes
The engineering drawing for the part receives a revision letter change that affects Form Fit Function	Full	Yes
If part has a nonconforming condition, RMA, MRB	PARTIAL FAIR due on next lot	Yes



authorizing rework or a requirement modification	manufactured or expiration of	
requirement modification	deviation / waiver	
Change in Special Process source since last approved First Article	PARTIAL FAIR	Yes
Two-year (2) lapse in production	Full	Yes
A change in manufacturing source or location of manufacturing equipment, including tooling transferred from another Supplier or division of the same supplier	Full	Yes

## **Production Part Approval Process (PPAP) Documentation**

Structured submission package demonstrating that the production process consistently meets specifications. Includes design records, process flow diagrams, control plans, and capability studies. Required for initial submission, revisions, or production restart after 48 months.

Amphenol Industrial Operations requires submission of **PPAP L3** prior to every first shipment or change of revision, process or sub-tier source of a product. If a different PPAP level is required, this will be communicated on a case-by-case basis.

- L1: Part Submission Warrant (PSW) only.
- L2: PSW with product samples and limited supporting data.
- L3: PSW with complete supporting documentation.
- L4: PSW and data per customer-specific requirements.
- L5: PSW with full documentation retained at the supplier's manufacturing location and available for on-site review.



#### International Material Data System (IMDS) Submission

IMDS (International Material Data System) is a global database used to declare all materials and substances contained in supplied products, ensuring compliance with environmental regulations and enabling traceability.

All IMDS submissions are **mandatory** prior to shipment for first-time deliveries, revisions, or production restarts.

Please send IMDS to Amphenol Industrial Operations' account ID 234570.

## **RoHS Certificate**

Certificate confirming that the product meets the EU Restriction of Hazardous Substances Directive (EU Directive 2002/95/EC), which limits the use of hazardous materials such as lead, cadmium, mercury, hexavalent chromium, PBB, PBDE, DEHP, BBP, DBP, and DIBP in electrical and electronic equipment.

#### **REACH Certificate**

Certification that the product complies with the EU REACH Regulation (EC No 1907/2006) regarding the Registration, Evaluation, Authorization, and Restriction of Chemicals. This includes declaration of any Substances of Very High Concern (SVHC).

#### **PFAS Declaration**

Formal declaration identifying whether the supplied product contains Per- and Polyfluoroalkyl Substances (PFAS), in compliance with applicable environmental restrictions and reporting requirements.

#### **Proposition 65 (Prop 65) Certificate**

Certificate confirming whether the product contains chemicals listed under California's Safe Drinking Water and Toxic Enforcement Act of 1986, known to cause cancer, birth defects, or reproductive harm. Required disclosure of substance name(s) and concentration levels.

#### Persistent Organic Pollutants (POPs) Certificate

Certification that the product does not contain Persistent Organic Pollutants above regulated thresholds, in alignment with the Stockholm Convention and related environmental regulations.



#### **TSCA Certificate**

Certificate of compliance with the U.S. Toxic Substances Control Act, verifying that all substances used in the product are listed on the TSCA Inventory and meet applicable restrictions.

## **Conflict Minerals Reporting Template (CMRT)**

Completed CMRT form per Responsible Minerals Initiative (RMI) requirements, documenting the sourcing of tin, tungsten, tantalum, and gold to ensure they do not originate from conflict-affected regions.

This is a request that will be requested annually.

## **Extended Minerals Reporting Template (EMRT)**

Completed EMRT form to report additional high-risk minerals such as mica and materials used in lithium-ion batteries, supporting full supply chain transparency.

This is a request that will be requested annually.

## Factory Mass Data (FMD) Report

Comprehensive data report summarizing manufacturing batch metrics (material composition, weight, yield, and scrap rates), used for production traceability and quality monitoring.

## Ozone Depleting Substances (ODS)

Class I or II Ozone Depleting Substances, as listed in 40 CFR part 82 Appendices A & B. are prohibited <u>from directly contacting Amphenol Parts</u> in the manufacturing process and shall not be contained in products sold to Amphenol.

#### Restrictions on the use of Mercury and or Mercury Containing Components

Products shall contain no metallic mercury and must be free from contamination by mercury. The Supplier shall not use mercury, mercury components or mercury bearing instruments or equipment that cause contamination during the manufacture, service, assembly, or test of materials. The Supplier shall send a signed statement with the shipment that tells that the items are free of mercury and free from mercury contamination,



# **CHANGE HISTORY**:

Date	Rev	Responsible	Change Description
7/23/24	01	Heidi Gutierrez	New Released
8/09/24	02	Heidi Gutierrez	Add in page 2 Contents, added the use of the Drop Ship form 4-QDF-01 describing specific requirement before the drop ship is approved. Add into content new sections: Supplier Qualification Approval and three certificates: Californian Proposition 65, PFAS and POPs.
8/18/25	03	Heidi Gutierrez	Added new documentation and overall requirements; removed requirements related to military standards.

