

SUPPLIER QUALITY MANUAL

Amphenol[®]
Industrial
Mesa AZ

Owner: Quality

Document # M-Q INSP-019
Rev: A
Date of Release: 9/19/24

Supplier Quality Manual

SUPPLIER QUALITY MANUAL

Amphenol[®]
Industrial
Mesa AZ

Owner: Quality

Document # M-Q INSP-019
Rev: A
Date of Release:

Table of Contents

1.0 Scope..... 3

2.0 Quality Requirements 3

3.0 Documentation..... 3

4.0 Certificate of Conformance and Certification package requirements 4

5.0 Quality Records 4

6.0 Business Contingency Plan..... 4

7.0 Notification of Changes..... 5

8.0 First Article Inspection Report (FAIR) 5

9.0 Special Processes..... 6

10.0 RoHS Compliance 7

11.0 Point of Acceptance (source inspections) 7

12.0 Counterfeit Parts 7

13.0 Notification of suspect counterfeit parts 8

14.0 Buyer-Certified Materials..... 8

15.0 GIDEP 8

16.0 Obsolete Parts 8

17.0 Control of Non-Conformance material..... 8

18.0 Calibration 8

19.0 Shelf-Life Items..... 8

20.0 Material Reports 9

21.0 Drop Ship Suppliers..... 9

22.0 Sub-tier Suppliers 9

23.0 FOD Control 9

24.0 Supplier Audits 10

Revision Sheet History 10

SUPPLIER QUALITY MANUAL		
	Owner: Quality	Document # M-Q INSP-019 Rev: A Date of Release:

1.0 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 provides product to Amphenol AIO divisions.

2.0 Quality Requirements

Suppliers and their sub tiers are required to be compliant or certified to one of the following:

ISO 9001, or 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 minimum performance expectations for a cumulative score of 100%

Quality: Acceptable 98-100% 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 pieces. Based on the number of on-time pieces received 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 10 business days with objective evidence of corrective action.

3.0 Documentation

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

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

SUPPLIER QUALITY MANUAL		
Amphenol® Industrial Mesa AZ	Owner: Quality	Document # M-Q INSP-019 Rev: A Date of Release:

4.0 Certificate of Conformance and Certification package requirements

Seller shall:

- a) provide a Certificate of conformance (“CoC”) to assert the Items contained with the shipment follow all applicable requirements of the PO; and a. annotate in the delivery package any exceptions, e.g., variances, Supplier Quality Assurance Report (“SQAR”), Variance #, RMA# 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 C of C 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 C of C/packing slip inside the shipping box with the parts and a copy of the packing slip on the outside of the shipping box.

5.0 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 (10) 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 ten (10) 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 prevents 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.

6.0 Business Contingency Plan

Suppliers shall have a business continuity for critical and sole sourced items.

SUPPLIER QUALITY MANUAL		
 Mesa AZ	Owner: Quality	Document # M-Q INSP-019 Rev: A Date of Release:

7.0 Notification of Changes

Suppliers shall notify AIO Buyer in writing within five (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 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 in writing, at least 90 days in advance of any 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

8.0 First Article Inspection Report (FAIR)

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 sub-tiers.

First Articles are required 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.

COTS items are excluded from First Article Requirements.

Material test reports for all materials are to be included in the First Article 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 Procurement Quality.

SUPPLIER QUALITY MANUAL		
 Amphenol® Industrial Mesa AZ	Owner: Quality	Document # M-Q INSP-019 Rev: A Date of Release:

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 authorizing rework or a requirement modification	PARTIAL FAIR due on next lot manufactured or Expiration of deviation / waiver	Yes
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

9.0 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 with NADCAP accreditation or as Customer Directed. Seller may access Nadcap approved sources at <http://www.p-r-i.org> then proceeding to <http://www.eAuditNet.com> Seller’s utilization of Buyer-approved or Nadcap accredited sources does not relieve Seller from the obligations to ensure subcontracted sources are in full compliance with applicable process specifications and to deliver conforming Items.

SUPPLIER QUALITY MANUAL		
Amphenol® Industrial Mesa AZ	Owner: Quality	Document # M-Q INSP-019 Rev: A Date of Release:

10.0 RoHS Compliance

RoHS ([EU Directive 2002/95/EC](#)) is a set of EU regulations that restrict the use of hazardous substances in electrical and electronic equipment. This directive bans placing on the EU market any product having an electrical/electronic component containing more than thresholds set for the following substances:

- Lead
- Cadmium
- Mercury
- Hexavalent chromium
- Polybrominated biphenyl (PBB)
- Polybrominated diphenyl ether (PBDE) flame retardants
- Bis(2-ethylhexyl) phthalate (DEHP)
- Butyl benzyl phthalate (BBP)
- Dibutyl phthalate (DBP)
- Di isobutyl phthalate (DIBP)

Any company that imports or sells goods containing electrical components into the European Union must be RoHS compliant.

11.0 Point of Acceptance (source inspections)

When this PO requires Buyer Accept at Source, Buyer acceptance can involve periodic surveillance by Buyer of Seller’s quality system, manufacturing processes or physical Item, including work at Seller’s sub-tiers. Based on Seller’s performance, Buyer acceptance activities may result in the requirement for full-time oversight of Seller’s or Seller’s agents and subcontractors. Buyer acceptance, prior to shipment, shall be performed at the Seller’s facility address referenced on Buyer’s PO. Source Inspection activities are at the supplier’s expense.

12.0 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.

SUPPLIER QUALITY MANUAL		
 Amphenol [®] Industrial Mesa AZ	Owner: Quality	Document # M-Q INSP-019 Rev: A Date of Release:

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.

13.0 Notification of suspect counterfeit parts

Suppliers shall 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.

14.0 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.

15.0 GIDEP

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

16.0 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. Supplier shall notify Amphenol Industrial Operations of any part number(s) that Amphenol Industrial Operations has purchased in the past that are now considered obsolete.

17.0 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 and documented prior to the next shipment of the part number involved.

18.0 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).

19.0 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

SUPPLIER QUALITY MANUAL		
 Amphenol® Industrial Mesa AZ	Owner: Quality	Document # M-Q INSP-019 Rev: A Date of Release:

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.

20.0 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 ten (10) years with copies provided to Amphenol upon request, unless special PO requirements exist.

21.0 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 Report for each part number to be shipped. Supplier shall receive written approval from Amphenol Procurement Quality prior to making Drop Shipments. Supplier shall retain inspection records.

22.0 Sub-tier Suppliers

Suppliers shall flow down to sub-tier suppliers all applicable requirements including critical items and Key characteristics when defined.

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.

23.0 FOD Control

Suppliers shall maintain a FOD control program compliant to NAS 412 or AS9146 and ensure Foreign Objects and subsequent Foreign Object Damage (FOD) is eliminated from all parts prior to shipments. In addition, work areas shall be controlled in such a manner as to preclude the risk of FOD incidents.

SUPPLIER QUALITY MANUAL		
Amphenol® Industrial Mesa AZ	Owner: Quality	Document # M-Q INSP-019 Rev: A Date of Release:

24.0 Supplier Audits

The supplier’s quality system will be evaluated approximately once a year. The purpose of evaluating suppliers is to minimize risks to Amphenol Industrial Operations regarding:

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

Revision Sheet History

Revision	Release Date	Summary of change	Requested by	Authorized by
A	9/19/24	Initial Release.	T. Meder	S. DeGraeve