

1.0 Purpose

This work instruction identifies the QA codes that shall be identified on purchase orders to suppliers of product and services to Wilmanco, Inc. ("Wilmanco"). The requirements listed below are listed by 'Q' (Quality) number. The applicable requirement(s) shall be identified by number on the first page of the PO, or specified by PO line item, as applicable. Contact purchasing if 'Q' requirements are not understood, or if they are missing. The supplier is responsible for meeting all specified requirements. Failure to comply shall result in rejection.

2.0 Scope

This work instruction is applicable to all RFQs and purchase orders to suppliers that provide materials and services for Wilmanco.

3.0 Requirements

Q-01 First Article Inspection

Supplier shall perform and document a comprehensive inspection and test of that article to assure its conformance with all drawing and specification requirements. The supplier's report shall provide as a minimum: contract number or purchase order number, revision level and part name, supplier's name, drawing requirements (including tolerance), method used to obtain results, and actual results of each measurement. Part(s) used for inspection shall be identified when shipped as "first article inspection sample". If the part requires functional testing, provide the actual test results.

Q-1A First Article Inspection / Plan - Critical Parts

The Seller shall submit an Inspection Plan Report to the Buyer within 14 days of purchase order award. The Inspection Plan Report shall list the intended methods used to verify compliance to the specific drawing dimensions, values and/or requirements. The Seller shall perform a First Article Inspection (FAI) on one item from the first lot of fabrication, or as required by the Buyer. The FAI shall be conducted and documented in accordance with the most current revision of the AS9102 aerospace FAI standard. The first article item shall be clearly identified by a tag attached to the item or a label applied to the bag, and a copy of the FAI report shall accompany the First Article part upon delivery to Wilmanco. The Buyer reserves the right to verify any or all of the characteristics documented on the FAI report at the seller's facility. The First Article requirements and Inspection Plan as set forth apply only to the first production lot and to any new revisions. Once the first article is accepted by Wilmanco, the Supplier shall not deviate from the process without authorization of the Buyer.

Q-02 First Piece Approval

Similar to Q-01 except it applies to the first piece produced and prohibits further processing until approval has been obtained.

Q-03 Manufacturers Standard Commercial QMS and Electronic Data Requirements

Supplier shall provide the required inspection report(s) and data electronically via email to Purchaser prior to, or coincident with product shipment.

Q-04 Inspection System

Supplier must be prepared to demonstrate that items supplied on this purchase order have been inspected prior to shipment and records of such inspections are maintained.

Q-05 Inspection Report Requirements

Supplier shall perform and document a comprehensive inspection and test of that item to assure its conformance with all drawing and specification requirements. The supplier's report shall provide as a minimum: contract number or purchase order number, revision level and part name, supplier's name, drawing requirements (including tolerance), method used to obtain results, and actual results of each measurement. Each item is to be serialized and marked (or "bag and tag") or otherwise traceable to the inspection report. If the part requires functional testing, provide the actual test results.

Q-06 Source Inspection

All items fabricated, assembled, tested, and/or processed under this order are subject to Source Inspection by a representative. The supplier is required to provide advance notice as specified by Wilmanco through the Purchasing department that product is ready for source inspection. All shipping and final inspection documents must be signed off by a quality representative.

Q-07 Approved Sources

Processing or fabrication work sublet under this order requires the use of approved suppliers only. You must obtain approval from the Purchasing department prior to initiating any subcontracting. A Certificate of Conformance from the sub-vendor must be supplied with delivery of items.

Q-08 Configuration Control of Commercial-off-the-shelf (COTS) Products

Although COTS items are typically produced in accordance with the supplier's own documentation, approval is required prior to any changes in item form, fit, or function during the term of the purchase order.

Q-8A Configuration Control

No changes to product drawings or processes are to be made without Wilmanco's written approval.

Q-09 One Way Traceability

Seller must provide information regarding Material Traceability. Seller shall maintain a traceability system on all electronic and electrical parts, raw material, and mechanical parts.

Q-09A Two Way Traceability

Seller must provide information regarding Material Traceability from their vendor's vendor. The system provides for two-way traceability forward, where each material or part can be traced to the next assembly and subsequently to the actual location in the supplies delivered to the buyer. Traceability backward, where each material or part used in the supplies can be traced back to the lot received at the seller's facility.

Q-10 Chemical and Physical Analysis of Raw Materials

Analysis of supplied material to insure conformance to buyer specifications.

Q-11 Preference for Domestic Specialty Metals

An authorized Certificate of Conformance (C of C) explicitly affirming the supplier's conformance, "Preference for Domestic Specialty Metals"-including flow-down to sub-tier supplier shall be provided with each shipment. The attestation to the aforementioned clause may be on a separate document, or incorporated onto the supplier's Certificate of Conformance.

Q-12 Shelf Life Materials

Materials supplied under this order which have a limited storage life (i.e. paints, adhesives, lubricants, etc.) must have a minimum of 75% of the shelf life remaining and must be physically identified with a label that is affixed to the container that contains the following:

1. Manufacturer's Name
2. Date of Manufacture, or cure date.
3. Batch/lot number
4. Wilmanco Inc. part number (If applicable)
5. "Do not use after" Date (Month Year)
6. MSDS required.

Q-13 Purchasing Information Flow down

Suppliers will flow down all applicable requirements of the Purchase Order to their suppliers.

Q-14 Certification of Analysis (C of A)

Shall perform the test(s) and inspection(s), and provide data, samples and certification(s) as specified by engineering optics.

Q-14A Certification of Material(s) and Process(es)

The Certificate of Conformance shall list raw material and/or process specification(s) used in the manufacturing of the item(s). The Seller shall retain original Material and/or Process certifications, upon request such certification(s) shall be made available to Buyer within 48 hours.

Q-15 Certified Test Data

Supplier must provide with shipment a detailed test report that includes the requirement and its parameters, the results of the test, the identity of the procedure and specification used, and the technician's signature and date.

Q-16 Certificate of Conformance (C of C)

Supplier must furnish with shipment a statement attesting to the conformance of supplies, items, or services to the requirements of the purchase order and referenced specifications. Supplier must retain on file, material test results and process records, as applicable, including his supplier and their supplier's certificates. These records must be retained for ten (10) years and available upon request or as required on the purchase order.

Q-17 Manufacturing Process Audit/Survey

Right to perform Audit/Survey of the Manufacturing Process at Suppliers facility.

Q-18 Customer Source Inspection (CSI)

Customer Source Inspection is required prior to shipment from your facility. Upon receipt of this order, promptly notify the Customer Representative who normally services your facility so that appropriate planning for Customer Inspection can be accomplished. All shipping and final inspection documents must bear the stamp and signature of the authorized Customer Representative. In the event the representative or office cannot be located, our purchasing agent should be notified immediately.

Q-19 Date Code

Electronic components supplied on this order must be identified either by physical markings on the part or on the original sealed manufacturer's container.

Q-20 ISO 9001

Supplier's quality management system must conform to the requirements of latest release of ISO 9001:2008 or ISO 9001:2015 subject to confirmation.

Q-21 AS 9101

Supplier's quality management system must conform to the requirements of latest release of AS 9101 subjects to confirmation.

Q-22 ANSI Z540-1

Supplier's calibration system must conform to the requirements of latest release of ANSI Z540-1 subject to confirmation. Third party registration by an accredited registrar will be accepted as proof of compliance. The seller's signed certification of Calibration must state traceability to National Standards, tool, gage or equipment number and Order number.

Q-23 Government/Customer Rights

In the absence of Q-01 the government, customer and company have the right to inspect any or all of the work included on this order at your facility.

Q-24 Government Source Inspection (GSI)

Government Source Inspection is required prior to shipment from your facility. Upon receipt of this order, promptly notify the Government Representative who normally services your facility so that appropriate planning for Government Inspection can be accomplished. All shipping and final inspection documents must bear the stamp and signature of the authorized Government Representative. Purchasing must be notified immediately in the event the representative or office cannot be located.

Q-25 Government/Customer PO notification

On receipt of this order, promptly furnish a copy to (government/customer representative name) who normally service your facility, or (government only) if none, to the nearest Defense Supply Agency Inspection Office. In the event the representative or office cannot be located, our purchasing agent should be notified immediately.

Q-26 Cure Date

Elastomer materials supplied under this order must bear the cure date marked on the container or a tag attached to the part.

Q-27 Chemical and Physical Test Reports

Supplier must furnish a certified chemical and physical test report for raw materials used in completion of this order with the shipment. The reports must show compliance with all of the specification requirements

Q-28 Target Pattern Machining Requirements

Target pattern feature size(s) and location(s) dimensions shown on the applicable drawing represent the finished, painted target dimension. The size requirements for the Supplier's machining (EDM) process must be factored to allow for 0.0005" of paint per side. For example, if the nominal size of a pattern feature (bar or slit width, pinhole diameter, etc) is 0.0150", then the feature must be machined to 0.0160". The tolerance for the machining process is ± 0.0005 ".

Q-29 Evidence of Compliance

The supplier is responsible for ensuring the qualification/approvals/registration are current from the specified agencies (see table below) for the item(s) specified on the applicable parts list(s). Agencies are specified in accordance with the following code letters (A thru H) as a suffix in the VQR column on the parts list. For example, a component requiring UL registration/approval would be assigned VQR-21 G on the parts list; a component requiring CE, ENEC, TUV PS and UL registration/approval would be assigned vendor code VQR-21ADFG on the parts list.

Q-30 Supplier System

The supplier system shall have in place the requirements for an ESD control program in accordance with ANSI/ESD-S-20.20 to minimize the effects of ESD on parts, assemblies and equipment. The requested method by Wilmanco Inc. of shipping/storing of raw piece parts is to use anti-static bags. The bag shall meet or exceed the requirements of ANSI/ESD-S-20.20 standards. All products packaging shall prevent damage to the product; physically and environmentally.

Q-31 Certified Processes

Contract manufacture shall have personnel performing special processes, such as Soldering and Bonding, certified for proof of proficiency. Soldering IPC Standards 610, class 1, 2, or 3 in accordance with IPC 6010, IPC 6011, IPC 6012, IPC 6013 as specified on PO line item.

Q-32 FOD- Foreign Object Damage

The supplier shall establish and maintain an effective Foreign Object Damage Preventative Program to reduce FOD. The material supplied on this PO shall be manufactured in an environment free of foreign objects. Additionally, material supplied shall be free of foreign objects.

Q-33 Wilmanco Inc. Supplied Drawing and Specifications

All engineering drawings and specifications provided by Wilmanco are Wilmanco's property and must be returned with the PO order.

Q-34 Supplier Process Non-Conforming Product/Process Notification

Supplier processor must notify Wilmanco of non-conforming product or process failures to include notification of any non-conformance product they may have shipped. Arrangements must be made to allow for Wilmanco to disposition all non-conformance products.

Q-35 Supplier-Processor Request for Deviation on Product/Process

The supplier-processor agrees not to make any changes in materials, services, parts or design details which would affect products or parts or any components thereof with regard to:

- a) Part number identification
- b) Physical or functional interchangeability
- c) Repair and overhaul procedures, processes, and material changes which affect these procedures without prior written approval from Wilmanco Inc.

Written authorization must be obtained from Wilmanco prior to any deviations with regards to internal process changes and any requirements stated on the purchase order, drawing, specification or other requirements that are known but not stated.

Q-36 ITAR Requirements--IMPORTANT/CONFIDENTIAL

A PO (and any drawing and /or attachments accompany it) **may** contain confidential information, including information protected by United States Government. The information

is only for the use of the intended recipient(s). Delivery of this PO to anyone other than the intended recipient(s) will not waive any privilege or otherwise detract from the confidentiality of the PO. If you are not the intended recipient, or if this PO has been addressed to you in error, do not read, disclose, reproduce, distribute, disseminate or otherwise use this information, rather, please promptly notify the sender by phone or e-mail, and then destroy all copies of the PO and its attachments, if any.

Q-37 Counterfeit Materials

Wilmanco is committed to preventing the entry of counterfeit electronic components into the facility by mandating the exclusive use of factory-direct or authorized distributors only as an approved vendor for component procurement. Component broker's or authorized distributors where the exposures to refurbished, reclaimed, reverse-engineered, remarked, rebranded, or counterfeit components are not used for procurement sources.

Q-38 Serialization Required

Parts delivered on this PO shall be marked with unique serial numbers or other identifiers.

Q-39 Packaging

Preservation, packaging, picking, handling, and shipment of items be in accordance with appropriate procedures to prevent damage and ensure that original quality is maintained.

Q-40 Coupons Required (PWB)

Seller shall provide one coupon from each printed wiring board panel with the first shipment.

Q-41 Solder Part Material Finish

Unless otherwise specified on the drawing, the base materials and surface finishes of all parts and materials used in the construction of the delivered items shall be free of pure tin, zinc or cadmium.

Q-42 Purchasing Information Flow down

Suppliers will flow down all applicable requirements of the Purchase Order to their suppliers to ensure a specification, drawings, ISO 9001:2015 or other Quality systems, regulations, public laws and other requirements as may be specified in the Purchase Order.

Q-43 No Change without Approval

All communication, technical guidance and instructions having contractual impact shall be accomplished directly between the buyer and the supplier's authorized representative. No contract or specification deviations shall be made without the written authorization of the Wilmanco buyer. Additionally, the Wilmanco buyer shall be notified prior to any major plant rearrangement, or plant relocation request for change, or notification of plant movement.

Q-44 Inspection System Requirements

MIL-I-45208A minimum specification requirement that establishes requirements for contractors' inspection system. These requirements pertain to the inspection and test

necessary to substantiate product conformance to drawings, specification and contract requirements and to all inspection and tests required by the contract.

Q-45 Surveillance/Customer Right of Entry

Wilmanco and its customers reserve the right to conduct inspection and surveillance of the supplier's procedures, facilities, and products. The right of entry provides Wilmanco, our customers, and regulatory agencies the ability to verify and examine the quality records and material at any place, including the plant of the subcontractor. Verification of product is not to be used as evidence of effective supplier quality control and does not absolve the requirement for conforming product or preclude subsequent rejection by Wilmanco or our customer.

Q-46 Packaging & Shipping

The Seller shall clean, preserve, and package each item on this order, using special packaging when required and specified. When not specified, the Seller may use specially designed shipping containers and/or good commercial practices as deemed necessary to prevent shipping damage. All packages shall be clearly identified with a label. As a minimum, the label shall contain the following information: Part number, revision, date of manufacture, and Buyer's Order Number.

Q-47 Seller Corrective Action

In response to Buyer-initiated corrective action requests, Seller shall advise Buyer of root cause determination, corrective action taken to prevent recurrence of reported problems and/or discrepancies, and effectivity dates of the planned corrective action(s). Seller shall maintain a corrective action system that determines the effectiveness of such corrective actions, and that prevents shipment of nonconforming articles without prior approval from Buyer.

Q-48 Certification of Material(s) and Process(es)

The Certificate of Conformance shall list raw material and/or process specification(s) used in the manufacturing of the item(s). The Seller shall retain original Material and/or Process certifications, upon request such certification(s) shall be made available to Buyer within 48 hours.

Q-49 Rework Report

In the event the item is returned with a reported functional failure, the Seller shall test, evaluate and rework as required. The Seller shall provide when required a complete detailed rework report including test results, evaluation findings and description of all work performed. In the event that the item is found to be fully functional and the failure/discrepancy could not be duplicated, the Seller shall state the CND (Can Not Duplicate) condition on the test and evaluation report.

Q-50 Service Bulletins

Seller shall notify and provide Buyer with copies of all Service Bulletins affecting the hardware delivered on this Purchase Order.

Q-51 Cable and Harness Assemblies.

Unless otherwise specified on the drawing Cables and Harness Assembly workmanship and acceptance criteria shall be in compliance with IPC-620 Class 3.

Q-52 Casting Inspection.

Wilmanco requires approval on NEW patterns, pattern CHANGES and MAJOR pattern REFURBISHMENTS. Supplier shall lay out one sample piece (Blued and Scribed) and record actuals on all drawing characteristics. Multi cavity molds shall be identified with each cavity laid out. Wilmanco QA Review & Approval of casting inspection required prior to production.

Q-53 Circuit Card Assemblies

Unless otherwise specified on the drawing: Soldering shall be in accordance with the requirements of J-STD-001 Class 3. IPC-A-610 Class 3 shall be the inspection criteria. Evidence of manufacturing and inspection shall be delivered with each assembly/lot. Printing Wiring Boards shall be listed on the Qualified Manufacturers List QML-31032 or Qualified Products List QPL-55110 as specified (applicable). Unless otherwise specified on the drawing: Printed Wiring Boards shall be fabricated and tested IAW MIL-PRF-31032. Solderability testing shall be in accordance with J-STD-003, Class 3. Lot acceptance data sheets listing the actual parameters tested in each case shall accompany each shipment

Q-54 MIL PRF-31032/MIL-PRF-55110 Printed Wiring Boards

Supplier for Printing Wiring Boards shall be listed on the Qualified Manufacturers List QML-31032 or Qualified Products List QPL55110 as specified (applicable). Unless otherwise specified on the drawing: Printed Wiring Boards shall be fabricated and tested IAW MIL-PRF-31032. Solderability testing shall be in accordance with J-STD-003, Class 3. Lot acceptance data sheets listing the actual parameters tested in each case shall accompany each shipment.

Q-55 Software Release Notes.

The supplier shall provide a document which contains the following: A description of the release or change to the software (release notes). Validation checksum or equivalent. Date of release. Item identification number (part number).

Q-56 Material Safety Data Sheet (MSDS)

If an MSDS is required for this material, the SELLER shall include one copy of the MSDS, and it shall be identifiable and provided with each shipment of the items furnished under this order.

Q-56 RoHS Compliant

Any RoHS compliant component is tested for the presence of Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent chromium (Hex-Cr), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE). For Cadmium and Hexavalent chromium, there

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must be less than 0.01% of the substance by weight at raw homogeneous materials level. For Lead, PBB, and PBDE, there must be no more than 0.1% of the material, when calculated by weight at raw homogeneous materials. Any RoHS compliant component must have 100 ppm or less of mercury and the mercury must not have been intentionally added to the component.

Q-57 Conflict Minerals Reporting

Wilmanco is committed to sourcing materials and supplies from companies that share our values with regard to ethics and integrity, respect for human rights, and environmental responsibility.

This includes the sourcing of conflict minerals, which are minerals mined in conditions of armed conflict and human rights abuses, and sold or traded by armed groups. International law recognizes that minerals from the Democratic Republic of Congo (DRC) region present a specific risk in this regard, and requires companies trading in natural resources from the DRC to do so in a way which is socially, economically, and environmentally responsible.

Wilmanco requires all of our suppliers to provide us with completed conflict minerals declarations using the EICC/GeSI Conflict Minerals Reporting Template. We may reconsider our willingness to partner with suppliers that fail to comply with this Policy.