

## QUALITY ASSURANCE CLAUSES

APPLICABLE QUALITY ASSURANCE CLAUSES ARE REFERENCED ON THE PURCHASE ORDER

Clause	Description	Revision Date
<b>CLAUSE 1</b>	<b>QUALITY SYSTEM REQUIREMENTS</b>	<b>07/27/16</b>
	<ul style="list-style-type: none"> <li>A) Sampling procedures, when used, must comply with ANSI/ASQC Z1.4 or ANSI/ASQC Z1.9 (latest revision) or equivalent and must have an Accept on Zero plans.</li> <li>B) The supplier must maintain a “Lot Control System” and traceability records as applicable.</li> <li>C) The Suppliers Quality System must be in compliance with ISO 9001-2008 and or AS 9100-2009 Rev. C</li> <li>D) The supplier is required to notify ABT immediately if non-conforming product was inadvertently shipped to ABT.</li> <li>E) The supplier is not allowed to ship non-conforming product disposition as USE AS IS or repaired without prior approval from ABT.</li> <li>F) The Supplier is required to flow down to all sub- tier suppliers all applicable requirements in the purchasing documents, including Key Characteristics on applicable drawing(s).</li> <li>G) Verification of Purchased material by the supplier at a sub tier supplier’s facility does not absolve them from providing acceptable material. Such material must be submitted and accepted to standard inspections and testing by ABT.</li> </ul>	
<b>CLAUSE 2</b>	<b>CERTIFICATION</b>	<b>09/09/16</b>
	<p>The supplier shall provide with each shipment a Certificate of Conformance signed with an original signature and title of signer. Certifications must show total quantity in the shipment, lot codes or date codes, part numbers and revisions for each part number. Certifications from Distributors must also show original manufactures name. Copies of the original manufactures certification shall also be furnished along with distributor’s certification. <b>Note</b> the supplier must certify to all applicable requirements of A through H.</p> <ul style="list-style-type: none"> <li>A) Special processes are required (heat treat, welding, etc.), the certification must reflect the applicable specification.</li> <li>B) Special inspection processes are required (magnetic particle/penetrate inspection, x ray, etc.) (1) The certification <b>MUST</b> indicate the quantity in the lot, quantity inspected and the inspection results or (2) A test report with the applicable information must accompany the certification. NOTE: X ray film when applicable must be forwarded to ABT for evaluation.</li> <li>C) Chemical and or mechanical properties when shipping raw materials such as ferrous and non-ferrous metals, aluminum castings, rubber and adhesives are required (1) The certification must reflect chemical analysis and/or results of the testing for mechanical properties or (2) The information must be on a separate report accompanying the certification.</li> <li>D) Drawings that have Supplementary Quality Assurance Provisions/Quality Assurance Requirements (SQAP/QAR). (1) The certification requirements of the SQAP/QAR will be met and the test data will be supplied with each shipment or (2) The certification will have a statement, such as, “The material supplied in this shipment has met the requirements of the SQAP/QAR (number), all applicable data is on file and will be made available upon request.</li> <li>E) Certification requires (if applicable) proof of qualification for special processes performed by qualified personnel.</li> <li>F) Country of origin and Harmonized Tariff Schedule (HTS) Codes must be provided for all shipments regardless of ship destinations. Use of CBP Form 434 or supplier’s internal form is acceptable as long as it complies with CBP Form 434.</li> <li>G) When grade 5, grade 8 or Metric Standard (10.9) hex head and socket head fasteners are supplied original Certificate of Analysis shall be furnished with each shipment that documents the actual material chemistry, core hardness, or tensile strength and finish.</li> <li>H) Painted items must have a Certificate of Analysis that reflects the part number of the material, manufacture and batch number of the material used in the process. Supplier must also supply record of the paint thickness.</li> </ul>	
<b>CLAUSE 3</b>	<b>RIGHT TO ACCESS BY ABT GOVERNMENT/CUSTOMER/REGULATORY AUTHORITIES</b>	<b>07/27/16</b>
	<p>All material covered by this purchase order is subject to surveillance inspection by ABT, GOVERNMENT, CUSTOMER, REGULATORY AUTHORITIES. This requirement may include surveillance of the product or the supplier’s Quality System, procedures and facilities. The supplier shall provide access to all facilities and equipment, supply data and perform test as required by the applicable drawings, specifications and inspection instructions under the surveillance of ABT Quality Assurance Representative, GOVERNMENT/CUSTOMER and REGULATORY AUTHORITIES, as requested. The surveillance inspection will be requested in advance in writing by ABT.</p>	
<b>CLAUSE 4</b>	<b>SOURCE INSPECTION (ON SITE)</b>	<b>07/27/16</b>
	<p>Material covered by this purchase order is subject to inspection at the supplier’s facility by ABT prior to shipment. The supplier shall furnish the necessary facilities and equipment, supply data and perform test as required by the applicable drawings, specifications</p>	

and inspection instructions under the surveillance of ABT Quality Assurance Representative, as requested. A five day notice must be given to ABT buyer as to when the material will be ready for inspection to allow for scheduling of source inspection.

**CLAUSE 5 FIRST PIECE INSPECTION**

**09/09/16**

First Piece (Qualification) is required on the first lot produced against this Purchase Order. This inspection will be performed by the supplier in accordance with AS9102 current revision. All supporting documentation including raw material certification and scored drawing must be supplied with the first shipment. The first piece inspection must meet all the requirements of the purchase order. Once the first lot is accepted the supplier shall make NO CHANGES to the process or material used without written authorization from ABT. Supplier must record all actual measurements and information must be recorded in the same unit of measure (i.e. Imperial or Metric) as the drawing.

This First Piece Inspection will need to be resubmitted if any of the following events occurs.

- 1) A lapse in production for more than 2 years.
- 2) Supplier changes sub-tier suppliers, processes, inspection methods, location of suppliers facility, tooling or materials that can potentially affect form fit or function.
- 3) A natural or manmade event which may affect the manufacturing process.
- 4) A change in design affecting the form, fit or function of the part.
- 5) A change in numerical control program or translation to another media that can potentially affect form fit or function.

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**CLAUSE 6 DIMENSIONAL/WELD SAMPLES**

**07/27/16**

- A) Dimensional sample of the material produced against this purchase order is required prior to production. Inspection of this sample will be arranged by the ABT buyer.
- B) Forgings, castings or molding: A sample from each cavity (unless otherwise specified) will be produced and inspected by the supplier. The dimensional report, along with the sample(s) will be submitted to ABT Quality Assurance for inspection and approval. The production run will not commence until approval has been given by ABT.
- C) Welded Items: Items that contain welds are required to be qualified prior to production; a qualification package must be presented 2 weeks prior to producing and shall contain a minimum of the following items.
  - 1) Weld Procedure Specification (WPS).
  - 2) Procedure Qualification Record (PQR) with accompanying test results.
  - 3) Welder Qualification Records.
  - 4) Weld map, detailing which WPS(s) apply to which weld joints. Assemblies welded to MIL Specs, AWS or SD-X Specs may require weld samples to be submitted. One weld sample for each weld, samples must be identified by the part number and for the joint location. Notification to ABT buyer is required prior to the fabrication of the samples.

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**CLAUSE 7 SUPPLIER FURNISHED INSPECTION AND TEST DATA**

**07/27/16**

A copy of the supplier's actual recorded inspection and test results for the material produced against this purchase order must be provided to ABT for the product delivered for each shipment. The data must comply with the requirements of the applicable drawing and/or specification. The data recorded must have positive identification with the product being supplied with that shipment. Unless otherwise specified on drawing this clause applies only during First Piece Inspections.

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**CLAUSE 8 TOOL, GAGE AND MEASURING EQUIPMENT**

**07/27/16**

The supplier shall maintain a system that will ensure adequate controls over all tools, gages, measuring and testing equipment that will be used for product acceptance in accordance with ISO 10012-1 or equivalent (this includes a system for periodic recall for calibrations) Calibrations must be traceable to the National Institute of Standards and Technology (NIST) NOTE tools, gages measuring and testing equipment supplied by ABT must be maintained in accordance with that system as well.

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**CLAUSE 9 GOVERNMENT/CUSTOMER SOURCE INSPECTION (ON SITE INSPECTION)**

**07/27/16**

When Government or Customer Source Inspection is required, it will be so stated in the body of the purchase order, along with the pertinent instructions.

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**CLAUSE 10 GOVERNMENT/CUSTOMER/REGULATORY AUTHORITIES SURVEILLANCE**

**07/27/16**

During the performance of this order the supplier's Quality System and manufacturing processes are subject to review verification and analysis by authorized Government/Customer Representatives and Regulatory Authorities.

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**CLAUSE 11 NO CHANGE CLAUSE**

**07/27/16**

Supplier shall make no change in design, manufacturing or assembly processes or source of supply, after approval of the first production test item or after acceptance of the first completed test item without the written approval of the buyer.

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**CLAUSE 12 SHELF LIFE MATERIALS**

**07/27/16**

The Date of Manufacture and Shelf Life Expiration Date shall be clearly marked on the item and / or packaging adjacent to batch / lot number identification. Eighty percent of the Shelf Life is required upon receipt.

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**CLAUSE 13 MATERIAL CERTIFICATION**

**07/27/16**

The supplier shall furnish certification for the materials used in the process. In addition, supplier's Certificate of Conformance will reflect products were manufactured/processed using this material. Unless otherwise specified on drawing this clause applies only during First Piece Inspections.

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**CLAUSE 14 LOT/DATE CODE CONTROL**

**07/27/16**

Components must be supplied in one lot. Components being supplied with multiple date codes must have a date code within a 12 month period. The date code shall be recorded on the certificate of conformance.

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**CLAUSE 15 QUALITY RECORDS**

**07/27/16**

- A) Quality records shall be maintained in a manner to ensure they remain legible, readily identifiable, and are easily retrievable. Quality Records shall be maintained for a period no less than 10 years from the date of purchase. Said records shall be available for review by ABT, ABT's Customers, and/or any applicable regulatory authorities upon request. Disposal of records shall be done in a manner that shall prevent reconstruction.
- B) The commodities/technical data shared with the supplier are controlled under the United States Export Regulations and may not be exported to a foreign person, either in the U.S. or abroad, without the proper authorization of the U.S. Department of State or the U.S. Department of Commerce. Please contact ABT for commodity classification and jurisdiction.

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**CLAUSE 16 FOREIGN MILITARY FINANCING FUNDED**

**07/27/16**

All material covered by this purchase order is subject to US Government requirements regarding Foreign Military Financing (FMF) Funding, including:

- A) Authorized representatives of the Government of the United States shall have access to and the right to examine, for a period of three (3) years following the final payment to the Supplier, any of the subcontractor's directly pertinent books, documents, papers, or other records involving transactions related to the subcontract.
- B) All material covered by this purchase order is subject to the Certification requirements specified on PRF-003, the ABT Supplier Certification & Agreement for Contracts Involving Foreign Military Financing.

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**CLAUSE 17 PACKAGING**

**07/27/16**

ESD sensitive items shall be packaged in accordance with EIA-STD-625 and J-STD-033 guidelines.

- A) Moisture sensitive non-hermetic solid state Surface Mount Devices (SMD) shall be handled, packaged, labeled and shipped in accordance with IPC/JEDEC J-STD-020 and IPC/JEDEC J-STD-033. The applicable Moisture Sensitivity Level (MSL) as defined by the component manufacturer applies.
- B) Surface Mount Devices must be shipped in machine ready packages. Examples tape & reel, matrix trays and tubes. No bulk shipments allowed.

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**CLAUSE 18 OBSOLESCENCE/END OF LIFE**

**07/27/16**

The supplier of the product delivered on this purchase order shall notify Amphenol Borisch Technologies Purchasing Department if one or any combinations of the following conditions exist:

- A) Products delivered are known to have Obsolescence or End of Life Issues.
- B) The product delivered is currently no longer in production.
- C) Products delivered are nearing the end of their life cycle and are to be discontinued from manufacturing/processing within the next five (5) years.

**CLAUSE 19 DFARS 225.225-7014**

**09/09/16**

Items furnished with a purchase order that contain a DPAS rating must comply with DFARS 225.225 Preference for Domestic Specialty Metals. Certification must reflect the material is complaint to DFAR 225.225-7014 and additional certifications must be furnished to show where the metals were obtained.