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Purchase Order QC Codes

Supplier Quality Assurance Codes

PURCHASE ORDER ATTACHMENT A

NOTE: The following codes are applicable to purchase orders issued to approved suppliers of Brown Precision, Inc. herein after called "BPI". The supplier shall be responsible for full compliance with each code assigned within the purchase order by BPI. Should the supplier have any questions regarding compliance to the assigned codes, the supplier shall contact BPI Purchasing Representative for clarification.

CODE REQUIREMENT

Q1 GOVERNMENT SOURCE INSPECTION -

Government Inspection is required prior to shipment from your facility. Upon receipt of this order, promptly notify the Government Representative who normally services your plant so that appropriate planning for government inspection can be accomplished. In the event the government office cannot be located, you must notify BPI Purchasing Representative for instructions.

Q2 GOVERNMENT RIGHT OF ENTRY –

All work on this purchase order is subject to inspection and/or test by the Government at all times and places (including the complete performance period) and, in any event prior to shipment. The Government Representative who services the supplier's plant shall be notified at least forty-eight (48) hours in advance of the time the article(s) are ready for inspection and/or tests.

Q3A INSPECTION SYSTEM REQUIREMENTS –

Suppliers shall have an Inspection System conforming to the minimum requirements of ISO 9001 (latest revision), and/or AS9100 (latest revision). All previsions therein apply to this purchase order. Substantiating information shall be made available to the Government and/or BPI, upon request.

Q3B RECORD RETENTION –

Suppliers must retain all quality records associated with this purchase order for a minimum of *eleven* (11) years unless specified otherwise in this purchase order. Quality records include any documents created by or used by supplier during completion of purchase order.



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Q4A SPC –

Statistical Process Control techniques shall be employed on key, critical, or controlling characteristics, as specified within the drawing(s), and/or within this purchase order.

Q4A1 SPC PLANS -

The supplier must submit an acceptable method of determining Cpk for BPI's approval. The supplier shall be responsible for submitting the Cpk values for each characteristic charted with each lot of parts shipped to BPI.

Q4B SPC PROGRAM APPROVAL –

BPI's approval of the supplier's SPC program is required prior to First Article of BPI parts. Supplier shall submit SPC procedures, including methods of selecting Key of Controlling Characteristics and control charts used.

Q4C INSPECTION SAMPLING PLAN –

Sampling Procedures employed by the supplier must be in compliance with ANSI/ASQ Z1.9 (latest revision) or ANSI/ASQ Z1.4 (latest revision).

Q5 CALIBRATION SYSTEM –

The supplier must maintain a calibration system that is in compliance with ANSI/NCSL Z540-1 (latest revision) or ISO/IEC 17025 (latest revision). Calibration records must show traceability of the standards used for calibration to the National Institute of Standards and Technology (NIST).

Q6 PART/LOT TRACEABILITY –

The individual part or parts in the lot shall carry specific, assigned serial numbers, traceable back to the material heat lot.

All certifications, manufacturing and quality documents relating to parts supplied or manufactured on this order must be retained and be available for inspection by BPI, or their customer for a minimum of *eleven (11)* years unless otherwise stated in Purchase Order. Identify in accordance with drawing, specification or purchase order requirements.

Q6A INSPECTION DATA –

Verifiable, quantitative inspection data must be furnished with each lot of parts furnished for this purchase order. Actual dimensions for each characteristic, on a minimum of the sample size of the parts, per shipment, must be part of the inspection data. The inspection data must also, indicate the total number of parts accepted and/or rejected for each characteristic. The inspection data must



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be signed and/or stamped by a member of the Quality Assurance group at the supplier facility.

Q6B LOT SERIALIZATION –

Parts shall be lot serialized. Supplier's processing records shall be maintained at all times by the lot serial number.

Q6C PART/LOT TRACEABILITY -

The individual part or parts in the lot shall carry specific, assigned serial numbers, traceable back to the material heat lot. Identify in accordance with drawing, specification or purchase order requirements.

Q6D MECHANICAL/ELECTRICAL TESTING AND ASSOCIATED DATA-

Each part/assembly must have a unique serial number assigned to it, with verifiable test results indicating the ability to meet the designed functional requirements. This test data must be furnished with each part/assembly. This test data must be signed and/or stamped by a Quality Representative at the supplier facility.

Q7 FIRST ARTICLE INSPECTION –

The first production piece, must have a complete, 100% First Article Inspection (FAI) performed on it and documented, to become part of the First Article Package, to be submitted to BPI for review/approval prior to continuation of production. The First Article Package must consist of; the first production piece, the documented inspection results, material certs, and special processing certs. If the processing is altered, after the original First Article approval, a Delta First Article, as a minimum, will be required with the first production piece after the alteration. The FAI part(s) must be segregated and marked as being the FAI part(s). All FAIs shall be documented on the AS9102 forms.

Q8 CERTIFICATION OF COMPLIANCE –

A certification of Compliance (C of C), signed by a supplier's Quality Representative, must accompany each lot of parts shipped to BPI. This C of C is an indication that all requirements of the associated purchase order, drawing(s), and specification(s) have been met.

The C of C must contain, as a minimum,:

- Name and Address of supplier
- Description of part
- Part Number and revision
- Quantity of acceptable parts

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- BPI's Purchase Order Number
- Shipper Number, if applicable
- Serial/Lot number, if applicable
- Shop order number, referenced on the Purchase Order, if applicable
- Conformance Statement

Q8A BPI SUPPLIED, CERTIFICATE of CONFORMANCE –

A BPI supplied C of C has been attached to this purchase order. The supplier is responsible for providing the necessary information required and sending a copy with each shipment of parts to BPI. This document must be signed by a Quality Representative, as an indication that all requirements associated with this Purchase Order, drawing(s), and specification(s) have been met.

Q9 CERTIFIED PHYSICAL & CHEMICAL TEST REPORTS –

Certified physical and chemical test reports as well as Rockwell Hardness results are required for each shipment of material on this purchase order and must be traceable to each heat lot involved. The documentation must be stamped or signed by a member of the supplier's Quality Assurance group.

Q9A SPECIAL PROCESS CERTIFICATION –

Any special processing performed on the material/parts associated with this purchase must be individually certified; including related data, such as thickness, temperatures, and hardness results. These processes shall include but are not limited to Heat Treat, Plating, Paint, Welding, NDT, etc.

Q9B FUNCTIONAL TEST –

Each completed part/assembly delivered on this purchase order, must be functionally and/or electrically tested, as applicable. Each item tested must be identified with, as a minimum, part number, revision and a unique serial number. The test data, which has the actual results of each parameter tested, will also have the part number, revision and the associated serial number. Each data packet mush be signed and dated by the Test Engineer doing the testing, as certification that the unit in question has been functionally tested and has met all of the requirements of the functional test. A copy of this data packet must accompany each item being delivered.

Q10 CURE DATES –

All parts/material delivered on this purchase order must be coded with an applicable cure date and accompanied by a cure date certification. The cure date certification must specify the applicable military, prime contractor, and/or BPI specification number.

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Q11 EXPIRATION DATES –

The material delivered on this purchase order must be identified with BPI Purchase Order number, date of manufacturing, expiration date and applicable military, prime contractor and/or BPI specification number. NOTE: As a minimum, 75% of the original shelf life must be remaining on the product.

Q11A MATERIAL SAFETY DATA SHEET –

Material Safety Data Sheets are required with each item delivered on this Purchase Order.

Q12 CATALOG INFORMATION –

Complete catalog and/or drawing data/information for all: (a) electrical, (b) dimensional, (c) physical, and (d) chemical properties, as applicable, shall be furnished with each lot shipped to BPI.

Q13 SOLDERING CERTIFICATION –

All soldering performed as a result of this Purchase Order shall be in compliance with the process and personnel certification requirements of Joint Industrial Standard J-STD-001 (latest revision).

Q13A WELDING CERTIFICATION –

All welding required for this Purchase Order shall be in compliance with the process requirements and personnel certification requirements of MIL-STD-1595, (latest revision) or the welding specification(s) identified on this Purchase Order.

Q14 ESD PROGRAM –

Supplier shall conform to the requirements of MIL-STD-1686, (latest revision) Electrostatic Discharge Program (ESD). Certification of compliance must accompany each shipment.

Q15 BPI SOURCE INSPECTION –

BPI Source Inspection at supplier's facility is required prior to shipment of any parts/material on this Purchase Order. Supplier shall notify BPI Purchasing Representative of the required date for BPI source inspection. Adequate time for arrangement must be allowed.

Q16 PRESERVATION/PACKAGING –

Parts and/or material furnished on this Purchase Order shall be preserved, packed, and packages in a "Best Commercial" manner to prevent deterioration



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or damage during shipment. Specific requirement deviating from "Best Commercial" method shall be defined within the Purchase Order. Bare part to part or bare material to material contact is not allowed under any circumstances.

Q17 RIGHT OF ENTRY –

All processing performed against this Purchase Order may be subject to review by BPI, BPI's customer, and/or the Government at any time during the duration of the Purchase Order. Adequate notice will be given to the supplier in the event this should occur.

Q18 IDENTIFICATION –

Parts and/or material provided for this purchase order shall be identified with the part number, revision, and Federal Manufacturer Code in accordance with MIL-STD-130 and/or drawing/specification requirements.

Q19 SPECIAL PROCESS APPROVAL FLOWDOWN –

Supplier shall be responsible for using BPI, BPI's customers, and/or Government approved sources, for performance of special processing. Contact the buyer for names of the approved suppliers.

Q20 APPROVED SUPPLIER –

All items supplied on this purchase order must be purchased from only those suppliers approved by BPI, BPI's customer, and/or the Government. Contact BPI Purchasing Representative for a list of approved suppliers.

Q21 FLIGHT SAFETY CRITICAL –

Items furnished under this purchase order are Flight Safety Critical. If a "fixed" plan is not supplied by BPI, the initial planning for manufacturing/processing must be submitted to BPI, for approval. Once the planning package has been approved, the process is "Fixed" and will require re-submittal before any process changes can be incorporated into the already approved process. Part serialization and traceability must be strictly maintained throughout all processes. All critical characteristics must be inspected 100%.

Q22 FASTENER QUALITY ACT –

Articles purchased on this Purchase Order must be produced in accordance with Fastener Quality Act (FQA) of July 26, 1998. All test laboratories must be approved by NIST of their authorized designees and be listed on the NIST's list of Approved Laboratories. In addition to your companies Certificate of Conformance, Certified Test Reports are required to accompany this order.



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Additionally, your Certificate of Conformance must include one of the following statements:

- (A) All fasteners meet the requirements of the (FQA) and records of compliance are on file or.
- (B) All fasteners were produced prior to the implementation of the FQA and are therefore exempt.

Q23 GRAIN DIRECTION –

Grain Direction identification is required on this order. All pieces of raw stock shall be identified with an arrow or other means denoting the drain direction. Failure to identify grain direction shall be cause for rejection.

Q24 PROPER REVISION LEVEL -

Unless otherwise indicated on Purchase Order, the latest document revision designation shall apply. In the event there is a conflict between the revision stated on the Purchase Order and the revision on the print, supplied to your facility, immediately notify your BPI Purchasing Representative for resolution.

Q25 PROCESS CHANGE CONTROL –

All processes which require BPI and/or Customer Process Approval prior to activity shall be considered frozen. Any change in: Procedure, Personnel, Equipment, Material, Tooling, Cleaning, Handling, etc. shall require written change approval prior to further processing.

Q26 NON-CONFORMING PRODUCT/MATERIAL –

Supplier shall arrange for approval prior to processing non-conforming material. Discrepant material shipped without prior approval shall be rejected and returned at the seller's expense. Supplier shall notify BPI immediately if it has been determined that non-conforming product may have been shipped.

Q27 The supplier shall not subcontract any part of the manufacturing process or finishing process of any part on this order without prior written approval from BPI.

Q28 SUB-TIER SUPPLIER FLOW DOWN -

The supplier shall flow down to sub-tier suppliers the applicable requirements in the purchasing documents, including key requirements where required.



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Q29 COUNTERFEIT PARTS/MATERIAL PREVENTION

Supplier shall establish and maintain a "Counterfeit Parts/Material Prevention and Control Plan" utilizing AS6174 as the standard to ensure that any Counterfeit Work is not delivered to BPI. Counterfeit Parts/Material Prevention includes work that is or contains items misrepresented as having been designed and/or produced under an approved system or other acceptable method. Supplier agrees and shall ensure that counterfeit parts are not delivered to BPI. When requested by BPI, Supplier shall provide documentation that authenticates traceability of the affected items.

Q30 The supplier will ensure that all personnel are aware of their contribution to product or service conformity, to product safety, and the importance of ethical behavior.