

PURCHASE ORDER QUALITY CODES SUPPLEMENT

The following supplementary provisions as noted on the purchase order shall be applicable to the furnishing of the goods and services covered by the attached purchase order. The Seller in accepting this order agrees to be bound by the paragraphs specified on the purchase order and comply with the required provisions in all respects. Astronics CSC Aerospace reserves the right to schedule and perform an onsite audit. For the purpose of this supplement, Astronics CSC Aerospace covers all product being assembled and kitted at the Itasca location product line.

- A test report is required with material to show actual content to stated specification.
- 2. Certification of Conformance (C of C) is required for each shipment. The C of C shall contain the following information; Purchase Order number, Supplier's name and address, specification number or drawing and revision, material identification, date, serial number (if applicable), specification requirements, special process specification for any outside processing (i.e.: heat treat, plating, painting, chemical conversion, NDT), actual test results including individuals and averages, batch, heat lot number or lot number, as applicable and signed by an authorized agent. Stockists and Distributors are required to send the original manufacturers certifications in addition to their own showing the traceability and origin.

Exemption from this requirement may be granted from Astronics CSC Aerospace. Prior to approval, supplier must provide objective evidence to ensure applicable records and test data can be retrieved from archives upon request within a reasonable period of time. Retention of all applicable inspection and test data, for Astronics CSC Aerospace, must be retained for a minimum of 20 years.

- 3. Specialty metals must be melted in the United States or a qualifying country, or they can be melted anywhere but must be "incorporated in an article manufactured in a qualifying country" per the requirements stated in DFARs 252.225. The clause allows a qualifying country to manufacture parts from metal that was melted anywhere, provided it meets specifications, but a United States company can only use metal that was melted in the United States or a qualifying country. (Also reference codes 37, 38, and 39)
- 4. Receipt of supplies and services applying to this order is interpreted as certification by the supplier and/or supplier's sub-tiers, if applicable, the supplier has conformed to the requirements of this purchase order. The supplier's records or the supplier's sub-tiers records must contain test results and quality data in sufficient detail to substantiate conformance to requirements, a copy of which will be sent to Astronics CSC Aerospace upon special request.
- 5. Government/Customer inspection is required prior to shipment from the supplier's facility. Upon receipt of this order, promptly notify and furnish a copy to the Government Representative normally servicing the supplier's facility allowing Government Inspection to be appropriately planned. If a Government Representative does not service the supplier's facility, contact the nearest Defense Contract Administration Services Office (DCASO). If the supplier cannot locate the Government Office, notify The Astronics CSC buyer immediately.
- Source Inspection Required Notify Astronics CSC Aerospace Buyer when material is ready for source inspection.
- 7. During performance on this order, the supplier Quality Control or Inspection System and Manufacturing processes are subject to review verification, and analysis by authorized Government and/or Astronics CSC Aerospace representatives. Government and/or Astronics CSC Aerospace and/or Astronics CSC Aerospace Customer inspection or release of product prior to shipment is not required unless the supplier is otherwise notified. A copy of this order will be furnished to your Government Representative upon request.
- Supplier's Quality Control system must conform to ISO 9000 or AS 9100.
 When required suppliers performing work for Honeywell must follow the SPOC Manual requirements.
- Supplier's Calibration System must conform, at a minimum, to ISO 10012 (traceability to NIST is required). For all suppliers or sub-tiers performing calibration on NDT equipment their calibration process must conform to ASTM E1444, ISO 10012, ISO 17025, or ANSI Z540 requirements.
- 10. Functional test data reports to accompany each item when material is shipped. (Note: Failure to comply or receive permission to deviate will result in material not being accepted at Astronics CSC Aerospace Receiving Dock. Material not accepted on our Receiving Dock will be returned at Supplier's expense).
- Design changes or material substitution <u>must be approved</u> by Astronics CSC Aerospace prior to implementation. In the event of a Manufacturing or Assembly process change, a NEW 1st article (per code 16 this supplement)

must be submitted to Astronics CSC Aerospace for approval. Supplier is to notify Astronics CSC Aerospace of non-conformances and procedure changes affecting Quality. Supplier shall implement a recall process to include a form of notification, work instruction describing the recall process, deviation form and disclosure to be approved by Astronics CSC Aerospace prior to shipment. (Note: Failure to comply or receive permission to deviate will result in material being rejected and returned at Supplier's expense).

- 12. In accordance with U.S. Government Specifications, Engineering Data may be required later under separate negotiations.
- All referenced specifications shall be interpreted to mean conformity with the revision in effect on the date which this order was entered unless otherwise noted.
- Material, packaging, equipment, and/or gaging furnished by Astronics CSC Aerospace shall be returned with each shipment.
- 15. A statement will accompany all material shipments listing manufactured date and shelf life date on material shipped. Statement will also note any special storage procedures such as temperature, etc. All parts having a shelf life requirement must have a minimum of 75% of the shelf life remaining upon receipt at Astronics CSC Aerospace articles with a remaining shelf life less than 75% will be subject to rejection.
- 16. A First Article Inspection Report (FAIR) per SAE's AS9102 is required to accompany parts whenever the following applies:
 - First Production Lot
 - When changes in manufacturing processes, equipment relocation, supplier relocation.
 - Lapse in production greater than 2 years.

First Article inspections shall be in compliance with SAE's AS9102 requirements unless otherwise noted. Every characteristic of one production part shall be verified and recorded. The supplier's standard form is not acceptable unless it mirrors the SAE AS9102 forms. Data shall include actual findings to stated specification. Examples:

- Physical Dimensions per drawing specifications
- Raw Material Composition
- Functional Characteristics
- Special Processes i.e. Plating, Soldering, Painting
- Chemical Conversion, Heat Treating
- Weight
- Others as necessary

Special Process certification shall be included as applicable. In any specific situation when an approved inspection fixture is employed to verify conformance (go/no go type data), the fixture number shall be furnished instead of an actual value.

AS9102 Form 1, shall contain a signature by the originator (block 19), date of origination (block 20), signature of the providers Reviewed By (block 21), and Reviewed by Date (block 22). Originator and Reviewed By are unique individuals.

- 17. Material furnished under this order shall be free from contamination by the presence of mercury. Material furnished under this order shall also be free from contamination by the presence of other toxic substances without prior approval from Astronics CSC Aerospace.
 - A. In the event of any accident involving mercury or any other toxic substance contamination of the material being furnished on this Purchase Order or suspicion of such contamination, Astronics CSC Aerospace shall be notified immediately.
 - B. The supplier's sub-tiers must be notified of, and must comply with the requirements of this notice. Flow down is required.
- 18. Statistical Process Control (SPC) Data for each key characteristic to accompany material when shipped. Key Characteristics are identified inside of a diamond on Astronics CSC Aerospace provided drawings with a letter designation as the following: "C" = Critical; This data shall demonstrate process control to an initial capability level of 1.67 CPK for "C" Critical and 1.33 CPK for follow on production.

- 19. If material is to be shipped under refrigeration a recording device must be included to ensure material maintenance during transit. If material is to be shipped under dry ice, a recording device is not required.
- Supplier shall provide fixed Process Control Planning for approval by Astronics CSC Aerospace prior to processing. Process Control Planning is to include; Process Control Plan and Failure Mode and Effects Analysis (FMEA).
- Supplier's Calibration / Material Testing lab system must conform to ANSI Z540 / ISO 17025.
- Supplier shall use Special Process Suppliers approved by Astronics CSC Aerospace, one of Astronics' CSC Aerospace tier one customers (ex; Honeywell, Panasonic, ViaSat, Government) or be Nadcap certified.
- When the suppliers facility is performing lot inspection sampling, instead of 100% lot inspection, the C=0 sampling plan is to be invoked.
- 24. Personnel with responsibility for performing work that affects product conformity must be qualified especially when responsibility includes any testing considered to be a special process. All personnel must be aware of their contribution to product and service conformity, product safety, and the importance of ethical behavior.
- Frozen planning: Any changes in the product or process, changes of suppliers, changes to manufacturing locations or equipment Astronics CSC Aerospace must be notified prior to the change taking place. (ref. code 16)
- 26. Astronics CSC Aerospace, its customers, and any regulatory authorities reserve the right of access to a supplier's facility or supplier sub-tiers when it has been deemed necessary. This includes applicable areas of the facility as well as any applicable records.
- Supplier shall maintain a formal internal tool control system that allows for the proper segregation, maintenance, and accountability of Astronics CSC Aerospace or Astronics' CSC Aerospace customer owned tooling.
- 28. Suppliers are responsible for meeting all requirements of the International Traffic in Arms Regulation (ITAR.) Suppliers are responsible for vetting employees and ensuring that only U.S. persons and/or employees with legal residency are permitted to work with Astronics CSC Aerospace product and/or technical data if identified as ITAR Controlled.
- 29. This supplement contains information that is subject to the controls defined in the International Traffic in Arms Regulations (ITAR). This information shall not be provided to non-U.S. persons or transferred by any means to any location outside the United States without advance approval from the United States Department of State.
- 30. This supplement contains information that is subject to the controls defined in the Export Administration Regulations (EAR). This information shall not be provided to non-U.S. persons or transferred by any means to any location outside the United States contrary to U.S. Law.
- Quality System Requirements for Certified Suppliers: Suppliers must maintain a Quality system in accordance with Astronics CSC Aerospace Supplier Quality Manual and provide with each shipment the documents as specified therein.
- 32. Special Process Certification: Supplier shall provide with each shipment a certification for all special processes performed, such certifications shall include:
 - Astronics CSC Aerospace purchase order number
 - Astronics CSC Aerospace part number and revision level
 - Specification including revision letter to which material or parts were processed (see note below)
 - Quantity Attention: In the event actual quantities don't match the purchase order quantity contact the Astronics CSC Aerospace buyer immediately upon receipt of order.
 - Any test results required by specification
 - Special process information when applicable, i.e. time and temperature used to process, technique cards, etc.

Note: Any subcontracted special processes must be performed by approved suppliers if applicable (contact Astronics CSC Aerospace Buyer for Approved supplier information).

Note: A process per a cancelled specification is to be performed per the superseding specification (also see note in note 13).

- Software Control; Supplier is to maintain a software control program in accordance with DOD-STD-2168 for configuration control of software driven measurement systems and equipment.
- Single Lot Control: The supplier shall maintain Single Lot Control for each PO line. All material used for each PO line shall consist of the same origin

- of material (heat, batch, resin, etc.) If multiple lots are required to complete the order, the supplier shall contact Astronics and request adding additional PO lines. Product shall be clearly identified with corresponding line item of purchase order.
- Supplier shall screen and maintain an Antidrug and Alcohol Misuse Prevention Program. Supplier shall maintain records and make available for inspection by the FAA Drug Abatement Compliance and Enforcement Inspectors upon request.
- 36. Conflict Materials (Dodd Frank Act) In November 2012, the United States Securities and Exchange Commission's Final Rules implementing Section 1502 of the Dodd-Frank Act governing companies' use of and disclosure regarding so-called conflict minerals became effective. Provide C of C to the "reasonable country of origin inquiries" required by the Final Rules. Provide a statement that your company does not use any tin from mined sources that originate from the Democratic Republic of the Congo or any of the adjoining countries. This statement should conclude the supplier has conducted a due diligence investigation by collaborating with any tin suppliers to ascertain the necessary information.
- RoHS Provide C of C that complies with the European End-of-Life Vehicle Directive, 2000/53/EC (ELVD) and Restriction of Hazardous Substances Directive know as EU-Directive 2011/65/EU, Effective January 3, 2013 (RoHS 2).
- 38. REACH Provide C of C with statement that all products provided to the purchase order were produced in accordance with the REACH guidance documentation. If the product provided under the purchase order are classified as "Articles" then include this in your C of C stating that in accordance with the REACH regulations, products classified as "articles" are not required to register their constituent "substances" (nor preregister). Verify that none of the material or product provided meets the registration requirements for products that are imported into the EU.
- 39. The supplier shall inspect all design characteristics 100% until the initial reliability requirement has been met. All designated "Major" characteristics will need a minimum 78 parts delivered with no defects prior to being approved to use a sampling plan, All designated "Minor" characteristics will need a minimum of 28 parts delivered with no defects before being approved to use a sampling plan, Sampling plan must be submitted for approval prior to implementation. (Major characteristics = tolerances less than .010; Minor characteristics = tolerances greater than .010)
- Supplier must have FOD program that conforms to the requirements of NAS412, Foreign Object Damage / Foreign Object Debris Prevention.
- 41. APQP: Supplier must provide all required Advanced Product Quality Planning (APQP) documentation for the parts being provided for the first time on this specific purchase order. This requirement shall continue to apply during ongoing production. Where a purchase order holder (supplier) subcontracts some/all of the manufacture of an item, the PO holder shall be responsible for the compliance of their subtier(s) to the requirements of this flow down requirement. This includes Parts Submission Warrant (PSW), Process Flow, PFMEA, and Control Plan for all parts being provided under this purchase order.
- 42. All suppliers must have a Counterfeit Part Prevention program per the requirements in AS6174. The program must include educating all personnel, planning, implementing and controls for preventing the use of counterfeit or suspect counterfeit parts. If Astronics determines that any delivered parts are counterfeit per the requirements in AS6174 the parts will not be returned to the supplier and will be forwarded to the proper authorities. The supplier will not be compensated for any parts dispositioned as counterfeit.