



FTG - Circuits Chatsworth
FTG - Aerospace Chatsworth

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FTG Purchase Order Quality Requirements

Revision N (04-05-2018)

Mandatory 01 – 14

Optional 32- 60

Mandatory Requirements on All Purchase Orders:

- 01: Right of access by FTG, our customer and regulatory authorities to all facilities involved in the order and all applicable quality records.
- 02: All related documentation to FTG purchased materials shall be retained for a minimum of 10 years unless otherwise specified. This includes work order instructions, material certifications and test reports but is not inclusive.
- 03: Supplier shall notify FTG if any non-conformances are identified in the process / product. Supplier shall seek guidance from FTG for disposition. Supplier shall not ship any non-conforming product without prior written authorization from FTG.
- 04: Supplier shall notify FTG of any changes in product and / or process, changes of suppliers, changes of manufacturing facility location and, where required shall obtain FTG approval prior to implementation of the change. Supplier shall notify FTG at least 90 days before the change is to be implemented.
- 05: The supplier shall flow down all applicable requirements provided by FTG to any sub-tier supplier including key characteristics where required.
- 06: Foreign Object Debris (FOD) Control. Supplier shall ensure that FOD is eliminated from all parts prior to shipment. Suppliers must maintain a FOD free environment during manufacturing, inspection, storage, packaging and shipping. Prior to closing inaccessible or obscured areas during manufacturing and assembly, ensure the areas are free of FOD. All parts must be clean and free of FOD to shipment. Suppliers are required to maintain a FOD prevention program.
- 07: Counterfeit Parts Prevention. Counterfeit parts means suspect parts that are a copy or substitute without legal right or authority to do so, or whose performance or characteristics are knowingly misrepresented. Supplier agrees and shall ensure that Counterfeit Parts are not contained in delivered products through the implementation of polices that include prevention, detection and risk mitigation methods to protect against their use. In the event Supplier suspects that it has furnished Counterfeit Parts, it shall immediately notify FTG. When requested by FTG, Supplier shall provide Original Manufacturer certification that authenticates traceability of the parts. Supplier shall include this clause or reasonably equivalent provisions in all subcontracts for the delivery of items that will be furnished to or included in products furnished to FTG. Supplier shall use Authorized (Franchised) Distributors unless a Non-Authorized Distributor candidate is approved by FTG. Material certificates of conformance are required from the original manufacturer.



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- 08: Nonconforming Materials Requirements. Supplier shall not deliver product that does not conform to procurement requirements without written approval from FTG. The supplier shall notify FTG within 48 hours of any non-conformances that require a Use-As-Is disposition. Submittal or resubmittal of nonconforming material which has been determined acceptable by FTG shall be identified on the Certificate of Conformance.
- 09: Parts Substitution Prohibited. Part and/or material substitutions for items stated on FTG requirements are not allowed. Any deviations from the requirements shall have written authorization from FTG.
- 10: Where the supplied products or goods have a limited shelf life, Supplier must supply maximum available shelf life data with this shipment. Products or goods with less than 75% of shelf life remaining must not be shipped, unless agreed to by FTG.
- 11: Supplier will adhere to the directions provided in executive order (EO) 13224, executive order on terrorist financing – blocking property and prohibiting transactions with persons who commit, threaten to commit, or support terrorism effective 9/24/2001 and any subsequent changes made to it. The supplier further agrees to include this requirement in lower – tier purchase orders or subcontractors. More information on the EO can be found at www.treas.gov
- 12: For ESDS (Electrostatic Discharge Sensitive) items, the Supplier shall establish and maintain a written electrostatic discharge control program for the control of Electrostatic Discharge (ESD) during fabrication, handling, and packaging of electrical and electronic parts, assemblies, and equipment. The program must comply with the requirements of the most current version of MIL-STD-1686 or ANSI/ESD S20.20.
- 13: Tin Whiskers: The use of pure tin as an under plate or final final finish, is prohibited both internally and externally, tin content solder shall not exceed 97% by mass. Tin shall be alloyed with a minimum of 3% lead. The use of alloys with tin content greater than 97% by mass, may exhibit Tin Whisker growth problems after manufacture.
- 14: The supplier shall ensure that its employees are aware of, their contribution to product or service conformity, their contribution to product safety, the importance of ethical behavior.

Requirements as Defined By the Purchase Order:

- 31: Must be on the FTG "Approved Suppliers List".
- 32: Exception to the FTG Circuits "Approved Vendors List", only with Qualities authorization.
- 33: Certificate of Conformance required. The C of C must show evidence of product testing, inspection, compliance; signature, printed name, and title by an authorized representative. All materials used in assemblies shall have C of C's for every component as depicted on the master drawing.
- 34: Test reports and lot traceability required.
- 35: Independent laboratory testing required.
- 36: Quality Management System certification – ISO 9001.
- 37: Quality Inspection System equivalent to MIL-I-45208.



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- 38: Quality Management System certification – AS9100.
- 39: Quality System non-certified, exempt or none applicable, only with FTG Quality authorization.
- 40: Physical part first article required.
- 41: First article report(s) IAW AS 9102 shall be provided with shipment.
- 42: Key characteristics, when applicable will be specified on PO.
- 43: Special processing requirements as stated from FTG via sub travelers or applicable documentation.
- 44: Prints, ECO'S, electronics files or applicable FTG customer documentation.
- 45: Source Inspection required by FTG.
- 46: FTG customer source inspection required.
- 47: Government Source inspection required.
- 48: Special packaging as requested by FTG, which will be specified in writing.

International Traffic in Arms Regulations (ITAR):

- 100: NOTICE: This communication may contain privileged or other confidential information. If you are not the intended recipient, or believe that you have received this communication in error, please do not print, copy, retransmit, disseminate, or otherwise use the information. Also, please indicate to the sender that you have received this e-mail in error, and delete the copy you received. Thank you. EXPORT COMPLIANCE STATEMENT: "The information contained herein is or may be controlled by the International Traffic in Arms Regulations (ITAR), 22 CFR 120-130, and may not be exported, or disclosed to a foreign person, whether in the United States or abroad, without prior U.S. Government written approval".

FTG Customer Specific Flow Down Requirements as Defined By the Purchase Order:

200: United Technology Corporations (UTC), Pratt Whitney, Otis, UTC Aerospace Systems, UTC Climate, Controls and Security

- 200A: Subcontracted Purchase Orders:** Where a UTC member owns the design of an article purchased from a supplier (FTG) who further subcontracts all or portions of that work to other subcontractors (second-tier), the FTG's purchase order must state that the articles are for applicable "UTC MEMBER'S END USE" and must be controlled per applicable purchase order requirements.

200B: Calibration Services Purchase Orders:

Control of Monitoring and Measuring Devices:

Calibration Systems shall meet the applicable requirements of AS 9100, ISO 10012, and ISO 17025 or ANSI/NCSL Z540-1. If ANSI/NCSL Z540 is applicable, the Handbook shall be used as the interpretive guide.

- (a) In accordance with the industry standards and guidance referenced above, stated reliability goals, accuracy ratios and Significant-Out-Of-Tolerance condition criteria must be established.



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- (1) The Calibration interval analysis methodology used to maintain the reliability of M&TE, shall have a stated reliability goal to meet a minimum 95% reliability target for M&TE in-tolerance at the end of their interval schedule.
 - (2) Significant-Out-Of-Tolerance conditions are defined as any M&TE out-of-tolerance condition exceeding 25% of the product tolerance. These conditions require documented review of impact on quality and notification to FTG and the UTC member if product received by UTC has been affected.
- (b) through (f) No Additional Requirements

300: Orbital Sciences

300A: Delivery of Inspection Reports. Supplier shall provide inspection reports at the time of delivery for items on this purchase order. Reports shall include: The test and/or inspection procedure document number and revision level; part number inspected; serial, lot, batch or date code numbers, as applicable; identification of each inspection point; The results of each inspection point; and; The identification of the person performing the inspection. Suppliers shall maintain the inspection records for their respective first-tier suppliers.

300B: Delivery of Rework Travelers. Any rework that was accomplished by the supplier must be documented and a copy of the documentation provided with the shipping documents package. Documentation includes, but is not limited to: The suppliers reject document; The supplier's rework routing that includes what requirements/specifications the rework complies to, and: The documentation by which the supplier accepted the rework process performed.