



Supplier Quality Manual (Quality Clauses)

F0052
Rev. A
QM001 Section 8.4

Purchase Order Quality Clauses

Q1 F0052 Rev. A applies to this purchase order: The Quality Clauses listed in F0052 apply to the extent specified by this FLEX-CELL PRECISION Purchase Order. Applicable Quality Clauses will be designated for each FLEX-CELL PRECISION Purchase Order Line item by using the respective Clause Codes only. The Quality Clause Titles and Text are not listed within this Purchase Order except for this Clause. Please note that this “Version” of *F0052* must be used in support of this Purchase Order. For your convenience, a complete listing of Flex-Cell Precision Quality Clauses has been posted on: www.flex-cellinc.com.

If a copy of *F0052* is downloaded by the Supplier for convenience, it is the Supplier’s responsibility to verify that the appropriate Version is being used for each Flex-Cell Purchase Order placed. Changes may occur with or without notice by Flex-Cell Precision.

Q2 Quality Management System: ISO 9001:2015. The Supplier shall have a Quality Management System that complies with ISO 9001:2015. A copy of the Suppliers ISO 9001:2015 certificate, which has been issued by a third-party registrar, must be submitted to FLEX-CELL PRECISION. In the event the Supplier changes registrars, loses ISO 9001:2015 registration, or is put on notice of losing its registration status; the Supplier shall notify FLEX-CELL PRECISION within 3 business days of the event.

Q3 Right of Access: Work performed under this Purchase Order is subject to government, customer, or regulatory authorities’ surveillance/inspection at any level of the supply chain (to the applicable areas of all facilities) involved in this Purchase Order including access to all applicable records. The Supplier will be notified in advance of any surveillance/inspection to be conducted.

Q4 FLEX-CELL PRECISION QA Source Inspection required: Upon receipt of this Purchase Order (or at the time this Quality Clause is imposed) and ten (10) working days prior to commencing work, the Seller shall promptly notify the FLEX-CELL PRECISION Buyer to obtain a point of contact within the FLEX-CELL PRECISION QA Department. FLEX-CELL PRECISION’s QA Representative will provide written direction, through the FLEX-CELL PRECISION Buyer, of those In-process Inspection / Test / Pre-cap / Final Inspection activities applicable to this Purchase Order. FLEX-CELL PRECISION QA retains the option to subsequently waive (in writing through the FLEX-CELL PRECISION Buyer) established Source Inspection requirements on a case-by-case basis. The Seller shall make available

Supplier Quality Manual (Quality Clauses)

to the FLEX-CELL PRECISION QA Representative (on-site at the Seller's facility) all applicable drawings, specifications, procedures, statements of work, Purchase Order, test software, and changes thereto, related inspection and/or test equipment, and such other information as may be required to satisfactorily perform the Source Inspection activities required under this Purchase Order.

Q5 Workmanship: The Seller must maintain written standards of workmanship directly applicable to the nature and level of services and/or work to be performed under this Purchase Order. The Seller shall develop, implement, and maintain training programs, as deemed necessary by the Seller's management, to assure acceptable levels of performance in product quality and services provided.

Q10 Certificate of Compliance (C of C): Supplier shall provide a certification with each shipment to attest that the parts, assemblies, subassemblies, or detailed parts conform to all the Purchase Order requirements. Lot, heat, batch, date code, serial number, or other Lot tracking number must appear on the certification. Certification documentation must contain the following:

- FLEX-CELL PRECISION Purchase Order number
- Part number and Revision
- Name of Manufacturer / Supplier and Country of Origin
- Name and address of Supplier
- Manufacturer's / Supplier's lot, heat, batch, date code, serial number, or other Lot tracking number
- Quantity
- Signed and dated by an official of the Supplier (electronic signature formats permitted)
- Statement attesting that parts conform to the Purchase Order requirements.

The Supplier shall establish and maintain a documented system for controlling product quality records (process and inspection records as a minimum) that support this Purchase Order. The Supplier shall perform inspection, as necessary, to determine the acceptability of all articles under this Purchase Order. All articles submitted by the Supplier under this Purchase Order are subject to final inspection at the FLEX-CELL PRECISION facility.

Q12 Non-conforming Material: The Supplier does not have MRB authority (approving variances from FLEX-CELL PRECISION drawings and specifications). All "Use As Is" and "Repair" dispositions must be made through the FLEX-CELL PRECISION Buyer (with FLEX-

Supplier Quality Manual (Quality Clauses)

CELL PRECISION QA Concurrence), unless otherwise specified by the Purchase Order. Shipment of non-conforming items must be accompanied by a FLEX-CELL PRECISION approval document with both Purchasing and QA approval. The Supplier shall provide for control, segregation and identification of non-conforming material detected at their facility to prevent its unintended use or delivery. In the event nonconforming material is detected after delivery to FLEX-CELL PRECISION, the Supplier shall notify FLEX-CELL PRECISION QA within one business day of confirmation of the defective condition. This notification will be in writing and shall clearly describe the nonconformity and include (as appropriate) part numbers, quantities affected, delivery dates, lot / batch numbers, etc.

Q13 Change Management:

- A) The supplier shall notify FLEX-CELL PRECISION of any proposed changes to FLEX-CELL PRECISION approved, parts, devices, materials, fabrication methods or processes. In addition, the supplier shall obtain written FLEX-CELL PRECISION Buyer approval prior to change incorporation.
- B) The supplier shall notify FLEX-CELL PRECISION Buyer of proposed changes affecting the performance or interfaces of the item(s) being supplied.
- C) The supplier shall notify FLEX-CELL PRECISION Buyer of any changes to the design, parts, materials, fabrication methods or processes for the item(s) being supplied.
- D) The supplier shall notify FLEX-CELL PRECISION Buyer immediately of a change to manufacturing facility location or changes in ownership.

Any changes made after a part has been qualified or the first item has been delivered may require requalification testing.

Q14 Limited Shelf-Life Material: The Supplier shall identify each item package or shipping container with the manufacturing date and shelf- life expiration date. When the “ship date” or “date of receipt” is utilized as the start date for the shelf-life period, the manufacturing date is not needed. In no case shall material be supplied with less than 50% of its useful shelf life remaining. When environment is a factor in determining useful life, the identification shall include storage conditions required to achieve the stated useful life. A copy of the manufacturer’s latest technical data sheet shall accompany each shipment in

Supplier Quality Manual (Quality Clauses)

addition to a Certificate of Compliance (CofC) from the original Manufacturer.

Documentation supplied with each shipment shall include the name and address of the manufacturer and the manufacturer's lot/batch number. In addition to the CofC requirements specified by Quality Clause Q10, the Supplier must also include expiry information on the CofC.

Q15 Chemical and Physical Analysis: The Supplier shall have available, upon request, chemical/physical analysis which is identifiable to the product delivered. The chemical/physical analysis shall validate compliance to applicable material specifications.

Q16 Commercial Packaging: The Supplier shall provide external packaging for all materials in accordance with the best commercial practices. Packaging shall provide adequate protection from damage and contamination to the product during transit.

Q17 Inspection at Supplier Facility: The Supplier is required to perform final inspection and/or test of all items per the requirements of the Purchase Order and all applicable specifications, prior to shipment to FLEX-CELL PRECISION.

Q22 Quality Assurance Management: The Supplier shall maintain a Quality Management System in compliance with one of the following: MIL-Q-9858, MIL-I-45208, ANSI/ISO/ ASQ Q9000 Series, SAE AS9000 Series or a FLEX-CELL PRECISION approved alternate. The Supplier shall also establish and maintain a formal system for calibration and maintenance of test and measuring equipment commensurate with those systems defined within the industry recognized Quality Management Systems. FLEX-CELL PRECISION reserves the right to perform surveys and audits as necessary to assure compliance to the Quality Assurance requirements of the latest Purchase Order revision in effect unless otherwise noted.

Q26 Q-Clause for authorized Distributors:

- A. Definition: Counterfeit Part – A part that is a copy or substitute without legal right or authority to do so or one whose material performance, or characteristics, are knowingly misrepresented by a Supplier at any level in the supply chain.
- B. Prohibition: SELLER agrees and shall ensure that Counterfeit Parts are not contained in products delivered to FLEX-CELL PRECISION
- C. Prevention: SELLER shall implement a counterfeit electronic parts detection and avoidance system using SAE Standard AS5553 as a guideline. Within sixty (60) days

Supplier Quality Manual (Quality Clauses)

of receipt of an initial order with this clause, SELLER shall submit to FLEX-CELL PRECISION a written report which details the process the SELLER uses to prevent the introduction of potentially Counterfeit Parts into its supply chain and in support of all FLEX-CELL PRECISION orders with this clause. SELLER shall only purchase parts procured directly from the Original Component Manufacturer (OCM) / Original Equipment Manufacturer (OEM), or through the OCM / OEM authorized distribution chain. The SELLER shall verify the procurement source and associated certifying paperwork. Appropriate incoming inspection test methods shall be used to detect potential Counterfeit Parts and materials. Products shall not be acquired from Independent Distribution / Brokers (any company, person, or entity who is not an OEM/OCM or not an OEM/OCM authorized franchised dealer or distributor) unless approved in advance in writing by FLEX-CELL PRECISION. When requested by FLEX-CELL PRECISION, SELLER (at SELLER's expense) shall provide documentation supporting authenticity and traceability of parts to the applicable OCM/OEM.

- D. Notification: In the event SELLER becomes aware or suspects that Counterfeit Parts have been furnished to FLEX-CELL PRECISION, SELLER shall immediately (within one business day) notify FLEX-CELL PRECISION
- E. Remedies: If products delivered under this Contract are, or include, Counterfeit Parts, SELLER shall (at SELLER's expense) promptly replace such Counterfeit Parts with genuine parts conforming to the requirements of this Contract. Notwithstanding any other provisions in the Contract, SELLER shall be liable for all direct costs relating to the investigation, analysis and disposition of parts determined to be Counterfeit.
- F. Flow-down: SELLER shall include this Clause or equivalent provisions in all lower tier subcontracts for the delivery of parts that will be furnished to or included in products furnished to FLEX-CELL PRECISION.

Q28 Solderability Requirements: Metallic-Coated Products: Metallic coated products to be soldered shall be evaluated to assure satisfactory performance in manufacturing processes requiring soldering. The evaluation of solderability shall be completed in accordance with the requirements of ASTM B 678. Alternate methods of solderability testing may be used upon prior review and approval by FLEX-CELL PRECISION Solderability test sample configuration is at the discretion of the Supplier and must be from the same material Lot used for finished items. Finished items supplied to FLEX-CELL PRECISION shall not be used for solderability testing.

Supplier Quality Manual (Quality Clauses)

Q29 Accelerated Aging Requirements: Metallic-Coated Products: Metallic coated products that are to be stored for up to 1 year and remain solderable shall be artificially aged prior to solderability testing. Artificial age conditioning is intended for tin and tin-lead coatings only and shall be completed in accordance with the requirements of ASTM B 678.

Q31 Foreign Object Damage (FOD) Prevention Control: The Supplier shall maintain a Foreign Object Damage (FOD) Prevention Program using Aerospace Standard AS9146 as a guide. The Supplier shall ensure that work is accomplished in a manner preventing foreign objects or materials from entering and remaining in deliverable items. Maintenance of the work area and control of tools, parts and materials shall preclude the risk of FOD incidents.

Q32 Flow down of requirements: The Supplier shall flow down to all required sub-tier Suppliers the applicable requirements of this Purchase Order, including key characteristics where required, and ensure that appropriate controls are in place at direct and sub-tier suppliers to meet the requirements of this Purchase Order.

Q33 First Article Inspection: The SELLER shall perform a First Article Inspection (FAI), in accordance with the requirements of AS9102, latest revision, and documented on one item of the first lot manufactured for this order, unless it has been completed on an earlier order and none of the following events has occurred:

- There are drawing revision changes.
- There is a change in design affecting form, fit, or function of the part.
- Change in manufacturing source(s), processes, assembly line, inspection method(s), location,
- tooling, or materials.
- A lapse in production of two years (or more) or as specified by the customer.
- When there is a change to a part, a FAI shall be performed on the next higher assembly to the extent that the change impacts that assembly.

A copy of the final First Article Inspection Report (FAIR) comprised of all supporting documentation including product certifications, build records, test records, inspection records, and subsequent approval documentation shall be forwarded to UEH's Quality Assurance for review and approval. All first article documentation shall be considered quality/acceptance records and shall be retained in accordance with purchase order requirements.

Unless contractually required, this Clause does not apply to:

Supplier Quality Manual (Quality Clauses)

- Development and prototype parts that are not considered as part of the first production run.
- Procured standard catalogue items, COTS (COMMERCIAL-OFF-THE-SHELF: Commercially available items intended by design to be procured and utilized without modification (e.g., common electronic components), or deliverable software.

Q36 Chemical and Physical Analysis Documentation REQUIRED with EACH

SHIPMENT: This Quality Clause applies when the material requirements are defined in a Specification and/or Drawing that is imposed by FLEX-CELL PRECISION's Purchase Order. The Supplier shall provide chemical/physical analysis reports for each Lot of raw material used traceable to the product delivered to FLEX-CELL PRECISION. The chemical/physical analysis reports shall validate compliance to applicable material specifications imposed by the governing Drawing. NOTE: If the "raw material Lot" is split for shipment of completed product to FLEX-CELL PRECISION and subsequent "ship Lots" are from a raw material Lot where test and inspection data have already been provided to FLEX-CELL PRECISION, the Supplier is not responsible for providing additional documentation provided the supplied documentation is traceable to the original raw material Lot.

Q37 Plating Inspection and Testing Documentation REQUIRED with EACH SHIPMENT:

This Quality Clause applies when the plating requirements are defined in a Specification and/or Drawing that is imposed by FLEX-CELL PRECISION's Purchase Order. The Supplier shall provide copies of Plating Inspection and Test reports for each plating Lot relative to each shipment provided to FLEX-CELL PRECISION. Inspection and Tests performed shall be, as a minimum, those specified by the governing Specification / Drawing. The Plating Inspection and Test reports provided shall represent compliance to applicable plating requirements imposed by the governing Specifications / Drawing. NOTE: If the "plating Lot" of completed product is split for shipment to FLEX-CELL PRECISION and various "ship Lots" are from the same plating Lot where Inspection and Test documentation has already been provided to FLEX-CELL PRECISION, the Supplier is not responsible for providing additional documentation provided the previously supplied documentation is traceable to the original plating Lot.

Q38 Key Characteristic Process Control Documentation: When Key Characteristics (KCs) have been identified by the governing Drawing / Specification, the Supplier shall maintain a Process Control Document that supports the following (as example):

Supplier Quality Manual (Quality Clauses)

- Potential sources of variation
- Manufacturing Process Elements that influence KCs
- Data Control Plan
- Control Techniques
- Types of reporting methods
- Process capability, including calculation methods
- Investigation results of out-of-control points
- Investigation results of sources of variation

The Supplier shall perform variation management activities supporting KCs (Reference AS9103) to establish process capability and maintain subsequent control. If statistical process control is chosen, the process shall be capable with a $Cpk \geq 1.33$. If other control methods are chosen, measurable evidence must demonstrate process capability and stability. The Supplier shall make available, upon request, documentation that supports compliance to a Process Control Document. Evidence of process control for KCs does not relieve the Supplier of compliance to all Drawing / Specification characteristics.

Q41 Part Substitution Prohibited: No Part substitutions (as defined by FLEX-CELL PRECISION's Purchase Order), are permitted without written authorization by FLEX-CELL PRECISION's Purchasing Department.

Q44 Specification Revision Level: When a FLEX-CELL PRECISION supplied Drawing references a military, industrial, and commercial specification, the Sellers shall use the latest revision (including the latest revision of Industry directed superseding specification) at time of the Purchase Order unless otherwise indicated on the Drawing or Purchase Order. When a military, industrial, and commercial specification referenced on a FLEX-CELL PRECISION supplied Drawing has been cancelled WITHOUT REPLACEMENT, the Seller shall contact the FLEX-CELL PRECISION Buyer to acquire the applicable specification and its revision.

Q45 Calibration Service Providers: Supplier shall maintain a documented calibration system for the calibration and maintenance of tooling, inspection, and test equipment. Supplier shall have a calibration system that is compliant to prevailing industry requirements for "Calibration" to ISO/IEC 17025 and/or ANSI/NCSL Z540-1 (ANSI Z540.3) Compliance to the applicable standard above shall be recorded on the Suppliers calibration record provided to FLEX-CELL PRECISION with the delivery of the item(s) calibrated/purchased. Testing and Calibration Laboratories shall also operate in



Supplier Quality Manual (Quality Clauses)

accordance with ISO 9001. Evidence of compliance shall be made available to FLEX-CELL PRECISION upon request.

Q46 Calibration Service Providers – Certificate of Calibration (C of C) Requirements:

Supplier shall provide a Certificate of Calibration with each item calibrated to attest that the calibration performed conforms to Purchase Order requirements. Certificate of Calibration received at FLEX-CELL PRECISION with the delivery of the item(s) calibrated must contain the following:

- Name and Address of calibration supplier
- Reference to unique identifier (i.e., Model Number, Part Number, Serial Number, Asset Number as applicable) of item(s) calibrated and covered by the Certificate of Calibration.
- A statement attesting to the compliance to required calibration system requirements of ISO/IEC 17025 and/or ANSI/NSCL Z540-1 (ANSI Z540.3).
- Stamp and/or Signature (electronic signature format permitted) by an official of the Supplier.

All Certificates of Calibration submitted by the Calibration Service Provider are subject to final review and approval at the FLEX-CELL PRECISION facility.

Q47 Counterfeit Part, Material, and Work Avoidance and Certification: The supplier's Certification of Conformance represents that the shipment does not contain any 'suspect' or 'known' Counterfeit Part, Material, or Work' and ensures that parts, material, or work are procured only through Original Equipment Manufacturers (OEMs)/Original Component Manufacturers (OCMs) or their Franchised Distributors or Authorized Supplier. Any use of other than an Authorized Supplier requires FLEX-CELL PRECISION written approval prior to procurement and use, which shall be contained within the deliverable data package. The supplier shall verify the procurement source and associated certifying documentation. Supplier's receiving inspection process shall utilize incoming inspection or test methods, or both, to detect potential counterfeit parts, material, or work. The supplier shall flow this clause in its entirety or equivalent (i.e., replacing "FLEX-CELL PRECISION" with "supplier's name") down to all lower tier subcontracts to prevent the inadvertent use of Counterfeit Parts, Material or Work. When an Authorized Supplier is not utilized by the supplier's lower tier, the supplier shall provide a copy of the risk assessment and their written approval within the deliverable data package.



Supplier Quality Manual (Quality Clauses)

Q48 Supplier Awareness: The following is being communicated to external providers (i.e., Supplier) in support of FLEX-CELL PRECISION's Quality Management System and continued improvement:

KEEP a. FLEX-CELL PRECISION's Quality Policy states, in part... Flex-Cell Precision, Inc. manufactures products which meet or exceed customer requirements.

b. FLEX-CELL PRECISION Suppliers maintaining a Product Quality Rating of $\geq 90\%$ and an overall Delivery Rating of $\geq 90\%$ support FLEX-CELL PRECISION's goals of: "Increased Customer Satisfaction"; "Reduced Non-Conformance"; and "On Time Delivery to Customers".

c. Accuracy and compliance with Purchase Order requirements by external providers contribute to the overall effectiveness of FLEX-CELL PRECISION's Quality Management System by improved performance and meeting mutually beneficial Quality Objectives. External providers contribute to product safety by supplying products and/or services in compliance with requirements.

Q49 Supplier Code of Ethics: FLEX-CELL PRECISION will conduct business in compliance with all applicable federal, state, local, and foreign country laws. We also expect all our employees and others with whom we do business (i.e., you the Supplier) to conduct their business activities with the utmost integrity, honesty, and to maintain high ethical standards. FLEX-CELL PRECISION has a formal Code of Ethics. It is expected that our Suppliers have and support similar practices to ensure full compliance. Many special laws and regulations apply when we do business with U.S. Government agencies and prime contractors. It is our responsibility and those whom we do business with to know, understand and comply with these laws and regulations, as well as with the Company's own high ethical standards in conducting business. Failure to comply with these rules can subject FLEX-CELL PRECISION, its employees, and those whom with do business with to serious civil and criminal liability, and penalties. We are committed to complying with all laws and regulations that apply to our government contracts and to acting ethically in all transactions with the Government and we thank you our Suppliers for your shared commitment to meeting these principles.

Q50 No Outsourcing Permitted: Unless otherwise approved, in advance and in writing, by FLEX-CELL PRECISION Quality Assurance Management and Buyer, the Seller is NOT permitted to outsource the work (i.e. manufacturing and/or altering of items governed by a



F0052
Rev. A
QM001 Section 8.4

Supplier Quality Manual (Quality Clauses)

FLEX-CELL PRECISION provided Drawing or Specification) associated with this Purchase Order.

Q52 Records Retention: Seller's records, supporting conformance to FLEX-CELL PRECISION Purchase Order requirement, shall be maintained and available for review by FLEX-CELL PRECISION, FLEX-CELL PRECISION Customers and/or Regulatory Agencies, upon request. Unless extended record retention requirements are specified elsewhere in this Purchase Order or attachments (e.g., Drawings, Specifications, FLEX-CELL PRECISION Customer flow-down requirements, etc.), records shall be maintained by the Seller and available for a minimum of two (2) years following the end of the calendar year in which the final delivery was made for each Purchase Order. At any time during this retention period, at FLEX-CELL PRECISION Buyer request, Seller will make available said records, or any part thereof, in support of the previously agreed upon Purchase Order requirements.