

PRECISION LLC 1009 Timothy Drive, San Jose, CA 95133

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TITLE: ELCON Supplier Purchase Order Quality Code Definition

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ELCON Supplier Purchase Order Quality Code Definition Questions regarding these Quality Codes should be directed to the responsible ELCON buyer.

Quality Code	Applicability	Description	
QA1	MFG	Supplier Quality Management System shall be compliant to and registered to ISO- 9001:2015. Material Review Authority IS NOT delegated to the supplier. All decisions to "Repair" or "Use –As-Is" and all "Standard Repair Procedures" utilized by the supplier in the performance of this order require ELCON approval prior to implementation. Supplier is required to "Flow Down" applicable purchasing document requirements including Key Characteristics and Ethical Behavior, Counterfeit Prevention, Product Safety and Product Service and Conformity to any and all SUB-TIER suppliers where required.	
QA2	MFG	Supplier Quality Management System shall be in accordance with ISO-9001:2015 although registration is not required. Material Review Authority IS NOT delegated to the supplier. All decisions to "Repair" or "Use –As-Is" and all "Standard Repair Procedures" utilized by the supplier in the performance of this order require ELCON approval prior to implementation. Supplier is required to "Flow Down" applicable purchasing document requirements including Key Characteristics and Ethical Behavior, Counterfeit Prevention, Product Safety and Product Service and Conformity to any and all SUB-TIER suppliers where required.	
QA2A	MFG	Supplier Quality System shall meet the requirements of MIL-Q-9858. Material Review Authority IS NOT delegated to the supplier. All decisions to "Repair" or "Use –As-Is" and all "Standard Repair Procedures" utilized by the supplier in the performance of this order require ELCON approval prior to implementation. Supplier is required to "Flow Down" applicable purchasing document requirements including Key Characteristics and Ethical Behavior, Counterfeit Prevention, Product Safety and Product Service and Conformity to any and all SUB-TIER suppliers where required.	
QA3	DIST	Certificate of Conformance (C of C)	
	MFG	Shall include:	
		 The identify of the Manufacturer and Manufacturer's Production Lot Number / Work Number / Plating Batch Number or other manufacturer's traceability identification (as applicable). ELCON Part Number and Revision Letter, PO Number and Quantity per traceability method as a minimum. 	
		 3) Identification of deviations or waivers or identifications of RMA / rework / repaired status (as applicable). 	
		4) The signature of an authorized company representative.	
QA4	MFG	Manufacturer shall provide a copy of a complete first article dimensional measurement data with delivery. 100% feature measurement required. First Article (F/A) is required for first time build, drawing revision changes. ELCON reserves the right of rejection of a manufacturer's F/A based upon dimensional verification. First Article dimensional data with deliveries is required until such time that the manufacturer submits acceptable first article data. Upon approval of the manufacturer's first article data, the manufacturer need only provide a copy of the manufacturer's internal final inspection results indicating the deliverable material lot is acceptable to the manufacturer for delivery to ELCON.	
QA5	MFG	100% Visual Inspection in accordance with the purchase order/ drawing requirements.	
QA6	MFG	ELCON's Final Source Verification –Products order under this purchase order/ contract are subject to source verification by ELCON's quality representative at supplier's facility. Verification shall be at "Final "which shall be considered prior to packaging for shipment or	

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One signed hardcopy maintained by Document Control. Master document maintained electronically. All printed copies, other than the one maintained by Document Control, are considered reference material only.



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Quality Code	Applicability	Description
		as otherwise indicated on this purchase order/ contract. Supplier shall notify ELCON by email or FAX at least five (5) working days in advance of the required source activity.
QA7	DIST MFG	Acceptance Test Results- Supplier shall include with each shipment a copy of the results of the lot or item acceptance test required by the applicable specification.
		The report shall include the principal specifications, including revision numbers or letters, which govern the production of the item. Where quantitative limits are established by the specification, the report shall indicate the actual values obtained during testing. Test reports shall include the control identity (e.g. lot, serial number) of the material or item tested. If Supplier is not the original manufacturer, Supplier shall furnish the manufacture's test report as described above.
QA8	DIST	Raw Material Test Results- Supplier shall include with each shipment the raw material
	MFG	manufacturer's test report that states the lot of the material furnished has been tested, inspected, and found to be in compliance with the applicable material specifications.
		The test report will list the specification, including revision number or letters, to which the material has been tested and/or inspected and the identification of the material lot to which it applies.
QA9	MFG	When DPA (DESTRUCTIVE PHYSICAL ANALYSIS) is required, samples shall be segregated and photographic report shall be supplied.
QA10	MFG	Plating Thickness measurement data to be provided with delivery. Final and under plate data required including plating specification and revision.
QA11	MFG	Manufacturer to provide electrical or mechanical test data, as applicable, in accordance with the drawing requirements.
QA12	MFG	Government Source Inspection is required prior to shipment from your facility. Notify your respective government source inspector upon receipt of this purchase order to schedule inspection.
QA13	MFG/DIST	Age Sensitive Material. Expiration Date and Storage Instructions shall be clearly identified on material packaging. Product with LESS THAN 60% of shelf life remaining shall not be delivered against this purchase order.
QA14	Calibration / Repair	Supplier Quality Management System shall be in accordance with ANSI/ISO-17025 although registration is not required. All calibration and repair shall meet the requirements of ANSI/NCSL Z540-1 or ISO 10012 or as otherwise specified in this purchase order/ contract.
QA15	MFG	Supplier shall implement a "Foreign Object Detection" Plan to detect and prevent foreign object entrapment within cavity devices / assemblies.
QA16	MFG/DIST	Inspection and Test Record Retention – Supplier and supplier's subcontractors shall maintain verifiable objective evidence of all inspections and test performed, obtained results, and dispositions of non-conforming articles. These records shall be identified to associated articles, including heat and lot number of materials, unit or lot serialization when applicable, and shall be made available for review to ELCON, authorized ELCON representative(s) or ELCON's customer upon request. Unless extended retention requirements are specified elsewhere in the contract, records shall be retained by supplier in a safe, accessible location for a period for five (5) years from the date of completion of the purchase order.
QA17	MFG / DIST	Safety Data Sheet compliant to Globally Harmonized System to be provided with delivery.



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Quality Code	Applicability	Description	
QA18	MFG/DIST	Material Chemical Composition (analysis of material make up) and C of C shall be provid with delivery	
QA19	MFG/DIST	Certification that the material was milled / final melted within the United States or a Qualifying Country as indicated within DFARS 252.225-7014 Alt 1 shall be included with the C of C.	
QA20	MFG/DIST	Function Test Required. Thickness, adhesion, and quality are acceptance tests and shall be performed on parts, or samples representing parts on each lot. Method for adhesion tests shall be documented Plating periodic tests may include corrosion resistance, solderability, internal stress, composition and hydrogen embrittlement results may be required.	
QA21	MFG	Select at random sample pieces in compliance with ANSI/ASQC Z1.4-2003 sampling plan	
QA22	MFG/DIST	Parts are free from defect, scratches, pits, no conducting inclusions and roll or die marks that will adversely affect the appearance and the performance of coatings applied to the basis material.	
QA23	MFG	Certify as RoHS compliant or state exceptions.	
QA23A	MFG DIST	Pure Tin Finish Prohibited. Tin alloy component lead finish shall be no less than three percent (3%) lead (Pb) alloy; tin / lead alloy used as a final finish or as an undercoat shall be no less than three percent (3%) lead content by weight. Components with Tin <u>alloys other</u> than lead require the Tin (Sn) content be less than or equal to 97 percent and require the supplier to notify Cobham (REMEC) of the alloy and may require refinishing with a Tin / Lead (Sn/Pb) alloy prior to delivery. After supplier notification to the ELCON, the supplier should expect written direction from ELCON.	
QA23B	MFG	Use of components with PURE TIN termination or lead finishes is unacceptable.	
QA24	MFG	 Without prior approval by ELCON in writing, supplier shall not make any changes in the following from end items accepted by ELCON under the Procurement Document and found to be satisfactory for ELCON's intended purposes: changes in product design, composition, configuration (including form, fit, function, or interchangeability), material, fabrication, SUB-TIER supplier, place of manufacture, or outside processing. Supplier shall flow down this requirement to all SUB-TIER suppliers. Elcon shall ensure where required that both the Elcon and all suppliers use customer –approved special process source. For every proposed change, the supplier shall submit supporting data, which verifies that, it will not degrade the quality or reliability of the product. The supporting data shall include as a minimum (a) the reasons for the change, (b) considerations of the effect of the change upon performance, failure rate, traceability, reliability and storage life, and (c) analysis and/or test evidence which shows the effect of the proposed change. 	
QA24A	MFG	Supplier shall notify ELCON of any changes in product design, fabrication methods, materials or processes from those used by supplier at time of supplier's quotation or offer to ELCON which resulted in the Procurement Document.	
QA25	MFG DIST	ELCON, ELCON's customer and regulatory authorities have right of access to supplier's all facilities involved in the order and to all applicable records.	
QA26	MFG	Supplier shall provide and maintain calibration program that is conformance with ISO10012 or ISO17025.	



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Quality Code	Applicability	Description	
QA27	MFG DIST	 DFARS Compliant : Per DFARS 252.225-7014, Preference for Domestic Specialty Metals, Alt 1 has the following basic requirements: 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". 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. As of the date of this article, the qualifying countries are Australia, Belgium, Canada, Denmark, Egypt, Germany, France, Greece, Israel, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom and Northern Ireland. 	
QA28	MFG / DIST	When added to Purchase Order access to the facility must be granted to the NSA and its contractors to perform quality surveys and inspections wherever materials and/or services are rendered.	