



Supplier Quality Procurement Requirements (SQPR)

REVISION DATE: 4/2/2019

NOTE: Futuramic is responsible for ensuring all items procured from its supply base including customer directed sources. It is the responsibility of the supplier to perform documented contract reviews where risks shall be considered and mitigation of those risks prior to acceptance of the Futuramic purchase order.

These SQPR requirements are in addition to the Terms and Conditions as stated on the Futuramic purchase order. Where there is conflict between the two documents, the SQPR's will take precedence.

The note code numbers specified on a supplier's purchase order must be reviewed for compliance prior to acceptance of hardware or services by Futuramic Tool and Engineering receiving Inspection.

An explanation of each note code requirement is contained herein. Standard note codes are identified with an "S" and are to be adhered to by all suppliers when applicable. Additional codes will be specified on the purchase order, as applicable.

STANDARDS:

100S LIFE-LIMITED PRODUCTS. Supplier that provides life limited product shall mark the life information on each container per its respective specification. If life data marking requirements are not covered by specifications, the supplier shall mark each container with date of manufacture and expiration date. **Upon receipt by Futuramic, the remaining useful life must be 70% or more of the total life limit.**

101S MATERIAL SAFETY DATA SHEETS. Supplier that provide hazardous products shall forward Safety Data Sheets, as applicable, with the shipment to the attention of: Safety and Training Coordinator.

102S FUTURAMIC OFFLOAD SUPPLIERS. Supplier shall provide:

- **CERTIFICATION OF CONFORMANCE.** A certificate of conformance is required stating, "All blueprint and/or specification requirements have been met" and that "inspection records, material certifications and/or special process records (when applicable), are on file and available for review."
- An authorized agent of the supplier quality organization, including the agent's title, must sign this certification.
- This certificate must contain the Purchase Order number, line item number, release number, part number, revision level, serial, factory or temporary serial numbers if assigned, raw material heat code, quantity shipped and reference to any Non Conformance documents.

103S NOTIFICATION RESPONSIBILITIES. See Terms and Conditions

104S EYE EXAMS. Futuramic requires that eye exams be conducted annually by medically qualified personnel for all supplier personnel conducting visual inspection.

- Jaeger #1 @ 12" – Welders and Certified Weld Inspectors
- Jaeger #2 @ 14" – Visual and Dimensional Inspectors

105S WORK TRANSFER. The supplier shall have a gated process for the control of work transitions from one supplier facility to another facility, from one supplier to a different supplier.

The gated process for the control of work transition shall:

- Ensure Futuramic approval is obtained prior to any change implementation.
- Establish timely gates and accountability within the work transition activity to assess and mitigate risks to achieve goals.
- Ensure compliance with Futuramic substantiation requirements related to the new work transition product.
- Address the requirements for receipt and containment of first new work transition product.
- Ensure notification to Futuramic of first delivery of new transition product.

The supplier shall formally request, the engineering substantiation requirements associated with the work transition of any part, part family of product(s) or any associated services, related to any Futuramic Purchase Order.

106S REVISIONS OF SPECIFICATIONS. Suppliers shall work to the latest revision of all industry standards/specifications. When Futuramic flows down customer standards/specifications/CAD Models, these can be obtained by contacting the Futuramic Data Manager. These documents are to be controlled during use and must be discarded at fulfillment of the purchase order.

107S CONTROL OF RECORDS. See Terms and Conditions

108S NONCONFORMING MATERIAL. Any Nonconformance or deviation to the Purchase Order requirements shall be reported using the Subcontractor Corrective Action Request. Contact your purchasing agent for a copy of this form. Supplier must receive disposition in writing prior to shipping product. All costs associated with non-conforming material, including freight, handling, material replacement, inspection, rework, etc. may be charged back to the supplier.

Please provide detailed information about the nonconformance:

- Provide pictures for cosmetics (worth a thousand words)
- Dimension as stated with its tolerance and how far away from tolerance band
- If specification controlled: give spec name, revision, page and brief statement of concern

Note: TAG parts identifying them as nonconforming and include NCR number on tag and on shipper when returning to Futuramic.

109S TRACEABILITY. Futuramic material identified by lot number, material type, specification and applicable revision identifier or date of issue, heat number, serial number, etc., must be maintained for traceability. Mixing of lots is not acceptable.

110S SAMPLING. Futuramic reserves the right to approve or disapprove sampling plans and/or process controls used for product acceptance. Sampling plans and controls must be approved by the Futuramic Quality Organization prior to use. In the absence of an approved sampling plan, 100% inspection is required.

111S RIGHT OF ENTRY. Supplier shall provide Futuramic and its customers access to any and all areas, including those of sub-tier suppliers where work is being or is scheduled to be performed under this purchase order.

112S HANDLING, STORAGE, PACKAGING, PRESERVATION & DELIVERY

Material Handling. Parts/Materials shall be protected in all phases of processing to eliminate handling damage. Once raw materials begin their process into parts, metal-to-metal contact is prohibited. Care and use of protective devices shall be considered.

Cleanliness/FOD. Ensure all parts/materials shipped are free from foreign material, debris and contaminants on all surfaces, particularly internal machined and cored passages and crevices, which may result in potential FOD. Part openings shall be controlled at all times during processing to prevent introduction of foreign objects.

The supplier shall maintain a FOD control program assuring work is accomplished in a manner preventing foreign objects or material from entering and remaining in deliverable items. Maintenance of the work area and control of tools, parts, and material shall preclude the risk of FOD incidents. The supplier shall document and investigate all FOD incidents assuring elimination of the root cause. Futuramic shall have the right to perform inspections and/or audits as a method of verification that the supplier's FOD control program is functional, documented, and effective.

Storage. Storage facilities shall be provided as necessary to isolate and protect materials pending use or shipment. Condition of material in stock shall be assessed for degradation periodically.

Preservation. When preservation of parts/materials is a requirement of the design documentation, fluids used shall be checked regularly for contaminants and maintained free from contaminants through the use of filtering or replacement of the fluid.

Packaging. Packaging methods shall take into consideration the weight, physical configuration and method of transportation to preclude damage to parts. Standard industry practices such as ATA Spec 300 can be used as a reference when developing methods. Ensure packing materials do not induce contamination to parts and assemblies.

Prohibited packing materials includes, but is not limited to, newspaper print, loose material small enough to block or become embedded into internal cavities, holes and crevices and glue bearing materials.

113S PROHIBITED MATERIALS. Supplier shall ensure that delivered hardware shall not contain any materials, nor shall they require the use of these materials for operation, maintenance, storage, transportation or service of the hardware per EPA guidelines. Go to the EPA website for a current listing of prohibited materials including limited use materials.

114S PREVENTION OF COUNTERFEIT PARTS. See Terms and Conditions

115S CRITICAL PROCESS SUPPLIERS. When the purchase order specifies any of the following critical processes the following is required:

Aluminum and Steel (Arc and Resistance) Welding and Brazing

- Supplier shall submit weld procedures and supporting qualification test data in accordance with the applicable specification including weld personnel certificates and eye exam results.
- Supplier Certified Weld Inspector to provide inspections to applicable specification requirements. If supplier does not have a CWI on staff inspection will be performed by a Futuramic CWI.
- Visual inspection per specification requirements by supplier in any case.
- Changes to previously approved weld procedures must be submitted for re-approval.
- A certificate of conformance shall be provided with the shipment stating that the work was performed to the approved weld procedure, specification, revision letter, purchase order number, lot code or heat numbers and serial numbers if applicable.

Nondestructive Testing- Radiography, Magnetic Particle, Liquid penetrant, Ultrasonic

- Supplier shall submit a part specific test procedure and any supporting data. Supplier shall not perform work until STP is approved.
- Changes to previously approved test procedures must be submitted for re-approval.
- Supplier to furnish a test report stating that the examinations were performed using the approved STP.
- The certification shall also include:
Type of test and coverage, applicable specification, acceptance criteria, name and address of company performing the tests and statement of process compliance.

Plating

- The supplier shall provide a certificate stating the plating was performed in accordance with the applicable specification. When baking for hydrogen embrittlement relief is required, a statement that the items were baked at the required temperature and minimum time specified by the applicable specification.
- The Certification of Conformance shall also include the:
Part number, PO number, specification and revision, serial numbers if applicable, baking temperature and time, a statement that the baking started within 3 hours of plating completion, printed name, signature, title of supplier representative and report date.

Painting

- The supplier shall provide a certificate stating the painting was performed in accordance with the applicable specification.
- Paint thickness of primers and top coat separately inspected on actual parts.
- Paint lot/batch numbers and expiration dates.
- Part number, PO number, specification and revision, serial numbers if applicable, printed name, signature, and title of supplier representative and report date.

Heat Treatments

- The supplier shall provide a certificate stating the heat treat was performed in accordance with the applicable specification.
- Include any test data showing conformance to specification such as tensile testing.
- Supplier shall conduct a visual inspection for cracks or other defects after processing.
- When purchase order or specification specifies a hardness range for the material, actual results shall be recorded on the certificate.
- The certificate of conformance shall include the part number, PO number, specification and revision, serial numbers if applicable, printed name, signature, and title of supplier representative and report date.

116S RAW MATERIAL SUPPLIERS. Suppliers of Roll Form Sections, Extrusions, Sheet, Plate, Bar, Tube etc. shall maintain a quality management system in compliance with AS9100 (Latest Revision).

- **MATERIAL CERTIFICATION.** A material certification shall be provided with the shipment stating the specification and revision number of the material, purchase order number, lot code or heat number and serial numbers if applicable.
Traceability to the original mill/manufacturer and date of shipment.
Actual test results as required by the specifications, such as mechanical test data, chemical properties, hardness, etc., shall accompany the certification.
This certification must be signed by an authorized agent of the supplier including the agent's title.

117S COMMERCIAL OFF THE SHELF (COTS) SUPPLIERS. Commodities/Parts generally purchased out of a catalog/website such as McMaster Carr, supplies from Home Depot, non-military EEE or non-Military fasteners, hardware, light bulbs, filters etc. A packslip is acceptable with reference to the OEM and part number traceability. NO certifications required.

118S INDEPENDENT DISTRIBUTERS. Nuts, bolts, washers, fasteners etc. ordered to military, federal or industry specifications or standards (e.g., MS, AN, NAS, etc.) shall maintain a quality management system registered to AS9120 (latest version). AS9100 is acceptable supplemented with a distributor clause.

- **CERTIFICATION OF CONFORMANCE.** A certificate of conformance is required stating, “All blueprint and/or specification requirements have been met” and that “inspection records, material certifications and/or special process records (when applicable), are on file and available for review.”
An authorized agent of the supplier quality organization, including the agent’s title, must sign this certification.
This certificate must also contain the Purchase Order number, line item number, release number, part number, revision level, serial, factory or temporary serial numbers if assigned, raw material heat code and quantity shipped.

119S SUPPLIER SUB-CONTRACTING. Subcontracting must be supported and requires strict quality assurance measures to ensure all requirements have been flowed down from our customer. Futuramic Quality Assurance must be notified in writing when a sub-tier to the supplier will be used. Prior to proceeding, the supplier must provide to Futuramic Purchasing, evidence that the requirements of this purchase order has been flowed down to the sub-tier, including key characteristics when applicable.

120S AWARENESS. The supplier shall ensure that persons doing work under the suppliers control to satisfy the requirement of this purchase order are aware of their contribution to:

- product or service conformity
- product safety
- the importance of ethical behavior

121S CALIBRATION SYSTEM. Suppliers performing dimensional, testing, special processing (any measurement taken to ensure conformance to requirements) shall maintain a calibration system that is traceable to NIST, NPL or another foreign equivalent.

122S SAFEGUARDING COVERED DEFENSE INFORMATION AND CYBER INCIDENT REPORTING

In accordance with DFARS 252.204-7012 Safeguarding Covered Defense Information and Cyber Incident reporting(Oct 2016), DoD contractor must meet the security requirements specified in the National Institute of Standards and Technology special publication NIST SP 800-171 “Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations”. The implementation date for this requirement is no later than December 31,2017. DFAS 252.204-7012 is a required flow-down for operation critical support or subcontractor performance that involves covered defense information. Supplier response to solicitations and/or accepting orders or contracts from Futuramic Tool and Engineering fully satisfies the applicable obligations as set forth in such flow-down clauses. Additional information is available at <https://www.acq.osd.mil/dpap/dars/dfars/html/current/252204.htm>.

123S FUTURAMIC SUPPLIED MATERIAL. When material is supplied by Futuramic for processing, a certification shall be provided with the shipment stating the material type (i.e. AMS 5662), the material heat/lot number and the quantity received as it appears on the Purchase Order. Material substitutions are prohibited without written approval by Futuramic.

ADDITIONS:

200 FIRST ARTICLE INSPECTION (FAI). Applies to the first delivery for this part number/revision level unless otherwise defined in the Purchase Order. The subcontractor shall furnish first article sample(s) produced using the material, tooling, processes and planning to be used for subsequent deliveries. The first article shall be tagged and identified as a first article sample, and submitted with a FAI report. The FAI report shall reflect actual readings and show compliance to the drawing, related specifications and in compliance with AS 9102. When first article acceptance testing is applicable, prior notification must be given to Futuramic Quality Organization to plan and schedule witness to the test.

201 INSPECTION/LAYOUT REPORT. An inspection layout report, identifying the characteristics produced on the purchased part(s) with the applicable inspection results, is required with the shipment. The report is to be signed, or stamped, and traceable to the person performing the inspection. Failure to send inspection/layout report may result in delayed payment and/or quality rating adjustments.

202 Left open intentionally

203 FUTURAMIC AND/OR CUSTOMER SOURCE INSPECTION REQUIRED. Prior to shipment of materials, parts or services, the Futuramic Purchasing agent must be notified to schedule Quality Assurance for source inspection and initial acceptance of the shipment. Acceptance does not imply that the shipment will not be rejected upon receiving inspection at Futuramic should a deviation be found.

NOTE: At times Futuramic will require that in-process inspections, audits, systems surveillance as part of the verification of conformance be performed. Futuramic reserves the right to perform such inspections on the supplier's premises.

204 DROP SHIPMENT REQUIREMENTS.

On the date of shipment, forward the following documents to Futuramic: Attention: Purchasing Department

- 1) Signed Bill of Lading as proof of shipment
- 2) Packing slip, which must reference the purchase order number to consignee as stated above
- 3) Material mill certifications

205 REQUIREMENTS FOR RECEIVING DROP SHIPPED MATERIALS.

On the date of receipt, forward the following documents to Futuramic: Attention: Purchasing Department

- 1) Signed Bill of Lading as proof of the receipt of shipment

206 CERTIFICATION OF CONFORMANCE (FURNACE THERMOCOUPLE WIRE). A certification of conformance is required stating:

- 1) Conformance to:
 - a. ISO 10012 Quality Assurance for Measuring Equipment, or ANSI/NCSL Z540-1 American National Standard for Calibration - Calibration Laboratories and Measuring and Test Equipment - General Requirements
 - b. AMS 2750, ASTM E 207 and ASTM E 220
- 2) Traceability to the NIST No. and date of test
- 3) Actual findings, error and/or correction factors
- 4) Calibrate both ends

207 CERTIFICATE OF CONFORMANCE (PYROMETRY CALIBRATION). A certificate of conformance is required stating:

- 1) Conformance to:
 - a. ISO 10012 Quality Assurance for measuring equipment, or ANSI/NCSL Z540-3 American National Standard for Calibration - Calibration Laboratories and Measuring and Test Equipment - General Requirements

- b. ISO 9003 or ANSI/ASQC Q9003 - Quality Systems-Model for Quality Assurance in Final Inspection and Test
- 2) Certified and traceable to the NIST No. and date of test
 - 3) Actual findings
 - 4) AMS 2750 if for pyrometry.

208 PROCESS APPROVAL REQUIREMENTS. This Purchase Order contains a process specification that requires approval. Work shall not proceed until approval is granted by the Futuramic Quality Organization.

209 MATERIAL TESTING. A sample of the material in its finished condition must be supplied with this shipment.

210 BOEING DIGITAL PRODUCT DEFINITION. Supplier shall conform to Boeing document D6-51991 “Quality Assurance Standard for Digital Product Definition at Boeing Suppliers” and obtain CMI approval as DPD-Capable if Supplier receives, downloads, and/or uses DPD geometry in any format.

- If Supplier receives DPD geometry in MBD format or derivatives of, Supplier is required to obtain Futuramic Tool & Engineering approval as MBD-Capable.
- If Supplier provides DPD geometry to Suppliers sub-tier suppliers in any format, Supplier shall impose Boeing document D6-51991 as a requirement and is responsible for its sub-tier supplier’s conformance.
- If Supplier provides DPD geometry in any format to Supplier’s sub-tier suppliers, Supplier shall comply with all applicable export laws.

Futuramic Tool & Engineering’s customer reserves the right to survey and/or review the supplier’s DPD system to verify effectiveness of the supplier’s documented DPD processes and procedures based on Boeing document D6-51991.

211 BAE QUALITY REQUIREMENTS. Supplier shall follow the requirements noted in the latest published BAE Supplier Quality Assurance Manual (SQAM) and . These requirements will take precedence over Futuramic Supplier Quality Assurance Requirements (SQPR). See the link on the Futuramic supplier portal.

REVISION HISTORY

4-2-2019 – Clerical corrections throughout the document.

- Note code 210 updated to include additional instructions to meet Boeing DPD standards.
- Approved for release on 4-2-2019 *Terrance Reese*