

# Crater Industries, LLC

## SUPPLIER QUALITY ASSURANCE REQUIREMENTS

This form establishes the specific quality requirements of Crater Industries, LLC. These requirements are in addition to those set forth in any other contracted document. The provisions indicated herein are an integral part of each purchase order.

Compliance with the requirements of these clauses does not reduce supplier responsibility for furnishing materials and services which fully comply with all applicable drawing and specification requirements nor does it guarantee acceptance of materials or services by Crater Industries. In the event that materials or services are found to be defective and cannot be demonstrated by the supplier to be in conformance with purchase order requirements, Crater Industries shall have the right to reject them.

### REQUIREMENTS

#### 1) Certification of Compliance

The supplier provides, with each shipment, a Certificate of Compliance traceable to the responsible supplier contact by signature or printed name. It must show Crater Industries' purchase order number, Item(s) part number and revision level as applicable, and the supplier reference number if any. This document certifies that material or parts furnished have been manufactured and verified in accordance with all applicable specifications as stated in Crater Industries' Purchase Order. This document also certifies that objective evidence of inspection and testing verifications is on file and available for review.

#### 2) Changes

The supplier does not substitute "equivalent" items in place of those items on the Purchase Order. If an equivalent item to a specified material is to be supplied, it is offered with supporting documentation prior to the shipment. All changes relating to part number, drawing specification, process specifications, delivery or price must be agreed to by Crater Industries' Purchasing Dept. and confirmed by a change to the Purchase Order. **Note:** Unless otherwise specified on the purchase order, raw material produced in accordance with superseded or superseding specifications are acceptable. Age-sensitive material (shelf life item) is precluded from this noted exception.

#### 3) Packaging

The supplier assures that all items are efficiently and economically packaged for the method of transportation and type of handling involved. Unit and intermediate packaging shall be employed as necessary to prevent damage or deterioration.

#### 4) Limited Shelf Life Items

The supplier identifies all materials and articles which have definite characteristics of quality degradation with age or environment. When environment is a factor in determining useful life, the identification shall include the storage conditions required to achieve the stated life. (i.e. temperature, humidity, etc.). A minimum of 75% of the applicable material/article shelf life remains upon receipt of the material by Crater Industries.

#### 5) Right of Entry

Crater Industries, Crater Industries' customers and/or representatives of involved regulatory agencies are allowed to inspect any and all of the material and/or records related to the parts included on Crater Industries' Purchase Orders at the supplier's, manufacturer's and/or sub-supplier's facilities.

#### 6) Traceability Documentation

When the Certification of Compliance from the supplier is based on Certifications of Tests and Inspections received from the manufacturer or another supplier, the supplier ensures that these Certifications are received and retained, and that adequate traceability exists to the manufacturer of the products.

#### 7) Records

Crater Industries requires the supplier and/or sub-supplier to maintain records of all operations and procedures. Such records shall be legible and stored in such a manner as to retain legibility. Records shall be retained for a minimum of ten (10) years and will be made available for review by Crater Industries authorized personnel at any time. All obsolete records are to be destroyed by shredding, burning, or any other like method to render them unusable.

#### 8) Specifications

Any use of Technical Data, drawings or specifications other than for manufacture of the ordered items is expressly prohibited. Any use of or transfer of **ITAR** controlled technical data other than released for production is expressly prohibited.

#### 9) First Article Inspection

Purchase Orders marked with "First Articles Required" indicate First Article Inspection (FAI) shall be performed in accordance with the requirements of AS9102 ("Aerospace First Article Inspection Requirement") as per the revision level established at time of purchase order issuance. First Article Inspection shall be performed **prior** to product acceptance by Crater Industries. Crater Industries disclaims responsibility for any parts shipped prior to approval of first articles. Approval of FAI part(s) does not guarantee acceptance of subsequent parts. **Note:** Use of forms from a previous AS9102 standard revision (e.g., AS9102A) is acceptable, provided the current form instructions are utilized. The following optional fields in the AS9102 FAI Report Form 1 are considered mandatory: 12, 21, and 22. If the supplier already has FAI documentation on file for the same configuration of product noted in the purchase order and is still compliant with AS9102, Paragraph 4.6 requirements, a new FAI is not required.

#### **10) Measurement Equipment Calibration**

All tests and measurements are made with equipment that has been calibrated and certified to the manufacturer's specifications and by suitable methods to assure traceability to the National Institute of Standards and Technology or equivalent government agency. Records regarding equipment calibration must be maintained.

#### **11) Quality System Requirements**

Supplier and/or sub-supplier maintains a documented system of procedures designed to ensure compliance with Purchase Order requirements and provide for the monitoring and improvement of company operations relating to product quality. The top management of the supplier facility is responsible for organizing the Quality function within the company in an effective manner. Crater Industries is notified whenever significant changes to the supplier's Quality System are implemented.

#### **12) Training**

The supplier shall guarantee that the personnel making and inspecting the parts are qualified to perform these tasks. Training records and experience information shall be made available upon request. Supplier must ensure that employees are aware of the importance of ethical behavior, their contribution to the product or service, and to product safety.

#### **13) Foreign Object Debris/ Damage (FOD)**

Supplier shall maintain good housekeeping and where applicable a Foreign Object Debris/Damage (FOD) prevention program, to preclude introduction of foreign objects into any deliverable item. Supplier shall employ appropriate housekeeping practices to assure timely removal of residue/debris generated during manufacturing operations or tasks. Supplier shall determine if sensitive areas that have a high probability for introduction of foreign objects should have special emphasis controls in place for the manufacturing environment.

#### **14) Notification of Nonconforming or Unsafe Product**

The supplier and/or sub-supplier notifies Crater Industries in writing of any occurrences of nonconforming product, processes or other anomalies in the product.

The supplier and/or sub-supplier immediately notifies Crater Industries of any material defect or condition (within their knowledge) that may have been shipped to Crater Industries that could result in an unsafe condition in an aircraft application.

#### **15) Product or Process Changes**

The supplier notifies Crater Industries of any changes that affect form, fit or function of any supplied part(s) or significant changes in the process(es) or tools (mold, etc.) involved in the manufacture of the supplied part(s). This includes notifying Crater Industries when the supplier changes his production methods or location.

#### **16) Part Obsolescence**

The supplier notifies Crater Industries of impending part obsolescence at least 6 months prior to the "end of life" date.

#### **17) Supplier Flow Down of Requirements**

As applicable, Crater Industries requires that suppliers must flow down applicable quality standards to sub-tier suppliers, including ITAR compliance requirements, key characteristics, customer approved special process sources, or corrective actions where applicable. Both supplier and/or sub-supplier must retain all records and documentation pertaining to Crater Industries P.O. for a minimum of ten (10) years from shipment date.

#### **18) GIDEP**

Crater Industries requires that manufacturers and distributors of electronic components be members of GIDEP. Distributors of mechanical components such as fasteners shall also be GIDEP members. Other sub tier suppliers who are not GIDEP members shall immediately notify Crater Industries if any of their products become the subject of a GIDEP alert.

**19) Counterfeit Part Prevention**

A Counterfeit Part Prevention program must be in place. All material must have traceability back to the original manufacturer with the original Certificate of Conformance.

**20) PROHIBITED MATERIAL (Pure Cadmium, Pure Zinc, Pure Tin)**

All constructions and finishes containing pure cadmium or pure zinc are prohibited. In addition, constructions and finishes containing pure tin are prohibited unless they contain a minimum of 3 weight percent lead.

Sellers shall certify that the above noted prohibited materials are not present in supplied hardware.