## Harmony Castings LLC. Quality Assurance Clauses

## All purchase orders are subject to the following referenced provisions as specifically noted on each individual purchase order or customer drawing.

#### QC-1 AS9100 or ISO9001

The seller shall provide and maintain a system that complies with Specification ISO 9001 'Quality Management System - Requirements'' or "AS9100 "Aerospace Standard." Notwithstanding the provisions of this clause, the seller is in no way relieved of the final responsibility to fumish the supplies or services specified.

## QC-2. INSPECTION REQUIREMENTS & NON-CONFORMING PRODUCT

The seller maintains an inspection system to ensure that all items furnished meet customer requirements. The seller is responsible for material acceptability and performance. Supplier shall notify Harmony Castings of any non-conforming process or product, and any major process changes. Q.A. may require corrective action for any products received that do not conform to all required specifications and/ or referenced documents. Q.A. shall determine disposition of rejected items & advise purchasing, who shall undertake all required subsequent actions. If a Supplier Corrective Action Request (SCAR) is issued, the supplier must respond within 14 days; or they will be unapproved for further procurements until the SCAR is satisfactorily resolved.

# QC-3. SOURCE SURVEILLANCE BY HARMONY CASTINGS LLC QUALITY REPRESENTATIVE

All items covered by this Purchase Order are subject to source surveillance by a Harmony Castings' Quality Representative. This will include surveillance of the seller's procedures, and facilities. The seller shall furnish, at no cost to Buyer, necessary facilities and equipment, supply data, and perform tests as required by applicable drawings, specifications, and inspection instructions under surveillance of the Harmony Castings Quality Representative. Evidence of surveillance shall accompany each shipment.

## QC-4. SOURCE INSPECTION (PHYSICAL INSPECTION BY HARMONY CASTINGS LLC)

All items covered by this Purchase Order are subject to inspection at the seller's facility by a Harmony Castings Quality Representative prior to shipment. The seller shall furnish, at no cost, acceptable facilities and equipment to the Harmony Castings Representative for his inspection. The seller shall provide no less than forty-eight (48) hours advance notice to the Buyer to permit scheduling of source inspection. Evidence of source inspection shall accompany each shipment.

## QC-5. FIRST ARTICLES AND PRODUCTION TOOLING

The 1st Article produced under this order shall be submitted for Harmony Castings Inspection prior to making further shipments. This Inspection is solely for Harmony Castings convenience and shall not waive Harmony Castings right to reject any parts not conforming to this order. Acceptance of production tooling on this Purchase Order shall be contingent upon inspection and acceptance of the submitted 1st Article. Said 1st Article must conform to all design requirements, detail specifications and tolerance limits of Specification Control Drawings or similar documents submitted with and referenced within this Purchase Order. Supplier shall safely maintain all referenced records and documents for a minimum of two years or until advised by Harmony Castings to either return or discard them.

### QC-6. TEST BARS

When test bars are required as part of Harmony Castings obligation to fulfill their purchase order to the end user the supplier shall be required to apply 2 legible test bar results to specified heats or production runs in accordance to Harmony Castings' need. This shall be provided from Harmony Castings when shipping papers are requested. OC-7. CHEMICAL TEST REPORTS – SEE OC-6

#### QC-7. CHEMICAL TEST REPORTS – SEE QC-6 QC-8 PHYSICAL TEST REPORT – SEE QC-6

## QC-9. CHEMICAL AND/OR PHYSICAL TEST REPORTS see QC-6

Each shipment, when required, must be accompanied by a legible and reproducible copy of all chemical and/or physical test reports identifiable with test parameters and products submitted. These reports must contain the signature and title of the authorized representative of the agency performing the test and must assure conformance to specification requirements.

## QC-10. ENVIRONMENTAL TEST REPORTS

Each shipment is accompanied by one (1) legible and reproducible copy of reports of actual test results identifiable with test parameters and products submitted. These reports contain the signature and title of the authorized representative of the agency performing the test and must conform to the specification.

## QC-11. STATEMENT OF CONFORMITY AND PROCESS CONTROL

If required, each shipment must be accompanied by a Certificate of Conformance referencing the P.O. & shipper number that ensures conformance to all referenced material and process specifications. Supplier must notify and obtain concurrence from Harmony Castings for any changes in either materials or processes specified on referenced Purchase Order.

#### QC-12, FUNCTIONAL TEST REPORTS

Functional tests are defined as operational inspections, e.g. mechanical, electronic, hydraulic, etc. Each shipment shall include one legible and reproducible test report of actual results identifiable with test parameters and products submitted. These reports

must contain the signature and title of the authorized representative of the agency performing the test and must assure conformance to specified requirements.

## QC-13. PROCESS CERTIFICATION

Each shipment must be accompanied by two (2) legible and reproducible copies of a certificate containing the signature and title of an authorized representative for all processes used. The certificate shall include the processing used, the specifications to which they conform, and the name of the agency that performed them if other than the seller. If parts are serialized, serial numbers must appear on the Process Certification.

Outside Processor shall safely maintain all associated records and documents for a minimum of five years unless advised by Harmony Castings to either return or discard them.

## QC-14. NONDESTRUCTIVE TEST REPORTS

Each shipment must be accompanied by two (2) legible and reproducible copies of actual Nondestructive test results identifiable with acceptance requirements and material submitted. These reports must contain the signature and title of the authorized representative of the agency performing the inspection and must assure conformance to specified requirements.

## QC.15. CERTIFICATION OF X-RAY

All parts requiring testing certification will be submitted to Harmony Castings' approved X-Ray laboratory and processed in accordance with Harmony Castings and/or Government specifications and standards. X-ray findings will be reported on an appropriate form, including the name of the reader and the signature and title of an authorized laboratory representative. The X-Ray Films and two (2) legible and reproducible copies of the report must accompany the material. An adequate method of identifying and cross referencing each report and item must be provided. The report must record the grade to which it was reviewed, the severity level of discontinuity found, and the penetrometer gage used for readability of the radiograph of X-ray.

## **QC-16. SOURCE INSPECTION - GOVERNMENT**

Government inspection is required prior to shipment from your plant. When material is ready for inspection or, if practical, ten (10) days in advance thereof notify the government representative who normally services your plant. Upon receipt of this order, promptly notify the Government Representative so that inspection can be accomplished.

### QC-17. FINAL ACCEPTANCE

Final acceptance will be based on Harmony Castings inspection and testing results at destination.

## QC-18. MATERIAL TRACEABILITY

The supplier shall certify that material furnished is from the same heat, lot or batch. as applicable. Supplier identifies each item, package, or container of shelf life material with its cure or manufacture date, expiration date, and special storage and handling conditions in addition to the standard identification requirements. Where shipments contain parts with different cure dates, are from different heats, lots or batches, separation into sub-lot and separate certification of sub-lots is required, Two (2) copies of certification shall be included with each shipment for each lot or sublot.

## QC-19. HARMONY CASTINGS FURNISHED MATERIAL

The supplier shall certify that material used in fabrication is the material furnished by Harmony Castings and is not counterfeit.

## QC-20. INSPECTION AND/OR PRODUCTION TOOLING

Seller is held responsible for the protection, calibration and care other than normal wear of all Production and/or Inspection tooling furnished by Harmony Castings for use in the performance of purchase order requirements. All tooling shall be subject to Harmony Castings surveillance and/or inspection upon notice. Said tooling, or replacement tooling of equal quality, shall be returned in an acceptable condition upon demand or notice.

## QC-21. CALIBRATION

All items furnished under this P.O. shall be accompanied by two (2) certifications of calibration stating: All Standards used arc traceable to the NIST (National Institute of Standards and Technology), ANSI-Z540 or ISO 10012-I current revisions.

### QC-22. RIGHT OF ACCESS

Supplier shall grant right of entry and access by Harmony Castings, their customer and regulatory agencies to all facilities involved in this order and to all applicable records.

## QC-23. PART IDENTIFICATION REQUIREM ENTS

Supplier ensures that all items are permanently and legibly identified. Identification requirements may include the following, as specified by purchasing or supplier documents, part number and revision level, manufacturer's identification, lot or date code, serial number, and quality.

## QC-24. INSPECTION RECORDS

Documented evidence in the form of inspection records indicating actual results in accordance with drawings, specification and or purchase order requirements must be accompanied with each shipment.

## QC-25 RECORD RETENTION

All records must be maintained for a period of 7 years for purchase orders and 7-10 years for inspection data or contractual agreement.

#### QC-26 Supplier Using Second Tier supplier

Any supplier of services for Harmony Castings LLC that may subcontract any of Harmony Castings' work to a second-tier supplier must obtain permission from Harmony Castings and flow down all applicable quality and record retention requirements to such supplier.

## QC-27 Supplier notification of change in address

All suppliers or vendors must notify Harmony Castings LLC of changes in product and/or process, changes of suppliers, changes of manufacturing facility location and obtain Harmony Castings LLC approval.

#### QC-28 SUPPLIER SHIPMENTS

All suppliers shall be required to ensure that any product Harmony Castings instructs them to ship meets all customer and Harmony Castings' requirements to include, PO, FOD, counterfeit, and quality standard for cosmetic, dimensional and other specifications mentioned on the PO.