

TPI Arcade, Inc. Quality Assurance Clauses Form QAD006 Rev. 6/22/2018

All purchase orders are subject to the following referenced provisions as specifically noted on each line item of each individual purchase order.

QC-1 AS9100 or ISO9001

The seller shall provide and maintain a system that complies with Specification ISO 9001-2015 '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 furnish the supplies or services specified.

QC-2 INSPECTION REQUIREMENTS & NON-CONFORMING PRODUCT

The seller maintains an inspection system to ensure that all items furnished have been inspected and/or tested. The seller is responsible for material acceptability and performance. Supplier shall notify TPi Arcade, Inc. of any non-conforming process or product and obtain approval for disposition, 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 (CAR) is issued, the supplier must respond within time specified on CAR; or they will be unapproved for further procurements until the CAR is satisfactorily resolved.

QC-3 SOURCE SURVEILLANCE BY TPI ARCADE, INC. QUALITY REPRESENTATIVE

All items covered by this Purchase Order are subject to source surveillance by a TPi Arcade, Inc. 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 TPi Arcade, Inc. Quality Representative. Evidence of surveillance shall accompany each shipment.

QC-4 SOURCE INSPECTION (PHYSICAL INSPECTION BY TPI ARCADE, INC.)

All items covered by this Purchase Order are subject to inspection at the seller's facility by a TPi Arcade, Inc. Quality Representative prior to shipment. The seller shall furnish, at no cost, acceptable facilities and equipment to the TPi Arcade, Inc. Representative for their 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 First Article produced under this order shall be submitted for TPi Arcade, Inc. Inspection prior to making further shipments. This Inspection is solely for TPi Arcade, Inc. convenience and shall not waive TPi Arcade, Inc. 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 ten years or until advised by TPi Arcade, Inc. to either return or discard them.

QC-6 FIRST ARTICLES – DESIGNATED QUALITY REPRESENTATIVES

For those suppliers to TPi Arcade that have Designated Quality Representative (DQR) status only the first article inspection (FAI) report need be submitted. Acceptance of production tooling on this Purchase Order shall be contingent upon inspection and acceptance of the submitted FAI. 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 ten years or until advised by TPi Arcade, Inc. to either return or discard them.

QC-7 TEST BARS

When test bars are required as part of TPi Arcade, Inc. 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 TPi Arcade, Inc. need. This shall be provided to TPi Arcade, Inc. when shipping papers are requested.

QC-8 CHEMICAL TEST REPORTS – SEE QC-7

QC-9 PHYSICAL TEST REPORT – SEE QC-7

QC-10 CHEMICAL AND/OR PHYSICAL TEST REPORTS see QC-7

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-11 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. The report must also be submitted by e-mail to TPi Arcade quality dept, dbrown@tpicast.com.

QC-12 STATEMENT OF CONFORMITY AND PROCESS CONTROL

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 TPi Arcade, Inc. for any changes in either materials or processes specified on referenced Purchase Order.

QC-13 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. The report must also be submitted by e-mail to TPi Arcade, Inc. quality dept, dbrown@tpicast.com.

QC-14 PROCESS CHANGES

Once first article approval has been achieved all production processes are considered frozen. After first article approval no process changes may be made without approval from TPi Arcade, Inc. This includes changes in suppliers or changes in manufacturing facility location.

QC-15 NONDESTRUCTIVE TEST REPORTS

Each shipment must be accompanied by a legible and reproducible copy 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. The report must also be submitted by e-mail to TPi Arcade, Inc. quality dept, dbrown@tpicast.com.

TPI Arcade, Inc. Quality Assurance Clauses Form QAD006 Rev. 6/22/2018

All purchase orders are subject to the following referenced provisions as specifically noted on each line item of each individual purchase order.

QC-16 CERTIFICATION OF X-RAY

All parts requiring radiographic certification will be submitted to TPi Arcade, Inc. approved X-Ray laboratory and processed in accordance with TPi Arcade, Inc. 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 film and a legible and reproducible copy of the report must accompany the material. An adequate method of identifying and cross referencing each film exposure report and item must be provided.

QC-17 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-18 FINAL ACCEPTANCE

Final acceptance will be based on TPi Arcade, Inc. inspection and testing results at destination.

QC-19 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, one (1) copy of certification shall be included with each shipment for each lot or sublot.

The report must also be submitted by e-mail to TPi Arcade, Inc. quality dept, dbrown@tpicast.com.

QC-20 TPI ARCADE, INC. FURNISHED MATERIAL

The supplier shall certify that material used in fabrication is the material furnished by TPi Arcade, Inc..

QC-21 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 TPi Arcade, Inc. for use in the performance of purchase order requirements. All tooling shall be subject to TPi Arcade, Inc. 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-22 CALIBRATION

All items furnished under this P.O. shall be inspected using calibrated inspection tools. Standards used are to be traceable to the NIST (National Institute of Standards and Technology), ANSI-Z540 or ISO 10012-I current revisions.

QC-23 RIGHT OF ACCESS

Supplier shall grant right of entry and access by TPi Arcade, Inc., their customer and regulatory agencies to all facilities involved in this order and to all applicable records at any level of the supply chain. A minimum of 24 hours' notice will be given to supplier prior to arrival of TPi Arcade, Inc., their customer and regulatory agencies.

QC-24 PART IDENTIFICATION REQUIREMENTS

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-25 INSPECTION RECORDS

Documented evidence in the form of inspection records indicating actual dimensional results in accordance with drawings, specification and or purchase order requirements must be accompanied with each shipment. The report must also be submitted by e-mail to TPi Arcade quality dept, dbrown@tpicast.com.

QC-26 RECORD RETENTION

All quality records must be maintained for a minimum period of 10 years. TPi must be notified prior to destroying any records older than 10 years as some customers may require longer retention. If approve by TPI to destroy Documents and records must be disposed of in accordance with document markings. i.e. EAR, ITAR

QC-27 SERIALIZATION

All parts must be serialized with a 3 digit serial number in a specified location. After 999 is reached resume with A001. When A999 is reached resume with B001 etc. Serial numbers can be etched with a vibratory marker, machined in or marked with a dot-peen marker. Other methods may be used with prior approval from TPi Arcade. MFG0004 serial number log must be used to record the serial number, PO, date, operation and operator ID. Parts that are processed through multiple subcontractors will be serialized at or before the first subcontracted operation. Subsequent subcontractors need to record the serial numbers of the parts as they process them on their own forms as long as batch quality control records can be accessed by serial number. Contact TPi Arcade Quality department dbrown@tpicast.com with questions regarding quality records and serial numbers. Serial number log records must be maintained for a minimum of 10 years.

QC-28 DEVIATION REQUESTS

TPi Arcade does not have design control and therefore cannot directly approve deviations from the drawing. Requests to do so must be made in writing to TPi Arcade. We will in turn request approval from our customer.

QC-29 FOD (Foreign Object Detection)

The supplier shall develop and maintain a Foreign Object Debris/Damage (FOD) prevention program to prevent introduction of foreign objects into any item delivered under this purchase order.

QC-30 REPROCESSING/REWORK/REPAIR

Reprocessing which is defined as additional processing to bring a part to full compliance with the drawing is permitted. Rework or Repair which is defined as special processing required to make a part functional requires permission from the end customer because TPi Arcade is not design responsible. Examples of rework and repair are helicoils to repair defective threads, welding or plugging etc.

TPI Arcade, Inc. Quality Assurance Clauses Form QAD006 Rev. 6/22/2018

All purchase orders are subject to the following referenced provisions as specifically noted on each line item of each individual purchase order.

QC-31 FLOW DOWN TO 2ND TIER SUPPLIERS

Whenever TPi Arcade's supplier subcontracts any work covered by this PO to a sub tier supplier all quality, confidentiality and records retention requirements called out in this PO must be flow down to the sub tier supplier. No part of this PO may be subcontracted to another supplier without TPi Arcade's permission.

QC-32 AS9102 INSPECTION FORMAT REQUIRED

The first article inspection for the parts covered by this PO must be submitted in AS9102 rev B format. Blank AS9102 inspection forms can be obtained from TPi Arcade Quality department dbrown@tpicast.com.

QC-33 ITAR AND EXPORT CONTROLS

The parts and technical data covered by this PO are controlled under ITAR and United States Export Regulations and may not be divulged or exported to a foreign person either in the US or abroad without authorization of the US Dept. of State or the US Dept. of Commerce.

QC-34 Counterfeit Parts Prevention Program

Must maintain a Counterfeit part program to an industry standard. Must prevent the use of counterfeit parts/material

QC-35 Interactions with the organization

The external providers' interactions with the organization will be verbal or in writing and may include, but not limited to, quoting, purchase orders, inquires, non-conforming issues, and corrective actions. All communications must be submitted to the TPi Purchasing Manager.

QC-36 Safety and Ethical Behavior

Ensuring that persons are aware of:

- their contribution to product or service conformity;
- their contribution to product safety;
- the importance of ethical behavior. Per TPI from # [HRM008](#), copy can be found on TPi Web page

QC-37 DFARS & NIST Compliance

NIST 800-171 compliant

QC-38 Competence

Suppliers shall be able to demonstrate their employees have the necessary competence for assigned responsibilities based on training, education and/or experience.

QC-39 Monitoring

Suppliers shall be capable of meeting TPi Arcade quality and delivery requirements as indicated on the Purchase Order. TPi Arcade will monitor quality and on-time delivery data for key suppliers and communicate issues requiring formal corrective action in accordance with TPi Arcade supplier corrective action process.

QC-40 External Providers

Use customer-designated or approved external providers, including process sources (e.g., special processes)

QC-41 Use of statistical techniques

Suppliers shall apply effective statistical process controls when specified on the Purchase Order.