



Advanced Conversion Technology, Inc.

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Supplier Quality Assurance Manual

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1. Purpose:

The Advanced Conversion Technology, Inc. (ACT) Supplier Quality Assurance Manual provides quality expectations and outlines the minimum requirements that our Suppliers and Sub-tier Suppliers must meet. It is ACT's intent to do business with Suppliers who are able to provide items, processes, and services consistently to procurement specifications, at a competitive price, and in accordance with the required delivery schedule.

A copy of this manual is made available for Suppliers to review. It is expected that the Supplier understands and complies with the applicable requirements as defined in this manual. Copies can be obtained from ACT Purchasing or on the ACT website at: <http://www.actpower.com>.

It is the responsibility of all ACT Suppliers to check periodically for any changes that may have occurred. Any questions should be directed to the ACT Purchasing Representative. Supplier requirements contained in this Manual will only be modified or waived by ACT Quality Assurance.

2. Scope:

This manual specifically applies to all Suppliers and Sub-tier Suppliers which require "Approval" as defined by ACT's Quality Management System. This manual does not alter or reduce any other contractual requirements covered by ACT purchasing documents and/or requirements defined by engineering documents or specifications. Also, this manual does not supersede any applicable governmental regulations and quality requirements of ACT Customers.

3. Cooperative Management Attitude:

ACT expects Suppliers' top management to share our commitment in meeting our product quality and delivery expectations. It is also expected that Suppliers fully support the relationship between ACT and its customers by demonstrating flexibility in assisting ACT in meeting all of our customer requirements.

Due to the critical needs of the Defense Industry, ACT has a serious concern when a Supplier causes a shutdown of ACT production. ACT highly suggests that all Suppliers have contingency plans in place to meet demanding schedules. Any condition causing a line shutdown warrants the Supplier's immediate action to facilitate ACT Production Operations and may result in associated costs charged back to the Supplier.

4. Ethics Policy:

ACT employees treat Suppliers, Customers, and others seeking to do business with our company with dignity and respect and in a manner that excludes considerations of personal advantage. ACT demands ethical business conduct from our employees in managing their relationships with present or potential Suppliers. Employees and representatives of the company shall avoid any conflict of interest that might interfere with or adversely influence their obligation to ACT. Our Suppliers are expected to give their full cooperation in observance of this policy.

5. Purchase Orders:

The Supplier is responsible for reviewing and meeting all of the ACT purchase order requirements. These requirements include:

- a. Purchase order number.
- b. Purchase item part number.
- c. Latest revision level of the drawing or specification if applicable to item.
- d. The order quantity and accuracy of price.
- e. Supplier Quality Requirements and Clauses specified on ACT Form # 1166. Copies can be obtained from ACT Purchasing or on the ACT website at: <http://www.actpower.com>.
- f. Required delivery date.
- g. Procurement Provisions specifically noted on the Purchase Order.
- h. Terms and Conditions.

If the Supplier cannot meet the specified requirements, the Supplier shall notify ACT Purchasing prior to acceptance. Once the Purchase Order has been reviewed, the Supplier must submit confirmation to the appropriate purchasing representative for acknowledgement.

6. Supplier Qualification and Approval:

a. Quality Management System:

The Supplier shall provide and maintain a Quality Management System acceptable to ACT. Suppliers are qualified and approved using the ACT Supplier Survey. Suppliers are encouraged to develop Quality Systems to meet AS9100 requirements and strive to obtain certification. At a minimum level, Suppliers shall have a documented Quality System consisting of a Quality organizational structure, trained personnel, procedures and documentation system. The Quality System shall ensure that all product conforms to document, specification and procurement requirements and to provide Zero Defect product, shipments, delivery, and excellent Supplier services.

Certified Suppliers shall notify ACT Purchasing within ten (10) working days if their Certificate of Registration is put on suspension. The Supplier shall forward a new copy of its certificate when received.

b. Documentation and Records/Data Control:

Documentation and records described herein shall be maintained for ten (10) years and be made available for review or retention by ACT and/or ACT's Customer Representative upon request:

- Records of inspection/test to verify compliance to applicable documents and/or specifications.
- Records of calibration for inspection/test equipment used for product acceptance.
- Records of personnel experience, training and qualification.
- Records of Certification of processes and personnel for processes such as welding, heat treat, plating, anodizing, NDE, and Painting etc., utilized for ACT production.
- Records of ACT PO/Contract, documents, specification and manufacturing processes.
- Records of Supplier Corrective Action related to ACT product.

All documents including prints, manuals, specifications, records and functional items received from ACT, are the property of ACT and shall be returned to ACT upon request. When ACT issues revised documents, specifications or manuals, the obsolete copies shall be disposed of.

7. Supplier Conformance

Suppliers must ensure their products and/or services meet all purchase order and required specification requirements ensuring their contribution to product or service conformity and product safety by providing high quality reliable product and services. Additionally, it is important that ethical behavior is maintained as noted in Section 4. Supplier processes must ensure that products and/or services furnished meet all purchase order or specified requirements by ensuring the following:

- The competence, including any required qualification of persons as applicable for the product or service.
- Design and development controls are in place as required for the product or service.
- Special requirements, critical items, or key characteristics are identified and controlled as applicable for the product or service.
- Test, inspection, and verification (including production process verification) are identified and controlled as applicable for the product or service.
- The use of statistical techniques for product acceptance and related instructions for acceptance are identified and controlled per industry standards as applicable or as defined on the purchase order.
- A quality management system is implemented and maintained.
- External providers including process sources (e.g. special processes) are approved or designated by ACT when specified on the purchase order as applicable for the product or service.

- ACT is notified of nonconforming processes, products, or services and approval for their disposition is obtained.
- A process is in place for the prevention of counterfeit parts or materials.
- Notification to ACT of changes to processes, products, or services, including changes of their external providers or location of manufacture, and obtain approval as applicable to ACT controlled products or services.
- Flow down to external providers applicable requirements including ACT requirements.
- Suppliers provide test specimens for design approval, inspection/verification, investigation, or auditing as specified on the ACT purchase order.
- Retention of documented information, including retention periods and disposition requirements as specified on the ACT purchase order.
- Provide the right of access to ACT, their customer, and regulatory authorities to the applicable areas of facilities and to applicable documented information, at any level of the supply chain.

8. Change Requirements:

- a. ACT Purchasing representatives are responsible to provide Suppliers with the latest revision of ACT document(s) and engineering specifications when an ACT document or specification has been revised, ACT Purchasing will send the Supplier a revised document, specification, or an Engineering Change Order. The Supplier shall review the document in order to accept or decline the requested changes. Suppliers are required to respond back to ACT's Purchasing Department within three (3) working days within receipt of changes.
- b. No changes without ACT written authorization may be made to items manufactured in accordance with ACT documents or specifications. Suppliers shall notify ACT of any change in Supplier controlled designs, materials or process specifications, change of subtler Suppliers or change in plant locations. Notification shall occur as soon as the situation is known or thirty (30) days prior to implementation whichever is greater.

9. Product Marking and Identification Requirements:

Where required by ACT document/specification, specific part marking or Supplier Identification marking shall be applied as specified.

10. Product Packaging, Shipment and Delivery Requirements:

- a. ACT's Quality and Delivery targets are 100% on-time delivery with Zero defects. Any defective product may result in rejection and return of defective product.
- b. Packaging shall prevent any product damage, marring, or defects during shipping and in accordance with any pre-approved packaging and labeling specification where applicable.
- c. ESDS items shall be packed in a manner that shields the item from extraneous radiation and/or static electricity or discharge. Packages shall be marked with ESD cautionary note and/or symbol.
- d. All devices that are susceptible to damage or degradation from moisture shall be handled, packaged and shipped in a manner to prevent damage. Handling, packaging, shipping and identification shall be completed in accordance with J-STD-033, latest revision. All fields shall be completed on the Moisture Sensitive Caution Label or in human readable form on the adjacent bar code label.
- e. All Supplier Packing Slips shall reference the ACT PO#.
- f. With each shipment, Suppliers are required to provide, at minimum, a signed Certificate of Conformance.

Any shipment that fails to comply with the above requirements or any assigned Quality Notes may be rejected and not received until Supplier resolution is obtained possibly delaying invoicing and payment by ACT.

11. Nonconforming Material Requirements:

ACT Supplier's shall not deliver any nonconforming items to ACT. Material Review Board (MRB) authority is NOT delegated: Nonconforming items require ACT documented approval prior to shipment.

12. Supplier Monitoring and Rating:

ACT Supplier's are monitored for performance. Supplier performance is measured on the Supplier's ability to meet ACT requirements for Items/Material Quality and Delivery. Suppliers must remain in good standing on ACT's Approved Supplier List. Failure to provide acceptable performance may result in being removed as an approved Supplier.

ACT Purchasing Representatives will notify Suppliers when poor performance puts them at risk of being removed as an approved Supplier. Poor performance may result in a Supplier Corrective Action Request (SCAR). The Supplier shall acknowledge receipt of a SCAR within forty-eight (48) hours. The SCAR written response shall include the method of containment for the discrepancy and actions taken to ensure compliance. Responses shall include root cause analysis, corrective action implemented, the corrective action implementation date and preventive action taken to eliminate any recurrence.

13. Confidentiality:

ACT shall only disclose proprietary information to Suppliers on a need to know basis. ACT and our Suppliers maintain a healthy and confidential relationship. Proprietary Information may include, but not limited to, Bill of Material (BOM), solid models, electronic documents, software, etc. By acceptance of any Purchase Order/Contract, the Supplier accepts accountability in protecting ACT, and ACT Customer, Proprietary Information. This includes notification to ACT prior to the release or transfer of proprietary information to a third party. Some information provided may be exported only in accordance with the U.S. International Traffic in Arms Regulations (22 CFR Parts 120-130) or the Export Administration Regulations (15 CFR Parts 730-774). Unauthorized use is strictly prohibited and may be unlawful.

Original proprietary information, as well as all copies of proprietary information must be destroyed when they are no longer needed or must be returned to the originating source when requested. Proprietary Information is not to be released and/or disclosed to competitors of ACT.

14. Material Obsolescence:

ACT is committed to providing notification of Item Obsolescence to our customers as quickly as possible and to offer life time buy opportunities, where applicable.

A twelve (12) month notice of all items becoming obsolete is requested. This notice allows sufficient time for communication to ACT customers and to allow planning to prevent the disruption of production flow. The following information is needed for any items becoming obsolete:

- Detailed description with manufacture part number.
- Last purchase order number when this item was ordered.
- Description of change.
- Reason for change.
- Suggested alternate part numbers, when available.
- Anticipated Impact on form, fit, function, quality & reliability.
- Last-time buy date.
- Last-time ship date.
- Life-time buy opportunities.
- Technical contact information.

15. Conflict Minerals:

Suppliers shall ensure that items supplied to ACT are in compliance with Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. Metals used in the manufacture or construction of items supplied shall be DRC "Conflict Mineral" free (not originating from the Democratic Republic of the Congo (DRC) or adjoining counties). "Conflict Minerals" are tantalum, tin, gold, tungsten, or their derivatives in accordance with the Dodd-Frank Wall Street Reform and Consumer Protection Act. Suppliers are expected to adopt policies and management systems with respect to conflict minerals and to require their Suppliers to adopt similar policies and systems.

16. Foreign Object Debris (FOD) Control:

Supplier shall prevent, detect and remove foreign objects that could result in foreign object damage to the items supplied under this purchase order using NAS412 as a guideline. Supplier's practice shall be proportional to the sensitivity of the design of the items to FOD, and to the FOD generating potential of the manufacturing methods.

17. Counterfeit Material Avoidance:

Supplier shall ensure all product supplied shall be procured from the original equipment or component manufacturer (OEM/OCM) or the OEM/OCM's authorized distributor. Traceability documentation or information back to the manufacturer is required with each shipment.

Supplier represents and warrants that only authentic materials are used in products delivered to ACT and shall not contain any counterfeit items and or documentation. Supplier shall only purchase authentic items directly from the Original Equipment Manufacturer (OEM) or through the OEM's authorized distribution chain. It is the responsibility of the Supplier to ensure not only the validity of the products/components/materials it purchased for use in the final item sold to ACT but also the documentation and certifications (e.g. raw material certifications) from its supply base. For electronic components, the Supplier must have procedures in place that are IAW SAE AS5553 "Counterfeit Electronic Items; Avoidance, Detection, Mitigation and Disposition." Supplier shall flow the requirements of this provision to its subcontractors and Suppliers at any tier.

Supplier shall flow the requirements of this provision to its subcontractors and suppliers at any tier. If at any time the supplier, sub-tier supplier or sub-contractor suspects a counterfeit item was introduced into a delivered item or assembly, the supplier, sub-tier supplier or sub-contractor shall notify the ACT Purchasing or Quality Department in writing within 48 hours of the suspect discovery.

18. Cyber Security:

Supplier (including its suppliers at every tier), by acceptance of this Purchase Order, certifies that adequate security is provided on all covered information systems – systems that process, store, or transmit federal contract information (FCI) or covered defense information (CDI).

- FCI is defined in the FAR 52.204-21.
- CDI is defined in the DFARS 252.2004-7009 and 252.2004-7012.

The controls apply to information that is unclassified, but still needs to be controlled. Items marked with DoD Distribution Statements B through F, statements of work, and specifications are a few of the many types of information that can fall within these definitions and need to be adequately secured.

These regulations are mandatory flow down requirements for suppliers, unless your company supplies Advanced Conversion Technology with only commercial off-the-shelf items (COTS) as defined in the Federal Acquisition Regulations (FAR) at 48 CFR 2.101.