

CONTROLLED QUALITY SYSTEM DOCUMENT

ATF Aerospace LLC
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P.O. TERMS & CONDITIONS OF QUALITY REQUIREMENTS

1. **QUALITY SYSTEM:** The supplier shall have implemented and maintain a Quality system that as a minimum meets the requirements equivalent to ISO or AS9100, unless otherwise approved by ATF Quality Management. Quality Clauses are flowed-down by the purchase order or other contract. Product and/or orders not meeting the requirements of the quality assurance clauses are subject to return and/or corrective action.

2. **GAGES AND TOOLING:** The supplier shall have implemented and maintain a calibration system that as a minimum meets the requirements of ANSI/NCSL-7-540. All gages and tooling used for product acceptance shall be subject to recall and/or periodic review as defined by the specification standard.

3. **SOURCE INSPECTION:** ATF reserves the right to invoke source inspection. If Source inspection is required per Purchase Order. Supplier must contact Quality Assurance personnel and shall provide inspection data, facilities, and all equipment necessary for product/process verification, prior to shipping. The supplier shall give a minimum of 24 hours notification prior to performing any inspections/test that are subsequently not verifiable at final source inspection. Source Inspection may be waived by ATF Aerospace Quality Assurance only, and must be in writing. Copy of waiver must be included in shipment to preclude rejection at receiving inspection.

4. **INSPECTION DATA:** The supplier shall provide inspection data representative of this manufacturing lot with the shipment. The inspection data shall be specific to Blue Print; MOT and / or specification requirements. Any applicable certifications shall be attached. The data shall also include the ATF Aerospace LLC Purchase Order Number. Suppliers shall maintain and control records I.A.W. AS9100 Section 7.5.

5. **TRACEABILITY:** The supplier shall provide and maintain a system for traceability of product through all phases of the manufacturing and processing cycle. All records of manufacturing, processing, inspections and test along with certifications of compliance shall reference the serial or lot number(s).

6. **FIRST ARTICLE:** If required per Purchase Order a First Article Inspection Report (FAIR) is required on one piece from this manufacturing lot. The first article part shall be identified. The FAIR shall include the following minimum general information; purchase order number, date, inspector identification, along with all specific B/P dimensions and all B/P notes. The FAIR information shall include actual dimensions obtained, B/P location, along with the specific measuring device type used. Any applicable certifications shall be attached.

7. **APPROVED PROCESSES:** All processes such as welding, heat treat, electroplating, cleaning, anodizing painting, chem. film, NDE, etc., shall only be accomplished by approved process suppliers. A certification of compliance shall be submitted with each shipment stating the process name, specification, type and class, and revision letter. Contact ATF Aerospace purchasing or quality assurance with questions regarding approval status prior to any processing if you are not sure of the approval status.

8. **PHYSICAL/CHEMICAL TEST REPORTS:** Upon request, a copy of the test report shall accompany the shipment. As a minimum the report shall include quantitative results of the percentage of each element of the chemical composition, physical properties of the raw materials, along with identification of the materials by reference to number of the melt, cast heat lot, or similar designator. The report shall also include the specification, revision, and the ATF Aerospace purchase order.
Temperature controlled items must show that materials were stored and handled in correct conditions throughout their life prior to arriving at ATFAerospace.

9. The quantities of chemicals and raw materials may not always align when a third party re-packages (through kitting, cutting, separating into smaller containers). In this case, the documents produced by the manufacturer and suppliers should still be provided showing the traceability of the product. The receipt will not be rejected for quantities that are not equal and will only be rejected if the quantity received is more than the total quantity the 3rd party received from the manufacturer such as 30 feet delivered to ATFAerospace when the 3rd party only received 5 yards.

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10. **KEY CHARACTERISTICS / SPC** If specified on purchase order. At receipt or during the manufacturing process any defect or Aerospace will furnish a CONTROL CHART on which the actual measurements shall be recorded. The a nonconformance is discovered, all further operations shall be halted and ATF Aerospace is to be notified immediately. CHART shall accompany the return shipment. Further activity will be at the direction of ATF Aerospace.

11. **CERTIFICATION OF CONFORMANCE:** The supplier shall provide a manufacturer's certification of conformance (CofC) with each shipment. The manufacturer's certification must have a Quality Representative's or an officer of the certifying companies' signature and date. The signature may be electronic, manual, or physically signed and dated by an authorized company representative as stated above. Each manufacturer's lot in each shipment must be segregated and identified to include quantity and lot number on each C of C to maintain lot traceability. Number of individual lots in any one order must be limited to four (4). Documentation showing clear traceability for the part number ordered, up to and including shipment to ATFAerospace and must be included for each lot in each shipment unless otherwise noted on the applicable purchase order. There must be a clear link(s) (ex: Heat #, Lot number), that ties the entire certification package together. This includes process certifications performed by sub-tier suppliers. There shall be NO breaks in the Chain of Custody ownership and every sale throughout the supply chain process shall include the appropriate Certification of Conformity. This includes Distributors - shall maintain clear traceability to the original manufacturer for each lot in a shipment. C of C or Certification of Conformance shall accompany the shipment. The hardware shall meet all requirements per the specified specification. The C of C shall include the following information as a minimum:

- A) Supplier or Manufactures name and Part Number as ordered on the
- B) ATFAerospace purchase order. Serial number (if applicable)
Lot number: lot number may be defined by any format that provides full trace to all elements of the manufactured lot – including special processes. Examples (but not limited to) could be date codes, work order numbers & heat numbers, as long as the format fulfills the requirement of full traceability for all elements of the manufactured lot.
- C)
- D) B/P; Specification and / or MOT with Revision Letter
- E) Raw Material Specification and revision letter if applicable
- F) **O'rings / Rubber** products shall not be more than fifteen percent of the shelf life or twelve (12) quarters or as per Purchase Order requirements.
- G) All lots must be segregated and identified to maintain batch and cure date traceability.
- H) A statement attesting to conformance.
- I) Signed by an authorized Representatie of the Company.
- J) Quantity (per each Mfg Lot in shipment
- K) Shelf life requirements including cure date (if applicable). This requirement may be met on DCC of Authorized Distributors.
- L) A statement that the parts/materials conform to all applicable drawing and specification requirements
- M) Statement of Origin (i.e. Made in the USA)

Note: Certifications and test reports supplied in fulfillment of orders must be in English

Records and certification packages related to items sold to ATFAerospace, must be available if requested, within 48 hours of request. Changes or corrections to records, regardless of the media, shall be made as follows: draw a single line through the old data, enter the correct data, date, and apply stamp or initials or signature of individual making the correction. No erasures, covering, or "white-out" allowed.

12. **GOVERNMENT INSPECTION:** If required per Purchase Order and Government inspection is required prior to shipment from your facility. Upon receipt of this order, promptly notify the Government Representative who normally services your plant for appropriate planning from the Government source.

13. **TEST SPECIMENS:** If required per Purchase Order and or / specification test report / specimens for lab analysis shall The specimens shall be from the same lot, batch or heat of materials that were utilized requirements manufacturing process(s), and special process(s). ATF Aerospace shall contact supplier prior to for production, and shall be processed in conjunction with the production hardware.
14. **RIGHT OF ENTRY:** During the performance of this Purchase Order ATF Aerospace and/or our customer(s) reserves, and regulatory agencies shall have the right of entry, at your facility, using reasonable scheduling. To any level of the supply chain necessary to determine and verify the quality of contracted work, records and material. The supplier shall provide facilities, equipment and personnel as necessary for the task. The right of entry may be used for verification/analysis of Quality Systems
15. **STATISTICAL PROCESS CONTROL (SPC):** IF SPC, Key characteristics are noted on the face of the drawing, and specified on the ATF Aerospace Purchase Order. Control Charts should be accomplished. At receipt, or during the manufacturing process if any defect / nonconformance is discovered, all further operations shall be halted and ATF Aerospace is to be notified immediately. Chart(s) shall accompany the return shipment. Further activity will be at the direction of ATF Aerospace.

Notification, Containment, and Corrective Action of Discrepant Orders

-The supplier shall provide prompt written notification to ATFAerospace when suspect nonconforming products or processes are discovered to have shipped. Notification shall include:

Part Numbers

Traceability (lot, serial, and manufacturer-numbers), Ship dates, Quantities, Purchase Order number, Description of the nonconformance.

- Upon notification of non-conformity by ATFAerospace the supplier shall complete containment activity within 48 hours.

- When formal corrective action is requested by ATFAerospace:

Enter containment in the CAR within 48 hours

Submit a formal corrective action response by the specified due date

Extensions shall be requested on or before the due date- ATFAerospace uses an internal corrective action tracking. Email notifications will be sent to suppliers when a corrective action has been assigned.

- When a shipment is received without the required documentation

- When processes or tooling are discovered which will not produce conforming hardware, discontinue production until failure modes are resolved and corrected or authorized MRB actions are complete.

- In the event that the supplier has determined that ATFAerospace has ejected material in error, the supplier shall contact the assigned ATF Quality Department or the buyer.

16. **DEVIATIONS/DISCREPANCIES:** All materials or supplies furnished by ATF Aerospace shall be verified upon receipt for damage and correct quantity. No furnished materials or supplies shall be used for any other purpose other than

17. **FOD:** The supplier shall use industry standard, commercially reasonable efforts to prevent and/or remove Foreign Objects that might be considered a potential source of Foreign Object Damage (FOD) from all parts prior to shipment. Potential FOD includes but is not limited to burrs, chips, dirt, corrosion and contamination resulting from manufacturing, assembly, processing, cleaning storage and subsequent packaging materials (examples: "peanuts" and staples) which may cause contamination, part obstructions or leave nonpreservation residue.

18. **COUNTERFEIT PROGRAM:** Supplier will maintain a counterfeit program in accordance with SAE Aerospace Standard-AS5553A, "Fraudulent/Counterfeit EEEE Parts; Avoidance, Detection, Mitigation, and Disposition", and SAE Aerospace Standard AS6174 "Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel",

19. **DFAR 252.225-7009 specialty metals applies**
Compliance options include: A statement of "conformity per DFAR 252.225-7009" on the Certificate of Compliance or associated paperwork.

- Certification to the Country of Melt

- Copy of original mill certification to validate Country of Melt

CRITICAL NOTES: If the shipment contains multiple manufactured lots, each lot shall be segregated and identified to maintain traceability in the shipment. Failure will result in a rejection.

All required documentation shall be completely legible, and reproducible. ATFAerospace will review documentation for compliance to requirements, legibility, and reproducibility by electronic scanning and/or copying.

Shipments that do not comply with requirements are subject to rejection, return, and/or and formal corrective action.

** If the part is considered ITAR or EAR based upon its "original design intent", then ITAR category or ECCN is required for "Verification of Export Compliance".

- If the part is considered dual use, then use the Commercial classification

20. **PROHIBITED MATERIALS** Products provided shall not contain Asbestos, 1,1,1-Trichloroethane, lead, chromium (VI), CFC-12, radioactive material, polychlorinated biphenyls or Penta/Octa PBDE.

(Space Hardware) The use of tin, zinc, and cadmium is prohibited as specified in the following subparagraphs.

Tin: Pure unalloyed tin is prohibited as a surface finish, including the surface finish on components. Solder-dipped tin alloy finishes shall contain at least three percent lead or at least three and a half percent silver. All other tin and tin alloy finishes shall contain at least three percent lead

Zinc: Pure zinc is prohibited as a surface finish. Un-plated brass (an alloy containing copper and zinc as the main constituents) containing greater than 21 percent zinc is prohibited. Brass with greater than 21 percent zinc is acceptable if the brass is over-plated with a minimum of 50 microinches of nickel, or 100 microinches of either copper or gold. Unplated alloys other than brass that contain greater than 10 percent zinc are prohibited. Unplated alloys other than brass alloys that contain greater than 10 percent zinc are acceptable if they are over-plated with a minimum of 50 microinches of nickel, or 100 microinches of either copper or gold. Zinc or alloys containing zinc, sealed within a hermetic cavity are acceptable.

Cadmium: Pure cadmium is prohibited as a surface finish. Unplated alloys containing greater than five percent cadmium are prohibited. Alloys containing greater than five percent cadmium are acceptable if they are over-plated with a minimum of 50 microinches of nickel, or 100 microinches of either copper or gold. Cadmium or alloys containing cadmium that are sealed within a hermetic cavity are acceptable.

21. **RECORDS:** Supplier shall maintain quality records in a manner that provides a methification, location, maintaining record integrity, control of access and protection from loss, damage or deterioration for a minimum retention period as follows:

Radiographic film	11 years, unless alternate is approved
Non-Traceable, non-serialized parts	11 years
Traceable parts as identified on the drawing or purchase order	Indefinitely
Serialized parts as identified on the drawing or purchase order	Indefinitely
Critical parts as identified on the drawing	Indefinitely
Distributor standard off the shelf product	7 Years

22. **Handling, Storage, Packaging, Preservation and Delivery** The supplier must ensure that all items are packaged adequately to ensure that hardware is delivered to ATF aerospace undamaged. The supplier will be responsible for repackaging at their expense if required. If there is damage due to inadequate packaging, the items shall be subject to rejection. Individual boxes/cartons shall not exceed 40 lbs. in weight (chemical packages that can't be packaged in a lower weight are exempt).

Product must also be protected against corrosion, rust or any elements which may cause a visual rejection or product failure. Silver plated parts or parts/assemblies containing silver components shall be protected from sulfur-laden fumes, or other sources that cause tarnish.

- Packaging must protect product against leakage.
- Electrostatic Discharge (ESD) product must be protected in ESD packaging.
- When print or specification requirements do not already mandate explicit thread or packaging protection, threads must then be sleeved or individually packaged in a manner to prevent damage.

23. **Electro Static Discharge (ESD) Protection**

Electro Static Discharge (ESD) Packaging and identification required as per specifications. All documentation must be packaged separately from the parts – not sealed in bags with the parts.

24. **Control of Software (scrap ozone)**

Lubrication per required spec - Bar coding - Mercury free - Supplier Sampling Requirement