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<b>ALTA Quality Requirements for Suppliers</b>	Quality Procedure Prepared and approved by Luigi Davoli  Approved by Jean Grondin  Process Owner: Quality Director & Procurement and Logistics Director

## 1. Scope

Alta Precision is active in the supply of critical parts and assemblies for the Aerospace industry. This procedure defines the quality requirements applicable to suppliers of products or services affecting parts quality. This document supersedes and replaces procedure QAP 7.4.2 Alta Quality Requirements for Suppliers.

## 2. Reference documents

SAE AS9100D	QMS Requirements for Aviation, Space and Defense Organizations
SAE AS9102B	Aerospace first article inspection requirements
SAE AS9120A	QMS Requirements for Aviation, Space and Defense Distributors
SAE AS5553B	Counterfeit Electrical, Electronic, and Electromechanical (EEE) Parts; Avoidance, Detection, Mitigation, and Disposition
SAE AS6174A	Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel
ISO 10012-2003	Measurement management systems – Requirements for measurement processes and measuring equipment
MIL-PRF-16173	Corrosion Preventive Compound, Solvent Cutback, Cold-Application,
LAT 7-8202	Liebherr, quality assurance requirements for suppliers of complete parts
LAT 7-9003	Liebherr, quality assurance requirements for extended bench suppliers
SCREQ-SLS-001	Requirements applicable to Safran Landing Systems suppliers
HPS-010	Heroux-Devtek Quality assurance requirements for suppliers
EQRS	Embraer quality requirements for suppliers.
QAP-08	Alta Certified Supplier Program

## 3. Requirements

### 3.1. Requirements for the Aerospace industry

Suppliers shall maintain a quality system in conformity with the following standards:

- ISO 9001 for raw materials and products distributors and for shop assist suppliers
- AS 9120 for distributors of Aerospace standard components
- AS 9100 for suppliers of complete parts made to customer design
- AS 9100 and NADCAP accreditation for sub-tiers performing controlled processes

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### 3.2. Purchase order information

a- When Alta customer is indicated on the purchase order or related engineering documents, customer quality requirements are applicable to the purchase order in addition to the requirements of this procedure namely HPS-10 for Heroux Devtek, LAT 7-8202 or LAT 7-9003 for Liebherr, SCREQ-001 for Safran and, EQRS for Embraer.

b- Additional requirements indicated on the purchase order such as those related to Prime customer (Design authority) and to critical parts, are applicable as stated.

### 3.3. Supplier communication

Subjects affecting product quality or delivery status shall be discussed with Alta supplier contact. Direct communication between suppliers and Alta customer is not permissible unless authorized by Alta quality department on a case by case basis.

### 3.4. Right of access

Alta Precision personnel, Alta customer representatives and regulatory authority representatives shall be granted right of access to supplier's facility and quality records, for audit or verification purposes for the duration of the contract or afterwards as deemed necessary.

### 3.5. Controlled goods program and confidentiality clause

a- All documents provided for the purpose of submitting a quotation or fulfilling purchase order requirements, are customer property and should be considered of a strictly confidential nature. Refer to Non-Disclosure Agreement (NDA).

b- Engineering documents related to military contracts are subject to ITAR or Canadian controlled goods program. Documents under those contracts are identified with 'Export control' or similar wording. The supplier shall maintain a register of employees having access to those documents.

### 3.6. Supplier information

a- Suppliers are requested to complete the form API-078 information and acknowledgement sheet and return it to Alta quality department in cases of a new supplier; a revision to this procedure or a significant change in supplier processes or capabilities.

b- The supplier is responsible for informing Alta Precision within 10 days, of any major change in ownership, management structure, resources or quality system.

### 3.7. Specifications and techniques revisions

The latest revision of any specification, standard or supplier approved technique called up on purchase orders or accompanying documents is applicable, unless otherwise mentioned on Alta purchase order or in the subject document. Supplier certificates of conformity must indicate the revision level of specifications and techniques to which parts have been processed.

### 3.8. Manufacturing process and technique approvals

a- Prior to order execution suppliers must submit to Alta their manufacturing and control plans and special process techniques for approval. This clause is applicable to class 1 parts and to designated parts (class 2 or 3 parts) that are deemed critical by Alta or customer.

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b- Alta or customer approval does not relieve the supplier from his responsibility in meeting all design and specification requirements. Departure from requirements shall be approved through requests for concession or waivers. Revisions are approved through the same process.

### 3.9. Nonconforming material, parts or process

a- Nonconforming output must be documented in a timely manner on Alta form API-196 Supplier non-conformance report. The completed form shall be sent to the following address: [ncrsupplier@altaprecision.com](mailto:ncrsupplier@altaprecision.com) for processing and disposition by Alta Quality or Alta Customer, prior to product delivery to Alta.

b- Suppliers will be charged for inspection and rework costs associated with non-conforming hardware received or poor workmanship.

c- Suppliers of non-destructive tests and surface processes must evaluate the effects of cleaning (etching) cycles on parts to minimize the risks of deviations on hardware. Bores must be protected during cleaning processes when indicated on the purchase order or in case of reprocessing. The supplier must contact Alta quality in case of any concern on the effects of cleaning cycles on bores and other features with tight tolerances.

d- Nonconforming product or process affecting product, detected by the supplier after delivery, must be disclosed in writing to Alta quality and supplier contact within 24 hours.

### 3.10. Corrective action following nonconformity

a- Requests for corrective action following a nonconformity shall be handled in a timely and efficient way to avoid recurrence.

b- Root cause analysis, corrective actions and verification of effectivity of actions taken should be returned to Alta quality department within the time noted on the request. Weak or inefficient actions or delays in responding to a corrective action request may result in recurring issues and will affect supplier rating.

c- Delivery delay is a deviation from contract requirements and may be subject to corrective action request by Alta quality or purchasing personnel.

### 3.11. Risk management, Logistics solutions and continual improvement

a- Suppliers shall maintain processes for risk identification, evaluation and mitigation and for continual improvement with the aim of improving quality, on-time delivery and pricing.

b- At request of Alta or by his own initiative, the supplier is encouraged to establish kitting, Kanban system or similar logistics solutions to improve flow and reduce costs and inventory.

### 3.12. Machining parts from plate or bar stock

a- For parts made from plate or bar stock unique material heat lot shall be used for any production batch in order to maintain raw material traceability.

b- Material source (Mill) must be approved by Alta quality if the supplier is not on Prime customer approved list.

c- When the raw material is supplied by Alta, extra remaining bar stock shall be returned to Alta with the finished parts. Returned material must be clearly identified (traceable).

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### 3.13. Product handling and preservation

- a- Supplier must verify Alta parts for integrity and serial numbers correctness upon receipt. Parts can be either sent directly from Alta or drop shipped from another supplier. Any unusual condition or damage affecting Alta property or discrepancy in the serial numbers listed shall be reported to Alta supplier contact without delay.
- b- Suppliers must develop safe handling, preservation and packaging procedures for parts at all stages of processing which include the reduction of foreign object damage.
- c- The use by the supplier of packaging material with which parts were received, does not relieve him from the responsibility of protecting parts adequately during shipping back to Alta.
- d- Bare surfaces of parts in process, in storage or prior to delivery must be protected with corrosion preventive oil conforming to MIL-PRF-16173 grade 2 or 3 unless otherwise indicated on Alta purchase order or associated engineering documents.

### 3.14. Product / process certification and related records

- a- Every shipment must be accompanied with a detailed certificate of conformity stating as applicable: Alta purchase order number and line number; part number delivered and revision level; certification date; production batch number; parts serial numbers individually listed (if applicable); approved technique number and revision level; process specification and revision level; test results; name and signature or stamp of the authorized person who released the product or process in accordance with Alta purchase order and engineering documents.
- b- The following documents are considered part of the certification package: original material certificate (mill test report); certificates for special processes; test reports; key characteristics inspection results (if applicable). Those records shall bear the supplier quality inspection stamp and date as proof of review and acceptance by the supplier.

### 3.15. First article inspection reports

- a- Manufacturers of parts must perform First Article Inspection in accordance with SAE AS9102B Standard in cases of first time production, when a significant change occurs on the manufacturing process and when the parts have not been produced for a period of 2 years.
- b- First Article Inspection report must be submitting to Alta quality with first shipment. Any derogation of this rule requires a waiver (form API-198) from Alta quality assurance department.

### 3.16. Product inspection and controls

- a- All product features manufactured or processed by the supplier or under his responsibility shall be verified for conformity to requirements in order to insure that only conforming products are delivered to Alta.
- b- Zero defect sampling plans may be applied on characteristics produced under controlled processes. Sampling on features having a tolerance tighter than 0.0015" or identified as key characteristics is not allowed unless a process certification program is in place with process capability of 1.33 or higher.
- c- When in-process verification by the machining operator is considered part of the inspection plan it shall be supported by appropriate records and a documented procedure for operators' certification.

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d- Visual inspection is required on 100% of parts to be released in order to verify conformity to requirements and acceptance criteria.

e- Alta reserves the right to review and approve suppliers' inspection plans, also known as control plans or quality plans.

f- Source Inspection:

1. Alta has the right to add and remove source inspection at supplier premises prior to delivery of products to Alta. The clause for source inspection shall appear on Alta purchase order.
2. Supplier quality must complete all measurements and controls on parts prior to notifying Alta that product is ready for source inspection.
3. Supplier must provide necessary support to Alta quality representative to perform product verification / inspection activities at source.
4. Source inspection indicated on purchase order may be waived in specific cases at the request of Alta or supplier. The waiver shall be requested and provided on form API-198.

### 3.17. Supplier measurement system

ISO 10012 Standard shall be used as basis for the control of measurement processes and equipment.

### 3.18. Product traceability and serial numbers control

a- Supplier must verify and maintain individual part traceability with allocated serial numbers at all stages of the process.

b- When serialization is a requirement on a product made from bar stock, parts shall be serialized with permanent marking after roughing operations and prior to Heat treat.

c- Serial numbers must be listed individually on supplier purchase orders to sub-tiers and on sub-tier certificates.

### 3.19. Documented information (quality records) and test pieces

a- Supplier shall maintain documented information in a secure environment and retain quality records related to their quality management system, to products and to processes for a minimum period of 10 years or as required by Prime customer. Records for critical parts and processes shall be retained for a period of 30 years. Documented information is subject to review by Alta or Prime customers and must be legible and easily retrievable.

b- Backup tensile test pieces shall be returned to Alta with clear traceability, i.e. supplier name, heat treat batch reference and Alta purchase order.

### 3.20. Non- traditional machining

Machining by non-traditional methods (i.e. electro discharge machining; laser machining or similar) is prohibited unless authorized on the drawing or by written waiver from a competent authority.

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### 3.21. Offloading operations

Offloading operations normally performed by a supplier, to another source or facility is prohibited unless authorized in writing by Alta quality.

### 3.22. Age sensitive products

a- Labels on containers for age sensitive materials and products shall have the following information: a- manufacturer's name; b- batch ID; c- storage temperature; d- specification number; e- date of manufacture and shelf life and/or expiry date.

b- Product shelf life should not have exceeded one third of total product life at time of delivery.

### 3.23. Externally provided material, products and services

a- Suppliers shall not sub-contract work intended to be performed internally to an external source prior to written approval from Alta Precision.

b- All purchases of material, products and processes to be incorporated in final product or having an effect on product quality, shall be directed to approved sources qualified by Alta customer or indicated on Alta Purchase order or as otherwise agreed upon with Alta Precision.

### 3.24. Counterfeit Product Prevention

Suppliers shall take necessary measures for counterfeit parts / material prevention and apply a control plan using SAE AS5553 (section 4) and/or SAE AS6174 (section 3) to ensure counterfeit products are not delivered to Alta Precision (e.g. articles, components, hardware, goods, raw materials and sub-assemblies). As a minimum, the following shall be followed:

a- The suppliers shall only purchase Product to be delivered or incorporated as Work to Alta directly from Original Component Manufacturer (OCM), Original Equipment Manufacturer (OEM) and/or authorized distributor chain, aftermarket manufacturer, or authorized reseller.

b- These products must have complete documentation that certifies the work is traceable to OCM/OEM and a copy of the traceability shall be obtained.

c- If traceability is not obtainable for a purchased product, such product shall not be incorporated into the work unless authorized in writing by Alta Precision.

d- Should the Supplier suspect a product to be counterfeit, he shall notify immediately Alta Precision buyer. The event will be reviewed by Alta Precision and the customer shall be notified immediately through form of formal communication.

e- The supplier must include this clause (3.24) or equivalent provisions to sub-tiers contracts for the delivery of product that will be included or supplied to Alta Precision.

f- The term "Counterfeit Work" defines a Product that either is or encompasses parts that have been misrepresented of having used an approved system during design and/or manufacture. The definition also comprise of approved work that has attained a design life limit or has been damaged beyond repair but has either been altered or misrepresented as being acceptable.

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### 3.25. Supplier awareness program

Supplier shall have in place an internal awareness program for insuring that personnel are aware of their contribution to product or service conformity and product safety and on for the importance of ethical behavior.

### 3.26. Certified Supplier Program

a- Alta certified supplier program is a certification process which enables an approved supplier to perform verification activities and release of products on behalf of Alta Precision quality assurance.

b- The program is intended for Alta suppliers and aims at improving the performance of the supply chain by reinforcing quality at source and reducing delays and redundant activities. Program activities are in addition to supplier's quality system requirements.

c- Alta procedure QAP-08 defines the responsibilities and requirements for the certified supplier' quality management and Alta delegated quality control inspector of certified supplier related to the scope of work.

## **4. Revisions**

25 Sept 2017 First issue. This document supersedes and replaces procedure QAP 7.4.2 issue 7 Alta Quality Requirements for Suppliers.

## **5. Annex**

Form API-078 Supplier acknowledgement and information sheet.

Form API-196 Supplier non conformity report

Form API-198 Quality Waiver