



ALTA Precision Inc.
Quality Procedure

Procedure **QAP 7.4.2**
Issue 2
Date 29 Nov 2010
Page 1 of 5

Quality Requirements for Suppliers

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1. Scope

This Procedure identifies the quality requirements for Alta Precision suppliers as applicable to each of the following categories:

- Producers and distributors of raw material, forgings and castings;
- Producers and distributors of products and standard components;
- Producers of semi finished or finished parts to customer design;
- Processing and testing companies.

2. Reference documents

SAE AS9100	Quality management systems; Requirements for aviation, space and defence organizations.
SAE AS9102	Aerospace first article inspection requirements
ISO 10012	Measurement management systems - Requirements for measurement processes and measuring equipment
MIL-C-15074	Corrosion preventative, finger print remover
MIL-PRF-16173	Corrosion preventive compound,
Document 300	Goodrich; Supplier and product quality requirements
HPS 10	Heroux-Devtek; Quality assurance requirements for suppliers
LAT 7-8202	Liebherr; Quality assurance requirements for suppliers of complete parts
PRIDE	Messier-Dowty process requirements in developing excellence

3. Quality Clauses

3.1. Requirements of the aerospace industry

3.1.1. Alta Precision is active in the manufacturing and supply of critical parts and assemblies for the aerospace industry. The requirements of AS9100 Standard are applicable to all purchases affecting product quality.

3.2. Supplier contract review

3.2.1. Suppliers shall review purchase orders and accompanying documents upon receipt to insure that Alta and Prime customer requirements are identified and met.

3.2.2. Prime customer may be indicated on Alta purchase order or identified on engineering documents.

3.2.3. Clauses stated on Alta purchase order or engineering documents, have precedence over this procedure in case of contradiction.

Procedure QAP 7.4.2	Date	Issue	Page
Quality Requirements for Suppliers	29 Nov 2010	2	2

3.2.4. On orders related to specific customers the latest issue of the following documents apply in addition to this procedure: Document 300 for Goodrich; HPS-10 for Heroux Devtek; LAT 7-8202 for Liebherr and PRIDE for Messier-Dowty.

3.3. Supplier communication

3.3.1. Any issue affecting product quality or delivery status shall be discussed with Alta supplier contact. Direct communication between a supplier and Alta customer is not allowed unless authorized by Alta on a case by case basis.

3.4. Right of access

3.4.1. 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:

3.5.1 All documents provided for the purpose of submitting a quotation or fulfilling purchase order requirements, are Alta or customer property and should be considered of a strictly confidential nature. These documents must be destroyed or returned to Alta Precision upon request.

3.5.2. Military contracts are subject to ITAR or Canadian Controlled Goods regulations.

3.6. Supplier information

3.6.1. 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

3.7.1. Unless stated otherwise, the latest active revision of any specification, standard or supplier approved technique called up on purchase orders or accompanying documents is applicable.

3.7.2. Supplier certificates of conformity must indicate the revision level of specifications and techniques to which material or parts have been processed.

3.8. Manufacturing process and technique approvals

3.8.1. For critical and designated parts (Class 1, AFA and high strength parts) suppliers shall submit to Alta a copy of their manufacturing plan or process techniques for review and approval prior to first time processing. Approvals are issued by Alta Precision or by Prime customer as applicable.

3.9. Non conforming material or process

3.9.1. Non conforming parts or material shall be reported to Alta on supplier form. The form will be forwarded to supplier contact for processing and disposition by Alta quality or Prime customer.

3.9.2. Non-conforming products will be held at Supplier's facility pending written disposition.

3.9.3. When parts must be reprocessed due to a defect in a surface treatment, Alta Quality department shall be advised prior to reprocessing in order to evaluate the effect on tight tolerances.

3.9.4. Non conforming product or process affecting product, detected by the supplier after delivery, shall be reported to Alta within 24 hours.

Procedure QAP 7.4.2	Date	Issue	Page
Quality Requirements for Suppliers	29 Nov 2010	2	3

3.10. Preventive and corrective actions

3.10.1. Supplier shall insure that a preventive and corrective action system is maintained and that Alta requests for corrective action following a declared or detected non-conformance are handled in an efficient and timely manner to avoid re-occurrence.

3.11. Machining parts from plate or bar stock

3.11.1. 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.

3.11.2. Alta quality shall be advised of Material source (Mill) to be used when manufacturing any part for the first time (FAI batch).

3.12. Product handling and preservation

3.12.1. Supplier shall 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 supplier contact without delay.

3.12.2. Supplier shall insure adequate handling, preservation and packaging of parts at all stages of the process and maintain foreign object damage control procedures (FOD) to insure product integrity.

3.12.3. Bare surfaces of parts in process, in storage or prior to delivery must be protected with corrosion preventive oil. In case the type and grade of oil is not indicated on Alta purchase order or engineering documents, Alta recommends the use of Oil conforming to MIL-PRF-16173, grade 3 for medium term protection or severe conditions. For short term indoors protection not exceeding 4 weeks, oil conforming to MIL-C-15074 is recommended.

3.13. Quality certificates

3.13.1. Every shipment must be accompanied with a detailed quality certificate stating as applicable: Alta purchase order number and item; product or part number delivered and applicable revision level; certification date; supplier production batch number and/or parts serial numbers; approved technique number and revision level; process specification and revision level and results of tests performed in accordance with purchase order and engineering documents.

3.13.2. Temperature time and set point for all thermal operations like normalizing, austenitizing, tempering, stress relieving, embrittlement relieving shall be recorded on the certificate.

3.13.3. For a first time delivery to Alta Precision of a part made to prime customer design; the certification package shall include a copy of the first article inspection record per AS9102 format. This clause could be waived by Alta quality, on a case by case basis if the supplier has produced the same part in the past for another customer.

3.13.4. All shipments must carry complete certification including original mill test reports and processes performed. Outside process certificates shall bear the supplier quality inspection stamp and date as proof of review.

3.13.5. A copy of certificates for parts drop shipped at Alta request to another supplier shall be promptly sent by Fax or Email to supplier contact at Alta.

Procedure QAP 7.4.2	Date	Issue	Page
Quality Requirements for Suppliers	29 Nov 2010	2	4

3.14. First article inspection reports

3.14.1. Producers shall perform First Article Inspection of parts in accordance with AS9102 standard i.e. in cases of first time production; when a significant change occurs on the manufacturing process and when there was no production of the same parts during 2 years or more.

3.14.2. The inspector releasing the product must insure that first article inspection has been performed per AS9102 and that results have been accepted.

3.15. Product inspection and control

3.15.1. 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.

3.15.2. Zero defect sampling plans may be applied on characteristics under statistical process control. Sampling on features having a tolerance tighter than 0.0015" or on identified key characteristics is not allowed unless a process certification program is in place showing a process capability of 1.33 or above.

3.15.4. When In-process verification by operators is considered part of the inspection plan it shall be supported by appropriate records and a documented procedure for operators' certification.

3.15.5. Supplier personnel authorized to certify the product shall insure that 100 % visual inspection has been performed at final stage and that quality records demonstrate product acceptance status and appropriate controls on any non-conforming parts.

3.15.6. Alta reserves the right to review and approve supplier's inspection plans.

3.16. Supplier measurement system

3.16.1. Suppliers shall assess their measurement and calibration processes at regular intervals for adequacy. ISO 10012 Standard can be used as basis for measurement systems evaluation and improvement.

3.17. Product traceability and serial numbers control

3.17.1. Supplier shall verify and maintain individual part traceability with allocated serial numbers at all stages of the process.

3.17.2. 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.

3.17.3. Serial numbers shall be clearly stated on supplier purchase orders to sub-tiers and on sub-tier certificates.

3.18. Quality records and test pieces

3.18.1. Suppliers shall retain quality records on file for a minimum period of 10 years or as required by Prime customer. Records are subject to review by Alta or Prime customers and should be legible and easily retrievable.

3.18.2. Records include but are not limited to: purchase orders, certificates of conformance, inspection records and CMM reports, material certificates, process/technique sheets, job travelers, process and personnel qualification/ certification.

Procedure QAP 7.4.2	Date	Issue	Page
Quality Requirements for Suppliers	29 Nov 2010	2	5

3.18.3. Test pieces, X-Ray films, heat treat charts and related exhibits shall be retained by the supplier unless specifically requested to be sent to Alta.

3.19. Non- traditional machining

3.19.1. 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.

3.20. Offloading operations

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

3.21. Age sensitive products

3.21.1. Containers for age sensitive materials and products shall have the following information written on each container: a- manufacturer's name; b- batch ID; c- storage temperature; d- specification number; e- date of manufacture/cure date; f- expiry date.

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

Document revisions

20 Sept 2007 First issue.

29 Nov 2010 Issue 2. This issue contains numerous changes to the original document.

Annex

API-078 Supplier acknowledgement and information sheet.