

ALMONDSBURY FORGE LTD

Supplier Quality Control

AF Ref No 14-01

**Almondsbury Forge Works Ltd
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Warning

Printed copies of this document are uncontrolled – if in doubt ask

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|--|-----------------------|---|---------|
| Note: by accepting our purchase order confirms a suppliers / sub-contract compliance with this document | | Date | 01/2017 |
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| Issue: 1/2017 – Ref No | Almondsbury Forge Ltd | Quality Control Terms & Conditions of Procurement | |

1.0 Scope

- 1.1 This document details the requirements to be satisfied by the suppliers to Almondsbury Forge Ltd (hereinafter referred to as AF). AF requires that each supplier (your business) must comply with the quality requirements set forth within this document and to maintain a Quality Management System that ensure materials, goods and services comply with all our specified requirements.
- 1.2 These contract requirements are additional to the details on our Purchase Order (which focus on product quantity, logistics, item description, special references, etc. with reference to the product required).

2.0 Purpose

- 2.1 To establish and confirm a supplier's Quality Assurance requirement for AF for organisations supplying materials, goods and services that have a direct impact on the specification and or performance of a AF product.

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4.0 Related Documents / Terminology

The following documents are internal to AF and may be available upon request:

| Procedure | Title Subject |
|-----------|--|
| AF Ref 03 | Purchasing (for reference only) |
| AF Ref 14 | Selection of Suppliers (Questionnaire) |
| AF Ref 08 | Non Conformance (for reference) Form |
| AF Ref 08 | Non Conformance Report (Complaints) |

5.0 Approval Requirements

- 5.1 Suppliers shall as the terms so require, produce, service, release and deliver all products in accordance with the Purchase Order and all requirements identified therein against the specification provided.

AF require its suppliers to be certified against EN 1090 Series (CE Marking) (for factory production control (FPC) and or materials supply) when contracted for Structural Steel & Allied Trades work (as this is an EN 1090 Series (CE Marking) customer contract requirement). If a supplier's business is not Structural Steel & Allied Trades, then the supplier is preferred to be certified against ISO 9001 for product and or services supplied. If a test and or calibration laboratory, the supplier must be ISO 17025 accredited by UKAS (or other EA recognised national accreditation body).

Supplier's that do not comply with the above may be used by EN-CE, provided the supplier's Quality Management System complies with the following requirements (AF Ref) and has been formally approved by AF management. All certification awarded by be accredited by UKAS (or similar notified body under the mutual recognition agreement (MRA) for international accreditation – refer to EA – EC notified bodies as listed within the Nando EC website).

Engineering services (including individual experts) provided to AF shall be professionally and technically competent and shall indemnify AF for the technical advice provided. Signed copy certificates confirming qualification shall be provided to AF on request.

5.2 All products shall be produced strictly in accordance with the purchase order (and technical specification provided). The delivery of incomplete product / shortages is not permissible unless specified on the purchase order or by written authority of AF.

5.4 When the supplier is producing a product on behalf of AF, the supplier may only use Special Process Suppliers who are AF approved. A complete list of AF approved Special Process Suppliers can be supplied on request.

5.5 Material Stockists / Distributors / Franchised Distributor shall hold as a minimum ISO 9001 (current version) Certification (appropriate scope for Stockist Scheme Certification). As a minimum, items shall only be procured directly from the manufacturer or approved distributor / franchised distributor.

Note: Documentation and data supplied with the purchased items / materials shall ensure that full traceability of the purchased item is maintained, confirming that the purchased supplies conform to specification and was actually produced by the designated producer (objectively). Certification and other supporting material specifications provided to AF does not absolve the supplier from ensuring material compliance against the AF order requirements.

5.6 In the event that a supplier has its approval against EN 1090 and / or ISO 9001 the supplier must immediately inform FG Lin writing stating reason / status of withdrawal.

6.0 General

6.1 Enquiries concerning the content of this document and other referenced documents, or requests for additional copies should be referred to the purchasing representative responsible for the Purchase Order within AF.

6.2 The requirements of this document and of AF 03-01 Selection of Suppliers will be used in to provide both existing and potential suppliers with visibility of the current Quality & Standard requirements and expectations of AF contracts.

6.3 It is the policy of AF to manufacture and supply products and services, which result in, or contribute to, safe conditions for its customers and the end-users of such products and services. In furtherance of this policy, Suppliers shall establish controls and procedures that ensure that the attention necessary for the achievement of this objective is objectively provided throughout the production in support of their products.

6.4 Suppliers are required to comply in full with the contents of this document. If a supplier cannot comply with any portion of this document, then the supplier must advise AF in writing. AF will review the supplier request and advise the supplier of the results in writing. The supplier is responsible for keeping all related documentation on file at their facility. No deviation from this document is acceptable in advance

of formal agreement to do so in writing from AF. Such formal agreement must be retained by the supplier.

6.5 Verbal agreements are un-acceptable.

6.6 Suppliers shall maintain AF specifications and other Standards at the latest issue and shall review the issue status of specifications on receipt of a Purchase Order and or at least once within a six-month period (particularly for repeat contracts).

7.0 Business Quality Improvement Objectives

7.1 All suppliers are expected to have plans to achieve Business (Quality) improvements as part of their continuous improvement programme.

7.2 AF is dedicated to continuous improvement in the Quality and integrity of its services and to the satisfaction of its customer requirements and expectations. Supplier's contribution to this approach through the quality and reliability of their products and services is a prerequisite.

7.3 Each supplier shall demonstrate continuous improvement based on pro-active loss-prevention, root cause analysis and effective timely corrective action.

8.0 Organisation

8.1 Any change to the management representative responsible for Quality Management System and / or Inspection within the suppliers organisation (or group ownership) shall be communicated to AF. Changes to premises shall be notified sufficiently in advance to EN-CE.

9.0 Purchase Order / Documentation Issue Control

9.1 Purchase Order amendments shall be subject to review by AF prior to acceptance. The review shall ensure that copies of all processes and specifications quoted within a Purchase Orders are available, and that, where a supplier is unable to carry out any operations, approved sub-contractors may be identified.

9.2 Where a supplier has more than one site, every site used to produce product for shipment direct to AF must have AF approval (by completion of AF Ref No).

9.3 AF shall be afforded the right of entry to verify at source and / or upon receipt that purchased product conforms in all respects to specified requirements. This action shall not absolve the supplier of the responsibility for the quality of the delivered product nor preclude its subsequent rejection should other quality issues arise at a later date / time.

9.4 Where the use of a sub-contractor is permitted, the identification and selection shall form a part of the initial contract review. Suppliers may consider / use a sub-contractor suitable given the following

circumstances: *The sub-contractor is currently approved by AF.*

9.5 Suppliers are responsible for ensuring the flow down of applicable sections of AF Ref No and related specifications to second tier suppliers.

9.6 Suppliers must reference AF Ref No on all Purchase Orders issued in support of activity for AF (referring their suppliers to the AF web-site for latest version documentation).

10.0 Procurement of Components

10.1 Failure of components can have major effects on airworthiness, safety, reliability, operational integrity – with related cost impact. All parts are therefore termed “controlled” and should be treated as such (bonding requirements may be appropriate and / or necessary).

10.2 Any component, which is sourced, and has the manufacturer identified on the Bill of Material (BOM) may only be purchased from that supplier or their approved agent. Suppliers must not source parts from non-approved sources (original producing suppliers only).

10.3 Where a Supplier wishes to change the source of a component, the Supplier shall request permission to make the change from AF.

NOTE: Identification of a supplier on a controlled BOM does not automatically approve them for use. It is the supplier’s responsibility to check that any sub-contractor is correctly approved prior to use (objective evidence for audit purposes is required).

11.0 Control of Non-Conforming Material

11.1 The supplier shall have no discretionary power to deviate from the specification requirements as detailed with Purchase Order (and supporting documentation). Concessions will only be accepted on receipt from the Supplier of a full “root cause analysis” report detailing the issues and evidence of preventative action. Parts subject to concession must not be delivered to AF until AF approves a concession.

Note: Concessions are normally only issued to Suppliers when a product is non-conforming, and the non-conformance does not affecting fit, form or functionality.

11.2 No rework shall be permitted on identified non-conforming product without written approval from AF. Manufacturing records shall clearly record the operation and the results achieved, should re-working under a concession be approved.

11.3 Where the supplier has any reason to suspect non-conformance of any delivered product, then the supplier must immediately notify AF.

11.4 Scraped (or non-conforming) components must be physically damaged beyond repair prior to actual disposal (to prevent mixing with conforming product of the same / similar type / model). The AF management representatives (or their customer) may require a report from the Supplier and / or witness by inspection and of process of damage and / or disposal.

12.0 Rejections after Delivery

12.1 The Supplier shall be notified of non-conforming supplies found after delivery. AF will contact the supplier and issue an NCR against the parts prior to return.

12.2 Following receipt of an NRC notification the Supplier shall take immediate containment action. The action shall include 100% inspection of all supplier stock or work in progress. This containment action shall be taken within 48 hours of notification from AF. The supplier shall provide within 14 days an investigation into the root cause of the problem and provide corrective action to prevent recurrence. The findings, corrective action and effective date shall be reported to AF.

13.0 Supplier Monitoring

13.1 All Suppliers shall monitor the quality and delivery performance of product delivered to AF. In addition each supplier’s quality and delivery performance is continually monitored by AF. Suppliers whose performance does not achieve and maintain an acceptable level shall be formally notified of their supplier status and may be required to implement improvement actions accordingly. Failure to improve or respond positively to an FGLNCR will result in the withdrawal of supplier approval by EN-CE.

14.0 Records & Archives

14.1 All (Quality Management System) records held by Suppliers shall be legible and identifiable to the product involved. Records shall be stored and maintained in such a way that they are readily retrievable in facilities that provide a suitable environment to minimise deterioration or damage and to prevent loss. Records shall be available for evaluation by AF staff until such time as AF authorise disposal in writing.

14.2 Documentation and records applicable to AF shall not be amended with correction fluid. A single linked line shall delete any revisions and/or correction of errors and will be accompanied by an initial and date.

14.3 Should a supplier cease trading with AF, quality records shall still be maintained until disposal is authorised by AF. If the supplier ceases trading completely, or is unable to maintain the records, AF must be informed so that alternate arrangements can be made to store the records.

14.4 All records shall be retained by the Supplier for a period of 12 years unless otherwise agreed with AF.

15.0 Certificate of Conformance

A Certificate of Conformity (C of C), which shall include sufficient information to enable it to be correlated to the supplies and must accompany supplies submitted / provided to AF. Certificates and supporting documentation will be identified by Purchase Order / Contract number and shall include the following information:

The Certificate shall include a statement of conformity individually signed by an authorised signatory of the Supplier and shall be as stated below or similar, subject to agreement by AF.

We (name of the supplier) hereby confirm that the whole of the supplies detailed hereon have been produced, inspected and tested and conform in all technical and integrity respects with the requirements of the contract order / specification.

*(signed by: authorised ** person from the Supplier)*

Note: ** The Supplier shall be able to demonstrate to the satisfaction of AF that the nominated authorized signatory has authority and competence (with the technical competence demonstrated by qualification and experience supported by validated CV claims).

Where the Supplier utilises an automated system for generation and / or authorisation of certificates / records, then those systems shall be subject to robust management and security controls approved by AF to protect the integrity of the certification process.

The Supplier shall ensure completion of all requirements of the purchase order prior to delivery including all processes. Deliveries of goods and or services that do not fulfil the purchase order requirements will not be accepted.

The Supplier is responsible for providing a C of C that confirms that the products, processes, and/or services furnished meet the requirements for the lot and or batch of each shipment, with reference to the AF Purchase Order.

The C of C must have at a minimum the following:

- a) Consignees name and address
- b) Consignors name and address
- c) Reference number and date of the certificate
- d) Description and quantity of supplies
- e) Related specification or drawing numbers and issue (as appropriate)
- f) Identification marks and serial numbers (as appropriate)
- g) Manufacturing lot no. or traceability reference (works order / batch number)
- h) Any limitations/Shelf Life Expiry dates (as appropriate)
- i) Signature(s) of ** approval (for inspection / release)

When the purchase order and / or applicable documents does not specify a method of packaging and preservation, it is the supplier's responsibility to

assure that product is preserved and packed using methods and materials that will assure that it arrives damage free to AF.

Note: to structural engineering services – unsigned documentation and or reports issued will not be legally accepted or binding by AF. Where such documentation is issued unsigned, AF will refer to the unsigned documentation in good faith in support of the customer contract specification with the understanding that the full liability (in the case of claim and or failure) placed on the supplier providing unsigned documentation.

15.1 Preservation: All critical / sensitive materials, components or devices must be preserved by the supplier using appropriate packaging materials, and stored under conditions recommend by the manufacturer.

15.2 Packaging: The method of packaging must:

- Prevent damage or deterioration in transit
- Permit safe handling
- Assure that all necessary warnings are completely visible
- Assure the shipping address, supplier name, qty, and part number are visible.
- Assure that the packing list, quality documents, and other important information is enclosed, or securely fastened.

15.3 Non-destructive Test Report (NDT)

When NDT is required with the product to demonstrate compliance with all the procurement specification detailed within the design package the NDT report must be provided by an accredited NDT service provider.

A copy of the NDT report shall be supplied with the product unless otherwise stated. The supplier shall retain the NDT report as a quality record and they shall not be disposed of without the written permission of AF. If in doubt refer to EN 1090 Table 24 for NDT.

An NDP report shall not absolve the supplier of the responsibility for the quality of the delivered product nor preclude its subsequent rejection should other quality issues arise.

15.4 Our right of access

Any person authorised by AF, including the Customer or Regulatory Authority, shall not be unreasonably refused permission by the supplier to enter any works, warehouse or other premises under the supplier's control for the purpose of surveillance or inspection of any tools or materials procured or used for the manufacture of the goods or process of manufacture on the completed goods themselves before dispatched to AF or their customer.

15.5 Business continuity planning

AF advises each supplier to have a written business continuity plan to cover disaster recovery and the responsibilities and actions to be taken in the event of an emergency that may affect deliveries to AF that will bring the supplier on line in the shortest possible time.

15.6 Change Control

Uncontrolled change within the supply chain is the major cause of deficiency escapes into AF. It is crucial therefore that all change, no matter how trivial it may appear, is assessed for potential risk and then subject to mitigating actions and control.

Changes can occur in three ways:

- 1) Change to the producing location, either within a supplier or between suppliers.
- 2) Changes to Components.
- 3) Changes within the company's stores department, Storage and dispatch method, including machines, people etc.

The control mechanism for these is as follows.

- 1) Changes to the producing location shall be notified to EN-CE.

- 2) Changes in components shall be raised with the buyer responsible for the purchase order. The buyer shall take the appropriate action within AF and inform the Customer. The supplier must not progress with any changes to the component without written agreement from AF.

- 3) Changes within the Company's stores department shall be controlled as follows

- All changes to components storage location shall be subject to a documented risk review prior to being carried out.
- Staff changes within the company's stores department must be fully trained and supervised until level of competence is assessed and approved as competent.
- Changes to the Stock control computer system, must be documented, risk assessed, audited and checked after changes for example, New operational software is introduced or updated.

All documentation relating to point 3 must be kept indefinitely and made available to AF on request in writing with reasonable notice following an NCR with relation to supply quality problems.

15.7 Traceability

All parts and or materials shall be clearly traceable back to the original manufacturer of the parts. Where the supplier has purchased a component or assembly, they shall have a copy of the original producers certificate of conformance.

All components and assemblies shall be traceable to the original material identification.

The traceability system must facilitate the rapid identification of any part delivered and suspected of being defective. Containment action must be implemented immediately to protect the customer on any defects found that affect quality of the product. All records in relation to AF must be kept indefinitely and shall be made available to AF upon request

15.8 Special process requirements (Ref. section 19.0 of this document for requirements)

Any special process supplier (usually welding, NDT or plating) must be approved or meet the requirements outlined in section 19 of this document. The supplier performing the special process must certify that all applicable requirements have been met.

15.9 Manufacturing & Process Control

Adequate, clean well-maintained facilities shall be provided to enable products to be consistently produced in accordance with the requirements of the AF order.

Suppliers shall establish a procedure detailing the general workmanship practices for the prevention of Foreign Object Damage.

Suppliers must not omit any part of any specification except when defined on the purchase order or covered by a non-conforming report authorised by AF.

Suppliers providing Shelf life items shall ensure they are correctly labelled with shelf life expiry and suitably packaged. No shelf life items within 6 months of expiry.

Suppliers are expected to establish procedures for identifying adequate statistical techniques for determining process capability of key characteristics, especially when these are identified on the documentation. Such techniques shall demonstrate management ownership and responsibility and be based on recognised industry models.

Where the supplier uses a sample inspection plan as a means of product acceptance, the plan shall be predicated on industry recognised models, statistically valid and shall preclude the acceptance of known non-conforming product. Documented procedures and records to demonstrate this shall be available.

All parts supplied to AF shall be identified in accordance with the requirements of AF. Suppliers shall maintain records to identify the materials used and the producing and processing history of each batch

of parts supplied to AF. A lot number that enables all associated records to be retrieved shall identify each batch.

15.10 Inspection Reports

The supplier is required to maintain and provide upon request all inspection records. The records must be at a minimum based on an established/recognized sampling plan.

16.0 Source Inspection

16.1 Source Inspection will be used by AF to help develop a new supplier, or a supplier that is having quality issues. Source inspection at a supplier's site will be imposed by a letter issued from AF to the supplier. In the event AF imposes source inspection, only AF can remove or waive source inspection.

AF will also use source inspectors to perform in process checks at a supplier, process audits at a supplier, or corrective action development, or follow up. AF will select a UKAS and / or other approved inspector.

17.0 Concessions / Permits

17.1 If a supplier's quality system discovers a non-conformance to the AF Purchase Order, the supplier can submit a request for a concession to EN-CE.

The supplier can use the table below to determine when a concession is needed.

| Option | AF Approval/Concession Required |
|---|---------------------------------|
| *Rework the non-conformance prior to shipment | No |
| Scrap and re-place | No |
| Request to use the product as is | *Yes |
| Request to repair the non-conformance | *Yes |

Requests to use as is, or repair a non-conformance, must be processed using the suppliers own concession request form and signed by EN-CE.

*Rework must return the part to full compliance and specification.

Note: The supplier is not authorised to dispatch items requiring concession until he has been informed of the applicable Concession Number and the supplier has a copy of the approved concession. This Concession Number must appear on his Certificate of Conformity, each time a delivery is made from the batch that has been approved under Concession.

18.0 Corrective Actions

18.1 If AF performs a supplier audit and finds a non-conformance a request for corrective action will be issued to the supplier. Corrective actions reports (CAR's) for issues found during an audit will be documented. Before an audit will be closed out all

open audit CAR's must be answered by the supplier and accepted by AF.

19.0 Special Process Suppliers

19.1 AF uses ISO 9001 and or EN 1090 approved special process suppliers. In addition to ISO 9001 approval the special process supplier must demonstrate the ability to satisfy all applicable requirements. Failure to satisfy any requirement will prevent AF from using that supplier. Coded welder status is required when requested.

19.2 AF considers the following to be special processes:

- Painting / power-coating
- Non-destructive testing (NDT)
- Anodizing / plating
- Galvanising
- Welding / soldering / brazing (all)
- Conformal coating

20. Distribution (appropriate access of this document)

Internal

- AF(purchasing)

External

- All AF suppliers, supplying against:
- Defence / Aerospace and related contracts (as identified by EN-CE)
- AF Customers (on request)
- Auditors from Certification Bodies (on request)

(end of this document contract text; contact below with any questions)

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