

# LANZEN FABRICATING INC.

## SUPPLIER QUALITY ASSURANCE REQUIREMENTS

Rev D – November 2, 2013

As noted on the Lanzen Fabricating Inc. (LFI) purchase document, compliance with designated clauses of this rider is necessary to meet minimum contractual requirements. The designated clauses supplement, but do not supersede the presently existing terms and conditions of the purchase order.

### 1.0 QUALITY SYSTEM

Prior to start of production, the supplier shall submit copy of either a Quality Manual, or a registration certificate which demonstrates compliance with ISO9001:2000 as a minimum.

### 2.0 QUALITY ASSURANCE (QA)

In the performance of this purchase order, the supplier shall comply with:

- ❑ Drawings Specifications
- ❑ Supplementary Quality Assurance Provisions (SQAP)
- ❑ Quality Assurance Requirements (QAR)
- ❑ Quality Assurance Provisions (QAP).

These provisions cover the minimum inspection necessary to assure compliance with established requirements. Objective evidence of these or operations performed by the supplier shall be forwarded to LFIQA Department. Failure to provide this data prior to or with shipment of material shall be cause for non-acceptance of material at LFI. Where suppliers failure to provide such data jeopardizes schedules, LFI may elect to perform necessary operations and/or tests at the supplier's expense.

It shall be the supplier's responsibility to assure that all requirements of the purchase order are flowed through to sub tier suppliers and subcontractors. The supplier must conduct sufficient inspection to assure that such requirements have been accomplished and that the products meet the LFI purchase requirements. SQAP/QAR/QAP drawing characteristic shall be inspected at an AQL specified on the SQAP/QAR/QAP or when AQL is not specified to an AQL equivalent to 1.0 using general inspection level, except for off-the-shelf hardware which may be special inspection level S-1.

### **3.2 SUPPLIER CONTROL**

Supplier shall have or establish and maintain a Quality Control System appropriate to the size and nature of its operation but of sufficient scope to assure that supplies delivered against this purchase document will comply with all the applicable drawings, specifications, LFI SQAR and other purchase document requirements.

### **4.0 CALIBRATION SYSTEM**

Supplier shall be responsible for providing and ascertaining correctness of tools, gages and test equipment to assure that product conforms to Quality Requirements. Documented procedure(s) shall be used that provide for periodic inspection and calibration in accordance to ISO10012-1 or ANSI-Z540-1 or equivalent. Evidence of such checks will be recorded and made available for review by LFI QA upon request.

### **5.0 STATISTICAL PROCESS CONTROL (SPC)**

Supplier shall have a SPC program in effect in their facility with applicable documented procedures. Statistical data shall be recorded and made available upon request as evidence that the supplier's parts/processes are within SPC limits and within allowable specification tolerances.

### **6.0 APPROVED SOURCE**

Supplier shall be responsible to ensure that procurement source is the “approved source” named on the drawing.

### **7.0 QUALIFIED PRODUCTS LIST (QPL)**

Suppliers of products such as electronic components, primers, enamels, oil, welding rod, switches, regulators, etc. direct to LFI are responsible to furnish these products as listed on the applicable QPL or have been approved for inclusion on such list. They shall substantiate the qualifications by listing the product, the name of the manufacturer, the QPL, and, if there is a shelf life on the product, the expiration date must be noted on the certification and the product.

### **8.0 CONTROL OF SUB-SUPPLIERS**

Supplier shall be responsible for conformance of all items procured from every tier of sub-suppliers and shall assure that all applicable requirements defined by LFI applicable drawings and specifications are passed through to sub-tier procurement sources. Documented evidence as to control sub-tier suppliers shall be maintained and made available for review by LFI QA upon request. Suppliers performing final surface finish operations such as painting or who install component parts or assemblies using QPL products shall abide by paragraph 7.0 (Qualified Products List).

## **9.0 NON-CONFORMING MATERIAL**

Materials that do not meet all drawing or specification requirements are considered non-conforming and shall not be shipped without LFI approval. Supplier may be required to complete a corrective action request. Should LFI authorize shipment, non-conforming material must be identified and segregated from conforming supplies. Disposition of non-conforming material will be made by LFI. Non-conforming materials received by LFI may be reworked at the suppliers expense should these materials be needed to meet scheduled deliveries.

## **10.0 DOCUMENTATION CHANGE CONTROL**

Supplier shall maintain adequate control to assure drawing revisions incorporated through purchase document changes are implemented in a timely manner. Items so effected shall be identified, segregated, and packed separately at established efficiency points. This includes but is not limited to NOR'S, ECP's, and Change Notices.

### **10.1 STANDARD REVISION LEVEL**

Supplier shall use the latest revision of specification/standard available unless an earlier revision is specifically called out in the purchase order.

### **11.0 LFI SOURCE INSPECTION**

Source inspection by a LFI QA Representative is required prior to shipment of items from your plant. Suppliers shall notify LFI QA at least ten (10) days prior to availability of supplies for inspection. Performance of Source Inspection does not relieve supplier from responsibility should discrepant conditions be discovered after shipment.

### **12.1 GOVERNMENT SOURCE INSPECTION (GSI) AT VENDORS FACILITY**

The items covered by this purchase document are subject to GSI and/or testing prior to shipment from your plant. Upon receipt of this order, promptly furnish a copy to the Government QAR who normally services your plant so that delegation can be arranged. Contact LFI immediately in the event the local Government QAR cannot be identified.

### **12.2 GOVERNMENT SOURCE INSPECTION (GSI) AT LFI**

The items covered by this purchase document are subject to GSI at LFI. With your shipment enclose all required certification and test data as specified by the purchase order drawing, SQAP, QAR, QAP and/or other applicable specifications.

### **13.1 FIRST PIECE INSPECTION**

A complete dimensional inspection shall be performed on the first piece of the production lot. Submit the first piece and any inspection documentation to LFI QA. Parts must be identified with part number, LFI purchase order number and appropriate first piece tag. To expedite material flow it is recommended that the supplier include a copy of his own completed first piece inspection report with the part. Supplier may request waiver of this requirement based upon previous approval on a government contract provided that no change has been made in facilities or methods of manufacture, and there has not been an interruption in production of more than twelve (12) months since approval. Requests for

waiver must be submitted in writing to LFI QA and include evidence of prior first piece acceptance.

### **13.2 FIRST ARTICLE INSPECTION/TEST**

First article inspection/test is required, including performance testing and evaluation to the extent required by the Government. The supplier is responsible for scheduling inspection/tests to obtain government QAR concurrence and to provide ten (10) days notice to allow LFI the option of witnessing the same. Supplier may request waiver of this requirement based upon previous approval on a government contract provided that no change has been made in facilities or methods of manufacture, and there has not been an interruption in production of more than twelve (12) months since approval. Requests for waiver must be submitted in writing to LFI QA and include evidence of prior first article acceptance.

### **13.4 FIRST PIECE INSPECTION – LFI**

Supplier must submit first piece sample with inspection report to LFI for approval. Proceeding with production before first piece has been approved is at the suppliers risk.

### **14.1 CERTIFICATION**

Certificate of Conformance is required and must accompany each shipment of material to LFI against this purchase document. Certificates must include the following data:

- Supplier Name
- LFI Purchase Document Number
- Part number and Revision level
- Quantity

Certifications must contain the signature and title of the authorized supplier representative. The certification must contain a statement that the supplier has on file and available for examination, evidence of conformance to the applicable specification. LFI QA reserves the right to request data supporting the Certification of Conformance. When requested, the supplier shall forward supporting data to LFI within five (5) working days.

### **14.2 CERTIFICATION - SPECIFIC REQUIREMENTS**

Same as 14.1, with the following additional requirements:

- Manufacturer's Name & Address (if different than suppliers)
- Manufacturer's Lot Number
- Inspection Date (if applicable)
- Drawing Number
- Specifications
- SQAP/QAR/QAP
- Test Results (as required).

### **15.0 SQAP/QAR/QAP APPLICABLE**

The drawings and/or specifications will list the mandatory SQAP/QAR/QAP required for minimum inspection and test control of the item being purchased.

### **16.1 RAW MATERIAL CERTIFICATION**

Supplier shall include with required Certification of Conformance, a raw material certification stating type, grade and applicable specification & revision of the raw material used to manufacture the items on this purchase document. Traceability to LFI purchase document number is required.

### **16.2 CHEMICAL/PHYSICAL TEST REPORTS**

Supplier shall furnish chemical analysis and physical test reports with each shipment. Reports must include heat or lot number, actual results of tests, and bear the company name, signature and title of an authorized representative. Traceability to LFI purchase document number is required.

### **17.0 CHEMICAL/PHYSICAL COUPONS**

Supplier shall submit sufficient coupons representative of the material to the attention of LFI QA, in order that appropriate chemical and/or physical testing may be performed. Coupons shall be shipped prior to or with products and identified by part number, LFI purchase document number and applicable heat/melt number(s). Shipment of product is not to be delayed during approval process.

### **18.1 BALLISTIC CERTIFICATION (ARMOR)**

Suppliers of armor must be qualified in accordance with the applicable specification. In addition to chemical and physical test reports required by the specification, supplier shall furnish evidence of ballistic qualification and the government approval letter including the final number for each heat/lot of material received for ballistic testing.

### **18.2 BALLISTIC SAMPLE (ARMOR) – LFI TESTING**

Supplier shall submit a specimen from the actual lot of armor material. Specimen shall be of sufficient quantity to allow ballistic testing. Supplier shall submit chemical and physical test data with the material specimen.

### **19.1 HARDNESS TEST CERTIFICATION**

Supplier shall submit results of hardness tests performed on material furnished. Hardness data must be in the appropriate scale, providing case depth data if required and bear the signature and title of an authorized representative of the organization performing the test. Traceability to LFI purchase document number is required.

### **19.2 HARDNESS REPORTS**

Suppliers shall submit to LFI QA a copy of heat treating procedures. The procedure shall bear the signature and title of an authorized representative of the organization performing the process.

### **20.0 HARDNESS REPORT COUPONS**

Supplier shall submit sufficient coupons representative of the material to the attention of LFI QA, in order that appropriate hardness testing may be performed. Coupons shall be

shipped prior to or with products and identified by part number, LFI purchase document number. Shipment of product is not to be delayed during approval process.

### **20.1 Round Part Heat Treating.**

When a round part requires heat treat, Lanzen will furnish their heat treat supplier coupons from the production lot of material used to make that part. Those coupons are to accompany each lot of product being heat treated.

Coupons processed in this manner are to be sectioned to determine core hardness values. Core hardness values are to be compared with drawing or design requirements to verify compliance.

### **21.0 TOOLING APPROVAL (CASTINGSIFORGINGS)**

Prior to proceeding with tooling for castings or forgings, the supplier must submit to LFI QA two (2) copies of a drawing marked up to show the exact size and configuration of the part to be supplied, including parting lines, draft angles, etc. The supplier may request a waiver of this requirement. Waiver approval will only be considered if all of the following criteria apply:

- Part has been produced within the last twelve (12) months,
- Manufacturing methods or locations have not changed
- Design has not changed
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Request for a waiver must be forwarded to LFI QA.

### **22.1 WELDING CERTIFICATION**

Supplier shall furnish a Certification of Compliance for welding/joining processes used in the fabrication of purchase order line item. Certification shall state specification and revision, bear the signature and title of an authorized representative of the manufacturer performing the process and include a statement that evidence of compliance is on file and available to LFI upon request. Traceability to LFI purchase document number is required.

### **22.2 WELDING PROCEDURES**

Supplier shall prepare and submit to LFI QA, a procedure in accordance with the applicable welding/joining specification. When required by the specification, a workmanship specimen shall be prepared for approval through the suppliers DCMA QA Representative. If suppliers facility is not normally serviced by DCMA the specimen may be submitted to LFI for DCMA submittal.

### **23.0 WORKMANSHIP SPECIMEN**

Supplier shall submit a workmanship specimen representative of the procedure (when required by clause number 22.2) to the attention of LFI QA for the required inspection tests. Workmanship specimens shall be shipped prior to, or with the products and identified with part and purchase order number. Shipment of products shall not be delayed while awaiting approval of workmanship specimen.

#### **24.0 WELDING EQUIPMENT APPROVAL**

Supplier shall provide certification for equipment used in the performance of spot, seam or other resistance welding processes as required by the applicable specification(s).

#### **25.0 NONDESTRUCTIVE TESTING (NDT)**

Suppliers performing nondestructive testing processes shall provide certifications, and/or test reports stating the applicable specification and revision and bear the signature and title of an authorized representative of the organization performing the test(s). In the case of radiographic examination, films must be submitted to LFI upon request. Traceability to LFI purchase document number is required.

#### **26.0 NONDESTRUCTIVE TESTING (NDT) FACILITY**

Prior to production of parts, supplier's NDT facility and applicable procedure must be approved by LFI.

#### **27.0 SURFACE PREPARATION PROCEDURE**

When the drawing specifies "Type I, spec TT-C490" or "MIL-DTL-16232", the supplier of the detail parts or assembly shall submit to LFI a copy of the plating source government approval letter for each process. When plating source approval letter is not available, the plating source shall prepare and submit through the supplier for approval by LFI, two (2) copies of their written procedure prepared in accordance with the applicable military specification prior to start of production. Furthermore, approval of the procedure will not require resubmission for any other drawing showing these surface preparations unless the procedure is revised.

#### **28.0 STANDARD PROCESSES – FINISH**

When a drawing makes reference to final finish surface processes such as cadmium, zinc, chrome, anodizing, etc., the material must be processed in accordance with the applicable government or commercial specification. Supplier shall furnish with each shipment to LFI, certification signed by an authorized representative of actual facility performing the process, stating that process meets applicable specifications (including specification revision) in accordance with the requirements of this purchase order, and that specific data or other evidence of conformance to the applicable specifications is available for examination. Traceability to LFI purchase document number is required.

#### **29.1 PAINTING AND FINISHING**

Supplier furnishing materials, component parts or assemblies that require protective coatings such as primers and topcoats, must accomplish all cleaning and surface preparations as outlined on the drawing prior to the application of the finish coatings. The primer and/or topcoat applications must be accomplished using products that are procured in accordance with the applicable QPL.

Unless otherwise specified, all uncoated or unprotected ferrous and nonferrous metal surfaces (internal and/or external) must be protected for thirty (30) days minimum against rust and corrosion and be suitably packed to prevent damage from handling or shipping.

Supplier shall furnish with each shipment to LFI, certification signed by an authorized representative of actual facility performing the process, stating that process meets applicable specifications (including specification revision) in accordance with the requirements of this purchase order, and that specific data or other evidence of conformance to the applicable specifications is available for examination. Traceability to LFI purchase document number is required.

### **29.2 PAINTING AND FINISHING - SPECIAL REQUIREMENTS**

Special paint and/or finishing requirements are required to facilitate subsequent operations. Please refer to the LFI purchase order which will define special requirements regarding paint and/or finish applications. Supplier should immediately notify the LFI buyer if any clarification and/or assistance is required in maintaining compliance. Supplier shall furnish with each shipment to LFI, certification signed by an authorized representative of actual facility performing the process, stating that process meets applicable specifications (including specification revision) in accordance with the requirements of this purchase document, and that specific data or other evidence of conformance to the applicable specifications is available for examination. Traceability to LFI purchase document number is required.

### **30.0 VALIDATION APPROVAL**

Suppliers of surface finishing, organic and chemical coatings must obtain validation approval of spectral reflectance characteristics and composition on each production lot/batch from the organic and chemical coating research group. A copy of the actual validation approval must be forwarded for each batch of coating utilized in the performance of this purchase order.

### **31.1 AGE CONTROL – CERTIFICATION**

Suppliers of items requiring identification of manufacture and expiration dates (age control) shall be identified in accordance with the applicable specification. Supplier shall provide Certification of Conformance to actual specification, and revisions: including batch identification, manufacture date, and expiration date as required. Certificate shall bear the signature and title of suppliers authorized representative and state that evidence of compliance is on file and available to LFI upon request.

### **31.2 AGE CONTROL - SPECIFIC DATA**

Supplier of adhesives, rubber, gaskets, packings, hoses, etc. shall mark the parts and exterior shipping container in accordance with applicable military specification. The date of manufacture and expiration date (quarter/year) is required as applicable.

Products shall not exceed two (2) quarters (six months), from the date of manufacturer to ship date and acceptance at LFI or half of shelf life, whichever is less.

Test data (composition of rubber and applicable physical test results), including applicable batch numbers and date of manufacture and expiration date (as applicable) must be forwarded to LFI upon request.

### **32.0 SAMPLES**

Supplier shall submit sufficient material samples to the attention of LFI QA (see clauses 31.1 and 32.2) from each applicable batch number for the required inspection tests. Samples shall be shipped prior to or with products and identified with part and purchase order number, batch number and date of manufacture. Shipment of products shall not be delayed awaiting approval of samples.

### **33.0 ASSEMBLY CONTROL**

Supplier shall maintain dated control in accordance to applicable military specifications or standards (Re: clauses 31.1 and 31.2). All assemblies shipped to LFI shall be appropriately identified (on the nameplate, when applicable) to reflect applicable assembly date.

### **34.0 TEST REPORTS**

Supplier shall furnish, with each shipment to LFI, performance test data for tests conducted on and identifiable to the product submitted (linked by serial number, when applicable). Performance test data reports must contain the signature and title of the person (or traceable inspector stamp) responsible for the tests. Traceability to LFI purchase document number is required.

### **35.0 MATERIAL IDENTIFICATION**

In accordance with drawing requirements, product is required to be identified in accordance to MIL- STD-130. In addition to drawing requirements, material shall be identified by LFI Federal Supply Code for Manufacturer (FSCM-1A424). Example of preferred application is shown below.

CAGE Code - Part Number – Revision Level – “MFR” LFI CAG Code

Example: 19207-10911091-E MFR 1A424

Contact LFI QA when clarification on part marking requirements are required.

### **36.0 PACKAGING/IDENTIFICATION REQUIREMENTS**

Supplier shall accomplish identification, cleaning, preservation, packaging and packing in accordance with the applicable drawings, specifications and instructions as referenced on the purchase document. Furthermore, the supplier shall assure supplies are packaged using materials of grade size and weight which will provide adequate protection from damage, corrosion, and/or contamination during handling and transport to point of deliver. Packaged parts shall be identified with Part No. and LFI PO. A preferred Identification label is described below.

NSN #####-##-###-####  
Quantity  
CAGE - Part Number – Rev  
Description  
PO Number/Contract Number

Contact LFI QA when clarification on package marking requirements are required.

**37.0 RETURN ALL DRAWINGS AND CHANGES**

All drawings and/or changes shall be returned to LFI upon completion of this order. Supplier shall be held responsible for checking drawings and/or changes and implementation of this clause against change call out on the LFI purchase order.

**38.0 INSPECTION OF SUPPLIER (FAR 52.246.2)**

The method used in the inspection of materials furnished shall comply with FAR 52.245-2 "inspection of suppliers" requirements. Supplier shall be required to respond to all Corrective Action Requests. Quality documents and related data shall be maintained by the supplier and made available upon request by LFI for four (4) years after completion of the order. Supplies delivered under this purchase document shall comply with all the applicable drawing, specification and defined LFI SQAR.

**39.0 SPECIAL REQUIREMENTS**

Supplier is to refer to the LFI purchase document and/or attachment(s) for special requirements concerning this item(s)

**40.0 GOVERNMENT/CUSTOMER RIGHT OF ACCESS**

During performance on this order, your quality control or inspection and manufacturing processes are subject to review, verification and analysis by authorized government or LFI customer representatives. Government QAR release of products prior to shipment is not required unless you are otherwise notified. A copy of this order will be furnished to your representative upon request.