



**SUPPLIERS QUALITY MANUAL**

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1.0 **PURPOSE**

- 1.1 **The Objective** of this procedure is to set forth the general quality requirements that must be followed by suppliers of direct material to C.F. Roark Welding and Engineering Co., Inc.
- 1.2 **The Intent** of this procedure is to ensure that:
  - 1.2.1 purchased materials or services meets or exceeds the quality requirements of C.F. Roark Welding and Engineering Co., Inc. and its customers; and
  - 1.2.2 the quality systems requirements imposed by C.F. Roark Welding and Engineering Co., Inc. on its suppliers are communicated in a logical and easily understood format.

2.0 **APPLICATION**

- 2.1 This procedure applies in total or in part to all suppliers of direct materials, parts, and services to C.F. Roark Welding and Engineering Co., Inc.

3.0 **DEFINITIONS/ABBREVIATIONS**

- 3.1 **Certificate of Conformance** (C of C) - A general statement that a product or process conforms to the requirements of a particular process, specification or other requirements
- 3.2 **Certification** (Cert) - A certification will contain actual test results proving that a product or service conforms to the requirements of a particular process, specification or other requirements.
- 3.3 **Deviation** - A deviation addresses material, which has not been produced nor has a known material substitution.
- 3.4 **Documentation** - Defined as all written correspondence and records related and pertaining to the manufacture of a product
- 3.5 **ITAR** - International Traffic-In- Arms Regulations
- 3.6 **MRB** - Material Review Board

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- 3.7 **Nonconforming** - Any component containing one or more defective characteristics is considered nonconforming.
  - 3.8 **PO** - Purchase Order
  - 3.9 **Purchaser** - CF Roark Welding & Engineering Co., Inc.
  - 3.10 **Supplier** - The Company providing the material, manufactured product and/or services described on the purchase order received from C. F. Roark Welding and Engineering Co., Inc.
  - 3.11 **Waiver** - A waiver addresses nonconforming material, which has already been produced.
- 4.0 **ASSOCIATED DOCUMENTS**
- 4.1 **AS 9100/ISO 9001** – Section 7.4
  - 4.2 **ISO 10012** – Measurement Management Systems

## 5.0 PROCEDURES

5.1 **Surveillance** - The Suppliers Quality System will be subject to initial and possibly periodic audits/surveys and acceptance by Roark Welding, it's customers, and/or government regulatory agencies (e.g. DOD, FAA functions), to the extent required to assure the suppliers conformance to this procedure.

- The intent of these audits/surveys is to evaluate the supplier's quality system to the degree necessary to ensure conformance to requirements, and to detect any changes, which could affect the quality of the product.

5.1.1 **Right of Entry** – The right of entry is to be granted to the purchaser, the purchaser's customer and/or regulatory agencies, as applicable, to all facilities involved in the order and applicable quality records.

5.1.1.1 This may include the right to conduct source inspection and the right to witness manufacturing operations inspections and tests as necessary to verify conformance of the product or services.

5.1.1.2 The supplier will provide reasonable facilities, equipment, records, and assistance as required to satisfy this requirement.

5.1.2 **Quality Rating** - The Purchaser assigns a quality rating to each category 1 supplier. The rating is based on the supplier's quality system, delivery, delivered quality and overall service.

5.2 **General Supplier Responsibilities** - This requirement applies to material and/or services manufactured and/or supplied by the supplier.

5.2.1 **Inspection System** - The supplier will maintain (prior to the initiation of production and during the life of the P.O.):

5.2.1.1 A documented inspection system, which ensures that all material and services submitted to the purchaser for acceptance, meet the requirements of the P.O.;

5.2.2 **FOD** - The supplier will have Foreign Object (material/debris) Detection and prevention process in place and implemented.

5.2.3 Inspection & Test - The supplier will perform, or have performed, the inspections and/or tests required to ensure product conformance to drawing, specifications, and P.O. requirements.

5.2.4 The supplier will notify Roark's Quality Control Manager in writing, of any change to any of the following:

5.2.4.1 The supplier's inspection system

5.2.4.2 Any changes to product, processes, suppliers and facilities.

5.2.4.3 All additional flow down requirements that are not covered in the procedure will be addressed on the purchase order.

➤ Note: The changes will be subject to disapproval if changes thereto could result in nonconforming product.

5.3 **Inspection and Testing Documentation** - Inspection and testing will be prescribed by clear, complete, and current instructions. The instructions will assure inspection and test of material, work in process, and completed articles as required by specification and the P.O. in addition, criteria for acceptance and rejection will be included.

5.4 **Records** -

5.4.1 Retention - Will be retained per the retention schedule located in Appendix 1 of this Supplier Quality Manual.

5.4.2 Maintain - The supplier will maintain adequate records of all inspections and tests.

5.4.3 Content -The records will indicate:

5.4.3.1 The nature and number of observations made

5.4.3.2 The number and type of defects found

5.4.3.3 The quantities accepted and/or rejected, and

5.4.3.4 The nature of corrective action taken as appropriate.

5.5 **Corrective Action**

5.5.1 **Actions** - The supplier will take prompt action to correct assignable conditions, which have resulted or could result in the submission of nonconforming material or services to the purchaser.

5.5.2 **Response** - The supplier will respond, in the time frame allotted, to any Supplier Corrective Action Request from the purchaser.

5.5.2.1 If the allotted time is not adequate, the supplier may request an extension, in writing, prior to the expiration of the assigned due date.

5.6 **Drawings and Changes** - The supplier's systems will provide controls, which will assure that the latest applicable drawings, specifications, and instructions required by the P.O.; as well as, authorized changes thereto, are used for manufacture, inspection, and testing.

5.7 **ITAR** - (International Traffic-In-Arms Regulations) and/or Proprietary Information - The supplier will ensure that all technical data (example: prints, specifications, etc.) that is sent to the supplier and identified as proprietary information will be handled within the U.S. Export Control Laws and ITAR (International Traffic-In-Arms Regulations). At the same time ensuring that this requirement is flowed down to sub-tier suppliers.

5.8 **Measuring and Test Equipment**

5.8.1 **Gages** - The supplier will provide and maintain gages and other measuring and test devices necessary to assure all delivered product is conforming.

5.8.1.1 In order to assure continued accuracy all inspection, measurement, and test devices will be calibrated at established intervals against certified masters, which are traceable to national standards. The calibration system will be in accordance with ISO 10012 or equivalent.

5.8.1.2 These requirements apply to any production tooling, such as jigs, fixtures, templates, and patterns, which are used as a media for product acceptance.

5.9 **Special Process Controls** - will be an integral part of the inspection system when such processes are part of the purchase order. As such, special process procedures will not be modified without prior approval of the purchaser.

- 5.10 **Indication of Inspection Status** - The supplier will maintain a positive system for identifying the inspection status of all products.
- 5.10.1 **Identification** may be accomplished by use of stamps, tags, routers, move tickets, tote box cards, or other control devices.
- 5.11 **Purchaser Furnished Material**
- 5.11.1 **Material** - When material is furnished by the purchaser, the supplier's procedures will include, as a minimum, the following:
- 5.11.1.1 Examination upon receipt, consistent with practicability, to detect damage in transit.
- 5.11.1.2 Inspection for completeness and proper type.
- 5.11.1.3 Periodic inspection and precautions to assure adequate storage conditions and to guard against damage from handling and/or deterioration during storage.
- 5.11.1.4 Identification and protection from improper use and disposition.
- 5.11.1.5 Verification of quantity
- 5.11.2 **NC Material** - The supplier will report to the purchaser any "Purchaser Furnished Material" found damaged or otherwise unsuitable for use.
- 5.11.2.1 In the event of damage or malfunctioning during or after receipt, the supplier will determine and record probable cause and necessity for withholding the material from use.
- 5.12 **Nonconforming Material**
- 5.12.1 **Control** - The supplier will maintain an effective and positive system for controlling nonconforming material.

5.12.2 Non-Shipment - Nonconforming material will not be shipped to the purchaser without written authority.

5.12.2.1 The supplier will submit a;

- Complete description of the nonconformance,
- Cause of the nonconformance, and
- Corrective action, which will permanently resolve the cause.
- Unless other wise instructed by the purchaser, the supplier will hold such material until the purchaser reviews and dispositions the request.

5.12.3 Rework Non-conformances, which can be reworked by repeating part or all of the initial process (other than special processes), will be considered as rework and can be accomplished without purchaser approval.

5.12.4 Special Process - Nonconformance's which are produced by a special process or do not meet the requirements:

5.12.4.1 Will be considered repair items and will require purchaser approval **prior** to performing the repair.

5.12.4.2 These items will be reported (in writing) to the Purchaser's Quality Assurance Manger with the addition of a formal repair procedure.

5.12.5 Calibration NC - If during gage calibration, rejection analysis, etc., it is determined that nonconforming material may have inadvertently been shipped, the purchaser will be notified immediately.

5.13 Sampling Inspection - Dimensional and/or visual sampling may be used where the process capability is acceptable and stable.

5.13.1 Sampling - Plans may be employed in accordance with military specifications or handbooks, providing their use assure fulfillment of purchaser's requirements.

5.13.2 Military - When other than military sampling plans are used; they require prior purchaser's approval.

5.13.3 NDT - Sampling will not be allowed without prior purchaser's approval.

5.14 **Certifications or Certificate of Conformance** – When specified by the purchaser, the supplier will furnish Certifications or Certificates of Conformance, as specified on in the Purchase Order. The following requirements apply:

5.14.1 Material or Process – Certifications that address Material or Process Specifications must contain test reports or certificate numbers that record measurable or inspectable features on the hardware.

5.14.1.1 Certificates of test must show specific values for both the requirement and the actual test result.

5.14.2 Material and Special Process Test– Certifications that address Material or Process Specifications must reflect all requirements of the drawing and/or specification and conform to drawing and/or specification limits.

5.14.2.1 Documented evidence of conformance is to include a listing of each material element or test result in the applicable test report.

5.14.2.2 The applicable test report must also clearly state that all drawing and/or specification requirements have or have not been met and contain following statements, as applicable:

5.14.2.3 When all tests and inspections have been performed and results meet the drawing and/or specification requirements, the test report must state:

➤ “Conforms To All Drawing and/or Specification Requirements” and be signed by a cognizant test laboratory person.

5.14.2.4 If all tests and inspections have been performed and results do not meet the drawing and/or specification requirements, the test report must state:

➤ “Does Not Conform to All Drawing and/or Specification Requirements” and be signed by a cognizant test laboratory person.

5.14.2.5 If all tests and inspections have not been performed per the drawing and/or specification requirements, the test report must state:

- “Does Not Conform to All Drawing and/or Specification Requirements, Test (xxx) or Inspection (xxx) Not Performed” and be signed by a cognizant test laboratory person.

5.15 **Sub-tier Control** - Subcontracted or purchased material and services will be subjected to receiving inspection and any other controls, as required, to ensure compliance to the purchase order and this procedure-

## REVISIONS

### **Revision N/C**

- 1) History on file

### **Revision A**

- 1) History on file

### **Revision B**

- 1) History on file

### **Revision C**

- 1) Added 5.2.1.1 to include a customer requirement for all sub-tiers to have a material / debris detection and prevention process in place and implemented.

### **Revision D**

- 1) Added 3.5 in definitions and adjusted numbers
- 2) Added 5.7 technical data flow down and adjusted numbers

### **Revision D 10/23/09**

- 1) Type-o correction 5.2.4
- 2) Added wording to 5.1.7 - no content change

### **Revision E**

- 1) Added 3.10 to define supplier
- 2) Revised 5.2.4 to reflect the notification requirements
- 3) Revised 5.4 and added Appendix 1 to reflect the record retention requirements
- 4) Restructured numbering through out document - no content change

## APPENDIX 1 RECORD RETENTION SCHEDULE

Manufacturing and Inspection	Class	Critical Parts	Class	Non-Critical Parts
<b>Certifications of Material and Test</b>	A	DO NOT DESTROY		
<b>Incoming Release Notes (C of C)</b>	A	DO NOT DESTROY	D	6
<b>Receipt &amp; Laboratory Inspection / Test Records</b>	B	30	C	10
<b>Wrought Product &amp; Castings</b>	A	DO NOT DESTROY	C	10
<b>CFM Records Inspection &amp; Communication</b>	B	30		
<b>Inspection History &amp; Test Results</b>	B	30	C	10
<b>Airworthiness Certificates (FAA)</b>	A	DO NOT DESTROY	A	DO NOT DESTROY
<b>First Article Inspection Reports</b>	B	30	C	10
<b>Heat Treat &amp; Processing Records</b>	B	30	C	10
<b>Manufacturing Completed Process Routers.</b>	B	30		
<b>Validation &amp; Tractability</b>	B	30	C	10
<b>Manufacturing &amp; Inspection Test Instructions</b>	B	30	C	10
<b>Critical Part Plans</b>	B	30	C	10
<b>Sensitive Part Plans</b>	B	30	C	10
<b>MRB Disposition Document, Repair / Overhaul, or Rework Records (Customer &amp; Internal)</b>	B	30	B	30
<b>NDT Techniques &amp; Testing Records</b>	B	30	C	10
<b>X-Ray Techniques</b>	B	30	C	10
<b>Ultrasonic C-Scan</b>	A	DO NOT DESTROY	A	DO NOT DESTROY
<b>Radiographs</b>	D	6	D	6
<b>Supplier Drawings &amp; Specification Change History</b>	B	30	C	10

(CON'T ON NEXT PAGE)

**APPENDIX 1 RECORD RETENTION SCHEDULE (CON'T)**

<b>Serial Number Assignment Records</b>				
<b>Trace ability Information (S/N's)</b>	B	30	C	10
<b>Manufacturing &amp; Inspection Administrative Records</b>				
<b>Internal Quality Audits (QMS, Process, Product, &amp; Work Center)</b>	D	6	D	6
<b>Management Review</b>	D	6		
<b>Sub-contractor Assessment &amp; Control</b>	D	6		
<b>Supplier Contracts</b>	B	30	C	10
<b>Supplier Approval</b>	D	6	D	6
<b>Sub-tier Reviews</b>	D	6	D	6
<b>Training</b>	D	6		
<b>Contract Review &amp; Planning Documents</b>	D	6		
<b>Quotation / Procurement Documents</b>	B	30	C	10
<b>Customer Complaints &amp; Remedial Action Results</b>	D	6		
<b>Manufacturing Change Request (ECR)</b>	A	DO NOT DESTROY	A	DO NOT DESTROY
<b>Corrective Action Records</b>	D	6	D	6
<b>Preventative Action Records</b>	D	6		
<b>Personnel Certification Records (as Required)</b>	D	6	D	6
<b>Eyesight Tests</b>	A	DO NOT DESTROY	A	DO NOT DESTROY
<b>Welder Tests</b>	D	6		
<b>Visual Weld Inspection Testing</b>	D	6		
<b>Process Certification Records (as Required)</b>	D	6		
<b>Outgoing Release Notes (C of C)</b>	A	DO NOT DESTROY	D	6
<b>Certified Tool , Gage, Instrument Drawings, Certifications, &amp; Control Records</b>	D	6		
<b>Calibration Records</b>	D	6	D	6
<b>NDT Administration</b>	D	6		
<b>MRB Administration Records (Logs, etc.)</b>	C	10	D	6
<b>Employee Inspection &amp; Process Stamp Assignment / Signature Records</b>	C	10	C	10
<b>Quality Acceptance Standards &amp; Records</b>	A	DO NOT DESTROY	D	6