



———— A Hitachi Group Company

# SUPPLIER QUALITY MANUAL

MQA002 Rev 7

Last Release: 11/05/2020

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## 1.0 Purpose

The Sullair Supplier Quality Manual (MQA002) defines the Quality expectations for all Sullair suppliers and the processes by which Sullair Supplier Quality will interface with suppliers.

Suppliers are expected to be knowledgeable of the Sullair Supplier Quality Manual content and to follow the requirements and guidelines listed in this document.

### **Scope**

This Supplier Quality Manual applies to all suppliers both domestic and international who provide service or material to Sullair.

## 2.0 Sullair Mission Statement, Quality Policy, and Supplier Quality Expectations

### **Sullair Mission Statement**

Sullair is committed to producing high quality, reliable and cost-effective products that are shipped on time, provide customer value, and conform to national and international standards. Sullair Customers expect defect-free purchased products and services.

### **Sullair Quality Policy**

*Sullair is committed to providing products and services that align with our customer's expectations.*

*Business objectives are established and monitored to enhance customer satisfaction.*

*Continuous Improvement is the method used to drive operational excellence.*

### **Sullair Supplier Quality Expectations**

Sullair expects all suppliers and sub-tier suppliers to have documented processes that are utilized throughout the Supplier's organization to ensure defect-free order entry (contract review) and product processing (including purchasing of parts and raw material and packaging/shipping) and to ensure all non-conformances (internal and escapes) are addressed in a timely manner to prevent recurrence. If these processes are not in place, the supplier is expected to be actively working toward this goal. Sullair's expectation is that suppliers who develop, implement, and institutionalize these processes throughout their organization are more likely to deliver defect-free parts to Sullair.

## 3.0 Supplier Qualification Process

***In support of Sullair's supplier qualification and maintenance process, below is a summary of the responsibilities and requirements of both the supplier and Sullair.***

### **Supplier Responsibility:**

- Completion of Supplier Qualification Workbook
- Submission of copies of Quality Management Certification (e.g. ISO 9001, TS 16949, ISO 17025, etc.)

**Sullair Responsibility:**

- Procure a signed Proprietary Information Agreement (PIA) and/or Non-Disclosure Agreement (NDA)
- Complete a Supplier Qualification on-site review and/or audit performed by a qualified auditor from Sullair (may not be required as determined by Sullair Quality Management).
- Completion of Sullair Supplier/Vendor Maintenance Form, signed/approved by authorized personnel

**Additional Requirements/Expectations for Approved Suppliers**

- All approved suppliers shall be compliant with or currently working towards being compliant with the current version of ISO 9001 or equivalent. Suppliers shall provide evidence of, or progress towards, obtaining third party quality certification or compliancy and the expected date of completion.
- Maintain a working knowledge of all policies and procedures governing the relationship between the supplier and Sullair.
- Responsible for the understanding of all engineering drawings, specifications and purchase/work order requirements that pertain to their products or services. It is the responsibility of the supplier to contact Sullair Sourcing/Purchasing for clarification of any questionable area and ensure resources are available to participate in product quality planning, as requested.
- Understand the Key Performance Indicators (KPIs) relating to quality and performance standards as expected from Sullair. At a minimum, this will include; defect rate (PPM), defect frequency (NCM incidences) and On Time Delivery among others specific to business relationship needs, as provided by Sullair.
- Responsible for initiating and managing a process to control the quality of the products they receive from their suppliers (sub-suppliers) to ensure the products conform to Sullair requirements. This applies to all suppliers: distributors, OEM's, fabricators.
- Suppliers are responsible for maintaining a corrective action program. All corrective actions are to be documented and forwarded to the appropriate personnel. Failure to respond to a request for corrective action will have a negative effect on Supplier's Performance Rating and may be subject to further action up to and including the possibility of no new business being awarded or any new PO issued to Supplier until resolved satisfactorily by Sullair.

## 4.0 Production Part Approval Process (PPAP)

***The below is a summary of the PPAP Process. Sullair's PPAP procedure describes the process in greater detail and takes precedence over the generalized statements listed below.***

**Definitions and Expectations of the Production Part Approval Process**

The PPAP process should be completed as far in advance as possible prior to shipment of production parts in order to accommodate any changes (by supplier or Sullair) that may be identified during in the course of the PPAP process.

The parts being submitted must be produced using the actual process(es) which will be used for production parts. The Approval Process for Production Parts qualifies production for specific tooling, equipment, measurements, line, factory and sub-tier production processes before full production orders are requested.

The supplier shall institute a framework that ensures robust product and process development capabilities. Advanced Product Quality Planning (APQP), published by AIAG, provides a proven and disciplined approach that meets Sullair's deliverable requirements. The supplier should understand these requirements and have the capability to follow them. Sullair can assist with specific questions and can provide resources when needed.

### **Overview of PPAP Steps**

- Before shipping parts to Sullair, supplier completes the PPAP Workbook and emails all required documents (in PPAP Workbook; see below, "What to Submit") to:
  - For suppliers to Sullair USA – [SQE@sullair.com](mailto:SQE@sullair.com)
  - For suppliers to Sullair China - [supplierquality@sullair.com](mailto:supplierquality@sullair.com)
- Supplier waits for acknowledgement of receipt and approval for shipment.
- After approval, supplier ships parts identified with PPAP labels included in PPAP Workbook.

### **When to Submit**

- Initial orders of all parts from new suppliers.
- Initial orders of new parts from existing suppliers.
- A major change in supplier location, process, or material.
- A major change in sub-suppliers or their methods.
- Inactivity (no purchases by Sullair) in the last 24 months.
- Special request as determined by Sullair

### **What to Submit**

#### **Standard Submission Requirements** (All included in Sullair PPAP workbook)

1. Part Verification Report (100% dimensional & notes compliance for 1 - 5 pieces, including numbered drawing). See PPAP Procedure for specifics on how many pieces are required for specific product types. PPAP parts are to be identified as the parts that were measured, corresponding to the items in the Part Verification Report in order to verify measurements and measurement processes.
2. Paint Certificate of Compliance (if painted part)
3. Material Certificate (if applicable)
4. Pictures of part numbers and markings
5. Pictures of Packaging/Shipping (in some cases only an explanation of methods will be required)
6. Print and affix Sullair's FAI Label on all 4 sides of shipment (see tab in Supplier Qualification Workbook)
7. All approved applicable Supplier Deviation Requests (SDR's)

#### **Additional Potential Submission Requirements** (to be specified by Sullair)

- Material Test Results, Performance Test Results, DFMEA/PFMEA, Control Plan, Process Flow Diagram, Measurement System Analysis (MSA), Reliability Test Results, Process Capability (or SPC), Laboratory Analysis Results, and others as specified.
- Special Considerations: Certain safety critical or key components will require a higher degree of rigor than standard components. The additional requirements will be requested by Sullair in advance and called out on the Part Qualification Check Sheet, including but not limited to a Sullair representative on-site to physically observe the process and all of the applicable elements.

## 5.0 Supplier Deviation Process (for parts and processes)

***The below is a summary of the SDR Process. Sullair's Supplier deviation procedure describes the process in greater detail and takes precedence over the generalized statements listed below.***

All Suppliers to Sullair are responsible for notifying the authorized Sullair Supply Chain and Supplier Quality Representative of any planned changes to the design, process, or site of manufacture via the SDR process. Supplier can contact their assigned buyer/planner and/or use the following email addresses if unsure who to contact:

- For suppliers to Sullair USA, use [certifications@sullair.com](mailto:certifications@sullair.com)
- For suppliers to Sullair China, use [supplierquality@sullair.com](mailto:supplierquality@sullair.com)

The Supplier Deviation Request Form is the primary tool the supplier shall use to notify Sullair of any non-conformances or process deviations and to obtain pre-approval to deviate from a specific Engineering Drawing requirement or from a specific process for the below conditions. **PRIOR TO SHIPPING THE AFFECTED PARTS**, the Supplier must receive approval of the Supplier Deviation Request (signed by Engineering, Supply Chain, & Quality). If the non-conformance is the result of a mistake by the Supplier, a Corrective Action form must be submitted with the SDR to ensure the non-conformance does not recur.

### **Current Production Part or Prototype Part**

- Already made with a physical non-conformance – Temporary waiver for Sullair acceptance
- Supplier needs or suggests alternate material or specification waiver to produce on time – Temporary or Permanent
- Supplier wants to change how the parts are processed

### **New Part for Supplier**

- Supplier needs a specification modification to produce – Temporary or Permanent
- Part Marking or Certification issue only. E.g. CRN, CE
- Engineering Design issue on print discovered by Supplier

## 6.0 Non-Conformance Management

Sullair intends to notify the supplier of every non-conformance (NCM) discovered. Sullair's expectation is that this information will be used for process improvement and non-conformance prevention.

Based on the quantity and severity of the non-conformance, Sullair will request formal Root Cause Corrective Action documentation of the problem-solving process, as covered in Sullair's Supplier Corrective Action Request (SCAR) procedure and forms.

When the Sullair Quality department notifies Supplier of the need for a formally documented corrective action (SCAR), the timing of the Supplier's response is critical and is outlined below. Exact instructions for each case may slightly differ and will be explained through the communication process.

- Immediate Initial Response. This is critical to assure the information is correct, the contact is correct, and the supplier understands the specific requirements of that particular request.
- Containment communication of pipeline material within 24 hours.

- Completed root cause and corrective action submitted within two weeks. It is best to submit early due to potential additional questions and requests.

Numerous other requests and activities may result from the discovery of non-conformances at Sullair, which may include but not be limited to: charge back to supplier costs incurred by Sullair, visits and audits, conference calls, revisions of supplier qualifications, review and observation of any upstream or downstream processes, corrective action follow-ups, and other incident specific needs determined by Sullair.

If a supplier does not feel a received non-conformance is justified, they may request a non-conformance dispute review through their Supply Chain Representative. The non-conformance review request is initiated by the use of the NCM Dispute Form.

## 7.0 Supplier Performance Metrics

Sullair will track supplier performance based on the quality of the product as received and On Time Delivery (OTD). Supplier performance metrics will be evaluated and reviewed with suppliers as part of the Business Management Reviews that are periodically scheduled by Sullair Supplier Quality or Supply Chain. Target levels of performance will be established each year for both quality and OTD, but the ultimate goal is zero defects and 100% OTD.

### Quality Performance

A policy of zero defects is the essence of this document. All suppliers are responsible for shipping a product that will arrive at Sullair's receiving dock in total conformance to all specifications and requirements. Supplier quality performance will be measured on the basis of the number of Non-Conforming Material Reports (NCM's), PPM, and number of Supplier Corrective Action Requests (SCAR's) issued to the supplier. Detailed Corrective Action plans (either 3C or 8D methodology) may be requested to track improvement and progress toward the zero-defect goal, as deemed necessary by Sullair Supplier Quality. Supplier quality performance metrics will be provided by Sullair.

## 8.0 Packaging, Labeling, and Preservation

Packing – All material shipped to Sullair is expected to have a standard packing plan. It is critical that the supplier implements a design that properly protects parts from damage and contamination while avoiding excess waste.

Labeling – All material shipped to Sullair is expected to be clearly labelled in accordance with Sullair drawings and specifications.

Preservation – As applicable, parts should be packaged to maximize their shelf life. Also, the supplier should use a "First-In-First-Out" inventory management system to ensure the oldest stock is used first, minimizing product aging.

## 9.0 Other Requirements

### **Revision Control**

Sullair Supply Chain will provide the supplier with changes to drawings or specifications as revision changes are released by Engineering. The supplier shall inform Sullair of the date these changes are to be incorporated in their production.

### **Warranty Requirements**

Definitions of warranty obligations of suppliers are provided in the terms and conditions listed in Sullair's purchase order. Supplier will assist in the investigation of warranty issues. In certain circumstances the supplier may be expected to reimburse Sullair for warranty claims due to product non-conformance.

### **Continuous Improvement**

Sullair expects that all areas of performance are evaluated for improvement on a regular basis in a systematic way that shows improvement over time. Sullair desires to work with suppliers to continuously improve performance in terms of cost, quality, and delivery.

### **Environmental, Health, & Safety**

It is expected that suppliers maintain an Environmental, Health, and Safety System to demonstrate their commitment to protect their workers and environment.

Sullair reserves the right to audit the supplier's Environmental, Health, and Safety System. Sullair will inform the supplier of relevant audit issues and parameters. During the audit, Sullair shall have access to all facilities, staff, and Sullair related documents. The supplier shall submit to Sullair a comprehensive action plan for agreed upon deviations identified during the audit.

## 10.0 Reference Documents

### **For Suppliers to Sullair USA:**

Supplier Qualification Workbook, FQA124

Supplier Production Part Approval Process (PPAP), PQA042

PPAP Workbook, FQA122

Purchased Component Labeling and Packaging Requirements, MP005

Supplier Change Notification Procedure, PQA075

Supplier Deviation Request Form, FQA039

Supplier Corrective Action Report (SCAR) Process, PQA073



Supplier Corrective Action Request Form – Full, FQA117

Supplier Corrective Action Request Form – 3C's, FQA118

Supplier NCM Dispute Form, FQA080

**For Suppliers to Sullair China:**

Supplier Quality Manual, 19.08.07.00

Supplier Qualification Process, 19.08.08.00

Supplier Qualification Workbook, 39.08.03.04

Supplier Production Part Approval Process (PPAP), 19.08.11.00

PPAP Workbook, 39.08.03.05

Supplier Deviation Request Process, 19.08.14.00

Supplier Deviation Request Form, 39.08.03.14

Supplier Corrective Action Report (SCAR) Process, 19.08.12.00

Supplier Corrective Action Request Form – Full, 39.08.03.13

Supplier Chargeback procedure, 19.08.15.00

Sample Parts Qualification Form, 39.08.03.09

