



# **Supplier Quality Assurance Manual**

# Jamac, Inc.

## Quality Policy

Jamac is steadfast in its goal to be recognized by our customers as their best supplier through meeting our quality goals and continuously improving the quality management system

## Goal

The goal of this Supplier Manual is to provide an overview of Jamac's processes and the expectations that form the basis of our supply chain partnership – affording a mutual long-term benefit.

## Scope of Use

Jamac uses the contents of this Supplier Manual with their supply chain.

Jamac, Inc. accepts the unending commitment to deliver valuable, defect-free products and services that meet or exceed our customer's expectations.

## Quality Commitment

Our personal commitment to customers is that we will work to understand their needs, to earn their loyalty and we will work each day to improve everything we do.

## Supply Chain Philosophy

In order to provide high quality, competitively priced products in today's demanding market, suppliers must share this vision and Quality Commitment. Jamac seeks partnerships with suppliers that embody the following attributes:

A supplier philosophy that creates a willingness to work as a partner with Jamac to achieve our mutual success.

Establishment of sourcing and supply chain initiatives that are synergistic with the strategies of both the supplier and Jamac and are scalable to provide for future growth.

Commitment to stable and capable processes, such that all supplied items and documentation meet our requirements each and every time.

Dedication to continuous improvement in the areas of quality, on-time delivery, service, product improvement, information completeness and accuracy, and total cost.

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# 1.0 Introduction

This Supplier Manual provides an overview for the general policy, requirements, and expectations for doing business with Jamac, Incorporated (herein referred to as Jamac) and all its businesses and affiliates.

Understanding the processes and expectations outlined in this manual will not only reduce risk of supply chain disruptions, but will also help Jamac and its suppliers increase our competitive industry position and ensure our continued success. These requirements can best be satisfied through the practice of:

- Mutual respect and cooperation
- Free exchange of information, including business goals and objectives
- Timely and complete provision of information required for compliance to Governmental, regulatory, or market requirements
- Agreement on evaluation of performance
- Commercial competitiveness and new business opportunities
- Acceptance of respective responsibilities
- Effective management and control systems
- Joint continuous improvement activities

## 1.1 Scope

The elements of this manual apply to all suppliers of finished goods, production materials (raw materials or components), as well as any outside processes or services where applicable.

**Languages** - In the event this Supplier Manual is translated into other languages besides English, such translations are for convenience only and the English version shall control.

## 2.2 Responsibilities

Jamac is the primary contact for all agreements with the supplier. Jamac will assure that the product requirements are clearly communicated to and agreed upon by and between Jamac and the Supplier. Outside of formal Purchase Orders, Jamac personnel are the only personnel authorized to enter into binding purchase commitments. Jamac should be a part of, or informed of all conversations with suppliers to assure clear, consistent messages are provided. Jamac will ensure suppliers are aware of their contribution to product or service conformity and to product safety as applicable.

**Suppliers** — It is the responsibility of the Supplier to review and understand this manual and any other applicable documents as part of the acceptance of purchase orders from Jamac. The supplier should obtain any referenced documents to ensure full compliance with all applicable requirements.

**Counterfeit Prevention** - Suppliers shall implement and enforce a documented Counterfeit Parts Prevention and Control Plan designed to preclude, detect, and remove any counterfeit products from all deliveries to Jamac.

As an integral part of this plan, the supplier shall maintain a database of counterfeit components received and applicable source data. Jamac requires that suppliers review AS6174 for reference, as best practice.

**Foreign Object Debris/Damage (FOD) Prevention** - Suppliers shall implement a FOD Prevention program necessary to reduce the occurrence of Foreign Objects, and the risk of Foreign Object Damage to Jamac products. Suppliers shall review the requirements of AS 9146 and/or meet applicable requirements.

**Conform with Regulatory Requirements** – Suppliers shall conform to any regulatory requirements in order to protect the customer, themselves and the environment.

## 2.0 Supplier Approval

Jamac will initiate supplier development activities in support of its business needs. A graphic of Jamac's supplier selection and approval process is depicted below:

**Figure 1 - Supplier selection and approval process**



### 2.1 Supplier Selection and Approval Process

Jamac has defined a process to select and approve suppliers. During the selection process, Jamac looks for suppliers that show strong quality processes, financial stability, provide exceptional customer service, are cost competitive, and operate in an environment that fosters continuous improvement.

The following documents / processes will be considered when doing business with Jamac:

- Non-Disclosure Agreement (NDA)
- Supplier Self-Survey
- Certification to a recognized Quality Standard (ISO 9001 or equivalent, TS16949 for automotive, AS9100 for aerospace, or as required by our customers)
- On-Site Assessment. If required, Jamac personnel will review a supplier's processes and systems in areas such as quality, manufacturing, financial, business, and management.

### 2.2 Supplier Sub-contractor Management

It is the responsibility of the supplier to manage the quality of all sub-contractor operations. Supplier may not change any sub-contractor after initial approval without the prior written authorization of Jamac.

Any unfavorable impact (financial or otherwise) resulting from unacceptable quality, delivery or cost from a subcontractor will be the responsibility of the supplier.

### 2.3 Social Accountability and Sustainability

Jamac selects business partners who comply with local law and internationally acceptable fair and safe labor practices. Suppliers shall comply with all applicable federal, state, and local laws, and rules and regulations of any government authority which have effect of the law.

Jamac takes a comprehensive approach to sustainability, focusing on the sustainability of the company, our customers, and the communities in which we operate. We work with our customers and suppliers to reduce packaging waste and recycle materials. Our goal is to provide a quality product and services with as little impact on the environment as possible.

Jamac also expects its suppliers to be committed to Environmental Compliance and Sustainability and the supplier agrees to support Jamac's ongoing sustainability efforts as they evolve.

## **2.4 Ethics and Business Conduct**

At Jamac we endeavor to be a company that our customers, employees, and investors can trust to do the right thing, time and time again. We differentiate ourselves not only by our products, but also by how we conduct business and our reputation. The Jamac Code of Ethics Policy helps us understand and maintain the highest standards of integrity by which we strive to do business. For more information on Jamac's Code of Ethics, go to [www.Jamac.com](http://www.Jamac.com). Jamac expects its suppliers to also maintain the highest standards of integrity and to be striving to substantially follow the Jamac Code of Ethics.

Jamac prohibits the use of forced labor and human trafficking in the workplace and requires its suppliers to abide by this same standard. All suppliers must be willing to demonstrate complicity with the above stated legislation, failure to comply or provide proof of compliance may result in the termination of the commercial relationship with the supplier.

## **2.5 Business Continuity Plan**

Suppliers may be requested to submit a formal Business Continuity Plan (This may also be called a "disaster recovery plan".) Jamac is not interested in any specific information that is confidential to a supplier's business or products, however, a formal plan should describe the steps that will be taken in the event of any business interruption. At a minimum, this includes understanding the likely interruption scenarios and having a plan for an alternate manufacturing capability, alternate supply lines for material procurement and staffing to ensure that any impact to Jamac and its customers is minimal.

# **3.0 Supplier Monitoring and Improvement**

## **3.1 Supplier Performance Evaluation**

Jamac will monitor and update the quality and on-time performance records of Approved Suppliers quarterly. The supplier's performance will determine if they are candidates for new business, expose opportunities for improvement, etc.

When unfavorable trends occur, suppliers agree to complete formal corrective actions per Jamac discretion. In addition, any supplier may at any time request a copy of their performance data by contacting Jamac.

## **3.2 Continuous Improvement**

Jamac encourages continuous improvement. The supplier's management should take a lead role by adopting continuous improvement as a key element of their business plan. Supplier continuous improvement activities are taken into account in Jamac's overall strategy.

## **3.3 Supplier Development**

Jamac encourages a collaborative relationship with its suppliers. This alliance allows Jamac to work closely with its suppliers which will assist in leveraging both companies' efforts. These efforts include improving product quality and delivery, reducing costs and lead time, and improving new product development.

# **4.0 Process Management Expectations**

## **4.1 Quality System Requirements**

Where required for a Jamac application, having appropriate quality management systems will be a condition for qualification (and doing business) for those applications, quality system documentation, including product lot traceability, calibration, and records shall be available for examination by authorized Jamac representatives upon request.

## **4.2 Documentation Review**

Suppliers must carefully review Jamac required specifications to ensure understanding and confirmation that the supplier can meet any such specifications. If clarification of requirements is needed, contact Jamac before submitting a quote or producing samples or production parts. All issues that are not covered on the existing drawings or specifications shall be communicated through a Purchase Order, revised specifications, etc.

Suppliers must have a system for assuring that only the correct and current version of specifications documentation is available for use in production.

## **4.3 Quality / Process Control / Statistical Techniques**

Suppliers are responsible for ensuring all items meet Jamac's purchase order requirements / specifications, regardless of their process sources (e.g. sub-tier supplier or subcontractor) including customer flow-down requirement related to the use of statistical techniques for product acceptance and related instructions for acceptance by the organization. Jamac reserves the right to have visibility and approval of any subcontract operations or sub-suppliers.

## **4.4 Critical Characteristics**

Inspection dimensions and performance characteristics have a significant influence on product fit, performance, service life, and manufacturability.

At a minimum, Jamac expects suppliers to demonstrate that processes for critical characteristics are stable and in control. Stability must be demonstrated through control charts or equivalent means.

## **4.5 Quality planning and records**

Jamac recommends that the supplier follow a New Product Development Process (NPD) as part of their Quality planning activities. Jamac employs a phase-gate NPD process and expects the supplier to work collaboratively during the development of new projects.

Jamac may require that the supplier use a formal product/process planning process that generates documentation called for in the Production Part Approval Process (PPAP) as part of Quality Planning on manufactured components. Qualification requirements are defined and documented by Jamac.

Suppliers must retain all quality system records for a minimum of 3 years after part obsolescence, unless specified or legally required to be retained longer. This includes records of process control and traceability which are vital to any required failure analysis.

## **4.6 Material Traceability**

As applicable, the supplier may be required to establish a lot traceability system that tracks raw material lot / batch numbers to the finished product lot / batch numbers including traceability to inspection records.

## **4.7 Intellectual property (IP)**

Any development or other research undertaken on behalf of Jamac will be viewed by Jamac to be Jamac's intellectual property. Any software or other invention or discovery in tangible media will be viewed as work for hire with all the rights vesting in Jamac. Additional issues with intellectual property will be provided in the master supply agreement, non-disclosure agreement (NDA), or other contractual documents provided by Jamac.

#### **4.8 Cost Management**

Jamac desires to do business with strategic partners that provide the best overall value. That value is defined as the highest valued products at the lowest evaluated cost. Proper management of total cost throughout the supply chain is critical to Jamac and our continuous improvement initiatives.

#### **4.9 Design and Development Support – (Customer Designed Product)**

It is Jamac's expectation that Approved Suppliers are willing to participate in new product development activities. All collaborative design activities will be conducted under the controls of Jamac's terms and non-disclosure agreement.

During this process, suggestions to change part geometry, materials, etc. that will allow suppliers to provide product of higher quality or better consistency are strongly encouraged.

#### **4.10 Assets**

Any specifications, drawings, information, tools, molds, masks, jigs, dies and other materials furnished to the supplier or funded or paid for by Jamac (whether separate or as a part of the unit price) shall belong to Jamac. These "assets" shall be clearly marked as Jamac property.

#### **4.11 Right of access**

Suppliers shall provide right of access to Jamac, its customers, and relevant government agencies to allow for the evaluating of quality system documentation and records, conducting audits, and verifying product conformance.

## **5.0 Communication Requirements**

#### **5.1 Supplier Communication**

Jamac encourages a strong and open communication process whether it is through email, face-to-face meetings, phone calls, internet meetings, or other means. Formal communication, as may be required for notice provisions or for other legally significant communication, should be performed in writing as prescribed by Jamac.

#### **5.2 Purchase Order or Contract Agreement**

Product specific requirements are communicated on Purchase Orders (PO). Product configuration will be specified by the prints / drawings. Acceptance of the PO is an acceptance of the standard Terms and Conditions unless a signed is in place whereby the master supply agreement (MSA) takes precedence. In addition, the supplier is required to advise Jamac of any delays or changes to existing or future orders in a proactive manner.

Verbal orders or those made without a supporting PO will not be honored. As a supplier of goods and services to Jamac, any action taken or commitments made without a Jamac PO is performed at the supplier's risk. Jamac will not be responsible for costs incurred without a PO.

It is expected that the supplier will respond to requests for quotation ("RFQ") within the stated deadline or by the end of the next business day.

Purchase orders are placed with instructions to suppliers of shelf life/age control items to provide the following information, as applicable:

- Part Number and Revision Letter
- Manufacturers' Part Number
- Manufacturers' Name and/or Identity Number
- Rubber Class Designation
- Date of Manufacture
- Cure Date



- Expiration Date - (If the shelf life/age control item is not controlled, provide that information also.)

### **5.3 Revisions**

Any revision to the product requirements will be communicated through Jamac using revision levels called out on PO's. It is the supplier's responsibility to review PO's to ensure that up-to-date revisions of product requirements are utilized by their manufacturing. In case of non-compatibility, it is the supplier's responsibility to request from Jamac an updated specification. The supplier is not allowed to deliver previous revision level items, except by written agreement with Jamac

### **5.4 Invoices**

Jamac require invoices be sent to Jamac "Accounting" via email and are paid according to the PO document. In order for the supplier to be paid effectively and efficiently, Jamac utilizes an invoice payment procedure. The lack of a PO number, incorrect quantity and / or price, lack of contact information, sending the invoice to the incorrect email address, etc., will result in a no payment situation.

In an effort to implement continuous improvement, improvements in processes involving invoicing and accounts payable are ongoing. Should Jamac alter its methodology in managing accounts payable, the supplier will be notified in advance, and Jamac will provide clarification / training as deemed appropriate.

### **5.5 Requests for information**

The supplier will provide accurate and complete information regarding its products and or product compliance initiatives upon request and within a reasonable period of time.

The supplier agrees to provide the requested compliance information through an email, on the packaging slip or invoice, or via any other reasonable method, as requested by Jamac...

Compliance and provision of compliance information is considered a condition of doing business. For more information contact Jamac.

### **5.6 Change Management Requirements**

The supplier may not change the fit, form, or function of any product without Jamac's prior written approval. Supplier should make such request to their Jamac representative. Many such requests will require a documented submission to assure continued product and process performance.

### **5.7 Unavailable Product (no longer available)**

The supplier must notify Jamac of intentions to discontinue supply of products or services at least six months before a "last time buy" order will be accepted with Jamac designed products. The supplier will continue to provide the discontinued product to Jamac for a minimum of 12 months or until Jamac can qualify and approve an alternate product or supplier. This requirement will be waived if Jamac and the supplier have superseding terms per a MSA.

### **5.8 Electronic Business (e-commerce)**

At a minimum, all suppliers are required be able to communicate via e-mail.

Electronic business data interchange for planning, purchase, and sale transactions will be used when beneficial to both parties. This will include, but is not limited to, electronic data transfer to exchange design, engineering, and quality information.

### **5.9 Requirements of Sub-tier Suppliers**

It is an expectation that the supplier will flow down to sub-tier suppliers the applicable requirements in the purchasing documents and terms and conditions.

## 6.0 Packaging and Shipping

### 6.1 Delivery

The supplier's ability to consistently deliver product on-time to the PO due date is an expectation and requirement to do business with Jamac. All suppliers are evaluated through a scorecard and on-time delivery is a key component of that performance evaluation.

Packaging and logistic requirements will be called out on Jamac specific requirements as referenced in the product specifications, drawings, PO's and / or MSA's.

Suppliers to use recommended packaging, storage and expiration date of age-controlled items. A minimum of 75% shelf life remaining on age-controlled items to be delivered to Jamac.

### Product Lead-time

The supplier lead-time for purchased products drives the material planning process and placement of purchase orders to Suppliers. The lead-time needs to be identified and agreed upon between Jamac and the supplier. The supplier is expected to have continuous improvement activities in place to actively reduce the lead-time as much as possible and proactively communicate any changes to the lead-time by contacting the Jamac Sourcing team member of record.

### Shipping

Suppliers are required to ship product via the logistical instructions that appear on the PO. In most cases, this means that the terms are FCA/FOB shipping point. In those unique instances where special conditions are required, the Jamac Sourcing team member of record will confirm and approve any exceptions to the normal method of transportation. The supplier is expected to immediately contact Jamac with any carrier related problems or delays.

### Support Documentation

Shipments are required to have the proper supporting documentation, including, at a minimum, a commercial invoice and packing list indicating the Jamac PO number, part number(s), part revision level, quantity, unit of measure, etc.

### 6.2 Packaging

The supplier is expected to meet the shipping, packaging, and label requirements as specified by Jamac. If not specifically stated in a Jamac document it is the supplier's responsibility to design and develop packaging and internal dunnage to withstand the given transportation mode.

## 7.0 Part Qualification

### 7.1 Production Certification Process

Jamac may utilize a modified Production Part Approval Process (PPAP) incorporated into the Part Qualification process. This modified process allows Jamac to make the Part Qualification Process simple, flexible and adaptable according to the requirements of the product and / or component.

The PPAP process may be used to qualify both new purchased parts and changes to existing parts or the manufacturing process and / or equipment. How and when a PPAP is applied is defined by specific situations called out in the PPAP requirements procedure. If a PPAP is required for a purchased part material, or product the supplier will be informed by Jamac.

The supplier is responsible for ensuring that the sourced product meets all the requirements identified both on the part print and all other referenced documents. If a PPAP is required, all product is considered unapproved until the PPAP submission is formally approved by Jamac.

### 7.2 First Article Inspection (FAI)

Jamac requires First Article Inspection (FAI) on many of our new parts and even changes to existing parts. FAI is typically a dimensional or performance related inspection performed by the supplier on a production ready part to verify compliance with our specifications prior to production trials and orders.

## 8.0 Nonconformance / Corrective Action

### 8.1 Product Requirement Nonconformance

Suppliers shall utilize a process to:

- Clearly identify and segregate non-conforming or suspect material to prevent unintended use or delivery.
- Ensure containment of suspect material that has previously shipped to Jamac.
- Retain documented information regarding a non-conformance.

Suppliers shall notify Jamac immediately upon suspicion of non-conforming product. Notification shall be provided via email to Jamac and include a detailed description of the non-conformance, the products affected, and the initial containment actions taken. Initial containment actions shall be completed within 24 hours of identification of non-conformance. Further containment and disposition of the non-conformance shall be agreed on with Jamac.

### 8.2 Corrective Action

It is crucial a supplier reacts to returned product and notifications with their analysis and documented corrective action response.

Suppliers shall implement actions to prevent non-conformances in their processes and products.

Suppliers shall utilize disciplined problem-solving methods to correct and prevent non-conformances in quality and delivery. Should a supplier not conform to requirements as outlined in this manual or product quality standards, Jamac will work with the supplier to obtain corrective actions.

Corrective action shall be executed in accordance with the following timeline from the Supplier's receipt of notification:

- Containment – 24 hours
- Root Cause Analysis – 3 days
- Corrective Action Plan Defined – 5 days
- Corrective Action Plan Executed – 21 days

Corrective action shall:

- Focus on system level improvements to prevent reoccurrence within the organization.
- Utilize a disciplined closed loop problem-solving method that works to encompass all possible outcomes.
- Examples: 8D, A3, 5 Whys, Ishikawa Diagrams (e.g., fishbone).
- Be submitted to Jamac for review and approval.
- Avoid generalized root causes; such as "Operator Error" or "Training".
- Acknowledge that retraining is insufficient and further actions shall be taken to error proof.
- Ensure all quality system documents affected are updated to accurately reflect the changes.

**Disclaimer**

*The information contained in this Supplier Manual is the property of Jamac and is being provided to Suppliers for the sole purpose of providing to our Suppliers an overview of the information and requirements of Jamac that are necessary to fulfill its rights and obligations in its performance of awarded contracts or purchase orders. By Supplier's receipt and retention of this Supplier Manual without written objection to Jamac, it agrees that (i) the information within this Supplier Manual is proprietary to Jamac; (ii) Supplier will not use this information for any other purpose. The process of this document does not compel Jamac in any way. Further, additional contractual documents will govern the relationship between Jamac and any potential suppliers. This document does not in any way create a contractual relationship with Jamac. Information in this document may change without notice or warning and should not be relied on for anything other than general information.*

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