

**Specification:** PUR-QSM-842-01 **Revision**: D

### **Table of Contents**

L Scope	_
2 Vendor Approval	2
2.1 Audits	2
2.2 Training and employee qualifications	2
2.3 Quality Management Systems (QMS)	2
2.4 Sub-Tier Suppliers	3
2.5 Special Processes	3
2.6 Business Structure Changes	3
2.7 Prohibited	4
3 Production Planning and Control	4
3.1 Documentation of Requirements	4
3.2 Routers and Control Plans	4
1 Lot Inspection at Vendor	5
1.1 Inspection Requirements	5
1.2 Special Inspection Requirements	7
1.3 Visual Inspection Requirements	7
1.4 Calibration	7
5 Certification Requirements	8
5.1 Material	8
5.2 Special Processes	8
5.3 Certificate of Compliance (C of C)	8
5.4 First Article Inspection Report (FAIR)	9
5 Non-Conforming Material	10
5.1 Return to Vendor (RTV)	10
5.2 Supplier Corrective Action Report (SCAR)	10
5.3 Special Process Request Form (SPR)	11
7 Associated Requirements	11
7.1 Part Identification	11
7.2 Packaging	11
7.3 Part Cleanliness	12
7.4 Quality Records	12
7.5 Shelf Life Requirements	12
7.6 MSDS	13
2 Pura Chiangina Chandria	42



**Specification:** PUR-QSM-842-01 **Revision**: D

#### 1 Scope

This document applies to Burrana subcontract vendors who supply Burrana PMA products (parts made to Burrana drawings & specifications). It clarifies quality requirements for products and services supplied to Burrana. This SQR is invoked as a P.O. requirement – products and services not meeting the requirements of this SQR are subject to return, cancellation and/or corrective action. In the event of conflicting requirements, P.O. notations, and government regulations will take precedence over this SQR.

## 2 Vendor Approval

Vendor approval and reassessment is based on a review of the vendor's capability, performance, and quality management system. A review and assessment will involve a questionnaire and where applicable, on-site visit(s). The frequency will be contingent upon the vendor's status of a recognized accreditation/certification, quality performance, customer issues and schedule performance.

New vendors that supply products or services will be subject to additional oversight until Burrana deems their performance and compliance with the requirements are acceptable.

Vendors who have a low rating or are on probation will be subject to additional oversight/inspection and/or restrictions.

Note: Burrana will consider vendor status when awarding new business.

#### 2.1 Audits

Burrana, Regulatory Authorities, and its Customers may perform periodic vendor evaluations

Burrana representatives or Customers shall be granted the right to verify at the vendor's premises that furnished product, services, processes, and records conform to specified requirements. The same rights are reserved for Burrana customers, regulatory agency, e.g. FAA, and/or US Govt. The vendor shall flow-down this Right of Access requirement to all sub-tier vendors. The vendor shall provide the equipment, facilities, and personnel necessary for the Burrana representatives to verify compliance.

### 2.2 Training and employee qualifications

Vendors shall ensure that all personnel performing activities affecting the quality of products/services are properly trained and deemed competent based on education, training and/or experience for each process task.

All personnel must be capable to perform the required task. This includes correct eyesight for inspecting parts and mental awareness.

All personnel must be given the authority to carry out their assigned task. They should be given the motivation and ability to fix any problem before it becomes a product issue.

All personnel must be trained on their contribution to product conformity, safety and the importance of ethical behavior.

Records of these trainings must be available for review or audit.

#### 2.3 Quality Management Systems (QMS)

Vendors shall maintain a documented QMS that is compliant with the latest revision of AS9100, AS9110, ISO9001, AS9003, AS5553 or equivalent or at a minimum United States 14 CFR 21.137



**Specification:** PUR-QSM-842-01 **Revision**: D

(accessible at). If not certified to one of these standards the vendor will show compliance through audits or similar means.

Changes to processes, products or services that affect Burrana products shall be reported before those changes are put into effect, in order to obtain approval from Burrana.

#### 2.4 Sub-Tier Suppliers

Where work is performed by sub-tiers, the vendor shall flow down all applicable requirements (Burrana PO, drawing and specification requirements, standards, and procedures). It is the vendor's responsibility to ensure these requirements are provided and followed by sub-tier suppliers. If at any time Burrana exclude a sub-tier supplier, it is the responsibility of the contracted supplier to find an alternative or notify Burrana that an alternative does not exist.

#### 2.5 Special Processes

For each special process that the vendor or their sub-tier suppliers uses to make Burrana parts they must maintain process approvals or certification for the following:

- · Non-Destructive testing
- Chemical Processing
- Elastomer processing
- Material testing in accordance with a controlled Materials Testing specification
- Coatings
- Composites
- Heat Treating (including Brazing)
- Welding (including Touch and Induction Brazing)
- Surface Enhancement
- Non-conventional Machining

Approval or certification can come from one of the following:

- Nadcap accreditation (this is the preferred certification). Burrana will need a copy of applicable credentials and updates as changes or renewals are made
- Nadcap equivalent credentials from OEM companies Boeing, Pratt & Whitney, Honeywell, or others as approved by Burrana Quality. Burrana will need a copy of applicable credentials and updates as changes or renewals are made
- Burrana Quality on-site audit and approval when the previous options are not available, this may be in conjunction with independent 3<sup>rd</sup> party evaluation. Burrana will track these audits and the approvals given.

When requested, test specimens must be provided for the purpose of design approval, inspection/verification, investigation or audit purposes.

### 2.6 Business Structure Changes

Vendors shall immediately notify the Burrana Buyer or Burrana Quality of business changes including:

- Change in location of facilities
- Change in ownership, name changes, or change in senior company management
- Change in quality leadership, system or controlled processes certification status, including suspensions or disapprovals



**Specification:** PUR-QSM-842-01 **Revision**: D

 Change in holder of design authority or change in location of the design office (change of CAGE code or NSCM)

#### 2.7 Prohibited

The following acts or practices are prohibited:

- Unauthorized Repair such as welding, brazing, soldering (with the exception of circuit board manufacture and repair), or the use of adhesives of parts damaged or found faulty in the fabrication process. This includes repairing holes in plastics or other materials by plugging or buildup without authorization from Burrana Buyer or as expressly allowed by the engineering drawing or standards
- Unauthorized Processing Addition revision or deletion of thermal chemical or electromechanical processes in manufacturing when processes are subject to specification control
- Improper Material Submittal Submission of material having known defects/problems
- Improper Material Resubmittal Resubmission of material without material being clearly identified as resubmitted material. (See RTV process)
- Unauthorized Material and Information Transfer No vendor shall buy, sell, trade, or transfer
  Burrana owned/supplied drawings, data, material, parts, devices, assemblies or end
  equipment for purposes other than the performance of Burrana business, without prior
  written approval
- Reclaimed Material No vendor shall use reclaimed material without prior written approval from the Buyer

## 3 Production Planning and Control

### 3.1 Documentation of Requirements

The Vendor shall ensure that the current configuration of all drawings, specifications and instructions required by the Contract/Purchase Order, are used for manufacturing, inspecting, and testing.

The Vendor shall retain Documented information such as, Test Reports, Inspection Records or other forms of product acceptance to Purchase Order Requirements for a minimum of 10 years following product lifecycle.

Handwritten, lined-out or initialed changes, verbal and/or email authorizations are not permitted to any Burrana requirement including purchase orders, engineering drawings/specification or technical data. When a deviation is needed to these requirements, the deviation is to be approved through the Burrana Special Process Request Form (SPR) per section 6.3, or documented in an NCR as applicable.

Note: Vendors are allowed to use any system in-house to track deviations as long as the system is robust in documenting and controlling authorization. The Burrana SPR and NCR Forms are the processes of keeping records of deviations from Vendor in Burrana's internal QMS.

### 3.2 Routers and Control Plans

The Vendor shall develop a Manufacturing Plan that defines the manufacturing processes to be employed in the manufacture of the part/ assembly prior to start of production. The Vendor is encouraged to maximize the use of current documentation techniques (e.g. Part Tracking Systems, Travelers, Control Plans, etc.). The Manufacturing Plan shall include the following as a minimum:

Processing Sequence including a brief description of each main processing step.



**Specification:** PUR-QSM-842-01 **Revision**: D

- Equipment to be used at each step (e.g. Mill)
- Any subcontracted procurements including the identification of sub-tier vendors (e.g. parts, processes, etc.)
- Inspection requirements both in process and final inspection. Including specified gages, test methods, or acceptance test plans.

Note: Burrana, in most cases, will **not** need to see the vendor's routers and control plans, however, Burrana may request to see these plans for audits, corrective actions, or other specific concerns. Burrana understands that in some cases these routers and control plans may be proprietary in nature. In cases where Burrana needs to review sensitive documents the vendor may request to do so in a way that the vendor maintains control / ownership of the documents.

## 4 Lot Inspection at Vendor

Vendors shall have a verifiable methodology for controlling and recording inspection of all design characteristics, as well as a method of validating received components from sub-tiers.

#### 4.1 Inspection Requirements

All features specified on an engineering drawing and/or specification must be controlled by the manufacturer of the part or assembly. Regardless of inspection processes the vendor is responsible for the continuous improvement, maintaining good manufacturing practices, and the use of statistical tools to maintain production integrity especially for special characteristic features.

At a minimum, each feature is to be inspected according to one of the options listed in sections 4.1.1 to 4.1.4. Features classified as critical or key characteristics require a heightened level of quality control to ensure product performance levels are met.

All recorded inspection measurements and results are to be kept with the production lot record. Inspection records must include the items listed below:

- Part number, lot, and serial information that apply to the product
- Measurement equipment used and any setting used for the inspection
- Measurement results and any statistical calculations. For serialized parts, this data to be traceable to each part
- Date of inspection
- · Inspector name with signature or stamp

### 4.1.1 OPTION 1 – STATISTICAL PROCESS CONTROL (SPC) METHOD

Since SPC is a proactive approach to inspection of parts, the first preference is to use SPC and other improvement tools on all Burrana products. When SPC is used, the following levels must be met, or on of the other options used:

- Critical Characteristics ≥ 2.00 Cpk
- Key Characteristic ≥ 1.67 Cpk
- Standard Characteristic ≥ 1.33 Cpk



**Specification:** PUR-QSM-842-01 **Revision**: D

#### 4.1.2 OPTION 2 - SAMPLING PLAN

A sampling plan may be used to gain a statistical confidence that parts meet the requirements without 100% inspection. When a sampling plan is used ANSI/ASQ Z1.4-2008 must be followed for sample inspection. This includes requirements for tightened inspection.

Reduced inspection plans may be used according to ANSI/ASQ Z1.4-2008 if the 10 consecutive lots found to meet the requirement to meet the requirement have been made within the past 3 years, and 2 lots within the previous year.

Inspection sample size is to meet or exceed the requirements for a single sampling plan with AQL=0.65.

An exception to ANSI/ASQ Z1.4-2008 is that accept / reject criteria is 0 / 1 for all cases, often called C=0. If any feature is found to be outside the specifications, then 100% inspection and sort is required for the nonconforming feature.

Inspection level for the different characteristics as follows:

- Critical Characteristic no sampling plan option allowed, manufacturer must use one of the other options
- Key Characteristic general inspection level III
- Standard Characteristic general inspection level II

Note: Following table – (for reference only) sample size for ANSI/ASQ Z1.4-2008 single normal plan AQL=0.65.

		Inspection Size		
Lot or batch size		Level II	Level III	
1	to	150	20*	20*
151	to	280	20	80
281	to	500	80	80
501	to	1,200	80	125
1,201	to	3,200	125	200
3,201	to	10,000	200	315
10,001	to	35,000	315	500
35,001	to	150,000	500	800
150,001	to	500,000	800	1,250
500,001	and	over	1,250	2,000

<sup>\*</sup>When inspection size is greater than the lot size 100% inspection is required.

## 4.1.3 **OPTION 3 – 100% INSPECTION**

If neither SPC nor sampling plan will work, then the feature is to be 100% inspected and sorted regardless of characteristic. If this is not feasible see option 4.

#### 4.1.4 OPTION 4 – EXCEPTION

If inspection of a feature requires destructive testing, is a hidden feature, or has other significant complications, one of the following alternatives may be used in place of the criteria previously outlined:

Vendor must provide acceptable proof, preferably based on sound statistical methods, that
the feature meets the requirements. Any such method must be documented and approved



**Specification:** PUR-QSM-842-01 **Revision**: D

in advance by Burrana Quality, fulfilling this requirement may include requirements of thirdparty verification

Alternate inspection must be done as specifically stated on the Burrana engineering drawing,
 PO, or as specified in this document.

## 4.2 Special Inspection Requirements

### 4.2.1 Non-Destructive Testing (NDT)

Vendor is to provide certification and recorded results for any NDT. Any artifacts from NDT such as x-ray film are to be retained with the quality records for the lot.

#### 4.2.2 Fasteners

When a procurement specification is specified in the drawing notes, the inspection requirements detailed by the procurement specification override the requirements of section 4.1 of this document. Otherwise, section 4.1 must be followed.

Fasteners are subject to the requirements of the Fastener Quality Act (Public Law 101-592).

#### 4.2.3 Electronics

Inspection of electrical parts is to be completed according to the ATP, the PO, or as agreed to in writing between the vendor and Burrana. Section 4.1 may apply to dimensions of electronic assemblies but does not apply to the electrical functions.

### 4.2.4 Acceptance Test Plans (ATP)

When specified by the engineering drawing specific test requirements may be required according to a Burrana ATP, vendor's internal test procedure, or industry standard. In all such cases the vendor is to complete the required testing and provide certification including test results.

#### 4.3 Visual Inspection Requirements

Obvious blemishes (e.g.: stains, discoloration, corrosion, digs, pits, scratches, etc.) are not permitted. Visual inspection must meet the requirements of QS-100-02.

#### 4.4 Calibration

The vendor shall maintain a calibration system complaint with one of the following:

- ANSI/NCSL Z540 or equivalent
- ISO 100112
- ISO 17025 (For vendors providing calibration services)

When Burrana owned measurement and test equipment is loaned to a vendor, the vendor is responsible to ensure the calibration status is maintained. Loaned measurement and test equipment must be returned in the same condition the vendor received it. Any modification or repairs must be approved by Burrana.



**Specification:** PUR-QSM-842-01 **Revision**: D

### 5 Certification Requirements

Then Vendor is responsible for maintaining and supplying accurate and legible certification documentation as objective evidence of meeting drawing, specification, technical data, or purchase order requirements.

Burrana often receives multiple shipments of parts from a single production lot. Certification documentation must meet one of the following:

- Vendor provides a complete documentation package with each shipment
- Vendor provides a complete document package with first shipment of the production lot.
   Each subsequent shipment has a copy of the Certificate of Compliance (C of C) provided with the first shipment, certification the parts are from the same lot, and date first shipment sent to BURRANA.

At the minimum, the following documentation is required.

### 5.1 Material

Raw material certification is required. This certification must specifically state the material as specified in the design requirements and must list the test results.

Vendors should complete independent third-party verification of materials on a regular basis.

### **5.2** Special Processes

Vendor is to provide certification for special processes as listed in the section 2.5.

## 5.3 Certificate of Compliance (C of C)

C of C shall be provided with each shipment. The C of C can be a separate document, or it can be included as part of the shipping declaration/packing slip text. The following list the C of C data/information requirements for each shipment:

- Vendor Name and Address
- Statement that parts conform to the purchase order, engineering requirements, and this document (PUR-QSM-842-01)
- · P.O. and line item number
- Original Manufacturer's name and part number (when the vendor is not the manufacturer)
- Part number and revision level
- Quantity shipped (listed quantities to be broken out by lot, and also totaled)
- Date and authorized signature of quality representative or company official
- When applicable evidence of Vendor Release Program (See section 4.2)
- 🌙 Vendor internal job, lot, or equivalent tracking number(s) that is unique to the production lot
- Manufacturing Country of Origin
- When required:
  - Serial numbers
  - Date code and shelf life (See section 7.5)
- Date of shipment
- For returned parts, the vendor shall provide a completed copy of the RTV Tracking Form



**Specification:** PUR-QSM-842-01 **Revision**: D

### 5.4 First Article Inspection Report (FAIR)

The vendor shall complete and submit a FAIR from the first production run of a new part or assembly. This verifies that the production processes, documentation, and tooling are capable of producing product(s) that meets requirements. Unless explicitly stated on the PO, this process shall be repeated when changes occur that invalidate the original results. SAE AS9102A section 5.3 lists reasons why a resubmitted first article inspection is required. Burrana requires vendors to follow these same criteria as follows:

- A change in the design affecting fit, form or function of the part
- A change in manufacturing source(s), process(es), inspection method(s), location of manufacture, tooling or materials, that can potentially affect fit, form, or function
- A change in numerical control program or translation to another media that can potentially affect fit, form, or function
- A natural or man-made event, which may adversely affect the manufacturing process
- A lapse in production for two years
- · As specified by Burrana

Unless otherwise specified, FAIR may be completed in any format but must contain the following:

- A complete dimensional report (layout) of all features listed on the engineering drawing. Each
  line item must include the dimension specified on the drawing with the corresponding
  tolerance, the measurement result, how measured (including gage used), and be traceable
  to the inspector
- Certification for all special features (all items that are not on the dimensional report). This
  includes copies of all certifications related to materials, heat treatment, validation testing,
  plating, nondestructive testing, processing, and so forth
- A balloon copy of the drawing when needed for clarity

FAIR is to include all measurements of the part, or if the part is an assembly, must include a FAIR for each of the component parts. For assemblies (excluding electrical) Burrana will need a sample of each unassembled part with the FAIR submission.

FAIR is to include all in-process dimensions or requirements that are specified by the Burrana Engineering Drawing. For example, "dimensions apply before coating." For coated or plated parts Burrana may require samples before coating or plating.

Burrana Quality reserves the right to be present at the time of the first article inspection. This includes in-process inspections such as inspection of castings, or dimensions before coating.

#### 5.4.1 Prototype Parts and First Product Lot:

For most first time buys of Burrana PMA parts, FAA approval has not been given for PMA. In order for Burrana to obtain PMA approval, an inspection is completed according to FAA requirements. This inspection, depending on FAA direction, may require physical evidence and independent results that all product requirements are met. This also may apply to CASA APMA products.

In order to provide proper evidence for this inspection there are additional items that Burrana needs vendors to provide with the first lot of parts made to each part number. This is based on what is typically needed, however the FAA at any time may ask for additional items in which case our vendor's assistance may be needed to help with meeting these additional requirements. In some cases, this may include on-site evaluation of the measurement or test system being used to inspect parts at the vendor. In addition to the First Article Inspection, the following items are to be provided with the first lot of parts:



**Specification:** PUR-QSM-842-01 **Revision**: D

- All certifications as listed in section 2.5
- Certification of all materials used to make the parts. This includes all polymers (plastic and Elastomer), metals, adhesives, paints, coatings, lubricants, any other material specified in the design requirements, or certification of standard parts used in an assembly
- Acceptance test results including ATPs, test specified on the engineering drawing, or any other specified test
- If the part is an assembly Burrana will need a sample of each subcomponent and subassembly
  processed up to the stage of the assembly or subassembly operation. This includes any
  assembly method including but not limited to press fits, adhesive bonds, welded
  components, and fasteners
- In addition to Heat Treat Certifications Burrana will need a coupon or sectioned part representative of the heat treatment lot and material
- In addition to certification for any type of coating, including plating, paint, or in any way covered with a layer of material; Burrana will need a sample of that part processed up to, but not including the coating process

## 6 Non-Conforming Material

Non-conforming Material must be identified, documented, and segregated to prevent unintended release or use.

Vendor authority for disposition of Burrana PMA parts is limited to rework, return to sub-tier supplier and scrap.

The vendor shall provide prompt written notification to Burrana when nonconforming products or processes are discovered to have shipped. Notification shall include P/Ns, traceability (lot, serial, and manufacturer numbers), ship dates, quantities and a description on the nonconformance.

All nonconformities found or reported to Burrana are assigned a Quality Deficiency Notice (QDN) number. The resolution and disposition of material are tracked by QDN. Vendor should include these numbers in all communication regarding these issues. Upon notification of a nonconformance by Burrana, the vendor shall complete containment activity within 48 hours.

## 6.1 Return to Vendor (RTV)

When parts are dispositioned by a Burrana NC Report as RTV, the parts in question will be returned to the vendor to be either reworked or scrapped at vendor's location. Burrana Purchasing will be the main point of contact for all RTV correspondence and will arrange financial, shipping, and RMA details. Burrana will provide an RTV tracking form that details the issues found with the parts and why the parts are not acceptable. The vendor is to complete the scrap, replace, rework & inspection sections of the form and return with the parts. In some cases, as noted on this form Burrana will need to review the rework procedure before parts are reworked. The information provided will allow Burrana to know what inspection will be required when parts are returned.

100% inspection of each dimension which is affected by the repair / fixed processes is recommended.

#### **6.2 Supplier Corrective Action Report (SCAR)**

At the discretion of Burrana Quality the vendor may be required to complete a SCAR for any quality issue.

The SCAR may be completed on the Burrana SCAR (provided with the request to compete a SCAR), or can be in any vendor format but must contain at least the following elements:



**Specification:** PUR-QSM-842-01 **Revision**: D

- · Person in charge
- · Statement of issues found
- · Short term containment plan
- Root cause(s)
- · Long term corrections
- · Documented results of changes made
- The vendor must provide within a week of the requested corrective action either a completed SCAR or a timeline/plan to complete the SCAR

#### 6.3 Deviations

The vendor shall notify Burrana of non-conforming material for the purpose of soliciting Burrana approval via Special Process Request Form (SPR) F-840-10 and/or NCR as applicable. For Burrana disposition of non-conforming items, the vendor shall agree with the SPR Form or NCR sent by Burrana. The deviation request must specify a limited timeframe or quantity of parts that can be accepted to a deviated requirement. However, when, and only when the SPR document is used to document an 'exception' (see section 4.1.4) the deviation may apply to all parts made to the revision of the engineering drawing. The SPR or NC report is to detail the specific changes allowed. The request shall be submitted from the Burrana Buyer to the Vendor.

An approved SPR or NCR shall be identified by authorized signatures from Burrana Quality, Burrana Engineering, Burrana Operations (If Applicable), Burrana Purchasing (If Applicable) and Burrana SQE Departments. An approved SPR Form or NCR will allow for short-term changes or inspection exceptions. All other existing requirements remain in force. With an approved SPR Form or NCR the vendor shall:

- Retain a copy of the approved Burrana SPR or NCR form in the vendor records
- · Segregate the deviated items into a separate lot
- Include a copy of the approved SPR Form or NC with the shipment
- As applicable, the vendor may initiate a root cause and corrective action process

## 7 Associated Requirements

### 7.1 Part Identification

Parts must be identified per requirements on the Burrana engineering drawing unless specifically stated otherwise on the Burrana PO. Any additional marking (vendor name, logo, or otherwise) is not allowed on the part or part packaging. Exceptions are marks required for fasteners and the outer shipping box.

Burrana prohibits the use of part marking or numbering that is false or misleading.

Note: See also public law 14 CFR Part 3.

Packaging identification labels must be located to allow the markings to be easily read when stored on shelves or stacked, and to ensure marking will be destroyed when the container is opened for inspection.

#### 7.2 Packaging

Items shall be packaged to protect from damaged during shipment and storage.

Hazardous materials, including compressed gases, shall be in approved containers.



**Specification:** PUR-QSM-842-01 **Revision**: D

Electronics items sensitive to electrostatic discharge (ESD) must be appropriately protected in compliance with MIL-STD-1686, in static shielding conductive containers meeting requirements of MIL-B-81705. Protection shall be provided to prevent physical damaged and to maintain leads and terminals in the manufactured condition under normal handling and transportation environments. The outside of packages containing ESD sensitive items shall have a clearly displayed ESD warning label conforming to ANSI/EOS/ESD. The same labels shall be used to seal shielded bags.

Item containing silver plating shall be protected from sulfur-laden fumes, or other sources that cause tarnish. (Silver saver bags or sheets are often used).

Corrosion Sensitive products shall be processed to ensure no corrosion is present and packaged to protect from moisture intrusion.

Additional internal packaging requirements may be specified by the Purchase Order, specification and/or drawing.

#### 7.3 Part Cleanliness

The vendor shall ensure that all parts supplied are free of any debris or foreign objects, and/or contamination throughout the complete process cycle including shipping. Enclosed areas can require flushing to assure debris/foreign object removal.

## 7.4 Quality Records

Burrana reserves the right to access records at the PO holder, or its sub-tiers involved in manufacture of Burrana product. The vendor shall make the records available within 48 hours or 2 business days, of the request for access.

The vendor shall contact the Burrana Buyer for disposition of records upon termination of business activity.

Record Retention: Quality Records must be legible, retrievable and stored in an environment that provides minimal risk of damage or deterioration. The vendor shall establish a system to retain quality records for the time prescribed. Quality Records shall be retained by the vendor for 7 years, except for CSI parts which will require 25 years of record retention.

Quality Records include (but are not limited to);

- · Burrana purchase orders
- · First article reports
- In-process & final inspection/test results, travelers/routers
- Calibration data
- Nonconforming material reports/disposition data
- Cause and corrective action data
- Certifications (including raw material)
- · Lubrication data

Records must be stored in an area which prevents loss, damage or deterioration. Records may be stored electronically provided the storage media can maintain data integrity for the retention storage period. Records shall be regularly audited to verify the integrity of the record retention.

## 7.5 Shelf Life Requirements

This section applies only to parts that are shelf life limited. Materials and items that are shelf limited shall have sufficient storage life remaining when delivered to Burrana. The vendor shall provide



**Specification:** PUR-QSM-842-01 **Revision**: D

sufficient data for Burrana and Burrana customers to manage the item while in storage. The curedate/shelf-life/lube-life information shall be shown on packaging and listed on the C of C.

The required shelf life and the storage management data is as follows:

Material or Item	Shelf Life Requirement	Certification Data Required
Elastomeric, rubbers, synthetic rubbers	No older than 4 quarters since cure, or no more than 25% expired, whichever is least.	Cure date ; batch number; compound or specification
Teflon, PTFE, plastics	At least 75% of life remaining	Cure or batch date; compound or specification
Adhesives, sealants	At least 75% of life remaining	Batch date; compound or specification
Paints, coatings	At least 75% of life remaining	Batch date; compound or specification
Lubricated bearings or product	At least 75% of life remaining	Lubrication date, lubrication specification or compound, percent of fill.
Miscellaneous item, shelf life limited	At least 75% of life remaining	Manufacture date, life limiting compound

Otherwise, it is determined as follows:

- For items made of elastomeric materials, the maximum storage life is in accordance with SAE ARP 5316. If not listed in ARP 5316 it is as specified by the raw material vendor
- For lubricants of bearings, the maximum storage life is in accordance with the bearing manufacturer's specification
- · For all other items, it is in accordance with the manufacturer's specification

### **7.6 MSDS**

Material Safety Data Sheets: On any delivery of hazardous material, the vendor shall provide the current edition of the Material Safety Data Sheet (MSDS) published by the manufacturer. Label the packaging according to the requirements of transport regulatory authority.

ASBESTOS FREE: No asbestos, as defined in FED-STD-313, is permitted in any parts supplied to Burrana, unless specifically agreed and stated on the P.O.

MERCURY FREE: Unless specifically agreed and stated on the P.O., parts may not contain or have come in direct contact with mercury.

## 8 Pre-Shipping Checklist

Vendor may use a Checklist to ensure all required items are completed and parts are ready to be shipped to Burrana before shipment. The following example or vendor specific list may be used:



**Specification:** PUR-QSM-842-01 **Revision**: D

Items	Complete	Not Applicable	Audit
P.O. notes and special requirements have been accounted for and complied with:			
Listed notes if needed			
Certificate of Conformance:			
Vendor Name and Address			
Statement that parts conform to the purchase order, engineering requirements, and QS-100-01			
P.O. and line item number			
Original Manufacturer's name and part number (when the vendor is not the manufacturer)			
Part number and revision level.			
Quantity shipped (listed quantities to be broken out by lot, and totalled)			
Date and authorized signature of quality representative or company official			
When applicable, evidence of Vendor Release Program (See section 4.2)			
Vendor internal job, lot, or equivalent tracking number(s) that is/are unique to the production lot			
Manufacturing Country of Origin			
When required:			
Serial numbers			
Date code and shelf life			
Date of shipment			
RTV Tracking Form			
FAIR (if required)			
AGE CONTROLLED MATERIALS			
Within shelf life requirements?			
Properly labelled on part and shipping packaging?			
Part marked according to the requirements			
P.O. reviewed for special marking requirements?			
Part marking legible?			
Packaging/Preservation:			
Corrosion Sensitive products reserved?			
Packaging adequate to prevent shipping damage?			
Lot traceability identified?			
. Material Safety Data Sheets included (if required)			