

# AmSafe Bridport Sri Lanka

# **Supplier Quality Requirements**

Document Ref No: WI/SL/03/07 Issue No: 2

No of Pages: 10

Prepared by:

Walter Chandralal
Procurement Manager

Reviewed by:

Date: 20/11/2019

Keerthi Chandrasekara
Quality & Technical Manager

Date: 20/11/2019

Keerthi Chandrasekara
Quality & Technical Manager

ORIGINAL

2 0 NOV 2019

# **Record of Revisions**

| Issue<br>No. | Date       | Description  | Sections<br>Affected | Prepared/<br>revised by | Reviewed<br>&<br>Approved by |
|--------------|------------|--|----------------------|-------------------------|------------------------------|
| 1            | 26/04/2019 | New document introduced  | All                  | Walter Chandralal       | Keerthi<br>Chandrasekera     |
| 2            | 20/11/2019 | Work instruction was fully reviewed & up issued including all mandatory requirement in AS9100D. Changes have been highlighted. | All                  | Walter Chandralal       | Keerthi<br>Chandrasekera     |

# 1.0 Objective

Objective of this document is to formally communicate the AmSafe Bridport – Sri Lanka quality requirements to the supply chain.

#### 2.0 Scope

This documents applies to all suppliers including customer approved or designated sources & their sub-tiers.

#### 3.0 Definitions

#### 3.1 Acceptance Authority Media

The means defined by the organization to document the status of outputs with respect but not limited to conformity, configuration, monitoring and measuring requirements and identification throughout the product life cycle

#### 3.2 Counterfeit Parts

An unauthorized copy, imitation, substitute, or modified part (e.g., material, part, component), which is knowingly misrepresented as a specified genuine part of an original or authorized manufacturer.

NOTE: Examples of a counterfeit part can include, but are not limited to, the false identification of marking or labeling, grade, serial number, date code, documentation, or performance characteristics

#### 3.3 Critical Items

Those items (e.g., functions, parts, software, characteristics, processes) having significant effect on the provision and use of the products and services; including safety, performance, form, fit, function, producibility, service life, etc.; that require specific actions to ensure they are adequately managed. Examples of critical items include safety critical items, fracture critical items, mission critical items, key characteristics, etc.

#### 3.4 Ethical Behavior

Acting in ways consistent with what organization and individuals typically think are good values.

# 3.5 FO (Foreign Object)

An alien substance or article (e.g., tools, consumables, hardware, product protective devices, personal items, product process debris, operations debris, environmental debris) that could potentially enter and/or migrate into/on the product or system and potentially cause a damage which could potentially degrade the product or system's required safety and/or performance characteristics, if not removed and controlled.

# 3.6 Key Characteristic

An attribute or feature whose variation has a significant effect on product fit, form, function, performance, service life or producibility, that requires specific actions for the purpose of controlling variation.

# 3.7 Product Safety

The state in which a product is able to perform to its designed or intended purpose without causing unacceptable risk of harm to persons or damage to property.

# 3.8 Special Processes

A process where the resulting output cannot be verified by subsequent monitoring or measurement and as a consequence, deficiencies become apparent only after the product is in use or has been delivered.

#### 3.9 Special Requirements

Those requirements identified by the customer, or determined by the organization, which have high risks of not being met, thus requiring their inclusion in the operational risk management process. Factors used in the determination of special requirements include product or process complexity, past experience, and product or process maturity.

# 3.10 Supplier

The term "supplier" means vendor, supplier of goods and services, sub-contractor and distributor.

#### 4.0 Quality Requirements

#### 4.1 General

- The suppliers shall agree to ensure that all information in this document is implemented within their business and flowed down to sub-tier suppliers if applicable, prior to commencing any work.
- In this document the terms "shall" mean that the described action is mandatory; "should" means that the described action is expected with some flexibility allowed in the method of compliance; and "may" means that the described action is permissible or discretionary.
- In addition to the requirement stipulated from this document, suppliers shall fully comply to the requirements communicated through the purchase orders.
- Any deviations to the requirements stipulated in this document must be submitted in writing and subsequently approved in writing by AmSafe Bridport in advance of product supply.

#### 4.2 Supplier Approval

- After identifying the potential suppliers, Strategic Procurement Team of AmSafe Bridport sends them a copy of this document with AmSafe Bridport Supplier Appraisal Questionnaire (FORM/SL/03/01) to communicate AmSafe Bridport supplier quality requirements & to know the compliance.
- Supplier shall duly fill the appraisal questionnaire & return it to the Quality Assurance Department of AmSafe Bridport.
- After reviewing the returned questionnaire, AmSafe Bridport Quality Assurance determines supplier's quality system can be directly approved or need an audit/ visit and/or risk assessment be conducted.
- After ensuring the supplier's compliance supplier is registered in the AmSafe Bridport Vendor Register.

#### 4.3 Quality Management System:

AmSafe Bridport prefers if suppliers can implement & maintain a quality management system to ISO9001 equivalent or better.

# 4.4 Interaction between AmSafe Bridport & the Supplier:

AmSafe Bridport considers the interaction between supplier & AmSafe is important for the business & can be maintained through communication, reviews, meetings, exchange of documented information, giving & taking feedbacks etc. as necessary.

#### 4.5 Control of Technical Data (Drawings, Specifications, Process Instructions etc.):

AmSafe Bridport assures that the suppliers are updated with latest technical data such as drawings, specifications & if required process instructions. Supplier shall retain them in a controlled manner.

If the purchases are done against the supplier's drawings or specifications, supplier shall notify AmSafe Bridport at the time they make any revision to those documents. Supply to new documents shall be commenced only after having the approval from AmSafe Bridport.

Products or services supplied to the AmSafe Bridport shall be to the revision level of the drawings or specification mentioned in the particular purchase order. If revision level is not available, it is the responsibility of the supplier to get it confirmed contacting AmSafe Bridport prior to commence manufacturing.

# 4.6 Design & Development Control:

If supplier undertakes any design & development activity, as a minimum they are bounded by the ISO 9001 quality requirements with regard to design & developments. As per the statement of work supplier shall do design planning, controls (e.g. design reviews, verifications, validation etc. as appropriate), & maintain/retain required documented information. In addition supplier shall have a change control system as well.

#### 4.7 Special Requirements, Critical Items & Key Characteristics

For the AmSafe designs, if there are any special requirements, critical items or key characteristics, AmSafe Bridport Procurement will communicate them to the suppliers. Thereafter supplier shall place necessary production/ process controls, monitoring & measurement systems to enhance product conformity.

#### 4.8 Competence, Training and Awareness

Supplier shall ensure personnel processing orders or performing work affecting to conformity of the product or service are trained and aware of the relevance and importance of their activities in relation to meet the requirements listed in the AmSafe Bridport purchase orders and in this document. This includes identification of competence/ skills required, training, assessment, evaluation, levels of qualification etc.

# 4.9 Product Safety:

Supplier shall aware their employees on their contribution to product safety. E.g. Individual accountability, compliance to process, attention to detail, knowledge of product end usage, potential impact relating to product issues etc.

#### 4.10 Ethical Behavior:

Supplier shall aware their employees at all levels on the importance of ethical behavior. Awareness on code of conducts, management/employee working relationships, fair treatment, employee work recognition, confidential

reporting mechanisms, protecting anonymity, no blame culture etc. will be helpful to practice the ethical behavior.

#### 4.11 Special Processes:

Upon request supplier shall provide the process records of special processes carried out by him or by his sub tiers with each shipment. The certificate shall include the processor, process used, controlled specification & revision, and the results of test or measurement performed. Sub-tiers used to perform special processes shall also be approved by AmSafe Bridport by auditing or based on the customer or other approval (E.g. NADCAP) which they have.

Example for special processes: Welding (WLD), Non-Destructive Testing (NDT), Heat Treatment (HT), Coating Including Painting (CT), Chemical Processing (CP), Non-Conventional Machining and Surface Enhancement (NMSE), Surface Enhancement (SE, e.g. shot peening), Composites (COMP), etc.

#### 4.12 Counterfeit Parts:

The Supplier shall agree with AmSafe Bridport (via Supplier Appraisal Questionnaire) that only new and authentic materials are used in products they supplied to AmSafe Bridport and contain no counterfeit parts.

All suppliers shall implement a process for prevention of counterfeit parts and that ensure control of counterfeit parts is cascaded down to sub-tier suppliers at any level of the supply chain as applicable and ensure they are understood and fulfilled.

Industry standards for guidance are,

- AS6174 Counterfeit material; Assuring Acquisition of Authentic and Conforming Material,
- AS5553 Counterfeit Electrical, Electronic, and Electromechanical (EEE) Parts; Avoidance, Detection, Mitigation and Disposition.

#### 4.13 FOD Programme:

Supplier is required to establish and maintain a Foreign Object Debris/Damage (FOD) prevention program that employs appropriate housekeeping practices to assure timely detection and removal of residue/debris generated, during operations and normal daily tasks. Parts supplied shall be free from oil, grease or any other FOD unless part requires said oil in order to avoid corrosion.

## 4.14 Limited Shelf Life Items:

Materials with limited shelf life shall indicate the date of manufacture, date of expiry, lot number and applicable specification on the container.

#### 4.15 Calibration System:

All Inspection, Measuring & Test Equipment used by the Supplier during in-process and final inspection to verify the conformity of products and services to requirements of AmSafe Bridport products shall be calibrated keeping traceability to international or national measurement standards; when no such standards exist, the basis used for calibration or verification shall be retained as documented information.

# 4.16 First Article Inspection:

Suppliers shall perform First Article Inspections to the latest revision of AS9102 Standard on new product for representation of the first production run to verify the production processes, production documentation, and tooling have the capability to produce products that meet established requirements. Then a full FAI or partial FAI for affected characteristics shall be performed when any of the following events occurs.

- A change in the design characteristics affecting fit, form or function of the part.
- A change in manufacturing sources, processes, inspection methods, location of manufacture, tooling or materials, that can potentially affect fit, form or function.
- A change in numerical control programme or translation to another media that can potentially affect fit, form or function.
- A natural man made event, which may adversely affect the manufacturing process.
- An implementation of corrective action required to complete a previous FAI.
- A lapse in production for two years shall require an update for any characteristics that may be impacted by the inactivity. This lapse is from the completion of last production operation to the actual restart of production.
- If AmSafe Bridport has requested a FAI from the purchase order

# 4.17 Identification & Traceability

Suppliers shall use suitable means to identify the outputs when it is necessary to ensure the conformity of product & services.

Traceability is a mandatory requirement stipulated by AmSafe Bridport. So it is a must all suppliers to control the unique identification of the outputs. This includes,

- the identification records to be maintained throughout the product life;
- the ability to trace all products manufactured from the same batch of raw material, or from the same manufacturing batch, operators involved etc.;
- for an assembly, the ability to trace its sub components to the assembly and then to the next higher assembly;
- for a product, a sequential record of its production (manufacture, assembly, inspection/verification) to be retained & easily retrievable.

# 4.18 Use of Customer Designated or Approved Suppliers:

If supplier use sub-tiers or sub-contractors, some cases suppliers have to use customer designated or approved sources including process sources especially when special processes are done. Such situations AmSafe Bridport communicate which sources to be used in written & suppliers shall use those sources.

# 4.19 Test, Inspection & Verification:

Tests, inspection & verifications shall be done per the criteria or instructions supplied by or agreed with the AmSafe Bridport. Relevant documented information shall be retained as per section 4.5 of this document.

# 4.20 Use of Statistical Techniques for Product Acceptance:

Unless AmSafe Bridport has specifically communicated through purchase order or in other mean, suppliers can use statistical technics for product acceptance. AmSafe Bridport prefers if it is done to an appropriate national, international or military standard. However supplier shall communicate to the AmSafe Bridport the basis they use to product acceptance for the approval.

#### 4.21 Operator Self Verification Programme

It is preferred if the supplier can implement an 'Operator Self Verification Programme' per AS9162 in addition to the final verification process where possible to have a greater first pass.

#### 4.22 Workmanship Quality:

Manufactured products shall fully achieve drawing spec requirements. They are free from burrs, sharp edges, snagging, dirt etc. Cosmetic issues caused during manufacturing shall be identified.

# 4.23 Packing, Handling & Delivery:

Supplier shall ensure that all parts are delivered correctly identified, as required by the drawings/ specifications and the Purchase Orders.

As a minimum, the Supplier shall pack all materials in a manner that they are protect against corrosion, oxidation, UV, electro statics as applicable & physical damages during handling & shipment to other country (If there is no anything separately agreed at the time of quotation). In addition, when multiple lots are shipped they shall be identified separately with their individual lot numbers.

The due date stipulated on the AmSafe Bridport Purchase Order is the date for latest receipt to the AmSafe Bridport facility. Depending on the Incoterms the suppliers should meet each line item dispatch date indicated in the Purchase Order. If line items are delivered > 0 after the dispatch date then they are deemed as late. Late deliveries will adversely affect the Supplier Performance Rating.

#### 4.24 Release Certificates

- (1) Supplier shall ensure release certificates and associated documentation (including Certificate of Conformity) are supplied prior to or with delivery of the goods. Failure to do so will affect supplier rating performance and may delay payment.
- (2) The Release Certificate / Certificate of Conformity must carry the following information:
  - (a) Unique Document Identity (through which traceability to original materials, manufacturing sources and records can be achieved)
  - (b) Document Issued date
  - (c) AmSafe Bridport Purchase Order Number and Line Item Numbers
  - (d) Description of Product / Service supplied
  - (e) Part Number
  - (f) Drawing number and or material specification number as applicable and issue number
  - (g) Quantity Supplied
  - (h) Batch Number or Serial Number as applicable

- - (i) Inspection Report/ Concession/ Permit/ Reject Note Number (if applicable)
  - (j) Statement of conformance against purchase order, name & signature of authorized personnel
  - (k) References to any other applicable supporting documents.

#### 4.25 Verification or Validation Activities Performed at the Supplier Premises:

If required with a prior notification AmSafe Bridport has to perform verification & validation activities at the supplier premises, which may include source inspection, witness, sampling, 3<sup>rd</sup> party verification, 2<sup>nd</sup> party audits, surveillance, process monitoring, product audits, functional testing, performance testing etc. Such situations supplier shall assist AmSafe Bridport team to perform them. This includes providing of test samples as well.

#### 4.26 Acceptance Authority Media (AAM):

When acceptance authority media are used (e.g., stamps, electronic signatures, passwords), the organization shall establish controls for the media.

#### 4.27 Retention of Records:

Documented information which provides evidence of product and service conformity to the purchase order requirement shall be retained for the period agreed through 'Supplier Appraisal Questionnaire'. For components of the airworthiness products manufactured by AmSafe Bridport, it is indefinite.

For the other products it is at least 12 years. It is the responsibility of the suppliers to flow down this requirement to their sub tiers.

If it is difficult to retain those records for such a long period there is an option suppliers to provide them with each delivery so that AmSafe Bridport can retain them.

# 4.28 Control of Non-Confirming Products & Materials:

Supplier shall have a system to control nonconforming materials & products. Preferred if it is aligned with ISO9001/ AS9100 requirements.

Materials, parts or products deviated from AmSafe Bridport Purchase order requirements shall be considered as nonconforming items. Their dispositions of use-as-is or repair for the acceptance shall only be done with a written approval from AmSafe Bridport.

If a non-conformity in a product already delivered to AmSafe Bridport, it shall be reported to AmSafe Bridport Quality Assurance within 24hrs after detecting the non-conformity. For all nonconformities supplier shall provide corrective actions to prevent their recurrence.

AmSafe Bridport has a right to reject parts and withhold payment if non-conforming parts are shipped without notification. Supplier is responsible for the total cost of product rejected due to non-conformance by the supplier.

#### 4.29 Rejection:

Products identified by AmSafe Bridport as nonconforming to the Purchase Order requirements are liable for rejection. The supplier may incur a replacement, credit note, corrective action report (CAR) and payment may be delayed.



#### Supplier Quality Requirements

Corrective Action Reports (CARs) are generated by AmSafe Bridport for all significant rejections and the supplier will investigate the cause of non-conformance and provide corrective actions to prevent their recurrence. CARs must be completed with corrective actions within 30 days of receipt and in case of delay it should be communicated to AmSafe Bridport and agreed.

#### 4.30 Obsolescence:

In the event of component obsolescence, supplier shall offer AmSafe Bridport a "Last time buy" notification to ensure adequate materials are made available during the transition to an alternative source/material. AmSafe Bridport should have a right to increase the purchase order quantity to make stocks after received "last time buy" notification for one time.

#### 4.31 Reporting Discrepancies:

Discrepancies, omissions, and the need for clarifications or interpretations of any nature encountered by Supplier in respect of furnished drawings or specifications shall be brought to the attention of AmSafe Bridport for resolution.

### 4.32 Confidentiality:

Suppliers shall hold all information received from AmSafe Bridport in confidence and no third-party request for information will be authorized unless approved, in writing, by AmSafe Bridport.

#### 4.33 Evaluation & Control:

AmSafe Bridport approved suppliers will be continuously monitored to assess their on-going suitability by performance measurement of Quality, On time Delivery & Correct Document On Time. Suppliers are required to achieve minimum standard of 98% calculated by line items monthly. These metrics are available upon request and as a practice communicate once six months. For the poor performers rating reports are sent more frequently. AmSafe Bridport uses these evaluation results to place necessary controls over their suppliers.

#### 4.34 Right of Access:

Supplier shall provide right of access to the AmSafe Bridport, its customers & regulatory authorities to the applicable areas of all their facilities, at any level of the supply chain, involved in the order or contract & to all applicable records.

#### 4.35 Change Management:

Supplier shall inform following changes in writing to AmSafe Bridport & shall obtain approval before commence manufacturing.

- When supplier approval bodies for third party certification are changed.
- If third party approval revoked.
- Changes happened to the scope of approval.
- Changes to the manufacturing location.
- Changes to the manufacturing process or inspection methods.
- Changes to the raw materials or material sources.

### Supplier Quality Requirements

- Changes to the tooling.
- Changes to the design data affect fit, form, function.
- Changes to the sub-ties or their manufacturing locations.
- Work transfers or sub-contracting of products or processes related to the products supply to AmSafe Bridport.
- Introduction of ERP system.

# 4.36 Flow Down to Sub-tier Suppliers:

Suppliers shall flow-down to sub-tier suppliers the applicable requirements as required by the Purchase Order either specifically or by reference including customer requirements. AmSafe Bridport reserves the right to evaluate and audit any sub-contractor/sub tier supplier.

#### 5.0 Reference

FORM/SL/03/01 - Supplier Appraisal Questionnaire