

# Supplemental Purchase Order Conditions (SPOC) Manual

Rev. 2021-01



# SUPPLEMENTAL PURCHASE ORDER CONDITIONS (SPOC) MANUAL

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## **Revision History**

| Date     | Ву            | Approved by | Revision History   |
|----------|---------------|-------------|--|
| 12-05-02 | J. Nguyen     | M. Rassas   | Original Issue   |
| 01-25-05 | J. Riley      | J. Riley    | Revision for clarification of requirements and additional  |
|          | ,             | ,           | information  |
| 03-10-06 | J. Riley      | J. Riley    | SPOC 101 added test documentation requirement for          |
|          | ,             | ,           | post processing tests.                                     |
|          |               |             | SPOC 105 revision to provide details for incoming          |
|          |               |             | document package requirements. Added requirement to        |
|          |               |             | note gage acceptance on inspection report when             |
|          |               |             | applicable. Added part#, PO and lot# requirements for      |
|          |               |             | inspection report. Added English language requirement      |
|          |               |             | for all certifications. SPOC 104 changed hardness test     |
|          |               |             | requirements to 8 mandatory pieces per lot.                |
|          |               |             | Revised AMSAFE INC. to AmSafe Inc. throughout              |
| 08-29-08 | J. Riley      | J. Riley    | Added NADCAP website information section 2.0, Added        |
|          |               |             | clarification to Delta FAI inspections page 7, Removed 3   |
|          |               |             | bullet items from section 2.2, SPOC 105 removed            |
|          |               |             | requirement for signed certifications page 11, Added       |
|          |               |             | item 6 under SPOC 105- lot number to be included on        |
|          |               |             | shipper(s) document  |
|          |               |             | Other items rewritten for clarification without changes    |
|          |               |             | to requirements. Added section 108 for Electronic          |
|          |               |             | components/assemblies. SPOC 101 sampling quantity          |
|          |               |             | changed from 30 pieces to 20 pieces and 5 pieces for       |
|          |               |             | molded parts.  |
| 01-28-09 | J. Riley      | J. Riley    | Added SPOC 109 for Web Supplier General                    |
|          |               |             | Requirements   |
| 08-24-09 | J. Riley      | J. Riley    | Revised SPOC 105 for lot definition clarification. Revised |
|          |               |             | SPOC 107 to add charge for rejected lots, revised          |
|          |               |             | requirement in 1st paragraph regarding deviation           |
|          |               |             | requests. SPOC 101 3 year FAI revised to 2 year IAW        |
|          |               |             | AS9102 requirements.                                       |
| 02-10-10 | Quality Staff | J. Riley    | Updated tooling requirements page 6, AS91 03 Critical      |
|          |               |             | Characteristics, miscellaneous grammar errors.             |
|          | Quality Staff | J. Riley    | SPOC 100.3, 100.7 revised added 100.17 DTS. Revised        |
| 02-28-11 |               |             | key characteristics requirements. SPOC 101 added item      |
|          |               |             | 6, revised inspection quantities, added delta FAI item 4.  |
|          |               |             | Revised SPOC 102 for clarity, SPOC 104 added key           |
|          |               |             | statement for hardness. SPOC 107 added source              |
|          |               |             | inspection requirement for rejected lots. Added SPOC       |
|          |               |             | 110 for artwork. SPOC 102 added that Am Safe will          |
| 10 1- 11 |               |             | supply an A079 with 100% dimensions.                       |
| 12-17-11 | Quality Staff | J. Riley    | Added right of access top of page 5.                       |



| 09-17-12 | Quality Staff  | J. Riley | Para 2.0 Revised ISO/AS9100 statement for   |
|----------|----------------|----------|---|
|          |                |          | compliant system requirements.  |
| 07-18-13 | Quality Staff  | J. Riley | Revised right of access statement page 4. SPOC 101  |
|          |                |          | added AS91 02 requirement, added configuration lock   |
|          |                |          | statement after FAI approval, changed inspection  |
|          |                |          | quantity requirements, for delta FAI revised statement  |
|          |                |          | for drawing changes that do not affect part   |
|          |                |          | configurations. SPOC 108 added counterfeit component  |
|          |                |          | statement. SPOC 107 added requirement for use of  |
|          |                |          | deviation notices to be one lot and notice forwarded  |
|          |                |          | with each affected shipment. Revised page 5 item 13   |
|          |                |          | statement, item 16 added "on or before shipment date.   |
| 06-06-14 | J. Riley       | J. Riley | Revised to revision 2014-00   |
|          |                |          | Added paragraph 3 at SPOC 100 for cosmetics   |
|          |                |          | SPOC 101: Added clarification that AS91 02 forms are  |
|          |                |          | required for FAI submittals   |
|          |                |          | SPOC 107: Added additional description for containment  |
|          |                |          | of non-conforming materials   |
|          |                |          | Added section describing corrective and preventive action   |
|          |                |          | requirements/methods  |
| 01-15-15 | D. Rosenberg   | J. Riley | Revised to revision 2015-00   |
|          |                |          | Updated Table of contents 1-15-2015 added SPOC 112,   |
|          |                |          | 113 for Conflict of Minerals Policy & Ethical Sourcing  |
|          |                |          | Policy Added form -2014 CMP-S.I.R. Conflict of Minerals   |
|          |                |          | Supplier Information form   |
|          |                |          | Added Policies for Conflict Minerals & Ethical Sourcing Added First article statement regarding the |
|          |                |          | frequency of FAIs Para.6 under SPOC 101   |
|          |                |          | Added to SPOC 106 packaging statement regarding   |
|          |                |          | minimum product identification being delivered to   |
|          |                |          | AmSafe Inc. Added to SPOC 101 Reference to using WI-  |
|          |                |          | 664 Cosmetic Inspection limits for plated,  |
|          |                |          | electrodeposited, powder coated items, molded and   |
|          |                |          | cast parts.   |
| 01-28-15 | D. Posonbora   | J. Riley | Added to SPOC 101 FAI (Electrical Part  |
| 01-59-12 | D. Rosenberg   | J. Kiley | ·   |
| 02.05.45 | D. Dansiele en | I Diles  | Requirements)   |
| 02-05-15 | D. Rosenberg   | J. Riley | Added SPOC 114 REACH Compliance Statement   |



| 02-26-16   | D. Rosenberg    | J. Riley                   | Removed all notations regarding the A079 forms, replaced with AS9102 forms. Added pages 19, 20, 21 Examples of AS9102 FAI sheets 1, 2, 3. Removed A079 Example Inspection sheet page 19. Updated the following sheets 22, 23, 24, 25. Page 9 added statement regarding hidden features. Page 1 (Table of Contents) Appendix forms updated for added sheets. SPOC 107 added 72-hour notification requirement.   |
|------------|-----------------|----------------------------|--|
| 01-31-18   | T. Dahlberg     | J. Riley<br>4/3/18         | Moved entire document to latest version of Word. Updated formatting throughout. Corrected spelling errors and typos throughout document. Changed wording as needed to clarify requirements. Updated and generalized external web links. Removed AS9102 First Article Form examples from appendices. Updated SPOC 101 to better align with language and requirements in AS9102. Updated SPOC 102 to change Ppk to Cpk and remove standard definitions that are readily available. Added AS5553 reference to SPOC 109. Added annual requirement to SPOC 112. |
| 06/04/2021 | L. Sunthonchart | J. Riley<br>06/16/21       | Revised the SPOC to version 2021-00, verbiage updated to reflect current AS9100 and AS9102 Standards, flow down to Suppliers, updated links, added NADCAP information, added Counterfeit Material controls, deleted Conflict of Minerals form not used and added link to the correct CMRT template location. Updated the table of contents and page numbers. Flowed down the SPOC numbers sequentially. Added Supplier SPC approval and records requirement.   |
| 10/07/2021 | A. Farrell      | M.<br>Browning<br>10/07/21 | Revised section 3.4.1. clarifying supplier responsibility to have the FAIR completed in Net-Inspect, in Pending Buyoff mode prior to product shipment. Revised 3.2.1.1 to remove requirement that AmSafe owned tooling has to be stamped with the revision.  |



#### 1.0 Scope

AmSafe Inc. provides safety related products to our customers. This manual, when imposed on the purchase order, is to define the Supplier requirements for the manufacture of AmSafe Inc. products. This manual provides the requirements that shall be met when supplying products to AmSafe Inc. This Supplemental Purchase Order Conditions (SPOC) manual is imposed on all Purchase Order's (PO's) that purchase detail and sub-assembly materials that are to be utilized in the manufacture of AmSafe Inc. restraint products. The SPOC shall be specified on the purchase order. The supplier is to ensure compliance to all stated conditions, as applicable, within this manual.

AmSafe Inc. suppliers shall ensure that all requirements stated herein in this SPOC manual, are analyzed, fulfilled, and flowed down internally and to all sub-tier suppliers. The supplier is responsible for evaluating, selecting, and monitoring their sub-tier suppliers. The supplier shall provide AmSafe Inc. with an Approved Supplier List (ASL) upon request.

Any deviations to the stated requirements within this manual, must be identified by the supplier, and approved by AmSafe Inc., in writing, prior to acceptance of any Purchase Order or Contract, by the supplier.

#### 2.0 General Requirements Applicable to All Purchases

AmSafe Inc. considers ISO9001 and AS9100 to be the benchmark international standards for quality system management. While registration is not required, 3<sup>rd</sup> party registered suppliers will be given preferential consideration. A quality management system compliant to these standards is required for AmSafe Inc. "A" category product suppliers.

AmSafe Inc. suppliers shall have a documented system in place that control key manufacturing and quality operations, including the ancillary processes of their sub-tier suppliers.

AmSafe Inc., including all customers, and the FAA, shall be permitted access to supplier facilities during the normal course of business. AmSafe Inc. will provide advanced notification when manufacturing process, Quality System reviews, or other business reviews that pertain to AmSafe Inc. production articles, are required.

NADCAP accredited suppliers are preferred for all special processing operations including sub-tier selection by AmSafe Inc. and by AmSafe Inc. suppliers. The NADCAP Accredited supplier listing (QML) may be found at: <a href="https://www.eauditnet.com/eauditnet/ean/user/login.htm">https://www.eauditnet.com/eauditnet/ean/user/login.htm</a>, this is a free service that requires registration.

#### 2.1 Expectations

Our intent is to forge a strategic relationship with capable suppliers based on mutual trust and performance. Performance includes total cost, innovation, delivered product quality, and on time delivery performance. There shall be a demonstrated commitment by both parties to support the success of each other during this relationship.



#### 2.2 Evaluation and Selection of Suppliers

Evaluation and selection of suppliers shall be made based on the supplier's ability to consistently meet all requirements. The following business elements to be used, but are not limited, for supplier consideration:

- Financial and labor stability
- Capability and Capacity
- Market or technology leadership and innovation
- Operational expertise such as lean manufacturing practices, contingency planning, design for manufacturing practices, etc.
- Effective material management systems including inventory management and lead time reduction practices
- Ability to consistently support AmSafe Inc. business plans
- Ability to propose and support cost reduction initiatives
- Responsive customer service processes
- Ability to quick turn prototype and pre-production initiatives
- Electronic data transfer capabilities
- Implemented quality systems that support the type of product being procured



#### 3.0 Quality Engineering

#### 3.1 SPOC 100: Quality Planning and Control

- **3.1.1** The Supplier shall review all drawings, specifications, P.O. Requirements, including AmSafe Inc. Terms & Conditions, and SPOC requirements, prior to acceptance of the Purchase Order.
  - **3.1.1.1** The supplier is responsible for resolving any concerns with the AmSafe Inc. Buyer, prior to acceptance of the Purchase Order.
  - **3.1.1.2** Supplier is to hold all production activities until full acceptance of the P.O. is sent to the AmSafe Inc. Buyer.
- **3.1.2** Supplier shall develop a Quality Control Plan prior to production. The plan shall provide for monitoring and controlling of all supplier manufacturing processes and sub-tier activities, throughout the production cycle. This plan shall also provide for any Quality Control inspections, to ensure that all product characteristics meet Engineering specifications and drawings.
  - **3.1.2.1** There shall be no deviations from AmSafe Inc. Inc. drawings or specifications identified on AmSafe Inc. PO's. Verbal approval or Red Line changes are not allowed. Any changes to drawings and/or specifications, shall be documented on released AmSafe Inc. drawings and/or specifications, or approved by Engineering via a Supplier Deviation form for that Lot only. Ref: paragraph 3.1.13.1, Appendix B, A-091 Form.
- **3.1.3** The Quality Plan and all subsequent Manufacturing records shall be maintained at the supplier, for a period not less than 10 years.
  - **3.1.3.1** Upon request by AmSafe Inc., a copy of any pertinent documentation and/or data, shall be submitted for review.
- 3.1.4 All products manufactured for AmSafe Inc. shall have an approved AS9102 Aerospace First Article Inspection Report (FAIR), Initial and/or Partial FAIR, to the latest Product Engineering revision, on File in Net-Inspect, in Pending Buyoff mode prior to shipment of the product, (Ref: SPOC 102). It is highly recommended that the Supplier purchase the latest version of AS9102 Aerospace First Article Inspection Report standard, for their use, in determining when a AS9102 FAIR is required to be submitted.
  - **3.1.4.1** The Supplier is wholly responsible to ensure their sub-tier suppliers also provide the AS9102 FAIR, when required.
  - **3.1.4.2** Suppliers manufacturing planning documents shall include these AS9102 FAIR requirements, as defined by AS9102, (Ref: SPOC 102).
  - **3.1.4.3** Products approved by FAIR are expected to yield an identical item for the life cycle of that revision.



- **3.1.5** Cosmetic appearance is critical to all AmSafe Inc. restraint parts and assemblies. Any parts having cosmetic blemishes are at risk of rejection. The supplier is responsible for ensuring all product is protected throughout the manufacturing process at the supplier's facility and those of their sub-tier suppliers.
  - **3.1.5.1** The supplier is also responsible for all product protections during shipment, Ref: SPOC 106: 3.8, Packaging
- **3.1.6** Supplier's documented procedures shall be implemented to ensure that all purchased product conforms to specified requirements.
  - **3.1.6.1** Suppliers shall perform verification inspection on all special processing including plating and heat treat, ensuring the product is acceptable and that all records received, specify the correct special process being performed, including results.
  - **3.1.6.2** For raw material, the Certificate of Conformance, metallurgical and physical properties test documents, shall be verified prior to use.
    - **3.1.6.2.1** All purchase orders for Raw Material shall include a detailed Raw Material description, such as size, specification, and any other description necessary to ensure the receipt of the correct material.
    - **3.1.6.2.2** Each lot of purchased raw material shall be verified against the material specification for conformity. All raw material records shall meet the Chemical and Physical property requirements, as stated in the applicable material specification.
    - **3.1.6.2.3** Raw material manufacturer's Certificate of Conformance including test and lab reports, shall be verified, and determined if acceptable, to the supplier issued Purchase Order requirements.
    - **3.1.6.2.4** A copy of the Raw Material Certificate of Conformance, and all Chemical, Test, and Lab Reports, are to be submitted in the Certification package with each AmSafe Inc. shipment. Ref: paragraph 3.1.18.
- **3.1.7** A system for identifying and tracking of each Lot of raw material shall be implemented. The system shall use a suitable means of identification and traceability, from raw material receipt, to storage, and throughout all stages of the production process, to delivery at AmSafe Inc.
- **3.1.8** When DFARS 252.225-7014 is specified on the AmSafe Inc. purchase order, only USA domestic melt, metals, and other specified materials are required to be from one of the qualifying countries as specified in DFARS 225.872-1 and shall be used. The DFARS requirements may be found at: https://www.acquisition.gov/dfars/225.872-1-general.



- **3.1.9** All outside special processing performed by AmSafe Inc. sub-tier suppliers shall be inspected by the supplier prior to shipment to AmSafe Inc.
  - **3.1.9.1** The AmSafe Inc. sub-tier Special Process supplier's system shall require that incoming product is not used or processed until it has been inspected or otherwise verified, as conforming to the specified requirements, before performing the Special Process prescribed by the AmSafe Inc. purchase order.
- **3.1.10** The use of Statistical Process Control (SPC) techniques appropriate to the manufacturing process is recommended, to minimize the production of nonconforming product, but is not required by AmSafe Inc.
  - **3.1.10.1** The use of statistical methods to control a manufacturing operation and/or feature, may be used as evidence of control, in lieu of additional final inspection data.
  - **3.1.10.2** Any SPC action needs to be <u>formally</u> approved, in writing, by AmSafe Inc. Quality Assurance, prior to implementation.
  - **3.1.10.3** Once approved, in-process SPC data may be used in lieu of additional final inspection reports for those product features.
  - **3.1.10.4** If SPC is approved and used by the supplier during production, a copy of the SPC records for the lot produced, shall be included with the Certification package. Ref: SPOC 100, paragraph 3.1.18.
- **3.1.11** Supplier shall develop and implement Document control procedures to control all AmSafe Inc., engineering drawings, specifications, documents, and any data/records that relates to all AmSafe Inc. product manufactured, inspected, and tested.
  - **3.1.11.1** Please note, the supplier is responsible to protect AmSafe Inc. documents which are proprietary, from unauthorized distribution.
- **3.1.12** Inspection equipment procedures shall be implemented to control, calibrate, and maintain inspection, measurement and test equipment, used to measure AmSafe Inc. product during the manufacturing process.
- **3.1.13** Nonconforming material procedures shall be developed and implemented to ensure any product, that does not conform to AmSafe Inc. P.O. requirements, is prevented from shipment to AmSafe Inc. or for any use whatsoever.
  - **3.1.13.1** Products having a non-conformance shall not knowingly be shipped to AmSafe Inc. without written approval from AmSafe Inc. A Supplier Deviation Request Form A-091, Appendix B, shall be completed by the supplier defining the defect(s) and the quantity affected, for the lot produced. Supplier Deviation Requests must be approved by AmSafe Inc. Engineering and Quality Assurance, prior to the lot being shipped to AmSafe Inc.



- **3.1.14** AmSafe Inc. owned Tooling, Fixtures, and Gages at Suppliers location shall have a process developed and implemented for the recording, verification, storage and maintenance of AmSafe Inc. owned tooling, fixture, and/or gages that are provided or purchased by AmSafe Inc. to the supplier, to manufacture AmSafe Inc. product.
  - **3.1.14.1** These tool control procedures shall also provide a requirement to systematically, record, and report, to the AmSafe Inc. Buyer, any tooling, fixtures, and/or gauges, that are lost, damaged, or are otherwise unsuitable for use.
- **3.1.15** Corrective and preventive action procedures shall be developed and implemented for effective corrective and preventive action.
  - **3.1.15.1** The corrective action plan shall include containment, direct cause, root cause, corrective action and the preventive action. The corrective action submission shall define any potential exposure to previously produced and shipped lots.
- **3.1.16** For inspection sampling, suppliers shall use ANSI/ASQC Z1.4, normal inspection, general inspection level III, with an acceptance level of C=O. To clarify, when executing sampling plans, a random sample of parts are selected and inspected. If a defect is encountered, the entire lot is rejected, and 100% inspection for the rejected characteristic, is required. This sampling plan does not relieve the Supplier of their obligation to conduct other appropriate tests and inspection procedures, to supply a conforming product to AmSafe Inc.
- **3.1.17** Unless otherwise stated in the purchase order, quantity deviations of +/- 5% shall be acceptable to AmSafe Inc.
- **3.1.18** Supplier Certifications of Conformance, raw material physical, chemical, and test reports, including Final Inspection report packages, shall be e-mailed at the time of lot shipment. This data shall be sent in PDF format and e-mailed to AmSafe Inc. on or before the product ship date. The subject line of the e-mail shall list the part number, AmSafe Inc. purchase order number, the purchase order line item number, and quantity, as shown below. See paragraph 3.1.19 for required Key Characteristic reporting.
  - **3.1.18.1** Subject line: P/N XXXXXX-XX-XX, PO#XXXXXX, PO line XX, Quantity XXXX. E-Mail to: phxqacerts@amsafe.com
  - **3.1.18.2** Return of any part lot previously rejected by AmSafe Inc., shall have the AmSafe Inc. IRR number and SCAR number (if applicable) noted on all Lot Certification documents. Returned parts shipment must also reference the IRR and SCAR number (if applicable) on the shipper and/or packing list.
- **3.1.19** Key characteristics: Key features are required to be inspected at minimum, for each production lot and reported on a Final Inspection Report. It is recommended, that other features used to control the manufacturing process also be reported on inspection reports, and submitted to AmSafe Inc. per paragraph 3.1.18.



- **3.1.19.1** Key Characteristic Definition: The features of a material or part whose variation has a significant influence on product fit, performance, service life, or manufacturability. Key Characteristics will be defined on the AmSafe Inc. Engineering drawings, but may also be defined by the supplier to ensure control of product features deemed critical to their manufacturing process.
- **3.1.20** The supplier shall immediately notify the AmSafe Inc. Buyer, of any production process that is moved to a sub-tier supplier, or if work is moved to a different sub-tier supplier. This change in supplier requires AmSafe Inc. Quality Assurance approval, and AS9102 FAIR reporting, as required.
- **3.1.21** The supplier shall plan, implement, and control processes, for the prevention of counterfeit or suspect counterfeit product. The supplier shall have a documented Prevention of Counterfeit Parts process in place following the guidance provided by AS9100, latest revision, Aerospace Quality Systems standard.

#### 3.2 SPOC 101: Tooling Requirements

- **3.2.1** The following requirements apply to any hard tooling that AmSafe Inc. purchases (Stamping, Casting, Injection Molding, etc.)
  - **3.2.1.1** Tooling shall be impression stamped with the Part Number ID and Property of AmSafe Inc. .
  - **3.2.1.2** Maintenance of the tool shall be the responsibility of the supplier.
  - **3.2.1.3** All AmSafe Inc. tooling is to be controlled per paragraph 3.1.14.

#### 3.3 SPOC 102: AS9102 First Article Inspection Report (FAIR)

- 3.3.1 AS9102 FAIR forms, current revision, are required for use on AmSafe Inc. First Article Inspection Reports (FAIR). Always refer to the latest version of AS9102 for complete information. What is noted below in this section, is for guidance only.
- **3.3.2** AS9102 FAIR must be submitted to AmSafe Inc. via the Net-Inspect web-based FAIR submittal tool. AmSafe Inc. Supplier Quality Engineering will assist with any implementation questions, as needed.
- **3.3.3** An approved FAIR in Net-Inspect, locks the Engineering configuration of the material and manufacturing processes, used for the initial production run. This applies to all sub-tier suppliers and manufacturers.
- **3.3.4** An AS9102 compliant full or partial FAIR is required but is not limited, for the following events:
  - **3.3.4.1** New part number/first production run
  - **3.3.4.2** New production tool
  - **3.3.4.3** Two year production lapse
  - **3.3.4.4** Production tool transfer from another supplier or from another division of the same supplier
  - **3.3.4.5** Tool refurbishment
  - **3.3.4.6** A natural or man-made event, which may adversely affect the manufacturing process.
  - **3.3.4.7** A change in design characteristics affecting form, fit, or function of the part
  - 3.3.4.8 Implementation of a corrective action which may affect the manufacturing process



- 3.3.4.9 Sub-Tier supplier change
- **3.3.4.10** First time use of a sub-tier supplier
- **3.3.4.11** A new dash number configuration is manufactured of a previously approved part
- **3.3.4.12** A second submission of a previously rejected first article part (previously rejected and corrected items only)
- 3.3.4.13 Required FAIR inspection quantities:
  - **3.3.4.13.1** The supplier shall use a representative item from the first production run to verify that the production processes, production documentation, and tooling have the capability to produce products consistently, that meet AmSafe Inc. requirements.
  - **3.3.4.13.2** Cast or molded parts, metal or plastic: 1 piece per tool cavity will be documented for 100% of the defined Engineering characteristics. *Note: multi-cavity/station tools shall have a FAIR for each cavity or station. Inspected FAIR parts shall be packaged separately and identified corresponding to the cavity/position.*
- **3.3.4.14** For cosmetic conditions you must refer to AmSafe Inc. specification WI-664 Cosmetic Inspection Acceptance Criteria. This specification is defined for plated, electrodeposited, powder coated items and molded and cast parts that are highly visible to the Customer.
- **3.3.5** FAI product shall be produced on the production tooling that will be used on subsequent production lots. FAIR detail parts and assemblies shall be selected and representative of the production run.
- **3.3.6** Part features which are not measurable in the Final product, shall be verified during manufacturing of the FAIR product, as long as these items are not altered by subsequent operations or by destructive means. Using one of these two methods, which need to be approved by AmSafe Inc. Quality Assurance:
  - **3.3.6.1** Production samples may be created during the manufacturing process, that are used to measure these hidden elements and retained for submission to AmSafe Inc. in the incomplete state, and entered into the Assembly FAIR per paragraph 3.3.6.3.
  - **3.3.6.2** Onsite visit to Supplier by AmSafe Inc. Quality Engineering witnessing the AS9102 FAIR, for features that will be hidden after subsequent operations or assembly.
  - **3.3.6.3** The supplier shall record the hidden characteristics inspected per AS9102.
- **3.3.7** Sub-Assembly and Final Assembly FAIR's shall be performed on those characteristics specified on the assembly drawing per AS9102.
- **3.3.8** All tests required by Amsafe drawings and/or specifications are to be documented per AS9102.
  - **3.3.8.1** Records of the tests performed are to be included with the AS9102 FAIR evidentiary documents.
- **3.3.9** First Article parts receiving any surface treatments shall have the process test criteria completed and documented as required by the AmSafe Inc. drawing and/or specification. All records of the test acceptance shall be submitted with the FAIR lot documentation.



- **3.3.10** First Article Acceptance Criteria
  - **3.3.10.1** AS9102 First Article Inspection Report (FAIR) shall document that the manufacturing process is capable of reliably reproducing conforming product.
  - **3.3.10.2** All drawing characteristics, including drawing notes, shall be listed on the AS9102 forms, as required per the standard. Drawing reference items are not required on the AS9102 FAIR. Supplier shall submit the FAIR parts with all related documentation, including actions taken and/or plan to resolve any nonconformances, to AmSafe Inc. for approval, via Net-Inspect.

#### 3.4 SPOC 103: Supplier Production Final Inspection Requirement

- **3.4.1** Supplier shall randomly select samples for final inspection of the key characteristics noted on the part drawing.
  - **3.4.1.1** Supplier shall provide their Final Inspection report with the production lot documentation per paragraph 3.1.18.
- **3.4.2** If Statistical Process Control (SPC) is used the Cpk shall be ≥ 1.33 for key characteristics.
  - **3.4.2.1** Note: multi-cavity/station tools shall have an inspection completed for each cavity/position. Inspected parts shall be identified corresponding to the cavity/position.
  - **3.4.2.2** SPC data in lieu of Final Inspection reporting is to be submitted to AmSafe Inc. per paragraph 3.1.10.

#### 3.5 SPOC 104: Identification of Shelf Life Items

- **3.5.1** The following information must be received with items subject to shelf life requirements.
  - **3.5.1.1** Name of Manufacturer (if applicable)
  - 3.5.1.2 Manufacturer's part number
  - **3.5.1.3** Date of Manufacture and Expiration date.
    - **3.5.1.3.1** Expiration date shall provide, at minimum a 75% of shelf life remaining, upon receipt at AmSafe Inc. Reference Engineering Specification E508137 and E511264.

#### 3.6 SPOC 105 Hardness Verification

- **3.6.1** This section applies when the AmSafe Inc. drawing specifies a heat treatment and/or hardness requirement for a part. Material hardness is a critical feature on AmSafe Inc. products. It is preferable that the Heat Treatment process be performed by a NADCAP approved supplier.
  - **3.6.1.1** The original source for heat treatment must document the specified heat treatment process performed on their Certificate of Conformance. The drawing specified test results are to be measured and the actual results of the hardness measurement shall be included on this Certificate of Conformance or on a separate test record from the Heat Treatment supplier.
  - **3.6.1.2** Hardness testing shall be verified after all manufacturing operations are completed but <u>prior to surface treatments</u>. Hardness is a key feature on all AmSafe Inc. products. Hardness testing results not documented shall be cause to reject the lot.



#### 3.7 SPOC 106: Lot Certification Requirements

- 3.7.1 Each lot shipped to AmSafe Inc. shall have a lot certification package by product type, as shown below. Lot certification packages shall be submitted electronically per paragraph 3.1.18. All Lot certification documents from AmSafe Inc. suppliers shall be in English, or must contain the English translation. Production lots are those lots that are produced from a specific lot of raw material and/or heat treat batch. A new lot must be established for each lot of that original material heat treat lot.
  - **3.7.1.1** It is permissible that a manufacturer's lot or single heat treat lot, as applicable, may be shipped in several increments over time, under the same lot number but the lot increment is defined by a prefix. Different raw material lots and different heat treatment lots, shall **never be mixed**.
  - **3.7.1.2** Lots being returned after a rejection must include the IRR and/or SCAR number on the supplier's shipping documents and Certification of Conformance.

#### 3.7.2 Manufactured Parts

#### 3.7.2.1 Certificate of Conformance

- AmSafe Inc. Part number and revision level listed
- AmSafe Inc. PO number listed
- PO line item(s) listed
- Quantity in this shipment and the total quantity for manufacture lot, if different.
- Supplier lot number, this is the traceability number or prefix, used by the supplier to track the Purchase Order to its material origins.

#### 3.7.2.2 Copies of material certifications

 Original raw material manufacturer certification including chemical analysis and test reports <u>must be supplied</u>

#### 3.7.2.3 Copies of processing certifications (as applicable)

- AmSafe Inc. part number listed
- Actual process specification listed , when applicable
  - Heat Treat process certifications shall also include the total quantity processed, list the drawing required the heat treatment specification and hardness values. Ref: Paragraph 3.6.

#### 3.7.2.4 Copy of the Final inspection record for Key Characteristics

- All information completed. No blank information.
- Part number and revision level produced
- All key features documented for acceptance
- Actual measurements of variable data is to be shown numerically ("OK" or "accepted" is not allowed)

#### 3.7.2.5 Copy of approved AmSafe Inc. deviation form, A-091 (when applicable)

• Deviation requests shall be approved prior to shipment. This approval shall be included in the lot certification package.



# 3.7.2.6 Supplier shipper/packing list shall always identify the manufacturer's lot number(s) included in each shipment

- Quantity shipped should match quantity on all related documents
- Multiple shipments of a single manufacture lot shall be identified. The manufacture lot number (supplier's lot number) shall be identified on both the shipper and on the certificate of conformance

#### 3.7.3 Assembled Parts

#### 3.7.3.1 Certificate of Conformance

- AmSafe Inc. Part number and revision level listed
- AmSafe Inc. PO number listed
- PO line item(s) listed
- Quantity in this shipment and the total quantity for manufacture lot if different.
- Supplier lot number or lot ID number
- Traceability information for detail parts used in the assembly (reference to AmSafe Inc. PO number for AmSafe Inc. supplied details is acceptable)

#### 3.7.3.2 Copies of material certifications

Original manufacturer certification must be supplied

#### 3.7.3.3 Copies of processing certifications (as applicable)

- AmSafe Inc. part number listed
- Total quantity of parts processed (should match total sent on other documents)
- Actual process specification and AmSafe Inc. specification listed when applicable
- Heat Treat process certifications shall also list hardness. Reference paragraph 3.6.

#### 3.7.3.4 Copy of the lot inspection record (supplier furnished detail parts)

- All information completed. No blank information.
- Part number and revision level produced
- All key features documented for acceptance
- Actual measurements of variable data to be shown numerically ("OK" or "accepted" not allowed)

#### 3.7.3.5 Copy of approved AmSafe Inc. deviation form, A-091 (when applicable)

**3.7.3.5.1** Deviation requests shall be approved prior to shipment. This approval shall be included in the lot certification package.

#### 3.7.4 AmSafe Inc. Work Order Supplied Product

- **3.7.4.1** The AmSafe Inc. Work Order (WO) number listed on the Purchase Order, for each item ordered, is the control number for the Lot being produced on AmSafe Inc. hehalf
  - **3.7.4.1.1** There shall be NO mixing of WO parts, as they are Lot controlled by the WO number.
  - **3.7.4.1.2** No AmSafe owned material is to be retained, unless approved in writing from AmSafe Inc., and a warehouse location is established in QAD for this supplier.
  - **3.7.4.1.3** All supplier documents used to control the WO Lot, also is subject to the Suppliers Lot Number control system. Traceability has to be strictly controlled and traceable to the WO number on the Purchase Order.



**3.7.4.1.4** The shipping document and the Certificate of Conformance is required from the supplier performing the WO operations. These documents are to include the AmSafe Inc. part number, PO number, WO number and quantity produced for this work order.

#### 3.7.5 Industry Standard, Commercial Off the Shelf (COTS) / Catalog Parts

**3.7.5.1** Shipping document to include the Manufacturer's or AmSafe Inc. part number (see the AmSafe Inc. PO for this number), total quantity shipped, and Lot and/or Serial number information.

#### 3.7.5.2 Certificate of Conformance

- AmSafe Inc. Part number and revision level listed, as applicable
- Industry standard or catalog part number listed
- AmSafe Inc. PO number listed
- AmSafe Inc. PO line item(s) listed
- Quantity in shipment
- Supplier lot number or lot ID number
- Signed by an authorized supplier representative

#### 3.8 SPOC 107: Packaging

- **3.8.1** The supplier is responsible for protecting the product from damage throughout the manufacturing process, and upon shipment.
- **3.8.2** Packaging must protect product and permit easy removal of the contents without damage.
- **3.8.3** Bulk packaging, containment packaging, individual packaging or other means suitable to the material being shipped is acceptable as long as there is adequate protection from physical damage for all methods of packaging. All items shall be packaged without risk of part to part damage or intrusion of any contaminants.
- **3.8.4** Minimum Product Identification being delivered to AmSafe Inc. :
  - **3.8.4.1** Format: human readable; optional barcode
  - **3.8.4.2** Location: Typical accessibility(s)
  - **3.8.4.3** Cartons at least (1): top, side, end; all (3) preferred.
  - **3.8.4.4** Piece-part per drawing or PO instructions)
  - **3.8.4.5** Content required: AmSafe Inc. part number, Supplier lot coding (for product requiring traceability required; others optional, but preferred), AmSafe Inc. PO and specific line item, part description.
  - **3.8.4.6** Optional- Supplier Part Number (but preferred), Quantity, number of containers.
- **3.8.5** Rigid Printed Circuit Board assemblies shall be packaged in individual ESD bags.
- **3.8.6** Overall weight of one shipped box is not to exceed 25 lbs.



#### 3.9 SPOC 108: Nonconforming material – Notification, Containment, and Corrective Action

3.9.1 Supplier Caused Escape Cost Relief – AmSafe Inc. may assess an administrative charge up to \$1000, if a supplier caused nonconformance is identified after receipt of product at AmSafe Inc. The supplier may be debited this charge for each rejected lot shipment. AmSafe Inc. reserves the right to assess additional charges to the supplier to cover scrap costs, labor costs associated with material sorting and testing, and other expenses related to resolution of the nonconformance.

#### **3.9.2** Prior to Shipment

- **3.9.2.1** Suppliers may request a Deviation/Waiver using form A-091 for evaluation and disposition of a nonconforming material. This deviation shall only be used when a defect cannot be reworked or sorted resulting in conformance to the drawing requirement. AmSafe Inc. reserves the right to approve or disapprove any deviation request. Nonconforming materials under a deviation request shall not be shipped until the deviation/waiver is accepted by AmSafe Inc. and returned to the supplier. A copy of the deviation shall be included with the lot certification records, and transmitted electronically per paragraph 3.1.18.
- **3.9.2.2** Deviation requests are not an approval for subsequent lots, a deviation request is valid for one lot, one time. Each shipment quantity under an approved deviation shall have the signed deviation form submitted with the shipment.
- 3.9.3 Containment of Nonconforming materials Material that does not meet the drawing/specification requirements shall be identified and controlled to prevent unauthorized use/delivery to AmSafe Inc. Containment action must be documented. Containment activity includes work in process, any inventory and formal notification to AmSafe Inc. of other lots previously shipped that may have the same issue.
- **3.9.4** Quality Escape/After Shipment Supplier shall inform the Buyer within 24 hours (excluding weekends and holidays) after discovery of a nonconforming product that has been shipped to AmSafe Inc. This disclosure shall include a detailed description of the nonconformance, part number, lot number or identification for traceability, ship dates, and quantity suspected.

#### 3.10 SPOC 109: Corrective Action and Preventive Action

- **3.10.1** For a nonconformance, a complete a corrective and preventive action plan with supporting objective evidence must be submitted to AmSafe Inc. within the allotted time stated on the Supplier Corrective Action Report (SCAR). Failure to submit the report by the due date may cause suspension of the supplier's approval status.
- **3.10.2** Source inspection may be required on the next lot of the affected part number. Fees may apply.



#### 3.11 SPOC 110: Electronic Components / ESD Sensitive Components

- **3.11.1** Suppliers of electrical components shall have procedures implemented compliant to AS5553 Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition that will detect counterfeit purchased components.
- **3.11.2** Workmanship standards for printed circuit board assemblies shall be in accordance with IPC-610, latest revision, Class 3.
- **3.11.3** Workmanship standards for cable assemblies shall be in accordance with IPC/WHMA-A-620, latest revision, Class 3.
- **3.11.4** Static sensitive components must be handled in accordance with ANSI/ESD S20.20, latest revision.
- **3.11.5** Storage temperature not to exceed -5° C to +50° C unless otherwise specified on the drawing or purchase order for the manufacture spec callout.

#### 3.12 SPOC 111: Web Supplier General Requirements

- **3.12.1** AmSafe Inc. requires that Data Color spectrophotometric equipment be implemented for all color measurements.
- **3.12.2** Tolerance for color deviation from the purchase order stated LAB values shall be; 1.0 DE CmC for color matching and 0.4 DE CmC for color differences side to side on web.
- 3.12.3 Color lots not meeting the stated tolerances shall be submitted under deviation prior to shipment to AmSafe Inc. AmSafe Inc. Buyer will provide a formal answer to each deviation request. Deviation requests shall include physical samples to enable a visual inspection at AmSafe Inc. Suppliers are required to send a copy of the Deviation Request Form: A-091 with samples for approval. Upon receipt of approval from AmSafe Inc. suppliers must also include a copy of the approved deviation with shipment.
- **3.12.4** Web lot certifications shall always include AmSafe Inc. master lot number and LAB values from purchase order, supplier lot number, and supplier sample LAB values at minimum.
- **3.12.5** Grey scale charts used to determine crocking levels shall be under calibration control and these charts shall be replaced on an annual basis. AmSafe Inc. will supply once yearly 2 new calibrated grey scales for staining to each supplier for elimination of tainted/faded grey scales in any location.
- **3.12.6** One grey scale should be kept as a MASTER scale and only used as a MASTER scale to assess the grey scale is within tolerance per the procedure in AATCC 2:2007 Grey Scale for Staining.
- **3.12.7** Web lots shall have the AmSafe Inc. part number of supplier lot number identified on each roll, spool, or container.

#### 3.13 SPOC 112: Artwork

- **3.13.1** AmSafe Inc. drawings requiring artwork or logos shall have a sample piece(s) submitted along with AS9102 FAI prior to submittal of the production lot. The sample shall be formally approved in writing by AmSafe Inc.
- **3.13.2** Artwork shall remain in the approved configuration for all future manufacture orders. This configuration includes the manufacture method of machining, etching or laser of the artwork.



#### 3.14 SPOC 113: Conflict of Minerals Policy

- **3.14.1** AmSafe Inc. is focused on serving customers, associates, and Suppliers including the communities where it does business.
- **3.14.2** AmSafe Inc. is committed to sourcing its products in accordance with the law, and it expects its suppliers to do the same. AmSafe Inc. maintains Conflict of Minerals reporting efforts to comply with Dodd-Franks Conflict of Minerals reporting rules.
- **3.14.3** Conflict Minerals Supplier Information must be signed and returned to AmSafe Inc. annually, and reported on the latest Conflict of Minerals Reporting Template, located at http://www.responsiblemineralsinitiative.org/reporting-templates/cmrt/?.

#### 3.15 SPOC 114: Ethical Sourcing Policies

- **3.15.1** AmSafe Inc. aims to provide our customers with Quality products and with products which have value. This requires sourcing from a variety of locations both nationally and internationally.
- **3.15.2** AmSafe Inc. expects our Suppliers to adopt sound labor practices and to follow all local laws and regulations including the International Labor Organization (ILO) Standards.

#### 3.16 SPOC 115: REACH Compliance

- **3.16.1** Since 2007 the European Regulation (EC) 1907/2006, latest revision, concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) has evolved.
- **3.16.2** AmSafe Inc. supports the basic aim of REACH in improving the protection of human health and environment through the better and earlier identification of intrinsic properties of chemical substances.
- **3.16.3** Due to increased environmental concerns around the world, AmSafe Inc. and other companies in the industry are now required to meet all applicable REACH requirements and AmSafe Inc. is committed to providing our customers with information about substances in its products, as required.
- **3.16.4** AmSafe Inc. is expecting our suppliers to follow the same process and to report on any use of substances which can affect products being supplied to our customers. For more information, please use the link below:
  - https://echa.europa.eu/



# **Appendix A – Lot Shipment Documentation Checklist**

| Part Number   |  |
|---------------|--|
| Revision      |  |
| PO and Line # |  |
| Supplier Name |  |

| Check | Category                   | Details Per SPOC 102 / 103 / 105                         |
|-------|----------------------------|--|
|       | Certificate of Conformance | - AmSafe Inc. Part number and revision level listed      |
|       |                            | - AmSafe Inc. PO number listed                           |
|       |                            | - PO line item(s) listed                                 |
|       |                            | - Quantity in this shipment and the total quantity for   |
|       |                            | manufacture lot if different.                            |
|       |                            | - Supplier lot number or lot ID number                   |
|       | Material Certifications    | - Original manufacturer certification must be supplied   |
|       |                            | - Traceable to lot                                       |
|       | Processing Certifications  | - AmSafe Inc. part number listed                         |
|       |                            | - Actual process specification and AmSafe Inc.           |
|       |                            | specification listed when applicable                     |
|       |                            | - Heat Treat process certifications shall also list      |
|       |                            | hardness (8) values minimum. Reference SPOC 104.         |
|       | Inspection Reports         | - All information completed. No blank information.       |
|       |                            | - Part number and revision level produced                |
|       |                            | - All key features documented for acceptance             |
|       |                            | - Actual measurements of variable data to be shown       |
|       |                            | numerically ("OK" or "accepted" not allowed)             |
|       | Deviation Request (when    | - Only on approved AmSafe Inc. deviation form, A-091     |
|       | applicable)                | - Deviation requests shall be approved prior to          |
|       |                            | shipment. This approval shall be included in the lot     |
|       |                            | certification package.                                   |
|       | Sub-Assembly Shipments     | - Traceability information for detail parts used in the  |
|       |                            | assembly (reference to AmSafe Inc. PO number for         |
|       |                            | AmSafe Inc. supplied details is acceptable)              |
|       |                            | - Supplier lot number or lot ID number is included       |
|       | Shelf Life Materials Only  | - Expiration date shall be a minimum of 75% of its shelf |
|       |                            | life. Reference AmSafe Inc. E508137.                     |



1043 N 47<sup>th</sup> Ave.

## **Appendix B: A-091 Supplier Deviation Request**

Phoenix, Arizona 85043 Date: PN: Rev: Description: Purchase Order # Supplier: Qty. Address: Lot# **Deviation / Waiver request: Root Cause: Corrective Action performed by Supplier: Preventive Action: Supplier Signature** Title Date AmSafe Inc. Approval: Yes  $\square$ No □ **Engineering Approval** Date **Comments:** QA Approval Date



# Appendix C: AMSAFE INC. SPOC TERMS AND CONDITIONS

| This document confirms that                     | has received, understands and |
|---|-------------------------------|
| agrees to comply with Supplemental Purchase Ord |                               |
|   |                               |
|   |                               |
|   |                               |
|   |                               |
| Company:  |                               |
|   |                               |
| Print name:                                     |                               |
|   |                               |
| Signature:                                      |                               |
|   |                               |
| Title:  |                               |
|   |                               |
| Date:   |                               |
|   |                               |
|   |                               |

Email completed form to: SPOC\_Quality@AmSafe.com