



SPS Technologies

Supplier Quality Requirements

Manual

SQR - 1

Release – A

Approvals				
	Name	Function	Date	Signature
Initiated by	Graeme Rolfe	Quality Manager	06.09.2022	
Checked by	Jim Bolton	Purchasing Manager	06.09.2022	
Approved by	David Abraham	Technical Director	06.09.2022	David Abraham

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Table of Contents

1.0	Introduction	3
2.0	Acknowledgement	4
3.0	Purpose	4
4.0	Quality System requirements	5
5.0	Supplier Sub-tier Requirements	5
6.0	Management Responsibilities	6
7.0	Product Realisation	8
8.0	Measurement and Analysis of Aircraft Product & Standard Parts	15
9.0	Control of Non-Conforming Products	19
10.0	Corrective/Preventive Action	21
11.0	Document and Data Control.....	22
Appendix A DEFINITIONS.....		23
Special Requirements Section		25
SR – 100	Counterfeit Parts Prevention	25
SR – 200	Human Rights Violations.....	26
SR – 300	Conflict Minerals Act - Section 1502 of the US law known as the "Dodd-Frank Act".....	27
SR – 400	Compliance to 40 CFR Part 82 "Ozone-depleting substance,"	27
SR – 500	Regulatory / Export Control Compliance –	28
SR – 600	Safety Data Sheets (SDS formerly MSDS)	29
SR – 700	Digital Product Definition (DPD) Data	29
SR – 800	Application of Acceptance Authority Media (AAM)	30

1.0 Introduction

We as the individual and combined members of SPS Technologies (including KG Coating) are dedicated to being a leading supplier in the Aerospace Industry. We can only achieve our customers' goals by working closely with and expecting the best from our Suppliers. We believe a strong, successful Supplier base will assist us in providing world class products and support. We ask that our Suppliers join us in providing outstanding products with respect to quality, delivery, and price. Our objective is to support the development of future mutual goals for our organizations.

2.0 Acknowledgement

Acceptance of the requirements of this document by Purchase Order acknowledgement, shall be unconditional. No provision contained herein may be added to, modified, or superseded unless otherwise specifically authorised within the PO (or side agreement) by the authorised Buyer of the issuing SPS Technologies company.

3.0 Purpose

- 3.1 This document establishes general, expected and mandatory Quality Assurance requirements for use on Purchase Orders from SPS Technologies' companies. It is intended to clearly define all minimum general requirements for the Supplier and its Sub-tiers to assure that all products, raw materials, outsourced processes, and components (inc factored parts), delivered by the Supplier as per the Purchase Order, conform to SPS Technologies' specified requirements for Safety, Quality, Reliability, and Integrity. This document is applicable to all work performed under formal contract between SPS Technologies companies and its respective approved Supplier for the manufacture or supply of any aerospace industry product and procured processing activity. Nothing herein shall be construed as a waiver of any other provisions of the contract of which it forms a part.
- 3.2 Inspection/test requirements specified by design drawings or design control documents shall be in addition to any inspection activity performed in accordance with this document. Any additional requirements, whether customer or regulatory, will be identified on the Purchase Order.
- 3.3 It is the responsibility of the Supplier to obtain and comply with the latest version of this document which can be obtained by submitting a request to the respective Buyer.
- 3.4 In the event there is a conflict between the contents of this document and the Purchase Order, the Purchase Order shall take precedence.
- 3.5 This Document shall be in addition to and used with "PCC Standard Terms and Conditions" as noted on the Purchase Order. In the event of Conflict between the contents of this document and the Terms & Conditions of Purchase, the Terms and Conditions of Purchase shall take precedence.

4.0 Quality System requirements

- 4.1 The Supplier shall implement and maintain a quality management system in accordance with the respective standard (ref Fig 4-1) below. Mandatory customer certification requirements will be flowed down through the PO or contract if/as necessary.
- 4.2 The Supplier shall provide a written notification to the Buyer within 48 hours of any intent to effect changes to the Supplier's management, ownership, location/address, name, and/or quality system.
- 4.3 Supplier shall provide written notification of the placement on probation or suspension of any certifications or customer approvals in regard to their Quality System or processes to the contract issuing PCC company. This shall be directed to the Buyer and the Quality department focal within 48 hours of action.
- 4.4 All Suppliers shall grant authorization for PCC to access any existing detailed audit information from ASQG/OASIS where applicable.
- 4.5 The Supplier must adhere to the minimum requirements or equivalent of the Precision Castparts Code of Conduct which can be found by searching the internet using the phrase "PCC Code of Conduct", or by requesting a copy from the Buyer.
- 4.6 The Supplier shall provide prior written notification of any work transfers or business events that could impact delivery or quality, for review and acknowledgment.

Supplier Capability	Quality Standard
Build-to-Print	AS/EN/JISQ 9100/ISO9001
Distributor	AS/EN/JISQ 9100 or AS/EN/JISQ 9120
Processor	NADCAP, AC7004 or AS/EN/JISQ 9100
Calibration Laboratory	A2LA, ISO 10012, ISO17025
Material Mill/Supplier	ISO9001

Fig. 4-1

5.0 Supplier Sub-tier Requirements

- 5.1 The Supplier shall ensure appropriate flow down of requirements from the Buyer's Purchase Order and this document to its Sub-tier Suppliers.

- 5.2 It is the Supplier's responsibility to ensure and validate compliance by Supplier's Sub-tier sources for all applicable requirements and to maintain documented evidence confirming said compliance.
- 5.3 In the event the Buyer's Purchase Order requires the use of Sub-tier sources to be approved by Buyer or Buyer's Customers, the Supplier's Quality system shall assure that only Sub-tier sources currently approved by the Buyer or its Customers are used to procure products or services. This includes the exchange of any proprietary technical data.
- 5.4 Use of specified Sub-tier sources does not relieve the Supplier of compliance to all product technical and quality requirements.
- 5.5 The Buyer reserves the right to inform the Supplier that a Sub-tier source has been unapproved by the Buyer and therefore the Supplier shall not use the Sub-tier source in processing of Buyer's product.
- 5.6 If there is a question of the approval status of any Supplier, please contact the Buyer for clarification.
- 5.7 The Supplier is expected to monitor performance (inc. quality and delivery) of its Sub-tiers to determine how Sub-tiers are performing to requirements.

6.0 Management Responsibilities

- 6.1 Contract review - It is the responsibility of the Supplier to review all POs placed by the Buyer. Review must be adequate to ensure that the Supplier has the resources, approvals, capability, and capacity to comply with the PO requirements.
- 6.2 Suppliers shall ensure PO queries are resolved by contacting the Buyer prior to the Supplier's commitment to supply the product or service.
- 6.3 Proprietary and Confidential Information - All drawings/documentation supplied to our Suppliers are to be considered proprietary information. Refer to mutual Non-Disclosure Agreement for further information.
- 6.4 Right of Entry and Access - The Buyer's authorised representatives and its Customer's and Regulatory representatives may enter the Supplier's facility and any facility involved in the order, at any level of the Supply Chain at all reasonable times to conduct preliminary inspections, audits and tests of

product and work in process, and have access to all applicable records. This requirement shall also be flowed down from Supplier to any level of its Supply Chain.

- 6.5 Note: the rights asserted above (6.4), may be partially limited to non-proprietary facilities (area's), processes and equipment of the Supplier and/or Supplier's Sub-tiers. Supplier must present in writing an assertion of proprietary rights prior to contract award or Purchase Order acceptance.
- 6.6 The Supplier and/or Sub-Contractor shall provide adequate provisions at Supplier's facility for the Buyer to review Supplier system and products.
- 6.7 Continuous improvement and Training – Supplier shall demonstrate a continuous improvement program that targets initiatives to improve safety, product quality, delivery and lower costs. The Supplier shall ensure personnel performing work affecting conformity to product requirements have vision/eyesight tests and are competent via the use of appropriate education, training, skills, and experience. All records pertaining to product realization shall be kept for a minimum of 10 years (ref sec 11.7), all other CI & Training records for a minimum of 3 years.
- 6.8 Suppliers shall ensure that their employees are aware of:
 - Their contribution to product or service conformity
 - Their contribution to product safety
 - The importance of ethical behavior
- 6.9 Foreign Object and Debris (FOD) – Suppliers and their Sub-tiers shall ensure work is accomplished in a manner preventing foreign objects or material being present in deliverable items.
- 6.10 Suppliers and their Sub-tiers shall maintain material handling, part protection, work area housekeeping, tool accountability, hardware accountability, and parts and materials in a manner sufficient to preclude the risk of FOD incidents and in accordance with NAS 412 and/or AS9146. The Supplier's FOD program shall be subject to audit review and approval by SPS Technologies and/or its Customers.
- 6.11 Document Sources - Copies of Buyer proprietary documents and documents not generally available from commercial sources, required by the Supplier to comply with PO requirements, will be furnished to the Supplier upon request.

- 6.12 Copies of Industry or Government documents and/or standards are available from a number of commercial sources, and Supplier is responsible for obtaining such documents.
- 6.13 Any problem experienced by Supplier in obtaining required documents should be brought to the attention of Buyer prior to acceptance of the PO.
- 6.14 Prohibited Practices The following acts and practices are prohibited, and any violations not approved by the Buyer in writing may result in disqualification of Supplier.
 - 6.14.1 FACILITY CHANGES – During performance of the PO, the Supplier shall give the Buyer written notice in advance of an intent to relocate any production, inspection or processing facilities; or transferring the work between different facilities, or making other changes which may affect product safety, quality or delivery.
 - 6.14.2 UNAUTHORIZED-PRODUCTS-CHANGES-OR SUBSTITUTIONS – The Supplier shall not make any changes or substitutions to any product(s) or service required by the applicable drawing, specification, or document without prior written authorisation by Buyer.
 - 6.14.3 UNAUTHORIZED REWORK – The Supplier shall not perform any rework or repair methods on product damaged or found to be discrepant during fabrication or processing unless such reworks are pre-authorised by the Buyer and able to bring the product back to 100% drawing compliance.
 - 6.14.4 SUBCONTRACT WORK – The Supplier shall not subcontract or relocate any work unless written permission is issued by the Buyer.
 - 6.14.5 UNSUITABLE MATERIALS FOR PACKAGING ARE PROHIBITED - Material such as newspaper (due to acidic nature of ink), “peanuts” or “popcorn” for packaging product is prohibited.

7.0 Product Realisation

- 7.1 Configuration control of Aircraft Product- The Supplier shall maintain a configuration management system to ensure technical data is available to validate characteristics of a product, change history, and changes are

verified. The Supplier shall not to make any change in materials or design details, that would affect the part or any component part thereof without prior written Buyer approval. The Supplier shall identify, on the statement of conformance and / or packing sheet, the as-built engineering revision level of the end item product being delivered to verify PO requirements are satisfied. Comments and questions regarding configuration control should be addressed to the Buyer.

- 7.2 Production/Quality Planning – For Aircraft Product or unless otherwise stated on the Purchase Order, the Supplier shall prepare manufacturing and inspection test plans, indicating operational sequence, inspection and test points, all product and process traceability requirements and other pertinent control media for the items to be fabricated. Accountability for each manufacturing, inspection and test requirement at each control point shall be clearly identified.
- A. When the PO requires the Supplier to use the Buyer's manufacturing plans, the Supplier will utilise the Buyer's production planning {step-by- step) without deviation of content or order during performance of operations.
 - B. In the event of proprietary elements, the Supplier shall demonstrate a program of configuration management and assignment of control numbers to the process.
 - C. When required by PO, legible and reproducible copies of the manufacturing plans shall be submitted to the Buyer for approval. Approval must be received in writing prior to start of manufacturing. If required by the PO, approved plans may be "frozen" and in part or total shall not be revised without the written authorisation of the Buyer.
 - D. When requested by the PO, the Supplier shall supply samples and data for correlation of their inspection techniques with those of the Buyer.
 - E. Note: The Buyer reserves the right to submit any manufacturing or Inspection plans to end-use Customer if/as required for review.
- 7.3 Classified or Controlled Products - Classified or Controlled Parts are considered "Primary", "Critical", "Flight Safety", and "Fracture Critical". The classification is noted on the Purchase Order when it applies. The Supplier shall note the classification, i.e. "Critical Part" on each page of the manufacturing or process plan and certificate of conformance.

- 7.4 Product Traceability - The Supplier shall maintain the traceability of Aircraft Products and Standard Parts through all stages of production including all relevant production documents. The Supplier's process shall ensure traceability of product from the raw material used to the finished product.
- A. The Supplier shall ensure that the product will be identified with a unique traceability number at all stages of manufacturing process.
 - B. Identification and traceability of the individual lot, batch, heat number, exposure units and cure times etc., shall be maintained from time of receipt by Supplier, from Supplier's Sub-tier sources to delivery to the Buyer.
- 7.5 Buyer/Customer Furnished Materials - The Supplier shall identify, protect and safeguard Buyer's property for use or incorporation into final product.
- A. The Supplier shall complete a receipt inspection of the Buyer's furnished material. If any discrepancies exist, the Supplier shall resolve with the Buyer, prior to any work being performed.
 - B. If the Buyer provides furnished material to the Supplier, traceability of the material to the Buyer's PO must be maintained through all stages of manufacture at the Supplier's facility. This traceability must be included on the Supplier's Certificate of Conformance or pack- slip. Excess or nonconforming material must be properly documented, identified, and returned with the end product. Failure to properly document, identify and return non-conforming material will cause delivery to be denied until the issue is resolved. The Supplier is expected to make every effort to prevent material scrap.
 - C. The Supplier shall ensure that the Buyer's furnished material is not intermixed with any other Buyer furnished material batches. The Supplier must maintain full traceability of product at all times for each of the Buyer's Orders.
- 7.6 Special Process Approval - For Aircraft Product, the Supplier when placing work at Sub-tiers must specify how special processes, production of raw material and the procurement of selected parts are performed in accordance with contractually established engineering specifications, drawings and quality requirements.
- A. The Supplier shall evaluate End Customer specifications at an interval not to exceed monthly frequencies for additions/revisions

that affect the Supplier's statement of work defined within the purchase order.

- B. Revisions that impact the Supplier's ability to provide compliance shall be brought to the attention of the Buyer within 5 working days.

7.7 Supplier Request for Information (RFI) - If the Supplier requires clarification on any of the Buyer's technical requirements, the Supplier, if it wishes, can formally request clarification from the Buyer.

- A. The applicable document shall be signed by the Buyer to formally acknowledge and clarify the issue.
- B. Correspondence regarding this RFI does not constitute any change authority and can only be used for clarification purposes. Such clarification shall be included in any supporting delivery documentation as appropriate. Any formal change notification will be provided by the Buyer via updated documentation and amended PO as appropriate.

7.8 Machined Parts - Suppliers shall not offload or subcontract any work without prior written approval from Buyer. Only Buyer or customer furnished drawings/data are to be used in the manufacture of machined parts.

- A. Suppliers shall perform first piece setup inspections to assure that a conforming part will result from setup, equipment and tools, feeds and speeds, and operator practices.
- B. If/as directed by the Buyer any post testing (eg NDT, hardness, conductivity etc.) of machined parts shall be documented with actual measurements and provided on the Buyer's request or as required by purchase order.

7.9 Where the material is for use on military aircraft and the material is considered a specialty metal as defined in DFARS 252.225-7009, then the Supplier shall assure that the materials are melted in the United States of America, its possession, unless supplier gains prior written approval through the Buyer from our customer for use of other sources.

7.10 Standard Hardware - Where the Supplier supplies hardware items of standard design (whether industry or SPS Technologies' Customer standard) the Supplier shall provide the original manufacturer's Certificate of Conformance which shall be in accordance with any applicable Qualified Product listings,

In the event that SPS Technologies' Customer requires the Distributor to be approved by the Customer, the Supplier shall only use and/or supply hardware from Customer approved Distributor listings.

7.11 Verification of Purchased product, services, & raw materials -

- A. Suppliers shall inspect, upon receipt, all subcontracted parts, components, and outside processes used in the fulfillment of the Buyer's POs.
- B. The Supplier is responsible for executing verification activities to ensure conformity of any procured materials, products and services used in the fulfillment of a Buyer's purchase order. (*Ref. Measurement and Analysis sec. 8.1.*)
- C. The Supplier must provide objective evidence of product conformity. Suppliers must verify purchased product against the latest applicable specification.
- D. The supplier shall inspect raw material conformity via the comparison of the material's Certificate of Analysis test data against the applicable specification to verify the requirements and achieved test results conform.

7.12 First Article Inspection (FAI) - The Supplier will perform a first article inspection (FAI) on the first lot, unit, part, or assembly of each type shipped. Documented results, actual dimensions, or findings shall also be furnished with the first item shipped. *Note: FAI may be required as a result from a corrective action and / or escapement.*

- A. Concurrent with delivery of first production product(s) and First Article sample, the Supplier shall provide the Buyer and have on file in their facility a First Article Inspection Report (FAIR) documenting the results of Supplier's First Article Inspection (FAI) and/or test of the product and for each Sub-tier component.
- B. All First Article Inspection reports shall be in accordance with AS9102 "First Article Inspection" process and documented on the prescribed forms unless superseded by purchase order requirements.

- C. First Article Report must be re-accomplished under the following circumstances.
- 1) Document changes (drawing, Parts List, Specs, etc.) including relevant drawing or flag notes.
 - 2) Any part which has not been produced by Supplier for a period longer than 24 months. (Or as designated by site specific requirements)
 - 3) Changes to Supplier facility including moving, expansion, change in manufacturing sources, inspection method, or substantial renovation, and significant management changes.
 - 4) Change in manufacturing process or equipment use.
 - 5) Change to the Bill of Materials (material, material specs, details, etc.)
 - 6) Note: FAI requirements may be satisfied by previously approved FAIs performed on identical characteristics of similar parts produced by identical means. A partial FAI that addresses differences between the current configuration and prior approved configurations may be completed using only the affected fields in the FAI forms.
- D. Note: Customer and Site-specific FAI requirements (such as NET inspect) will be flowed by purchase order and made available to the Supplier.
- E. Note: FAI part families may only be used when coordinated and approved by Buyer in advance of part manufacturing date.
- F. Note: FAI will not be performed on any prototype parts, or parts manufactured using methods not representative of the normal production process, or non-production parts unless specified in the contract.
- G. When requested by Buyer, a Last Article Inspection (LAI) shall be performed on a part or assembly prior to reallocation of the manufacturing site. LAI consists of full FAI activities content including all activities necessary to capture all manufacturing and inspection activities.
- H. Note: All Suppliers generated First Article Records shall be retrievable and accessible within 24 hours notification from Buyer

or Buyer customers upon request.

- 7.13 Product Identification – All Aircraft Products and Standard Parts must be identified (part mark) per the engineering/specification requirements or as directed on the Purchase Order. Supplier's manufacturing planning shall reflect the required part marking information including type/method and format at the proper operation sequence.
- 7.14 Serialized Parts: When applicable, Serial numbers for all products on the Buyer's Purchase Order shall be assigned by the Buyer, applied on all products and recorded on all applicable documentation by the Supplier. The assigned serial numbers shall not be altered or replaced without prior written authorisation from the Buyer.
- 7.15 Packaging and Shipping – The Supplier shall pack the Product to prevent damage, deterioration and presence of foreign objects taking into account shipment method, location and destination, and duration.
- A. The Supplier shall use preferred / reputable carriers with service levels as appropriate to the Buyer's requirements.
 - B. Measures shall be taken to prevent comingling of similar parts. Visual aids may include separate packaging of each lot, with traceability information on the outside of each lot packaged, closed boxes or containers, one PO line item per box, separate pallets for similar parts, and may include interim part marking of parts or packaging, color coded labels to keep similar parts segregated, and to maintain separation and traceability to build documentation.
 - C. Packaging design shall be suitable for, and consistent with the requirements and limitations of the transportation mode as agreed with the Buyer, and ensure the design is cost effective, environmentally friendly, with any external identification being consistent with delivery documentation and PO.
 - D. If the Buyer ships utilizing reusable packaging, that same packaging must be used when returning product. A charge will be incurred by Supplier for loss of reusable packaging.
 - E. The Buyer may charge the Supplier for damage to or deterioration of any Products resulting from improper packing and/or packaging. The Supplier shall comply with any special instructions as stated in the PO.

- F. Items capable of being degraded or damaged by static electrical charges must be packaged in such a manner as to preclude their exposure to the generation or discharge of static energy. Packaging should be clearly marked or labeled to indicate the contents are subject to damage or degradation by static electricity.

7.16 Calibration Program - Supplier shall maintain the National Institute of Standards and Technology (NIST) traceable calibration system or similar, i.e. in conformance with ISO 10012, ISO/IEC 17025, or ASNI/NCSL Z540.3, capable of insuring the accuracy of all measuring equipment utilized in the inspection and acceptance. Traceable calibration certifications for calibration standards must be maintained on file and available for review by SPS Technologies.

8.0 Measurement and Analysis of Aircraft Product & Standard Parts

8.1 Inspection Program - The supplier is responsible for executing verification activities to ensure conformity of products in the fulfillment of an SPS Technologies Purchase Order. This includes any inspections and tests that are required to substantiate conformity.

- A. The Supplier shall employ receiving, in-process and final inspection and testing to the extent necessary to verify product conformance to all applicable requirements.
- B. Inspection records, certifications, test reports and technical data statements of quality shall be maintained by the Supplier as objective evidence or product quality.
- C. Inspection stamps should be used and shall be of a design that cannot be mistaken for a Government stamp.
- D. The Supplier may not use a statistical sampling plan unless it has been approved by the Buyer in advance of its utilization of product acceptance. Any Supplier sampling plan system submitted for approval must be compliant to ARP 9013/AS13100 or equivalent and approved by Buyer's quality management or invoked specification.
- E. Where hidden features exist, including part characteristics that would be impossible or difficult to inspect following subsequent

operations, the Supplier shall maintain records of inspection (documented dimensions) on file and have these records available upon request.

- F. Statistical Process Control (SPC) - SPS Technologies encourages the use of SPC to track and improve process capabilities. SPC techniques should be employed on key, critical, or controlling characteristics as specified within the drawing(s). SPC per specific methodology is mandatory when required by the PO or contract requirements.

8.2 Raw materials - The supplier is required to review, verify to requirements, and provide a raw material Certificate of Conformance and Material Test Reports with each shipment.

- A. Raw Material certification shall be from the original mill and shall contain:
 - 1) material specification and applicable revision
 - 2) material description
 - 3) alloy and condition
 - 4) physical properties
 - 5) chemical analysis {when applicable}
 - 6) heat lot number
- B. Any departure from required specifications must be submitted and approved in writing by the Buyer prior to shipment.
- C. Where raw material is purchased from a distributor, the distributor must include its Certificate of Conformance along with the Certificate of Analysis from the original mill/manufacturer. Material Test Reports shall contain actual results of chemical and/or physical analysis, as applicable for each lot or batch number.
- D. Supplier utilizing test reports to verify conformance of purchased metallic raw material to applicable specification requirements shall periodically validate the reports through independent testing of material received. Test Reports shall be retained and made available on request for a minimum of 10 years, unless otherwise defined by the end customer or invoked specification.
- E. Drop Ship Procedure: When Buyer owned material is received at the Supplier's facility the Supplier shall send a confirmation email including the material certification to the Buyer.
- F. Suppliers of Limited Shelf-Life materials (Paints, Adhesives, Sealants, etc.) shall not ship products with less than 70 days or

a minimum of 75% of the manufacturers stated shelf life remaining (whichever comes first) unless specifically authorized by the Buyer.

- G. The Supplier shall identify the container, package and packing sheet with Governing Specification, Name of Manufacturer, Date of manufacture, Cure date if applicable, Batch Number/Net Contents (as applicable) Storage Requirements (e.g., temperature, etc.) Expiration date.

8.3 Subcontracted Processes. Subcontracted processes include Laboratory Material Testing, Heat Treatment, Shot Peening, Non-Destructive Testing, Chemical Processes, Welding, Coatings, Measurement and Inspection, and Non-Conventional Machining.

- A. The Supplier and its Sub-tier's processes must meet the end use Customers' certification eligibility requirements (eg. Nadcap).
- B. The latest process specification revision level shall be maintained by the Supplier, including any cancelled / superseded specifications.
- C. The Supplier is required to review, verify to requirements, and provide process certifications with each shipment. Any departure from required specifications must be approved by the Buyer prior to shipment.

8.4 Certificate of Conformance (C of C) - The Supplier shall include, with each shipment, a Certificate of Conformance (C of C) that must be signed by an authorized representative of the Supplier's quality organization and must show the part number, revision level, PO number, quantity shipped, date of shipment, third party or customer approval number and deviation/concession number when applicable to ensure the product meets the requirements of the engineering documents and the Purchase Order. The C of C shall also state that the goods listed comply to the requirements of this SQR-1.

- A. When the Purchase Order does not specify the revision level of the engineering documents or specification, the latest engineering documents or specification will apply.
- B. The Supplier shall provide a copy of all Certificates of Conformance from its subcontractors or raw material Suppliers when requested by the Buyer, including physical and chemical test reports.

- C. If no Certificate of Conformance is received with the shipment, the shipment may be rejected and may affect the Supplier's quality and delivery score rating.
- D. Raw material must be identified by heat lot and or heat treat load (if applicable). Test reports must be traceable to the material lots shipped.
- E. If the Supplier manufactures parts for SPS Technologies, with either Rockwell Hardness or Conductivity testing required by the Buyer and then applies finishes (plating, painting, etc. either by sub- tier or in-house) the Supplier shall perform 100% of the testing prior to application of finishes.
- F. In the event the Buyer provides the raw material for a specific PO, the Supplier shall certify on each shipment that the SPS Technologies raw material has been used and the Supplier has not made an unauthorized substitution of the material. Any substitution of raw material must have prior authorisation from the Buyer

8.5 Source Inspection

- 1) In-process Source Inspection: If products to be delivered under the PO require in-process inspection, tests, or both, the supplier shall notify the Buyer at least forty-eight (48) hours in advance of the time the product will be ready for in-process inspection. The Supplier's measuring and test equipment, facilities, and personnel shall be made available for use by Buyer's representative when requested.
- 2) Final Source Inspection: If Products to be delivered under the PO require final source inspection, tests, or both, the Supplier shall notify Buyer at least forty-eight (48) hours in advance of the time product will be ready for final inspection. The Supplier's measuring and test equipment, facilities, and personnel shall be made available for use by the Buyer's representative when requested.

- 8.6 **Shipping Documentation:** - In addition to the Certificate of Conformance any additional documentation such as; product certifications, test reports, First Article reports etc. that is required per the PO, must be provided preferably before or included with the shipped products.

SPS Technologies, TJ Brooks reserves the right to charge a minimum £150 (GBP) for product delivered that lacks the required documentation.

9.0 Control of Non-Conforming Products

- 9.1 The Supplier shall maintain an effective documented system for controlling non-conforming materials and products including procedures for identification and segregation, identifying non-conforming items immediately upon discovery and containment in a bonded storage area.
- 9.2 The Supplier shall quarantine all non-conforming products.
- 9.3 If the Supplier delivers non-conforming products from another source, The Buyer may at its option and at the Supplier's expense return the Products for credit and refund, require the Supplier to promptly correct or replace the Products, including from another source acceptable to the Buyer.
- 9.4 Under no circumstances shall non-conformities nor the non-conformance process be used in advance of an anticipated design change.
- 9.5 The Buyer may not fund replacement material it has previously provided in the event of Supplier non-conformance.
- A. Standard Rejection Tag charges, SPS Technologies reserves the right to charge a minimum of £250.00 (GBP) in addition to any afore-mentioned assertions and / or end use customer charges incurred by Buyer.

9.6 Material Review Board (MRB) Authority

- A. The Supplier's disposition authority of non-conformance is limited to rework and return to the Customer. Other dispositions that fall outside of re-work and return to supplier shall be submitted to Buyer as follows:
- B. Supplier will document discrepancies, other than noted above, on their own Discrepant Material Report. Supplier will be subject to a charge for discrepancies deemed satisfactory to

submit to MRB for disposition, amount will be dependent on the scope of the evaluation. Buyer reserves judgment on whether the discrepancy is to be submitted to MRB.

- C. Supplier's shipping document shall include a note stating "nonconforming parts and Material Report worksheet included in shipment." A tag, stating "nonconforming part", shall be affixed to each discrepant part, and separated in the shipment from the conforming product.
- D. Discrepant material delivered to Buyer without the proper documentation, including, but not limited to a Discrepant Material Report), as well as inadequate identification of nonconforming product, may be subject to a £250 (GBP) processing/ handling fee for each line item received.

9.7 Notice of Escapement Disclosure (NoE)

In the event the supplier identifies or becomes aware of defective product/service/material that has escaped from the Supplier's facility and shipped to SPS Technologies, the Supplier shall immediately notify the Buyer. *For escapements potentially affecting flight safety, the Supplier shall notify the Buyer within 24 hours of discovery, all other escapements within 48 hours.*

SPS Technologies may debit the Suppliers per the PCC "Standard Terms and Conditions" for adverse impact as a result of the escapement.

Written Notice must include:

- 1) Supplier Name
- 2) Part Numbers
- 3) Serial Number, Heat Lot Number, Batch number
- 4) PO Number
- 5) Quantities
- 6) Dates Delivered
- 7) Description of Defect

Note: Additional information and/or notification process may be required depending on specific Buyer and or Buyer's Customer requirements.

- 9.8 The Supplier shall identify and document any additional products that may be affected by the same or similar conditions of the disclosed non-conformance.

10.0 Corrective/Preventive Action

- 10.1 In all cases of Supplier caused scrap and/or rework, the Buyer reserves the right to issue a "Request for Corrective Action" to direct and track root cause investigation efforts and ensure documentation of effective corrective action.
- 10.2 The Supplier agrees to provide a formal response upon request using the Buyer provided "P" (Purchased) Type corrective action request form. The P Type response form must be completed fully and returned within the timeframe indicated on the form.
- 10.3 Non-Conforming products that have been shipped to the Buyer and not returned may be required in support of a Root Cause Corrective Action investigation. The Supplier must contact the Buyer to request the materials as needed.
- 10.4 The Buyer reserves the right to require additional industry-recognized investigative tools such as an 8D, cause map and/or fishbone diagram as needed to ensure that the true root cause of the defect has been identified.
- 10.5 Each identified root cause must be addressed by a specific corrective action. Each corrective action must include objective evidence of a documented improvement to the production process which will become a permanent part of all future planning with the intent to mitigate the risk of a repeated failure.
- 10.6 The Buyer's Quality function must approve all Corrective Action Responses by reviewing documented evidence or by observation at the Supplier's site.
 - A. When a due date extension is required, the Supplier will contact the Buyer. Requests for an extension must be in writing, approved by applicable Quality focal and contain the following:
 - 1) Reason for the extension request
 - 2) Status of the investigation
 - 3) Date being requested for final submittal
- 10.7 Delinquent responses without extension requests will be escalated to the Buyer's Quality Management for review and possible further actions such as suspension or removal from the approved suppliers listing.

11.0 Document and Data Control

- 11.1 All data required to support the Purchase Order will be provided by the Buyer, unless readily available to the Supplier through industry channels. All data provided to the Supplier not readily available through industry channels is considered proprietary to SPS Technologies and / or its Customers. All drawings, specifications and other information must be controlled to the extent required to ensure that dissemination is limited to individuals performing tasks related to Buyer's Purchase Orders or requests for quotations / information.
- 11.2 All engineering documents received by the Supplier shall be controlled to ensure they are approved before use and reviewed and updated as changes are released. Requested changes to any product authority media must be officially made in writing to the Buyer for review and approval by the Design Authority. Any anomaly noted within the drawing, specification, or requirements that could result in non-conformance/non-compliance shall be formally notified to the Buyer.
- 11.3 The Supplier shall maintain an English translation of all quality documents related to SPS Technologies' products.
- 11.4 Digital Product Data (DPD) provided to the Supplier is to be considered "for reference only" unless the Supplier is approved to handle DPD in accordance with the SPS Technologies requirement in the "Special Requirements Section" of this document. Partial or Full approval may be granted depending on the Supplier's capabilities and procedural controls.
- 11.5 The Supplier shall notify the Buyer of any discrepancies, conflicts or omissions found on product engineering data or Purchase Orders. Product engineering conflicts that cannot be resolved will be submitted for resolution to the appropriate engineering authority. Additional specifications or drawings required can be requested from the primary point of contact.
- 11.6 **Retention of records** – The Supplier shall maintain on file at its facility Quality records traceable to the conformance of delivered product/part numbers.
 - 1) The Supplier shall make such records available to regulatory authorities and Buyer's authorized representatives.

- 2) From the Date of Manufacture the Supplier shall retain Quality records for the following period:
 - 40 years for Critical Safety Items
 - 10 years for all other serialized parts
 - 10 years for all other non-serialized parts
- 3) All other documentation shall be maintained as covered in PCC “Standard terms and Conditions” unless otherwise specified by Purchase order requirements.
- 4) All records must be available on file at the Supplier for the service life of the applicable product family as described above.
- 5) At the expiration of such period, the Buyer reserves the right to request delivery of such records. If the Buyer chooses to exercise this right, the Supplier shall promptly deliver such records to the Buyer at no additional cost on media agreed to by both parties.

Appendix A DEFINITIONS

Aircraft product – OEM specially designed product and components. This also includes subcontracted processes and services and raw materials that are part of the Bill of Materials used in the manufacture of aircraft components and assemblies.

Certificate of Analysis - a Certificate of Analysis (CoA) - A document issued by Quality Assurance that authenticates that a regulated product fulfills its product requirements

Certificate of Conformance (CoC) - A document certified by a competent authority verifying the fact that the provided goods or services fulfill the essential requirements of the Purchase Order

Component or Sub-component – Any product or element of a finished product.

Classified or Controlled Products - Classified or Controlled Parts are considered "Primary", "Critical", "Flight Safety", and "Fracture Critical".

Control Plan – A document that addresses the potential failure modes identified in the PFMEA with the highest risk and methods for controlling / mitigating these risks.

End User – SPS Technologies' customer

First Article Inspection (FAI) – The process of inspecting and validating all design characteristics and processes.

Failure Reporting – Immediate communication of any test anomaly, failure or improper test procedure. Requires a detailed action plan to correct the malfunction and / or

improper test procedure to the purchaser. In the event of a failure, a failure report will be generated including failure photos.

Frozen Process / Method – is a requirement preventing suppliers or sub-tiers from changing established processes or methods of manufacturing. Changes to frozen processes / methods may not be made without first obtaining documented customer approval.

FOD- Foreign Objects & Debris

Gage Repeatability & Reproducibility Study (GR&R) – A study used to determine measurement system variation to include variation by the appraiser and measurement equipment.

Identification & Traceability – The supplier shall ensure the complete identification and traceability of all related products and documentation. The supplier shall identify / mark product in accordance with the specification drawing or product standard.

Key Quality Characteristic / Critical to Quality Characteristic – A product characteristic or process parameter which can influence safety, compliance, fit, form, function, or processing of the product.

Material Products – Raw materials used to produce an SPS Technologies provided product.

MRB authority – Persons responsible at SPS technologies for the disposition of non-conforming product or items manufactured in instances where processes have been non-compliant.

Process Failure Modes & Effects Analysis – Tool used to identify all potential failure modes of a process as well as identification of opportunities for improvement to reduce risk.

Production Hardware – Items used in the production of aircraft components such as tooling and fixtures equipment for example.

Production Part Approval Process (PPAP) – A process used to ensure suppliers can comply with the design specifications consistently without affecting SPS Technologies' operation. For more information on PPAP requirements suppliers may refer to the AIAG's web site at www.aiag.org.

Purchaser – Company who has the contractual agreement with the Supplier.

Special Processes – Processes that cause of product to undergo a chemical, metallurgical, or physical change. Examples of special process include, but are not limited to: welding, painting, plating, heat treating. Special processes also include testing and inspection methods such as: mechanical testing, non-destructive testing, and calibration.

Standard Hardware – These are also known as Aircraft standard parts that follow standards and regulations set forth by different agencies and organizations.

Subcontractor – The supplier's supplier or collaborative firm.

Supplier – The holder of the Purchaser's contract

True Copy – Means a complete copy (front and back) of the original including all terms, signature, and dates, to which is attached a signed statement that the copy has been compared with the original and that it is a true copy. The copy must be legible, reproducible, and printed on paper permanent in nature.

Special Requirements Section

SR – 100 Counterfeit Parts Prevention

For the purpose of this clause, Work consists of those parts delivered under this Contract that are the lowest level of separately identifiable items. (I.e. articles, components, goods, and assemblies). "Counterfeit Work" means Work that is or contains items misrepresented as having been designed and/or produced under an approved system or other acceptable method. The term also includes approved work that has reached a design life limit or has been damaged beyond possible repair, but is altered and misrepresented as acceptable.

Supplier must agree and shall ensure that Counterfeit Work is not delivered to SPS Technologies, TJ Brooks Company's.

Supplier, if eligible for utilization of the Government-Industry Data Exchange Program (GIDEP), shall utilize the GIDEP process to screen their material and products for risks, taking appropriate mitigating actions when necessary, and alert the industry of encountered counterfeit parts.

Supplier shall only purchase new and authentic products to be delivered or incorporated as Work to SPS Technologies, TJ Brooks Company's directly from the Original Component/Equipment Manufacturer (OEM/OCM) or through an OCM/OEM authorized distributor chain or authorized aftermarket manufacturer. Work shall not be acquired from independent distributors or brokers as defined in AS6174 (or AS5553) unless approved in advance in writing by SPS Technologies, TJ Brooks.

Supplier shall immediately notify SPS Technologies, TJ Brooks with the pertinent facts if Supplier becomes aware or suspects that it has furnished Counterfeit Work. Supplier shall maintain OCM/OEM certifications of conformance with traceability (including the

name and location of all supply chain intermediaries from the original manufacturer and build identification such as date codes, lot codes, serialization or other batch identification) that authenticates traceability of the affected items to the applicable OCM/OEM. Supplier shall provide said documents when requested by SPS Technologies, TJ Brooks.

In the event that work delivered under this contract constitutes or includes Counterfeit Work, Supplier shall, at their expense, promptly replace such Counterfeit Work with genuine Work conforming to the requirements of this contract.

Notwithstanding any other provision in this contract, Supplier shall be liable for all costs relating to the removal and replacement of Counterfeit Work, of re- inserting replacement Work, and of any testing necessitated by the reinstallation of Work after Counterfeit Work has been exchanged, Supplier shall pay for all other damage, loss or claims arising out of Counterfeit Work. The remedies contained in this Quality Clause shall be in addition to any remedies SPS Technologies, TJ Brooks may have at law, equity, or under other provisions of this Contract.

This clause applies in addition to any quality provision, specification, statement of work, or other provision included in this Contract addressing the authenticity of Work. To the extent that such provisions conflict with this clause, this clause takes precedence (prevails).

Supplier shall include the requirements of this clause to any and all subcontractors in lower tier contracts included in the delivery in or furnished as Work for SPS Technologies, TJ Brooks.

SR – 200 Human Rights Violations

In addition to the provisions set forth in the Terms and Conditions of this contract, Supplier further commits that any material violation of law by Supplier relating to basic working conditions and human rights, including laws regarding slavery and human trafficking, applicable to Supplier's performance under this Contract/ Agreement may be considered a material breach of this Contract/Agreement for which SPS Technologies, TJ Brooks (Buyer) may elect to cancel any open Orders between Buyer and the Supplier, for cause, in accordance with the provisions of this Contract/Agreement, or exercise any other right of Buyer for an Event of Default under this Contract/Agreement.

Supplier shall include the substance of this clause, including this flow down requirement, in all subcontracts awarded by Supplier for work under this Contract/Agreement.

SR – 300 Conflict Minerals Act - Section 1502 of the US law known as the "Dodd-Frank Act"

PCC or their subsidiaries cannot accept any parts, materials, or commodities containing or consisting of the conflict minerals coming from the Democratic of the Congo or adjoining countries. Currently the list consists of four minerals: tungsten, tantalum, tin and gold. The Conflicts Mineral Law requires U.S. and certain foreign companies to report and make public the use of so-called minerals and all materials, parts or commodities containing or consisting of the conflict minerals need to be properly screened and comply with all trade-related laws and regulations

SR – 400 Compliance to 40 CFR Part 82 "Ozone-depleting substance,"

"Ozone-depleting substance," as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR Part 82 as--

- (1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or
- (2) Class II, including, but not limited to hydrochlorofluorocarbons.

Supplier shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as applicable:

Warning Contains * _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

Warning Manufactured with * _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

* Supplier shall insert the name of the substance(s).

SPS Technologies, TJ Brooks requires that the provisions/requirements set forth above be included in Supplier's direct supply contracts as well as the obligation that they be flowed to the Sub-tier supply chain.

SR – 500 Regulatory / Export Control Compliance –

Supplier shall comply with all regulatory and export control requirements. Export controlled information or material is any form of information or material that cannot be released to foreign nationals or representatives of a foreign entity, without first obtaining approval or license from the Department of State for items controlled by ITAR or EAR. Export controlled information must be controlled as sensitive information and marked accordingly including flow down to Sub-tiers. When applicable, the purchase order will identify the specific required information.

In the event that performance of any SPS Technologies, TJ Brooks purchase agreement involves the use of or access to articles, technical data or software that is subject to export controls under 22 United States Code 2751 – 2799 (Arms Export Control Act) and 22 Code of Federal Regulations 120-130 (International Traffic in Arms Regulations or “ITAR”). Supplier represents and warrants that it is either 1) a U.S. Person as that term is defined in the Export Laws and Regulations, or 2) a Foreign Person as that term is defined in the Export Laws and Regulations and has disclosed to Buyer’s Representative in writing the country in which it is incorporated/authorized/ organized to do business, and all nationalities of any dual or third- country national employees who will require access to the data, articles or services provided hereunder. Supplier shall comply with any and all Export Laws and Regulations, and any license(s) issued there under.

1. **Registration.** If Supplier is a U.S. entity and is engaged in the business of either exporting or manufacturing (whether exporting or not) defense articles or furnishing defense services, Supplier represents that it is registered with the U.S. Department of State’s Directorate of Defense Trade Controls, as required by the ITAR, and it maintains an effective export and import compliance program in accordance with the ITAR.
2. **Foreign Persons.** Supplier shall not re-transfer any export- controlled information (e.g. technical data or software) to any other non- US person or entity (including the Supplier’s dual and/or third-country national employees) without first complying with all the requirements of the applicable Export Laws and Regulations. Prior to any proposed retransfer, Supplier shall first obtain the written consent of the Buyer. No consent granted by Buyer in response to Supplier’s request shall relieve Supplier of its obligations to comply with the Export Laws and Regulations, nor shall any such consent constitute a waiver of the requirements hereinabove, nor constitute consent for Supplier to violate any provision of the Export Laws and Regulations.

SR – 600 Safety Data Sheets (SDS formerly MSDS)

Materials noted on this purchase order must be supplied in accordance with OSHA's hazard communication standard 29CFR1910-1200, OSHA instruction CPL2-2.38, August 5, 1985. Materials not received in compliance with OSHA requirements will be subject to immediate rejection and return as Vendor's expense. In addition, if Vendor is aware of any additional precautions and / or handling techniques instituted with regard to other customers the Vendor is required to submit those safeguards with the SDS. Vendor is required to forward a Toxic Substances Control Act (TSCA) certification letter to the Buyer for the product purchased on this Purchase Order, with the statement that, every chemical component of the product is listed by the Toxic Substances Control Act Inventory (P.L 94-94-969).

SR – 700 Digital Product Definition (DPD) Data

When DPD data is provided, the Supplier shall maintain a documented DPD procedure to ensure the integrity of product engineering and/or tooling, and configuration is maintained throughout the supplier's DPD system from receipt of Buyer's supplied data through creation of derivatives to product acceptance and process improvement. Supplier shall include a flow diagram in the documented procedure that graphically depicts the flow of data from receipt to product validation, and in analysis of measurements for process improvements. The flow diagram shall specify all segregated, secure storage locations of authority and derivative media and shall specify all supplier departmental functions responsible for performance of CAD/CAM operations including the delivery of Buyer's provided data to Sub-tier Suppliers. To ensure the Supplier's DPD system is compatible with SPS Technologies, TJ Brooks requirements, Supplier shall maintain and make available to Buyer upon request a list of the current level of hardware configuration, software, software revisions, and other digital system information for computing equipment that receives authority data. The Supplier shall notify Buyer within thirty {30} days of any changes to DPD processes, CAD, CAM, CAI software, and measurement equipment. The Supplier shall assure nonconforming digital product definition datasets are identified as discrepant, segregated and reviewed for disposition and a corrective action system includes reporting, tracking and resolving all transmission, hardware, software and dataset problems, and product deficiencies to Buyer.

Supplier is responsible for securing access to digital data provided by Buyer. When developing NC Programs, the Supplier shall maintain traceability from the NC Program to the original dataset and ensure only current authority datasets are available for use in production and inspection. Production acceptance software and tooling shall be validated prior to use and re-validated as changes are made. Data protection {encryption} shall be used when electronically transmitting digital data. Training records, which specially identify DPD training has been administered shall be maintained. The Supplier shall conduct audits on all operations affecting DPD data and related documentation to assure compliance with contractual requirements, software and production part quality standards, and the observance of security restrictions. Buyer reserves the right to evaluate the Supplier's DPD system to determine if the Supplier has adequate documentation, hardware/software, equipment, and inspection capabilities and are in compliance with specified DPD requirements. Supplier shall flow down these requirements to their Sub-tier Suppliers.

SR – 800 Application of Acceptance Authority Media (AAM)

Supplier will ensure and sub-tier compliance to the following requirements

Supplier shall comply with the **AS/EN/JISQ 9100** requirements **14CFR Part 21.2** regarding the application of the Acceptance Authority Media (AAM) requirements.

Supplier shall, within its organization and supply chain, ensure that the use of AAM is clearly defined within its Quality Management System (QMS).

Supplier shall, upon Customer request, be able to demonstrate evidence of communication to its employees and to its supply chain; use of AAM must be considered as a personal warranty of compliance and conformity.

Supplier shall maintain compliance to the AAM requirements by assessing its process and supply chain as part of its internal and external audit activities. The areas of focus of this assessment shall include but not limited to:

- Authority Media Application Errors (i.e. Omission, Typos, Legibility, etc.)
- Authority Media Application Untimely Use (i.e. Documentation is not completed as planned, "Stamp/Sign as you go", etc.)
- Authority Media Application Misrepresentation (i.e., uncertified personnel, falsification of documentation, work not performed as planned, etc.)
- Authority Media Application Training Deficiencies (i.e. Ethics, Culture awareness, Proper use of authority media, etc.)



Uncontrolled when printed.

Seller to document and make the internal audit records and the communication to its supply chain available for customer/Buyer review on demand