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REVIEWED AND APPROVED BY:			
NAME	TITLE	SIGNATURE	DATE
Michele Starrs	Vice President & General Manager	Signature on file	04/05/2019
Charles Palella	Procurement Supervisor	Signature on file	04/04/2019
Salil Pradhan	Dir. Quality Assurance	Signature on file	04/05/2019

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1.0 SCOPE

This document applies to PCC Fluid Fittings Group suppliers and personnel involved in the selection of potential suppliers and active suppliers who provide raw materials, goods and services for use with end products. This document is an expression of the expectations by PCC Fluid Fittings of all of its suppliers today and in the future.

2.0 PURPOSE

To establish the quality requirements that suppliers are required to meet in order to satisfy customer and industry requirements.

3.0 RESPONSIBILITY

The following individuals/organizations are responsible for ensuring the requirements of this document are met:

- Quality Engineering
- Procurement
- Quality Administration
- Suppliers/ External Providers

All managers and supervisors must ensure that employees assigned the responsibility of meeting the requirements of this document are advised of that responsibility and notified when any changes occur.

4.0 GENERAL

PCC Fluid Fittings supplier quality requirements shall be flowed down to all suppliers who provide raw materials, goods, and services applicable to deliverable products. Through this document, personnel assures that suppliers are capable of meeting necessary portions of customer imposed Quality specifications and that special requirements are relayed to suppliers.

Product and/or orders not meeting the supplier quality requirements are subject to return and/or corrective action.

5.0 APPLICABLE DOCUMENTS

INTERNAL

QPM900-001 Quality Management System Manual
DQP900-006-002 Supplier Requirements, Survey and Evaluations


EXTERNAL

AS9100/ISO 9001 Control of Externally Provided Processes, Products, and Services

6.0 DEFINITIONS

PCC Fluid Fittings Group: A subdivision of PCC's Engineered Products Division consisting of DMC Inc. dba Permaswage USA, Permaswage Nelson, Permaswage France, Permaswage China, Faber Fluid Fittings and Airdrome Precision Components. The requirements defined in this document apply to USA locations only.

Buyer: A PCC Fluid Fittings Procurement personnel.

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7.0 PROCEDURE

This document is issued to and applies to all PCC Fluid Fittings Group suppliers described within this document and listed in the Approved Suppliers List. Compliance to this document is imposed on the supplier via the purchase order.

If there is a question regarding the interpretation of requirement of the purchase order or information that may be missing (such as a drawing), or a conflict between the requirements of this procedure and other data provided (i.e. drawing, specification, etc.) and/or the purchase order, immediately notify your PCC Fluid Fittings Group Buyer and request further information/clarification.

If the supplier is in possession of any previously submitted flowed down procedures, discard them. When changes are made to this document or its associated documents, copies will be sent directly to the supplier. Suppliers will be responsible for the proper maintenance and updating of their procedure(s) and associated documents.

The supplier is required to comply with the following quality requirements unless otherwise specified by the purchase order.

Q1. ACCESS

PCC Fluid Fittings Group and its customer representatives, including regulatory authorities (such as the FAA), shall be given access to any premises where work on its contracts is performed for the purpose of surveillance and inspection of records, facilities systems, data, equipment, personnel and products to ensure that the requirements of its contracts are implemented and/or conduct any investigation upon request.

Q2. QUALITY MANAGEMENT SYSTEM

The supplier shall establish and maintain at minimum a documented quality system in compliance to the latest ISO9001, AS9100 or AC7004 standards as a means of ensuring product quality and provide evidence that products conform to defined requirements. If the supplier is accredited to the aforementioned standards and subsequently loses accreditation status, the supplier shall notify PCC Fluid Fittings Group within 72 business hours of receiving such notice from its Certification/Registration Body.

Q3. ORGANIZATION

The supplier must establish and maintain a Quality Program to include identified functions and activities that directly affect quality and assign specific authority and responsibility separate from the other functions in the organization.

Q4. CONTRACT/PURCHASE ORDER REVIEW

All Purchase Orders shall be reviewed by the supplier's Quality Department before release for production to assure that all quality requirements are reflected in production and inspection procedures. The supplier shall meet all requirements of the Purchase Orders, including this document.



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Q5. RECORDS

Records and other objective evidence of inspection, testing, processing and fabrication shall be retained by the supplier for a minimum of 15 years after the completion of the contract unless otherwise specified. The records shall be traceable to the originator. These records shall be identified and stored to enable the records to be readily located and retrieved.

Q6. INSPECTION

The supplier shall establish a quality monitoring system that will be structured to provide 100% defect free products / services to include a F.O.D. (Foreign Object Debris/Damage) awareness program.

As a minimum, the inspection of products and/or services shall be documented and traceable to the Purchase Order.

PCC Fluid Fittings Group will stipulate any requirements for design, test, examination, inspection and related instructions for inspection within the body of the purchase order. PCC Fluid Fittings Group will stipulate any requirements for test specimens (e.g., production method, number, storage conditions) for design approval, inspection, investigation, or auditing within the body of the purchase order.

Q7. PROCESS CONTROL

The supplier shall be able to demonstrate adequate control of processes. Records shall be maintained for qualified processes, equipment, tooling, testing and personnel as required.

The supplier shall flow down to any sub tier suppliers, the applicable requirements in the purchasing documents, including key characteristics where required.

Q8. CERTIFICATION OF CONFORMANCE

A Certification of Conformance (C of C) for the product and/or service applicable to the Purchase Order shall be provided. Processes shall be certified to the applicable specifications. Raw material certification shall be available upon request, and must comply with DFARS 252.225-7009¹ (7014), Domestic Material Preference and Section 1502 of the Dodd-Frank Act as it relates to conflict minerals. Chemical materials & test certifications shall include the applicable specification (as required) and the manufactured date or test date which includes the month, day and year (MM/DD/YYYY)."

Supplier C of Cs shall, at minimum, include the following:

- a. Supplier name and address;
- b. Buyer's part number;
- c. Lot traceability;
- d. Signature or stamp with title of Supplier's authorized personnel signing the certificate.

Q9. NON-CONFORMING MATERIAL

Non-conforming material is any product that does not meet one or more of the requirements as defined on the purchase order.

- 1) If non-conforming material is identified at the supplier's facility, the supplier shall not exercise discrepant material review authority on parts and/or material manufactured to PCC Fluid Fittings Group drawings and

¹ Tooling and no-fly products are excluded from the specialty metals DFARS requirement.



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specifications. The supplier shall notify PCC Fluid Fittings Group within 24 business hours of all nonconformities for disposition, review and approval. In the case where PCC Fluid Fittings Quality dispositioned for the rejected parts to be sent back to PCC Fluid Fittings Group for further evaluation, the supplier shall bag and tag the parts and segregate from conforming parts.

- 2) If non-conforming material due to the supplier is identified at the Buyer's facility, the supplier is responsible for paying for the shipment. A Non-conformance Notice will be sent to the responsible supplier after PCC Fluid Fittings Material Review Board (MRB) has dispositioned the rejected parts to the following options:
- Return for Sort, Rework and/or Replacement of the discrepant material:** The supplier shall provide the Return Material Authorization (RMA) number, execute containment actions and assure the conformity on all affected parts before the next shipment.
 - Return for Confirmation of Scrap:** The supplier shall provide a written notice of the quantity of discrepant parts that will be scrapped.
 - Supplier to Sort at the Buyer's facility:** If requested by the Buyer, the supplier may provide a representative to perform sorting of all parts at the Buyer's facility, at their cost. The representative shall have familiarity with the product and the ability to communicate well. The supplier's measuring devices shall have proof of calibration. The supplier shall identify all sorted material to show either "Accepted" or "Rejected" and label each container with part number, quantity, and date.

Q10. SUPPLIER CORRECTIVE ACTION REQUEST (SCAR)

The supplier shall provide a corrective action plan that is acceptable to the PCC Fluid Fittings Group. All steps taken from root cause to corrective action verification shall be documented on the SCAR, including the following, at a minimum:

- Identification and Verification of the root cause of the problem: The supplier may use industry tools, such as 5-Why, Fishbone and Cause Map, to help with the root cause analysis.
- Identification and Implementation Plan for the Corrective Action(s): The supplier shall include Immediate and Corrective Action(s) to solve root cause(s) identified, along with effective date(s).
- Validation Plan for the Corrective Action(s): The supplier shall provide objective evidence that the Corrective Action(s) are effectively in place and maintained.

The supplier shall provide a response within the period stated on the SCAR. If an extension is needed, the supplier shall contact PCC Fluid Fittings Quality personnel for an extension prior to the state due date. In the case where the supplier fails to respond and provide objective evidence, PCC Fluid Fittings Purchasing and Quality group will determine an appropriate course of action, up to and including disqualification of the supplier.

Q11. CALIBRATION SYSTEM

The supplier shall establish a Calibration System acceptable to Quality Assurance for the control and calibration of all measuring and test equipment. Calibration shall be traceable to the National Institute of Standards and Technology and ISO/IEC 17025.

In the case where PCC Fluid Fittings Group provide calibrated equipment (i.e. Tri-roll gage, etc.), supplier shall return the provided equipment with the parts upon delivery.

Q12. PROTECTION

The supplier is responsible for using a protection method acceptable by Quality Assurance. If specific requirements are provided by the Purchase Order, those instructions are to be followed. The supplier is

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responsible for repackaging at their expense if required. If there is damage due to inadequate packaging, the items shall be subject to rejection.

Q13. AGE CONTROL

The supplier is responsible to maintain procedures for age control of sensitive products. The supplier shall identify each elastomeric or other limited shelf life item with the name of material, part number, type, size, quantity, date of manufacture and expiration date. Date of manufacture and expiration shall be recorded on the certification document or shipper. Material shall have 90% shelf life remaining unless otherwise authorized, in writing, by the PCC Fluid Fittings Buyer.

Q14. CONTINUOUS IMPROVEMENT

PCC Fluid Fittings Group will control and monitor Quality and On-Time Delivery performance. Suppliers are encouraged to embrace the Continuous Improvement philosophy with regard to Quality, Delivery, and Cost.

Specific requirements may be imposed as Continuous Improvement tools, such as SPC, for Key Characteristics or other processes.

Q15. CHANGES

The supplier is required to notify PCC Fluid Fittings Group if a change is made to the product or process definition, change of suppliers, change of manufacturing facility location, ownership, company name, and Quality System approvals as described by the supplier approval or internal documentation.

Q16. LOT CONTROL

Raw material used in the manufacture of products shall be traceable to one heat lot; no exceptions.

Q17. SPECIAL PROCESS APPROVAL

Special processes shall be only performed by NADCAP approved suppliers. Special processes include but are not limited to: NDT, Heat Treat, Plating/Coating, Welding and Chemical Processing, Test Labs and Shot Peen. If the supplier loses accreditation status, the supplier shall notify PCC Fluid Fittings Group within 72 business hours of receiving such notice from its Certification/Registration Body.

Q18. FIRST ARTICLE

A documented first article is required on first run production per AS9102. Additional revisions due to engineering, design and/or specification changes require a Delta AS9102. The supplier assumes all financial responsibility for material, rework and/or replacement when production of parts is begun without first article inspection approval from PCC Fluid Fittings Group. The First Article Inspection Report (FAIR) shall show dimension range and actual measurements per technical drawing. Prior to start of production, supplier shall send the first article and FAIR to PCC Fluid Fittings Quality for approval as stated in the purchase order.



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Q19. COUNTERFEIT

The supplier shall establish and maintain a Counterfeit Parts Prevention and Control Plan using industry standard AS6174 as a guideline. The purpose of this document shall be to prevent the delivery of counterfeit parts and control parts identified as counterfeit.

Q20. ENVIRONMENTAL

Q20.1 OZONE DEPLETING SUBSTANCES

The supplier shall label products which contain or are manufactured with ozone-depleting substances in the manner and to extent required by 42 U.S.C. 7671 (b), (c), and (d) and 40CFR part 82, Subpart E, as applicable: Warning Contains “_____”, a substance(s) which harm(s) public health and the environment by destroying the ozone in the upper atmosphere.

Warning

Manufactured with “_____”, a substance(s) which harm(s) public health and the environment by destroying the ozone in the upper atmosphere. Supplier shall insert the name of the substance (s).

PCC Fluid Fittings Group requires that the provision set forth above be included in Seller’s direct supply contracts as well as the obligation that these requirements are flowed down to the sub-tier supply chain.

Q20.2 REACH ARTICLE 33 SUBSTANCES OF VERY HIGH CONCERN

The supplier shall declare that none of the substances of very high concern used in the following processes are supplied through a company established in the European Union;

Fluoride-phosphate conversion coating (AMS 2486), Aluminum anodization (MIL–A–8625), Alodine coating (AMS-C-5541), 15-5 PH passivation (AMS-QQ-P-35 type 2) and marking inks.

The supplier shall notify PCC Fluid Fittings Group if any the substances of very high concern are used in the processes or products supplied.

Q21. REVISION LEVELS

All parts and/ or materials furnished to PCC Fluid Fittings Group by the seller and its suppliers must be manufactured and/ or meet the latest revision level of the applicable part number and specifications associated at the time the purchase order was issued, unless otherwise specified on the purchase order.

Q22. AWARENESS

The supplier shall ensure that personnel performing the work under its control is aware of the quality policy, relevant quality objectives, their contribution to the effectiveness of the quality management system, including the benefits of improved performance, the implications of not conforming with the quality management system requirements, relevant quality management system documented information and changes thereto, their contribution to product or service conformity, their contribution to product safety and the importance of ethical behavior.

Q23. SHIPMENT

Products shall be packaged to prevent any damage during shipment. Do not ship sooner than 20 days prior to Purchase Order due date, unless otherwise specified on the PO. Do not ship partials without prior written authorization from the Buyer.



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Q24. INSPECTION EQUIPMENT

PCC Fluid Fittings Group may supply calibrated inspection equipment upon supplier's request. The gauges shall be properly used, stored, protected and readily available upon request return by PCC Fluid Fittings. The supplier may be debited for any gages lost, damaged or not returned per written request while at the supplier's facility.

Q25. NOTICE OF ESCAPE

Supplier shall immediately notify PCC Fluid Fittings Group within 72 business hours in writing when a nonconformance is determined to exist, or is suspected to exist, on product already delivered to PCC Fluid Fittings Group under this agreement. Notification shall include the following information as a minimum:

1. Affected process or product number and name;
2. Applicable purchase order number(s), quantity, and dates delivered;
3. Description of the problem (i.e., what it is and what it should be);
4. Proposed containment actions/requests (i.e., units to be checked, recording required, method of check, etc.).

Q26. AUDITS

The supplier's Quality Management System shall be subject to initial and periodic audits, at a frequency determined by PCC Fluid Fittings Group or its customers, to determine compliance to this or any other contractually imposed requirement. Audit scope and frequency will be commensurate with the assessed risk of the source. Audit requirements may range from completion of a survey assessment of the source's processes and controls to a full facility audit of these processes.

Q27. SUPPLIER PERFORMANCE SCORECARD

The Supplier Performance Scorecard, published quarterly, details the performance of all suppliers. It is used as part of the supplier evaluation process and to construct the PCC Fluid Fittings Group Approved Supplier List.

The score is calculated on each line item based on the following equations:

$$\text{Quality Rating} = \frac{\text{Quantity Accepted}}{\text{Quantity Received}} \text{ and } \text{Delivery Rating} = \frac{\text{Quantity Received On - Time}}{\text{Quantity Received}}$$

whereas Performance Rating is 60% Quality and 40% Delivery. Delivery window is 20 calendar days from the due date stated on the Purchase Order.

When supplier's quality performance is out of the required target, PCC Fluid Fittings Group reserves the right to issue a SCAR to request the supplier to implement an improvement plan in order to increase its performance rating. Suppliers with poor performance rating for two consecutive quarters may be placed on "Hold" status at the discretion of the PCC Fluid Fittings Group Quality Management.



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Q28. SUPPLIER DELEGATED INSPECITON PROGRAM (SDIP)

If a supplier maintains an "Excellent" rating for over six months and a minimum of 30 purchase order lines, PCC Fluid Fittings Group may consider to qualify the supplier to the Supplier Delegated Inspection Program per DQP900-006-004.

Q29. SUB-TIER SUPPLIER CONTROL

The supplier shall establish and apply appropriate controls to its sub-tier suppliers (i.e. Chemical Processing, NDT, Tapping, etc.) that may affect any PCC Fluid Fittings Group products to ensure requirements in this document are properly flowed down and met.

Q30. EXCEPTIONS

Any exceptions to these requirements must be specifically authorized in writing by the PCC Fluid Fittings Quality Management Group.



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03/14/18	-	N/C	RELEASED FOR USE; Replaces a portion of DQP900-006-002.
04/04/19	196982	A	§6.0 Added Buyer. §7.0 Updated Procedure. Updated Q2, Q8, Q9, Q10, Q13, Q17, Q18 and Q23. Added Q24, Q25, Q26, Q27, Q28, Q29 and Q30.