

# **PURCHASING**

# **SUPPLIER QUALITY REQUIREMENTS**

Q.P. 6.4

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#### 1.0 PURPOSE:

It is not a requirement for suppliers to hold formal Quality Management Systems (QMS) certification, for example ISO 9001. However, the fundamental aspects of a QMS must be in place as appropriate to the type of business, and operating effectively, for the supplier to be approved for use by Cam Lock Ltd.

This manual is written to define Cam Lock Ltd Supplier Quality Requirements, irrespective of supplier QMS certification status.

#### 2.0 SCOPE:

These requirements are applicable to all Cam Lock Ltd suppliers as appropriate to the product and services supplied. Should a conflict arise, the Cam Lock Ltd Terms and Conditions take precedence over these requirements.

#### 3.0 REFERENCES:

Cam Lock Ltd Standard Terms and Conditions

ISO 9001:2008, AS9100:2009 (rev C)

CML/CRM Systems Manual

QF13 - Sub-Contractor Assessment Form

QF5.2 - Vendor Assessment Calculation Sheet

QF75 - Supplier Corrective Action Request

QF182B - Notification of Engineering Change

PDS 0.8 Production Part Approval Process (PPAP)

QP 6.1 Appendix A

QP 6.1 Appendix B

QP 10.1 Appendix G

QP 6.2 Appendix F

#### 4.0 PROCEDURE:

### 4.1 General Requirements

### 4.1.1 Applicable Standards

The supplier shall provide the supplies subject to all reasonably applicable quality standards and to those set out as a special condition and/or in the specification and/or in the purchaser's quality approval/authority issued to the supplier.

### 4.12 Access for Audit and Source Inspection

Upon the purchaser providing reasonable notice, the supplier shall (and procure that its agents and sub-contractors shall) allow the purchaser and persons authorised by the purchaser (which may include the purchaser's customer) access to the supplier's premises (and those of its agents and sub-contractors) as are being used to carry out work on the supplies in order to inspect and audit the facilities, processes and procedures used in manufacturing the Supplies.



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Items being supplied may also be subject to inspection / test acceptance at the suppliers premises prior to delivery. Not less than 7 days' notice of availability is required in writing. Applicable process documentation, test and inspection records and certificates shall be provided at the time of the visit.

#### 4.1.3 Cam Lock Ltd Supplier Evaluation, Approval and Monitoring Process

Cam Lock Ltd reserves the right to carry out supplier Quality Management Systems Surveys and Audits, or process Audits, at any time subject to reasonable notice being given.

A Quality Survey is required to be completed prior to initial supplier approval by Cam Lock Ltd, and subsequently every three years.

Evidence of certification to QMS standards such as ISO 9001 shall be provided on request. Suppliers without a formal QMS certification may be subject to on-site QMS audit. Note: Suppliers with QMS certificates issued by organisations that are not accredited by UKAS or other national accreditation bodies are considered to be uncertified.

Suppliers of parts with Special Characteristics identified shall be required to submit Control Plans for approval prior to commencing production. Control Charts and process capability data shall be provided to Cam Lock at a mutually agreed time early on in the production phase. Cam Lock may request to perform a Process Audit to coincide with availability of the capability data.

A part / supplier risk assessment is performed by Cam Lock Ltd on some products. Suppliers producing high risk items may be requested to deploy Advanced Product Quality Planning (APQP) tools per PDS 0.8 Production Part Approval Process, and may be subject to on-site process audit and assessment.

An evaluation of Quality and Delivery performance shall be issued by Cam Lock Ltd on an annual basis. Suppliers may be selected for more frequent and focussed activity, requiring site visits, monthly evaluation and performance improvement action.



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#### 4.1.4 Return of Parts

Failure of parts supplied to comply with the drawings and specifications defined on purchase order, or the documentation requirements stated in section 4.3, will result in the goods being returned and a Supplier Corrective Action Request (SCAR) form issued. Suppliers shall complete the form indicating containment actions, root cause analysis, corrective and preventive actions.

An initial response detailing immediate containment action is required within 2 days of receiving notification of failure, this may be before parts are received for verification. The SCAR shall be completed and returned to Cam Lock Ltd within 30 days of issue. The form should be submitted electronically to the e-mail address <a href="Quality@camlockuk.com">Quality@camlockuk.com</a> and copied to the buyer named on the purchase order.

### 4.1.5 <u>Sub-Contracting</u>

A complete work package related to Cam Lock Ltd purchase orders shall not be sub-contracted without the written approval of Cam Lock Ltd. Processes and operations may be sub-contracted as required. Written notification of change of source for such processes shall be provided to Cam Lock prior to commencement of any work. It is the responsibility of the Cam Lock contracted supplier to provide an FAIR (i.a.w section4.3.5) for any sub-contracted work. Cam Lock reserves the right to reject, or delay any such changes in the interest of maintaining the qualified product status of its finished goods.

#### 4.1.6 Cam Lock Ltd Property

All free issues of materials, parts, tooling and drawings etc., provided to suppliers in support of purchase orders, shall at all times remain the property of Cam Lock Ltd. They must be segregated and stored in suitable conditions. Losses or damage sustained to Cam Lock Ltd property may require financial re-imbursement.

Drawings shall be provided to the supplier using the Cam Lock Ltd QF182B Notification of Engineering Change form. Such drawings will be classed as uncontrolled. It is the responsibility of the Supplier to ensure that they are using the correct issue of documentation in accordance with the contract / purchase order requirements. The drawings shall be stored and controlled to ensure the security of any proprietary data and to ensure the correct revision is available to persons performing the work. It is the supplier's responsibility to ensure that drawings used match the part revision noted on Purchase Orders.

### 4.2 Quality Management System

It is not mandatory for Cam Lock Ltd suppliers to hold formal Quality Management System (QMS) certification such as ISO 9001. However, suppliers are required to effectively control all activities related to Cam Lock Ltd purchase orders. The supplier shall operate a documented and controlled QMS including procedures for the following as a minimum;



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- Control of Documents and Records
- Internal Quality Audits
- Control of Non-Conforming Product
- Corrective and Preventive Actions

The following paragraphs of section 4.2 describe these procedural requirements in more detail. Additional process requirements are also described and shall be implemented as appropriate to the size and nature of the business. Records resulting from these requirements shall be maintained as evidence of compliance per 4.2.2.

The terms verification and validation are used throughout this section and are defined here for clarification;

- Verification 'Are you doing the right thing' or 'have you accurately understood and translated the requirement
- Validation 'Are you doing it right' or 'does the process or product actually meet the requirement'

### 4.2.1 Management review of the effectiveness of the system

A minimum of annual review of the following:

- Follow-up of previous review actions
- Quality policy
- Quality objectives
- · Results of audits
- Customer feedback
- Process performance and product conformity
- Status of corrective and preventive actions
- Changes that could affect the QMS
- Recommendations for improvement

The review shall result in actions where appropriate to improve the effectiveness of the QMS, to improve product and service relating to customer requirements, and should identify the resources required to achieve this. Records of these reviews shall be maintained.

### 4.2.2 Procedures for document and record control

Documents required by the QMS shall be controlled to ensure only reviewed and approved versions are available, that they are legible and maintained in a condition fit for use. Records of document review shall be maintained.

Records required by the QMS shall be maintained to provide evidence of conformity to requirements. These shall be stored securely and in appropriate environmental conditions for a minimum of 10 years. Electronic records shall have



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appropriate measures in place to ensure security and availability in the event of system failure. Where the supplier intends to dispose of documents and records retained in support of Cam Lock UK Limited purchase orders, they shall be offered to Cam Lock prior to disposal. Should the Supplier cease trading, any documentation relating to Cam Lock purchase orders or contracts shall be offered to Cam Lock prior to disposal.

### 4.2.3 Assessment of personnel competence and training needs

The organisation shall determine necessary competences for personnel whose work affects conformity to product requirements, and to perform training where necessary. Training shall include awareness of how their activities contribute to the Quality Objectives.

Appropriate records of education, training, skills and experience shall be maintained.

### 4.2.4 <u>Determination and review of customer requirements related to the product</u>

The organisation shall determine the requirements specified by customers, including specifications, requirements for delivery and post-delivery, statutory and regulatory requirements applicable to the product, and any other requirements considered necessary.

These requirements shall be reviewed to ensure adequate definition, resolution of issues, and to identify any special requirements or risks.

Records of these reviews shall be maintained.

### 4.2.5 Verification and Validation of design activity if applicable

Where the supplier is responsible for design, they shall control and define the design and development stages, processes for verification and validation of product at each stage, and the responsibilities and authorities for these activities.

Verification shall be conducted to ensure design and development outputs meet requirements. Validation shall be conducted to ensure the resulting Product meets requirements. Records of design verification and validation shall me maintained.

### 4.2.6 Purchasing and supplier evaluation and monitoring

The supplier shall verify that purchased product conforms to requirements through implementation of appropriate inspection and / or test processes. This includes verification of traceability to manufacturing source.

The organisation shall evaluate and select suppliers on their ability to supply to requirements. Criteria for selection and evaluation shall be established.



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Records of product verification, and supplier evaluations and actions shall be maintained.

- 4.2.6.1 Suppliers shall implement processes to reduce the risk of counterfeit parts being used in product. These processes shall ensure the following;
  - Items shall be purchased or sourced directly from the original component manufacturer (OCM), or OCM authorised distributor
  - Use of a non-OCM authorised distributor requires customer approval
  - Traceability of components to the OCM must be maintained and include all relevant information, for example part numbering, batch and serial numbers, tests and inspection references, deviations etc.
  - Counterfeit or suspect counterfeit parts should be treated as nonconforming product and kept in quarantine to facilitate a Cam Lock Ltd or 3<sup>rd</sup> party investigation
  - Suppliers shall notify Cam Lock Ltd, relevant authorities, and other stakeholders when counterfeit parts are confirmed or suspected
  - Suppliers shall flow these requirements down in a formal and contractually binding format

These processes shall be adequately documented and records maintained.

# 4.2.7 <u>Verification, validation, and control of processes and associated equipment and tooling</u>

Suppliers shall be responsible for developing, verifying and validating, and maintaining adequate process, equipment and tooling controls. Formal written instructions and procedures shall be implemented and should be available at all times to staff operating the applicable process, equipment and tooling.

Process, equipment and tooling design / definitions shall be verified to ensure they meet requirements, and validation performed to ensure they operate per requirements. Records of process, equipment and tooling verification and validation shall me maintained.

### 4.2.8 Product identification and traceability

Parts purchased or sourced by the supplier shall be traceable to the original manufacturer.

The supplier shall establish internal processes to ensure identification of product configuration and to control and record unique identification of product in order to provide an appropriate level of traceability.

Product configuration and traceability records shall be maintained.



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### 4.2.9 Calibration and verification of monitoring and measuring equipment

A register of monitoring and measuring equipment shall be maintained. The system shall provide a unique identification, describe equipment type, location, frequency and method of calibration / verification, and acceptance criteria.

A process shall be established to recall and perform the calibration / verification, and shall include appropriate mitigating activity in the event that equipment is found outside the defined limits. Calibration records shall be maintained.

### 4.2.10 Procedures for internal audit

The supplier shall plan and conduct audits to determine whether the QMS conforms to planned arrangements (for example, customer requirements), and that it is effectively implemented. Non-conformities shall require timely corrective actions, which shall be verified through follow-up. Records of these audits and their results shall be maintained.

### 4.2.11 Procedures to control non-conforming product

A process shall be established to define the controls and related responsibilities and authorities for dealing with non-conforming product. Controls shall include required action to quarantine a segregate detected non-conforming product, processes for authorising use or acceptance, and the process for addressing and communicating non-conformity of product already supplied to the customer. Records of non-conforming product and subsequent actions shall be maintained.

# 4.2.12 <u>Procedures for corrective and preventive action relating to product or process non-conformities and customer complaints</u>

The supplier shall implement processes that take action to understand and eliminate causes of product and process non-conformities, to prevent their recurrence (corrective action), and to eliminate causes of potential non-conformities (preventive action). Records of corrective and preventive action shall be maintained.



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### 4.3 Purchase Order Document Requirements

### 4.3.1 <u>Certificate of Conformity</u>

A Certificate of Conformity (C of C) certifying compliance with the Purchase Order and any other requirements is to be delivered with goods/services as required by Cam Lock Limited purchase order. Non-production equipment / items / processes may be exempted from this requirement, as determined by Appendix A.

The release documentation shall provide traceability to the manufacturing source, including details such as the manufacturers Part Number, Serial or Batch numbers etc.

#### 4.3.2 Calibration

A calibration certificate traceable to a National Calibration Standard shall be provided for any items supplied that require calibration.

### 4.3.3 Special Processes, Inspections and Tests

All deliveries and shipments shall include Test Result Sheets and / or Inspection Reports, including Material Certificates and Compound Analysis Reports as appropriate to the delivery. Where non-destructive Inspection and Testing is not possible, for example during application of Special Processes such as welding, plating or heat treatment, the certificates should include the controlled and verified process parameters for the delivered items.

### 4.3.4 Control Plans, Control Charts, Measurement and Process Capability Data

Suppliers of parts with Special Characteristics identified shall be required to submit Control Plans for approval prior to commencing production. Control Charts and process capability data shall be provided to Cam Lock at a mutually agreed time early on in the production phase.

The data provided shall demonstrate measurement capability as a precursor to process capability analysis.

### 4.3.5 First Article Inspection

A First Article Inspection (FAI) Report shall be submitted by the Supplier prior to the first shipment of production supplies. The Supplier is responsible for ensuring that development / prototype items meet the defined requirements, as per Purchase Order. An FAI is not required if Supplies have been previously supplied or if a previous FAI has been performed. Standard catalogue parts are excluded from this requirement. It is preferred that FAI reports are submitted in the format defined in AS9102. Alternative report structures may be used



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A repeat FAI shall be performed if any of the following applies:

- i) One or more significant changes have been made to the supplies. 'Significant' here means where there is any effect on the form, fit or function of the supplies, thus causing a part number, or part number/issue increment. A change of material would count as a 'form' change;
- ii) There has been a significant change to the supplier's manufacturing process; 'Significant' here means a change of key manufacturing equipment and/or personnel, or the introduction of, or removal of, process stages which could affect final product quality;
- iii) There has been a change of manufacturing location;
- iv) There has been a change of a sub-tier supplier of a critical sub-part or outsourced process; or
- v) There has been a break in supply or production of the ordered Supplies of greater than twenty-four (24) calendar months (e.g. non-contiguous follow-on orders).

Repeat FAI's may be full or partial, the scope being determined by the purchaser on notification by the supplier of the nature of the change.

The FAI is to be performed to include, but is not limited to, the recording of actual dimensions, test data results, and traceability to any defined standards, thus ensuring that the Supplies are fully compliant with the approved design data.

It is the Cam Lock Ltd preference for advanced copies of the FAI report to be e-mailed to reduce processing delays of Supplies received at Purchaser's Inwards Goods. Supplies requiring FAI will not be booked in (i.e. accepted and processed for payment) until an FAI report has been received and deemed acceptable by the Purchaser's Quality Assurance.

FAI reports containing US Export controlled data (ITAR/EAR) should not be sent in with the goods but emailed to <a href="mailto:Compliance@camlockuk.com">Compliance@camlockuk.com</a> along with details of the appropriate US Export Licence (TAA/MLA/DSP-5 Licence reference numbers) and copied to the buyer using a secure method.

For FAI reports NOT containing US Export controlled data (ITAR /EAR) advanced copies should be emailed to <a href="mailto:Quality@camlockuk.com">Quality@camlockuk.com</a>.

#### 4.3.6 Production Part Approval Process Documentation

Suppliers producing high risk items may be requested to deploy Advanced Product Quality Planning (APQP) tools per PDS 0.8 Production Part Approval Process.



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In addition to Control Plans, Control Charts, Measurement and Process Capability Data, and FAI reports, suppliers shall be required to complete Potential Failure Modes and Effects Analysis (pFMEA), for Design (if applicable), and for process. A Process Flow Chart outlining the key production steps is also required, and should show Special Characteristics, Control Plan references and capability data where applicable.

#### 4.3.7 Production Permits and Concessions

Non-conforming product may only be supplied with prior consent from Cam Lock Ltd. Details of the non-conformity shall be detailed on a Cam Lock Ltd Production Permit or Concession form, together with root cause analysis and proposed corrective and preventive actions, and should be emailed to <a href="mailto:Quality@camlockuk.com">Quality@camlockuk.com</a>.

Cam Lock Ltd Engineering and Quality functions will determine the disposition and return the document if approved. A copy of the permit or concession shall be provided with the delivery.

Non-conforming product shall not be delivered without the completed and approved production permit or concession attached.

#### 4.3.8 Shelf Life

The post cure shelf life of elastomeric and rubber products shall be in accordance with the purchase order requirements. The maximum expired shelf life (at the point of delivery to Cam Lock) of elastomeric and rubber components shall not exceed that stated in the relevant purchase order. Where not stated, please contact the relevant Cam Lock buyer.

The shelf life of other products shall be in accordance with the manufacturer's recommendations.

Labels and Certification for all life limited products shall indicate Cure Date and Expiry Date as appropriate to the product.



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Appendix A

Type of Supply	Certificate of Conformity	Material (Mill) Certificate	Special Process Certificate
Raw material	X	X	
Castings	X		
Mouldings	X		
Machined components	X		
Fabricated assemblies	X		
Catalogue Off-The-Shelf (COTS) items including fixings, fasteners, O rings, bearings, bushings, seals, hoses, etc.	X		
Plating	X		X*
Chemical Processing	X		X*
Heat Treatment	X		X*
Non-destructive Testing	X		X*
Welding	X		X*
Certificate of Conformity or other release not required for:			
Stationery			
Documents (e.g. manuals)			
Flyers			
Posters			
Books			
Leaflets			
Packaging**			

<sup>\*</sup> Only where sub-contracted as a discreet process by Cam Lock, or as requested by Purchase Order.

https://www.gov.uk/requirements-for-wood-packaging-used-for-imports-and-exports

<sup>\*\*</sup> Wood packaging must comply with relevant legislation relating to ISPM15 as detailed at: