 <b>Continental Machining Company, Inc.</b> Albuquerque, New Mexico	<b>QMS LEVEL III STANDARD</b>	Effective: <b>02/22/2018</b>	Number: <b>CMCST-07-01</b>
Title: <b>Supplier Quality Provisions</b>		Revision: <b>D</b>	
Management Approval: <b>Jason Romero</b>			Page 1 of 9

## 1 Purpose

Continental Supplier Quality Provisions (SQP), define each clause and its applicability in the fabrication, assembly and purchase of all components, sub-assemblies, assemblies, tool fixtures and jigs delivered to CMC. SQP's are specified in CMC Purchase Orders. This Standard also contains "Approved Vendor" requirements (***highlighted in Bold Italic***).

## 2 Scope

This Standard applies to all Continental Machining Company Suppliers who provide a product or service that affects CMC Customer quality.

## 3 Requirements

**Supplier's AQMS (Approved Quality Management System) - CMC reserves the right to provide CMC-identified quality system findings, associated quality system data, and quality performance data to the supplier's Management. *Suppliers that have an AS9100 certification, NADCAP or National Accreditation will not require an On Site Audit but could be required to complete a Survey or Questionnaire every 24 months if the supplier has had any quality nonconformances. Suppliers that do not have an AQMS could be evaluated every 12 months if the supplier has had any quality nonconformances.***

Note: AS9100 contains ISO9001 requirements

Note: All documentation shall be in English

**Note: Suppliers doing business with Continental Machining Company prior to January 1, 2009 are considered approved. Follow up evaluations will be conducted every 12 to 24 months if needed to validate the Suppliers continuing efforts to meet CMC requirements.**

Requirements of this Standard shall be followed in the fabricating of all detail parts, sub-assemblies, assemblies, standard parts and tooling involved in the manufacturing of all CMC Customer products. Compliance with Purchase Order (PO) requirements, which include SQP's, is subject to CMC and/or Regulatory Authority on-site verifications. CMC, CMC's Customers and any Regulatory Authority shall have a right of access to all facilities involved in the order and to all applicable records, and requirements for the Supplier to flow down to sub-tier suppliers the applicable requirements in the purchasing documents, including key characteristics where required. Primary CMC suppliers who use sub-tier

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suppliers to manufacture CMC customer product, shall be responsible for flowing down the Supplier Quality Provision requirements to the sub-tier supplier. CMC suppliers are also responsible for obtaining and submitting all sub-tier quality records to CMC when the product is delivered to CMC.

### ***Supplier Evaluation and Approval***

***The Supplier will be asked to provide all or part of the following objective evidence as part of the CMC Vendor Approval process:***

- ***Copy(s) of applicable quality certificate(s), e.g., AS9100, NADCAP accreditations***
- ***Completed CMC Survey or Questionnaire***
- ***List of Qualified Sub-tier Suppliers***
- ***Quality System Manual***
- ***Original Equipment Manufacturer, OEM approved, OEM recommended***

***Additional approval evaluations are considered and could consist of one or more of the following:***

- ***On-site audit of the Suppliers Quality Management System***
- ***CMC Customer directed***
- ***Temporary approval for emergencies***
- ***Fixed Process Control (SQP 6)***

CMC Quality will evaluate the supplier's documentation (if available) for adequacy. After evaluation, CMC may elect to perform an on-site audit of the quality system and the products. If the suppliers are ISO/AS certified, CMC reserves the right to approve the Supplier without an on site assessment.

CMC Quality will re-evaluate the performance of suppliers. The frequency of re-evaluation will be 2 years or less, or depending on the supplier's performance and the impact of the product or service delivered. The Key Performance Indicators are Quality and On Time delivery.

Suppliers that do not meet CMC requirements could be required to complete a Corrective Action Request issued by CMC.

Material Review Board (MRB) authority is considered ***not*** delegated to suppliers. All Supplier non-conformances shall be promptly reported to CMC. Include all nonconformances and those generated against raw material and any supplier/sub-tier parts that may be part of the final part, assembly or installation

Notification of Defective Delivered Product(s):

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CMC requires written notification of any nonconformance's that may be discovered affecting previously delivered product.



### **Handling, Storage, Packaging and Delivery**

- **Handling** - The supplier shall provide methods of handling product that prevent damage or deterioration.
- **Storage** - The supplier shall use designated storage areas or stock rooms to prevent damage or deterioration of product, pending use or delivery.
- **Packaging** – Parts will be packed in accordance with good industry standards to prevent damage in transit. Special packaging instructions may be required in addition to this provision
- **Preservation** - The supplier shall apply appropriate methods for preservation and segregation of product when the product is under the supplier's control.
- **Delivery** - The supplier shall arrange for the protection of the quality of product after final inspection and test. Where contractually specified, this protection shall be extended to include delivery to destination.

**Tools, Jigs and Fixtures** – CMC owned tools, jigs and check fixtures must be protected against damage. Tooling must be adequately stored to avoid damage and/or loss.

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## SUPPLIER QUALITY PROVISIONS

**SQP 1) Key Characteristics (KC)** - Features identified by the “KC” symbol  are defined as key characteristics. This requirement is applicable when it is specified on the approved engineering drawing. All Engineering Drawings are “Bubbled”  prior to Manufacturing. The Supplier shall provide variable data (Report) to CMC for each part manufactured. Attribute (go/no-go) data shall be used only if no other inspection technique is feasible. Supplier must contact CMC to request this change. CMC Quality will review the request and approve if feasible.

**SQP 2) Standard / Military Specification Hardware** - Supplier shall deliver Product with standard/military specification hardware (AN, MS, NAS, etc.) that is compliant with the latest document revision, unless otherwise specified by CMC.

Supplier shall ship with all hardware a Certificate of Conformance stating that the hardware conforms to an established industry or U.S. government published standard/specification.

**SQP 3) Material Certification** – Suppliers shall supply CMC with all mill certifications, which contain the actual and complete values for chemical and mechanical test data that meet the acceptance requirements of the applicable material specification and/or engineering drawing.

Raw material, forgings, or extrusions defined by CMC Material Specifications must be compliant to the quality requirements defined in Customer and/or CMC drawings.

**SQP 4) Product Identification** – The Supplier will be responsible for Part Marking. The Part Marking Requirement will be noted on the CMC Purchase Order including the Specification as noted on the Customer Engineering Drawing. It is the responsibility of the Supplier to contact CMC if the Part Marking requirements are not clearly understood.

### **SQP 5) Certificates of Conformance (C of C)**

The supplier is required to submit a Certificate of Conformance indicating compliance to all CMC Purchase Order requirements. The “C of C” **must** be signed by the Suppliers authorized representative.

As a minimum the C of C shall include:

- Name of Supplier
- C of C Date
- CMC Purchase Order (PO)
- Part Number and (Revision Letter for machining or welding)
- Quantity Shipped
- Traceability Data should include one of the following: Certificate Number, Purchase Order Number, Sales Order Number, Heat Code, Batch Code, or Lot Code
- Include any process specifications called out on the CMC Purchase Order

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**SQP 6) Fixed Process Control** - Fixed Process Control, when required by CMC shall include the documentation of Travelers, Inspection Plans, and Work Instructions. This documentation will be submitted along with the delivery of the product and will be subject to CMC approval.

**SQP 7) Inspection and Test** - The supplier shall establish and maintain documented procedures for inspection and test activities that verify product compliance with latest engineering requirements, drawings and specifications. The supplier shall comply with the following requirements:

- Inspect the product to ensure that it conforms to the purchase order or contract, drawing, and specifications of CMC parts and assemblies.
- Perform final inspections and verify that all inspections and tests have been completed.
- Establish and maintain a documented process for identification of inspection and test status.
- The inspection and test status of a product shall be identified by suitable means, which indicate the conformance or nonconformance of a product with regard to the inspection and tests performed.
- **Sampling plans** must be in compliance with industry standards. Sampling of Nondestructive Inspection (e.g. Eddy Current, Radiographic, Magnetic Particle, Ultrasonic, and Fluorescent Penetrant) is not allowed. Referenced standards for consideration are:
  - MIL-HDBK-1916, *Companion Document to MIL-STD-1916*
  - MIL-STD-1916, *DOD Preferred Methods for Acceptance of Product*
  - Zero Acceptance Number Sampling Plans, *by Nicholas Squeglia*

The inspection and test status of a product shall be traceable to the individual performing the acceptance.

Inspection Methodologies - Supplier shall design, develop, and validate all inspection processes, methods, or other product verification techniques required to assure the integrity of materials and workmanship used in the fabrication, assembly, or test of production hardware and components.

- The supplier shall establish and maintain documented procedures to control, calibrate and maintain all inspection, tooling, measuring and test equipment that can affect product quality, including test software and personally owned equipment and CMC supplied equipment.
- Calibrations shall be traceable to internationally or nationally recognized standards. Where no such standards exist, the basis used for calibration shall be documented.
- Equipment shall be identified with suitable indicators or an approved identification record of the calibration status.
- The Supplier shall assess the validity of the previous inspection results when equipment is found to be faulty or out of calibration and shall recall the product for

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re-inspection when the assessment indicates the result may be a nonconforming product. (Reference procedure: Control of Nonconforming Product)

**SQP 8) Acceptance Test Procedure (ATP) Data - PRESSURE OR LEAK TESTS**

REPORT - The Supplier shall provide a copy of the test report containing test parameters and actual results. The report shall include copies of all supporting documentation such as strip charts and time/temperature readings.

The report shall reference serial or lot numbers and shall be signed by the test operator and responsible company official. The supplier shall reference the data produced by the functional tests on the Certificate of Conformance.

**SQP 9) First Article Inspection:** The supplier's quality system shall provide a process, as appropriate, for the inspection, verification, and documentation of the first production article. First Article Inspection documentation shall include a list of the characteristics required by the design data (including those listed in specifications and sub-tier specifications) and any required tolerances, the actual results, and when testing is required, the results of the test. The First Article Inspection shall be updated to include changes to production processes or product configuration. The First Article Inspection Report (AS9102 First Article Inspection Form) shall be submitted to CMC along with the actual product that was inspected for the FAI.

**SQP 10) Statistical Process Control (SPC)** – CMC Customer requirements for SPC will be the noted on the CMC Purchase Order. It is the responsibility of the Supplier to contact CMC if the Customer requirement is not clearly understood. All SPC data will be submitted to CMC along with the delivery of the product.

**SQP 11) Special Processes** - Suppliers shall be responsible for imposing satisfactory oversight and controls for any in-house or subcontracted special processing and non-destructive testing used on CMC product. National Aerospace and Defense Contractors Accreditation Program (NADCAP) or similar accreditation is the preferred method of approval for Special Process.

**Note:** Loss of third party accreditation requires written notification to the CMC Purchasing Manager and Quality Manager.

Special processes include:

- Non-destructive testing (radiographic, ultrasonic, fluorescent penetrant, magnetic particle, etc.)
- Non-conventional machining (i.e. Electrochemical Machining (ECM), Electrochemical Grinding (ECG), Electrical Discharge Machining (EDM), Laser Beam Machining (LBM), Chemical Milling)
- Shot Peening

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- Chemical processing (i.e. Painting, Plating, Anodizing, Chemical Cleaning, Chemical Milling, Conversion / Phosphate Coatings, Paint / Dry Film Coatings, Plating, Stripping, Surface Treatment / Passivation, Etching)
- Materials testing (metals testing only, hardness, metallography, micro-hardness, mechanical testing, chemical analysis)
- Heat-treating, Hot Forming and Furnace Brazing
- Welding (i.e. Friction Stir, Electron Beam, Resistance, Laser, Fusion)
- Sealant application

Suppliers performing special processes on CMC product are required to demonstrate operator and/or equipment capability and proficiency upon request of CMC Quality. This request shall be in written form and/or onsite audit.

**SQP 12) Direct Shipment** - Direct Ship may be granted in a written statement by CMC to an approved supplier.

To ensure that all product produced under CMC's production approval conform to the approved design and are in condition for safe operation, CMC will only grant Direct Ship Authority after the supplier has been audited by CMC.

The supplier must have CMC approved quality procedures in place that will compensate for the absence of inspections normally conducted at CMC. Inspections of Direct Ship product shall be performed as follows:

- Source Inspection performed by CMC
- Inspection performed by the supplier under delegated inspection authority approved by CMC

After Direct Ship is granted to a supplier, the supplier is obligated to meet the following requirements:

- Meet any special customer requirements that are accepted by CMC
- Maintain evidence that the supplier has direct ship authorization by CMC
- Provide a signed direct ship certificate of conformance with every shipment
- Provide a signed/stamped statement of conformity every shipment
- Provide traceability with every shipment to the customer purchase request
- Provide evidence with every shipment that acceptance/inspection has been accomplished by CMC or through delegated inspection authority

**SQP 13) Source Inspection** - Supplier shall submit deliverable items on the Purchase

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Order (PO) to CMC Source Inspection or designee prior to shipment of product.

Upon receipt of the Purchase Order, promptly notify the CMC Quality Group to determine in-process inspection points.

**SQP 14) DFARS** – Defense Federal Acquisition Regulation Supplement. DFARS 225.872-1 General, Contracting with qualifying country sources. Supplement available from CMC Purchasing or <http://twmetals.com/resources/dfars/DFARS2258721.aspx>

**SQP 15) DPAS** – This is a rated order certified for national defense use. You are required to follow all the provisions of the defense priorities and allocation system regulation (15 CFR Part 700). <http://law.justia.com/us/cfr/title15/15-2.1.3.2.1.html>

**SQP 16) Suspect Counterfeit Prevention-** Suppliers shall follow suspect counterfeit prevention requirements as flowed down by CMC or it's customers. When required, the supplier shall provide evidence of a SC/I program.

**SQP 17) ITAR** – The Contractor agrees to comply with all applicable U.S. laws and regulations regarding export-controlled items, including, but not limited to, the requirements of the Arms Export Control Act, 22 U.S.C.2751-2794, including the International Traffic in Arms Regulation (ITAR), 22 C.F.R. 120 et seq.; and the Export Administration Act, 50 U.S.C app. 2401-2420, including the Export Administration Regulations, 15 C.F.R. 730-774; including the requirements for obtaining any export license or agreement, if applicable. Without limiting the foregoing, contractor agrees that it will not transfer any export controlled items, data, or services, to include transfer to foreign persons employed by or associated with, or under contract to contractor or contractors lower tier suppliers, without the authority of an export license, agreement, or applicable exemption or exception.

#### 4 Revision History



RELEASE DATE	REVISION LETTER	DESCRIPTION OF CHANGE
04/15/2009	-	Original Release
06/23/2009	A	<p><b>Added:</b> “CMC, CMC’s Customers and any Regulatory Authority shall have a right of access to all facilities involved in the order and to all applicable records, and requirements for the Supplier to flow down to sub-tier suppliers the applicable requirements in the purchasing documents, including key characteristics where required.”</p> <p><b>Added:</b> “Primary CMC suppliers who use sub-tier suppliers to manufacture CMC customer product, shall be responsible for flowing down the Supplier Quality Provision requirements to the sub-tier supplier. CMC suppliers are also responsible for obtaining and submitting all sub-tier quality records to CMC when the product is delivered to CMC. The CMC supplier is also responsible for maintaining all sub-tier supplier quality records.”</p>
05/18/2010	B	<p><b>Supplier’s AQMS (Approved Quality Management System) –</b> CMC reserves the right to provide CMC-identified quality system findings, associated quality system data, and quality performance data to the supplier’s Management. <b>Suppliers that have an AS9100 certification, NADCAP or National Accreditation will not require an On Site Audit but will (removed) could (added) be required to complete a Survey or Questionnaire every 24 months if the supplier has had any quality nonconformances (added). Suppliers that do not have an AQMS will(removed) could (added) be surveyed every 12 months if the supplier has had any quality nonconformances (added).</b></p> <p><b>Follow up assessments will be conducted every 12 to 24 months if needed (added) to validate the Suppliers continuing efforts to meet CMC requirements.</b></p> <p>The CMC supplier is also responsible for supplying CMC with all Quality Records when product is delivered (added). Maintaining all sub-tier supplier quality records. (removed)</p>
12/22/2014	C	Add SQP 16, Suspect counterfeit prevention
02/22/2018	D	ADD SQP 17