

Printed versions of this document are for reference only and are subject to change at any time. It is the responsibility of the person using the printed copy to verify it is the latest revision.



Toray Composite Materials America, Inc.



Supplier Quality Requirements Manual (SQRM)

TCMAN-Q-S100 Revision 10

This document is an integral part of the Purchase Order. The revision in effect at the time the purchase order was placed applies. Page 1 of 19

Table of Contents

Tora	ay Composite Materials (America), Inc. (CMA)	3		
Cor	Corporate Mission			
Purp	Dose	3		
Sco	pe	3		
Арр	licability	3		
1.	Quality System Requirements	4		
2.	Quality Clauses	5		
3.	CMA Supplier Approval1	4		
4.	Surveillance1	4		
5.	Abbreviations1	4		
6.	Definitions1	5		
7.	References1	5		
8.	Quick Link References1	6		
9.	Revision History1	7		

Toray Composite Materials (America), Inc. (CMA)

Corporate Mission

Be the Global Leader in Advanced Materials by supporting our customers, leading the market, and harnessing the value of our people.

Additional information can be found at https://www.toraycma.com.

Purpose

Toray Composite Materials America, Inc. (CMA) serves a diverse market that includes aerospace, defense, industrial, and sports-grade. This document establishes CMA's requirements for suppliers providing product or services for incorporation into CMA's product and quality clauses that may be included in your order.

Scope

This manual applies to all suppliers providing material or services that affects CMA product realization (fit, form, function); products that physically contact CMA's finished product; or when there are close-tolerance controlled products provided to CMA; not to exclude sub-tier sources.

Applicability

This document applies when specified by inclusion on a CMA Purchase Order.

If a Supplier cannot comply with the applicable Quality Clause requirement listed within the Applicability by Industry Table or on a Purchase Order, the Supplier must provide Formal Communication to request exception(s) to CMA Quality Assurance via email to supplierquality@toraycma.com.

The CMA SQRM Clause Exception Form is available at https://www.toraycma.com/resources/quality.

CMA quality representative will review supplier's requested exception(s) and provide a written response addressing each exception.

Supplier must receive written approval from CMA in order to utilize any Quality Clause exception, <u>prior</u> to fulfilling a CMA purchase order.

1. Quality System Requirements

- 1.1. Supplier shall maintain a Quality Management System (QMS) suitable to the type of products and services provided to CMA.
- 1.2. Each supplier should maintain and implement a documented quality management system that is <u>certified</u> by an accredited Certification / Registration Body (CRB). Supplier shall maintain objective evidence of CRB certification or registration on file at Supplier's facility. Objective evidence shall include:
 - The accredited Quality Certificate of registration.
 - The audit report(s), including all information pertaining to the audit results in accordance with the applicable certification or registration.
 - Copies of all CRB finding(s), objective evidence of corrective action(s), and closure of the findings.
 - Aerospace (space, civil, etc.): AS/EN/JISQ9100 and/or ISO9001
 - NADCAP Accreditation laboratory is required when any testing for CMA used for certification
 - Defense (aerospace and non-aerospace): AS/EN/JISQ9100 and/or ISO9001
 - NADCAP Accreditation laboratory is required when any testing for CMA used for certification
 - Industrial (i.e. automotive, truck & heavy equipment products): ISO/TS16949 and/or ISO9001
 - **Sports-Grade:** AS/EN/JISQ9100, and/or ISO9001
 - Distributors: AS9120/EN9120, AS/EN/JISQ9100, and/or ISO9001
 - Laboratory Testing Service: ISO17025 accreditation and/or ISO9001
 - NADCAP Accreditation laboratory is required when any testing for CMA used for certification
 - Equipment Maintenance & Service: AS/EN/JISQ9100, and/or ISO9001
 - Calibration Service Suppliers: Suppliers providing calibration services shall be accredited to ANS/ISO/IEC17025, ANSI/NCSL Z540.3, and/or ISO9001. Supplier is required to prove that its processes and procedures are traceable to NIST
- 1.3. Other quality system qualifications not listed above may be considered as an acceptable alternate (i.e. Space, Defense, etc.) on a case by case basis and shall be approved in writing by CMA as an acceptable alternate.
- 1.4. Suppliers who do not maintain a quality system certified and / or accredited to the above referenced standards must maintain documented procedures that address the following and shall be approved in writing by CMA as an acceptable alternate.
 - Quality Manual
 - Contract / Purchase Order Review
 - Identification and Traceability
 - Control of Nonconforming Material
 - Control of Customer Property
 - Process Control
 - Measurement and Monitoring of Product
 - Training
 - Preservation of Product
 - Control of Quality Records

- Internal Audit
- FOD Control Program

2. Quality Clauses

- 2.1. Quality Clauses (QC) serve as the basic quality requirements considered for aerospace, defense, sports-grade, and industrial standard quality requirements associated with products and/or services used to support production related activities to customers.
- 2.2. Suppliers are to comply with the requirements of all Quality Clauses.
- 2.3. Quality Clauses are intended to be an addition, not an exception to, purchase order requirements.
- 2.4. Refer to the Applicability by Industry Table. The Applicable to all Industries is required for all suppliers. In addition, each industry (i.e. Aerospace, Defense, Industrial, etc.) may have specific requirements. Each supplier, service provider and distributor must be fully aware of their applicability to CMA. Communicate with CMA Buyer to resolve any uncertainty.
 - 2.4.1. Applicable Industry categories include: All, Aerospace, Defense, Automotive, Sports-grade, Industrial, Calibration Services, Laboratory Testing Services, and Equipment Maintenance and Services.
 - 2.4.2. When a supplier provides products to more than one applicable industry (see Applicability by Industry Table below), then the most stringent Industry Type Quality Clauses would be applicable (i.e. a supplier of both sports-grade and aerospace product is required to meet and maintain Aerospace Quality Clauses. *Example*: QC11 - 15 year (Aerospace/Automotive) quality record retention compared to QC11a - 3 year (Sports/Industrial Grade) record retention.

Applicability by Industry Table

Industry Type	Quality Clauses
Applicable to <u>all</u> industries Note: specific industry types below are also required in addition to these clauses*	QC01, QC02, QC03, QC04, QC05, QC06, QC12, QC13, QC20, QC22, QC23, QC24, QC29, QC33
Aerospace (space, civil, etc.)	QC07; QC08, QC10, QC11, QC14, QC15, QC17, QC18, QC24a, QC25, QC26, QC26a, QC27, QC27a, QC28, QC30, QC31, QC32
Defense (aerospace and non- aerospace)	QC07; QC08, QC10, QC11a non-aerospace / QC11 aerospace, QC14, QC15, QC17, QC18, QC25, QC26, QC27, QC28, QC30, QC31, QC32
Automotive	QC07a, QC08, QC10, QC11, QC14, QC17, QC18
Sports-Grade / Industrial	QC07a, QC08, QC10, QC11a, QC14, QC17, QC18
Calibration Service Suppliers	QC11a, QC21
Laboratory Testing Services	QC11a, QC21
Equipment Maintenance & Service	QC11a



Quality Clause Table

#	Quality Clause	Description
QC01	Notify CMA of Business or Process Changes	The manufacturer or distributor shall not make any significant changes in CMA material including but not limited to: the composition, the raw materials, suppliers, the manufacturing process, the manufacturing process conditions, the test methods, quality control procedures, the process equipment or the plant site without prior coordination and written CMA approval.
		Upon review of the proposed changes, CMA may require additional information and/or approval prior to implementation.
QC02	Notify CMA of key personnel changes	CMA shall be notified via Formal Communication of any key personnel changes (QMS Management Representative, Quality Manager, and / or higher executive, Plant Manager, President or equivalent) that will affect their management system (address/location, quality system approval level/type).
QC03	Notify CMA of changes in Manufacturing Name or Location	Supplier shall immediately notify CMA via Formal Communication of any changes to the name or address of the manufacturing and/or distribution facility.
QC04	English Language	 Supplier shall make specified quality data and/or design data available in the English language. Any correspondence or data submitted to CMA in support of requirements contained herein are to be in English. Quality Data may include and is not limited to: Quality Manual, Quality Manual Table of Contents, Certificate of Analysis; Certificate of Conformance.
QC05	Inspection	Supplier shall inspect or otherwise verify that all products or services, including those supplied by a sub-contractor or supplier shall comply with the requirements of the Purchase Order prior to shipment. Supplier shall be responsible for all tests and inspections of the product during receiving, manufacturing, and final inspection. Supplier agrees to furnish copies of test and/or control data upon request from CMA's procurement representative.
QC06	Control of nonconforming product	When CMA notifies the supplier of a detected nonconformance received at CMA or at the end-customer, the supplier shall take immediate action to contain and prevent shipment of all affected products within the supplier control and minimize the impact to CMA.



Supplier Quality Requirements Manual

	Notice of Escapement	Upon discovery of nonconforming or suspected nonconforming product that has been shipped to CMA, the supplier shall notify CMA and submit via Formal Communication a Notice of Escapement (NOE) within <u>24 hours</u> to CMA Quality Assurance via <u>supplierquality@toraycma.com</u> . The written Communication shall consist of the following information as applicable:
QC07		 Part number and description Nonconformance description Suspect lot number range (POs, delivery dates, dates of manufacture) Potential effect to performance, reliability, and safety Recommended disposition Containment plan Preliminary root cause and corrective action Replacement schedule
		After Communication to CMA of escapement, the supplier shall continue investigation and determine Root Cause and Corrective Action (RCCA).
	Notice of Escapement	Upon discovery of nonconforming or suspected nonconforming product that has been shipped to CMA, the supplier shall notify CMA and submit via Formal Communication a Notice of Escapement (NOE) within <u>3 business days</u> , Written Communication shall be provided simultaneously to CMA Quality Assurance via <u>supplierquality@toraycma.com</u>
		The written Communication shall consist of the following information as applicable:
QC07a		 Part number and description Nonconformance description Suspect lot number range (POs, delivery dates, dates of manufacture) Potential effect to performance, reliability, and safety Recommended disposition Containment plan
		 Containment plan Preliminary root cause and corrective action Replacement schedule
		After communication to CMA of escapement, the supplier shall continue investigation and determine Root Cause and Corrective/Preventative Action.



QC08	Material Review and Supplier Advanced Rejection Notice	 If the supplier has reason to believe that the product does not conform to CMA Purchase Order (PO), TCSC or Procurement Agreement requirements, but may be acceptable for use, the supplier shall complete a Supplier Advanced Rejection Notice (SARN) (either Supplier's form, or CMA's form available upon request). Nonconforming product shall not be shipped unless CMA approves the request. These requests shall be routed through supplierquality@toraycma.com. If approved, a copy of the approved request shall accompany the shipment. When the following is known, written Communication shall include: Affected process(es) or product number and name Description of the nonconforming condition and the affected requirement CMA purchase order/line item/release, manufacturer lot number, quantities, and dates shipped to CMA.
QC10	Distributor Responsibility	Distributors, as a direct supplier to CMA and/or the representative of the Manufacturer, are responsible for compliance with all procurement action requirements. The applicable requirements of all quality clauses, and any technical requirements listed on the purchase order will apply to both the Distributor and the Manufacturer of the product.
QC11	Quality Record Retention	Suppliers shall retain documented information (quality records for products, equipment or services provided to CMA), including retention periods and disposition requirements. Retention shall be for a minimum of <u>15 years</u> after the requirements of the procurement action have been delivered. Once the minimum document retention has been met, the documents may be dispositioned at the supplier's discretion per the supplier's internal procedure. Any retained records that will be discarded and that contain information proprietary to CMA must be permanently destroyed in a manner that will prevent their inadvertent release to any other entities. Quality records: Records used to demonstrate conformance to specified requirements and the effective operation of the quality system. Records may be retained in hardcopy or by electronic means.



		Suppliers shall retain documented information (quality records for products, equipment or services provided to CMA), including retention periods and disposition requirements.
QC11a	Quality Record Retention	Retention shall be for a minimum of <u>3 years</u> after the requirements of the procurement action have been delivered. Once the minimum document retention has been met, the documents may be dispositioned at the supplier's discretion per the supplier's internal procedure. Any retained records that will be discarded and that contain information proprietary to CMA must be permanently destroyed in a manner that will prevent their inadvertent release to any other entities
		Quality records: Records used to demonstrate conformance to specified requirements and the effective operation of the quality system.
		Records may be retained in hardcopy or by electronic means.
	12 Certificate of Conformance	Dependent on the type of product procured by CMA, the Supplier is required to provide with each shipment of product a document (Certificate of Conformance Certificate of Analysis, etc.) with a statement of conformity that contains the following at a minimum unless specified differently in the TCSC or Procurement Agreement: • Manufacturer Name • Certificate issue date
		 Specification Code Actual Test Results Lot Number Shipment Quantity TCSC or Procurement Agreement and their revision as applicable
QC12		NOTE: A Certificate of Conformance document must accompany each shipment, be on company letterhead and contain a supplier representative's signature (electronic is acceptable). It must also include a statement that the product provided meets the purchase order requirements.
		When agreed upon in writing, certain suppliers may provide Certificate of Conformances (CoC) via email in advance of shipments or be provided access to CMA's web portal to allow direct upload of the CoC and other relevant documentation; or the CoC may be emailed in lieu of providing a hardcopy certificate with each shipment.
		Distributors - A CoC from the Manufacturer is required at the time of shipment of product.



QC13	Supplier flow down requirements to sub-tier suppliers	Direct suppliers to CMA will flow down applicable quality and purchase order requirements to their sub-tier suppliers to ensure the integrity of the specified requirements are maintained throughout the entire supply chain.
QC14	Sub-contracting – manufacturing or process	CMA must be notified via Formal Communication when supplier chooses to use any outside manufacturer or process through written consent by CMA Quality Assurance, Supply Chain Management, and Technical. Once approved, Supplier shall flow down to Sub- contractors any/all applicable requirements in the purchasing documents, including key characteristics, where required.
		Note: The supplier is required to obtain written approval from CMA prior to any subcontracting outside of the United States.
QC15	Foreign Object Debris (FOD) Control Program	The supplier is required to establish and maintain a FOD prevention program in compliance with AS/EN/SJAC 9146.
QC17	Shelf life	Manufacturing dates shall be as defined in the relevant TCSC or Procurement Agreement; if there is no TCSC or Procurement Agreement then the manufacturing dates shall be noted on each individual container label and Certificate of Conformance.
	Protection of	Materials which are volatile or toxic in nature shall be properly packaged in accordance with the applicable Code of Federal Regulation.
QC18	product against contamination or	Product must be boxed, banded, or shipped in a manner that will ensure that no damage will occur.
	damage, labeling and SDS	Containers shall be plainly marked as to the contents with appropriate warnings, precautions, instructions, and storage conditions.
		Appropriate Safety Data Sheet (SDS) shall be provided with all shipments as applicable.
	Supplier Quality Performance Rating (QPR)	CMA expects all suppliers to review their Supplier Quality Performance Rating (QPR) report.
QC20		Suppliers that do not achieve the minimum score provided directly on the QPR report may receive a Supplier Corrective Action Request (SCAR); be subject to additional intervention and surveillance from CMA including but not limited to: an onsite audit, source inspection, or additional oversight as applicable.
QC21	Calibration Certificates	The calibration supplier shall provide a Certificate of Calibration for each item calibrated. The certificate must include the date of calibration, readings "as received" and "after adjustment" as applicable; calibration due date, model and serial number of the equipment used in the calibration and a statement that all equipment / standards used are traceable to NIST (National Institute and Technology) or other recognized International standard".



Supplier Quality Requirements Manual

	Statistical	The supplier shall use Statistical Process Control (SPC) to reduce key characteristic variability, improve productivity and reduce cost.]
QC22	Process Control	Statistical process control is required. Provide SPC data, when requested, for key characteristics: supplierquality@toraycma.com	
QC23	Right of Entry	CMA and/or CMA's customer or government / regulatory agencies will have the right to survey all applicable facilities involved in CMA product and the right to survey all applicable records (items, materials, components and processes used in CMA products) will be granted to Buyer, Buyer's customer and government / regulatory authorities. Supplier's sub-tier suppliers are also subject to this surveillance.	
QC24	Supplier facility visit	CMA, and/or CMA's customers or government/regulatory agencies may visit the Supplier's facility and/or their sub-tier Suppliers for the purpose of verifying compliance and product conformity (i.e., inspection, product audit, and quality system audit). Supplier will provide necessary support to the visiting personnel. Arrangements for such visits shall be coordinated through the CMA Supply Chain Management (SCM).	
QC24a	Supplier facility visit	If the Supplier uses an Operator Self-Verification (OSV) program, the Supplier must comply with the requirements set forth in AS/EN/SJAC 9162, "Aerospace Operator Self Verification Programs", as may be amended from time to time. Buyer reserves the right to conduct surveillance at Supplier facility to determine that Supplier is compliant to the requirements of AS/EN/SJAC 9162.	R
QC25	Manage Sub-tier Risk	The supplier shall identify and manage the risks associated with the external provision of processes, products, and services, as well as the selection and use of sub-tier suppliers.	
QC26	Supplier Sub-tier Requirements	The supplier shall require that sub-tier suppliers apply appropriate controls to their direct and sub-tier supplier, to ensure that requirements are met.	
		When Supplier utilizes test reports to accept raw material from External Providers, the following requirements apply: a) Test reports must be checked 100% against Supplier's requirements and applicable specifications.	R
QC26a	Supplier Sub-tier Requirements	b) Validation test requirement: Supplier must periodically validate test reports for raw material accepted on the basis of test reports. That validation must be accomplished by Supplier or other independent party through periodic, scheduled tests of raw material samples. Schedules for frequency of tests will be established by Supplier based on historical performance of the raw material provider/manufacturer.	
		c) Supplier must retain test reports provided by the raw material provider/manufacturer, as well as Supplier's validation test report results as quality records traceable to the conformance of Goods, as specified elsewhere in this Contract.	



QC27	Counterfeit products	The supplier shall plan, implement, and control processes, appropriate to the supplier and the product, for the prevention of counterfeit or suspect counterfeit products used and included in product(s) delivered to CMA.	R
QC27a	Counterfeit products Applicable where Boeing Specifications Require supplier to use particular approved process provider(s)	Supplier must comply with Boeing document D1-4426 "Approved Process Sources" (http://active.boeing.com/doingbiz/d14426/index.cfm). This document, subject to revision from time to time, defines the approved sources for special processing, composite raw materials, composite products, aircraft bearings, designated fasteners, and metallic raw materials. The Supplier's purchasing information must conform to the purchasing data requirements of Boeing document D1- 4426 Appendix D. These purchasing data requirements can be found at: http://active.boeing.com/doingbiz/d14426/Appendix-D.pdf	R
QC28	Application of Acceptance	Seller shall, within its organization and its supply chain, ensure that the use of AAM is clearly defined within its Quality Management System (QMS). Seller shall, upon 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. Seller shall maintain compliance to the AAM requirements by assessing its process and supply chain as part of its internal audit activities. The areas of focus of this assessment shall include but not limited to: • Authority Media Application Errors (i.e. Omission, Typos,	
	Authority Media (AAM)	 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.) 	
QC29	Notify CMA of QMS certification suspension or withdrawn	Notify CMA immediately via Formal Communication if supplier's certification or registration is suspended or withdrawn (including NADCAP certification), or accreditation status of supplier's quality system is withdrawn.	
QC30	AS9100 Certification and Audit Report	AS9100 certified suppliers will have their certification uploaded in OASIS database and make their audit report available to Toray CMA upon request.	



QC31	Customer Designated or Approved External Providers	Use customer-desginated or approved external providers, including process sources (e. g., special processes)
QC32	Test Specimens	Provide test specimens for design approval, inspection/verification, investigation, or auditing
QC33	Ensure Awareness	 Supplier shall ensure that personnel are aware of: Their contribution to product or service conformity and product safety; and the importance of ethical behavior.

3. CMA Supplier Approval

Supplier Approval

- a. A supplier's initial approval will be contingent on a successful review of the following requirements:
 - Quality Management System
 - Supply Chain Management
 - Technical
 - Compliance
 - Safety and Environmental
 - Accounting
 - Other

*Note: Approval does not infer in any way an obligation to CMA to issue a purchase order.

4. Surveillance

CMA Quality Assurance or Supply Chain Management may perform surveillance activities with suppliers during their approval duration. These activities may include, but are not limited to:

- Supplier Assessments
- Onsite Audits
- Supplier development activities

5. Abbreviations

- ASL Approved Supplier List
- CAR Corrective Action Report
- CMA (Toray) Composite Materials America, Inc.
- CMRL Composite Material Research Lab
- CoC Certificate of Conformance
- OTD On-Time-Delivery
- PCD Process Control Document
- PO Purchase Order
- QMS Quality Management System
- QPR Quality Performance Rating
- SCM Supply Chain Management

TCMAN-Q-S100 Revision 10



SDS	Safety Data Sheet
SPC	Statistical Process Control
SQRM	Supplier Quality Assurance Manual
TCSC	Toray Composites Specification Control

6. Definitions

Approved Status	Suppliers with Approved Status have been assessed as able to provide materials meeting the quality assurance and technical requirements provided by CMA.
Conditional Status	During initial assessment, a supplier may be assigned this status if there are pending corrective actions or reviews for approval. This may also be assigned based on CMA customer approval.
Corrective Action	Action taken to correct the root cause of a problem or defect that prevents reoccurrence.
Critical Supplier	A supplier of a raw material or service that is used in main components of the final product or in primary processing components (fiber/fabric, resin, carrier material, as Delegated Suppliers). Single source supplier.
Delivery	Receipt of a material or service
Formal Communication	A Formal Communication can be provided via email or regular mail. The content should be provided on a suitable company document, such as Press Release, Nonconformance Report, Company letterhead, etc.
Informal Communication	An Informal Communication can be provided via email. Communication includes relevant company information and / or Communication.
On Time Delivery	Delivery within the period agreed to in the purchase.
Raw Material	Material cited in raw material specifications.
Rejection Rate	Quantity of rejected deliveries divided by total quantity delivered
Shall	Mandatory Requirement.
Should	Recommendation.

7. References

ANSI / NCSL Z540.3	Requirements for the Calibration of Measuring and Test Equipment
AS/EN/JISQ 9100	Aerospace Standard – Quality Management Systems – Requirements for Aviation, Space, and Defense Organizations
ISO9001	Quality Management
ISO10012	Requirements for Measurement Processes and Measuring Equipment
ISO/TS16949	Quality System Requirements
ANS / ISO / IEC 17025	General Requirements for the competence of testing and calibration laboratories
AS/EN/SJAC 9146	Foreign Object Damage (FOD) Prevention Program – Requirements for Aviation, Space, and Defense Programs.

TCMAN-Q-S100 Revision 10

8. Quick Link References

 Toray Composite Materials (America), Inc.
 http://www.toraycma.com/

 NADCAP
 http://www.pri-network.org/nadcap/

 International Aerospace Quality Group,
 Online Aerospace Supplier Information System (OASIS) http://www.sae.org/iaqg/

Links for accreditation certification bodies: AS9100 ISO/TS 16949 ANSI-ASQ

http://www.sae.org/iaqg/ http://www.iatfglobaloversight.org/ http://www.anab.org/

Contact CMA Quality Assurance E-mail Quick Links

supplierquality@toraycma.com

9. Revision History

Revision	Release Date	Change By	Description of Change
New	1-9-2014	K. Schiffel	New
A	9-9-2015	K. Schiffel	Revised retention period to minimum of 11 years
В	1-11-2017	J. Hart	 Significant changes to content and layout Scope, Applicability revised TCA contact email revised throughout document; 1.3 Revised and added Quality system requirements for all industries Added Applicability by Industry Table with Quality Clauses by Industry Revised Table of Contents Revised and added Quality clauses to the Quality Clause table. Renumbered all Quality clauses. Added Quality Clauses: QC03 QC04a, QC04b, QC05, QC07a, QC11a, QC15, QC21, QC22a, QC25 Revised Quality Clause QC04, QC06, QC09, QC11, QC12, QC13, QC15a, QC17, QC18, QC20, QC22, QC23 Revised Section 5 Revised Section 6 Revised Section 7
C	4/1/2017	J. Hart	Throughout the document, revised all TCA references to CMA (Toray Composite Materials America, Inc.). Revised email from TCASupplierQuality@toraytca.com to supplierquality@toraycma.com; Corporate Overview - revised Cover page – revised Table of Contents – revised; Applicability revised QC04 added to General; QC04A and QC04B removed 2.2 revised, removed "Additionally, a Quality Clause may be a part of a procurement action, either directly or by reference. The Quality Clause will be imposed with regard to procurement actions. These requirements generally will not be described in any other document and are exclusive to CMA. as noted in a CMA procurement action (Purchase Order) document. 2.3 Removed "A Quality Clause (statement of requirement) may be noted on the purchase order when a specific quality clause does not address a specific requirement." 2.4 Changed Supply Chain Management to Buyer 2.5 revised (transferred key elements to Applicability) 2.6.1 revised 2.6.2 revised Applicability by Industry Table - Revised Quality Clause Table QC4 revised; QC4a and QC4b removed QC20 Quality level revised from 80% to 90% QC24 Supplier facility visit – revised QC25 Manage Sub-tier Risk – added



D	6/22/2017	J. Hart	QC26 Sub-tier Supplier Requirements – added QC27 Counterfeit products - added Section 3 – Quality Assurance - revised Section 5 – Abbreviations - added Section 6 – Definitions – added Section 7 – AS/EN/JISQ 9100 – revised Supplier SQRM Acknowledgement – added Scope Added semicolons
			Applicability Removed "with the equivalent quality requirements" 1.3 Revised Defense and Space to "Space, Defense" 1.4 Added Application of Acceptance Authority Media (AAM) 2.1 Replaced "to be" with "for" QC01 Moved section for "Notify CMA of QMS certification suspension or withdrawn" to QC29 QC01 Removed "In addition to facility process change", QC02 revised "Notify CMA of QMS Changes" to Notify CMA of key personnel changes" Added "or equivalent" QC03 Revised wording to improve clarity QC07 and QC07A removed Cost of Nonconformity; changed "will" to "shall"; replaced "find" with "determine" QC08 Revised Supplier Advanced Rejection Form to Supplier Advanced Rejection Notice (SARN) QC09 Deleted Natural Disaster Occurrence / Program Interruptions QC16 Deleted Excess Inventory QC19 Deleted Export Controls QC20 Deleted "In the event of recurring or very serious issues impacting CMA's business, these measures may be at the supplier's expense. Under such circumstances, CMA reserves the right to debit or invoice supplier accounts to compensate for inspection or related activities that take place as a result of CMA directed inspections." QC24 Replaced "contract" with "compliance"; replaced "will" with "shall" QC28 and QC28A Added; QC28 added to Aerospace; Defense; QC28A added to Sports-grade, Industrial; Calibration Services, Laboratory Testing Services. QC29 Added Notify CMA of QMS certification suspension or withdrawn
E	11-9-2017	J. Hart	Section 1.2 revised definition of Aerospace; added new line for Defense Section 1.3 Removed FDA Section 1.4 removed reference to Application of Acceptance Authority Media. – Only required for AS9100 Rev. D (Aerospace / Defense applicability) Applicability by Industry Table – Revised Aligned definition of Aerospace and Defense to Section 1.2 Aerospace: Edit reference QC28a Defense: added "non-aerospace / QC11 aerospace" QC11 and QC11A revised. Updated working to align with AS9100 Revision D QC15 removed reference from General; added reference to QC15 via Aerospace, Defense

TCMAN-Q-S100 Revision 10



			QC28A Removed reference from Sports-grade / Industrial (i.e. automotive), Calibration Services and Laboratory Testing Services QC15 Edited QC24 Removed Quality Representative QC28 Edited – removed "Seller shall comply with the AS/EN/JISQ 9100 requirements regarding the application of the Acceptance Authority Media (AAM) requirements." QC28A Removed QC29 Added (including NADCAP certification) QC30 Added per CMA Quality request QC31 Added per AS9100 Rev. D QC32 Added per AS9100 Rev. D QC33 Added per AS9100 Rev. D
F	6-18-2019	J. Kaczynski	 7. Added AS/EN/SJAC 9146 2.4.1 Updated language to separate automotive as its' own category. 2.4.2 Updated example language for accuracy to 15 years and correct QC clause. Applicability by Industry Table: Separated Automotive as its' own category and added appropriate clauses. QC11: Updated from 11 to 15 years record retention. QC20: Updated wording for increased process inclusion of the Multiple CMA sites.
G	10-30-2019	S. Ellison	Updated Applicability by Industry Table: - Removed QC 13 and QC 33 from Aerospace and Defense Industry Types - Added QC 13 and QC 33 to Applicable to All Industries
08	5-08-2020	S. Ellison	Revision Number changed due to migration to new Document Control system. No changes made to content. Revision 08 and G are interchangeable.
09	2-19-2021	S. Ellison	QC 11: Added disposition instructions for record retention QC 11a: Added disposition instructions for record retention QC 03: Added notification of change of distribution location
10	5-19-2023	M. Goodson	 -Added link to existing CMA Exception Form to Applicability Section. -Added clauses QC24a, QC26a, and QC27a to comply with flow down requirements of customer. -Added clauses QC24a, QC26a, and QC27a to Applicability by Industry Table. -Revised wording of QC27 for clarity.