

MEGGITT PROCEDURE

Quality Clauses QA-016

Company confidential

Approved By:	Title:	Digital Signature:
Karn Ghtaoura	Supplier Quality Manager	<i>APPROVAL HISTORY AVAILABLE PER EPDM HISTORY TAB.</i>

Document: QA 016 Quality Clauses
Revision: E
Function: Supplier Quality
Process owner: Supplier Quality Manager

REVISION RECORD SHEET

Revision	Date	Description	Author
1	08/02/2019	NEW PROCEDURE TEMPLATE. REMOVED THE FOLLOWING QUALITY CODES: Q1, Q2, Q6, Q7, Q9, Q14, Q15, Q18, Q20, Q28, Q29, Q32, AND Q40. ADDED SPS 718 AS A REFERENCED DOCUMENT. REMOVED REQUIREMENT TO ADD NOTICE OF FAI ON COC OR SHIPPER SLIP FROM Q19. CLARIFIED VERBIAGE ON Q19 CLAUSES. UPDATED DOCUMENT NAME FROM QA-16 TO QA-016.	- *
2	9/26/2019	UPDATED Q23 TO INCLUDE THE NEW DFAR SPECIALTY METAL CLAUSE. UPDATED Q19 PARTIAL FAI REQUIREMENTS TO MATCH SAE AS9102 UPDATED HEADER TO SPECIFY NAME AND REV.	- *
3	10/24/19	UPDATED CLAUSE Q8 TO INCLUDE UNAUTHORIZED MATERIAL SUBSTITUTIONS PROHIBITION. ADDED APPLICABILITY TO SUB-TIERS IN SECTION 2.	- *
4	2/05/2020	UPDATED CLAUSE Q8 TO INCLUDE CHAIN OF CUSTODY & FULL PEDIGREE REQUIREMENT; UPDATED Q8 TITLE. ADDED WEBSITE LOCATION IN SECTION 3.0 REMOVED WEBSITE REFERENCE FROM Q41. CORRECTED TYPO IN Q19.	- *
5	TBD	REMOVED "COMPANY CONFIDENTIAL" HEADER. REMOVED REVISION FROM THE HEADER. REPLACE WKR WEBSITES COMBINE Q13 & Q41 UPDATED 2 ND HALF OF Q11 UPDATE ALL CLAUSE TITLE TO CAPS REMOVED Q42 CLARIFIED Q19 REQUIREMENTS. ADDED Q43.	- *
6	10/13/20	ADDED FIRST ARTICLE ON FILE & AVAILABLE UPON REQUEST TO Q19.	- *
7	12/02/2020	UPDATED Q13 BY REPLACING QN FORM WITH (PMRR). THE PMRR IS AVAILABLE FROM THE BUYER AND SHALL BE SUBMITTED TO THE BUYER FOR PROCESSING. UPDATE WKR.COM WEBSITE IN Q17 & Q35 WITH CURRENT MEGGITT SITE: HTTPS://WWW.MEGGITT.COM/PRODUCTS-SERVICES/FLOW-CONTROL-VALVES/ REQUEST UPLOAD OF FLYSHEETS QA4-104 AND QA4-105 TO ABOVE MEGGITT WEBSITE. FLYSHEETS AVAILABLE IN SMARTEAM. UPDATE NADCAP TO NADCAP. (NADCAP IS NOT AN ACRONYM) LOCATED IN Q11 & Q35. Q8 - ADDED: PURCHASE ORDER NAMES / P.O. NUMBERS AND /OR COMPANY NAMES MUST FLOW DIRECTLY THROUGH ALL SOURCES ON PURCHASE ORDERS OR CERTIFICATION DOCUMENTS.	- *

Revisions continued on next page...

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REVISION RECORD SHEET

Revision	Date	Description	Author
A	1/19/2021	UPDATED TO LATEST MFT-3 TEMPLATE. ADDED NEW CLAUSE Q44 CYBER SECURITY PROVISIONS. FUTURE REVISIONS TO BE LETTER BASED (REQUIRED BY NEW EPDM SYSTEM).	S. RODEA T. HINES
B	5/14/2021	CLARIFIED Q13 CLAUSE TO ADD TEO REQUIREMENTS	E. SIERRA
C	6/17/2021	<ol style="list-style-type: none"> ADDED EXCEPTION TO Q8, Q11, and Q19 CLAUSES FOR COMMERCIAL OFF-THE-SHELF AND STANDARD CATALOGUE PARTS: "Commercial off-the-shelf and standard catalogue parts are exempt from this requirement unless explicitly required by drawing and/or PO. All certifications for objective evidence of conformance must be kept on file and available for review upon Meggitt request." Removed statement from Q11 "Special process certifications cover a certain "lot" quantity, so every shipment do not require a full cert package to be sent. For instance, multiple lots of material delivered at different times but manufactured at the same time, we only require one cert for that quantity of parts; however supplier shall include a statement on the CoC or paperwork that certs have already been submitted for that specific lot. REMOVED LINK TO SPS718 ADDED LINK FOR MPRC-10 	K. GHATAOURA
D	2/16/2022	Q19 added requirement for Net-Inspect Q33 – changed link as the link was broken Q43 – changed requirement from Aerospace to Net-Inspect Q45 - added Casting Tool Maintenance clause	K. GHATAOURA
E	11/17/2022	<ol style="list-style-type: none"> Modified Table at Q11, added secondary asterisk denotation after same table and added Excerpt after Q11 as Q11-1, to incorporate Customer COLLINS Supplier Quality System Requirements (ASQR-01), Production Part Approval Process – PPAP (ASQR-09.2), Supplier Sampling Requirements (ASQR-20.1), and Process Control Requirements (UTCQR-09.1); with intent to drive supplier conformance through flow down – section 11 Appendices. Adjusted Q19 "COTS" statement. 	K. GHATAOURA

* Previously indicated as "Approved".

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1. PURPOSE

The purpose of this document is to establish additional Quality Assurance requirements from those stated in Meggitt Global Supplier Quality Requirement Document (SQRD) MPRC-10. This document applies to all suppliers performing work pursuant to Meggitt Engine Systems – North Hollywood purchase orders.

2. SCOPE

Only the Q codes that appear on purchase orders are applicable. When the following requirements are identified within a Meggitt Engine Systems - North Hollywood purchase order, they become a part of the contract requirements and must be satisfied by the Seller and it's sub-tiers to fulfil the complete contract obligations of the purchase order. Where reference is made to specifications, standards or regulations noted in any of the requirements, the latest revision issued at the time of purchase order award shall be applicable on the Seller unless otherwise specified.

This revision only includes ACTIVE Q Codes. Any Q Codes that appear on purchase orders and are NOT on this list are INACTIVE and no longer applicable.

3. RESPONSIBILITIES AND AUTHORITY

Quality Systems Manager: Approves this document and periodically reviews for accuracy and adherence to standard.

4. DEFINITIONS AND ABBREVIATIONS

CoC:	Certificate of Conformance
DFARS:	Department of Defense FAR Supplement
FAI:	First Article Inspection
FAIR:	First Article Inspection Report
ISPM:	International Standards for Phytosanitary Measures
MSDS:	Material Safety Data Sheets
NDE:	Non-destructive evaluation
PMRR:	Preliminary Material Review Report
PO:	Purchase Order
QPL:	Qualified Products List
SQRD:	Supplier Quality Requirement Document
MGU-01	Abbreviations and Definitions Dictionary

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5. PROCESS INPUTS, OUTPUTS, AND MEASURES (TURTLE DIAGRAM)

N/A

6. PROCESS FLOW DIAGRAM (PFD)

N/A

7. PROCEDURE

Quality Codes:

Q3. SOURCE INSPECTION BY MCS - PRIOR TO SHIPMENT

All items covered by this Purchase Order are subject to inspection at the supplier's facility by a Meggitt (North Hollywood), Inc. Quality Representative prior to shipment. The supplier shall furnish, at no cost, acceptable facilities and equipment for the inspection. The supplier shall provide no less than forty-eight (48) hours advance notice to the Quality Representative to permit scheduling of source inspection for in-process inspections, Final inspections and/or Shipping inspections. Evidence of the completed source inspection shall accompany each shipment evidenced by the Inspector stamping and signing the supplier's shipping document. Notwithstanding the provisions of this clause, all items may be subject to inspection and acceptance by Meggitt (North Hollywood), Inc., Inc. and/or Customer / Government Representative to Meggitt (North Hollywood), Inc., by giving 48 hours' notice and shall be granted access to supplier's facility in order to accomplish Source Inspection and to inspect Tooling, Material, Certification Documents, and scheduling information.

Q4. SOURCE INSPECTION BY GOVERNMENT AGENCY

Government inspection is required prior to shipment from the supplier's facility. Upon receipt of this order, promptly notify the Government Representative who normally services your facility so that appropriate planning for the Government inspection can be accomplished. On receipt of this order, promptly furnish a copy to the Government Representative that normally services your facility or, if none, to the nearest Army, Navy, Air Force, or Defense Supply Agency Inspection Office. In the event the representative cannot be located, our purchasing agent should be notified immediately. The supplier shall report to the Government Representative any non-conformance found on Government source-inspected supplies and shall require his supplier to coordinate with his Government Representative on corrective action.

Q5. CERTIFICATION OF CONFORMANCE AND RECORD RETENTION

Manufacturer: Each shipment shall be accompanied by a legible, reproducible copy of a certificate of conformance that must state that all items contained within the shipment are in compliance with all applicable requirements of this Purchase Order and were produced with materials of which the seller can confirm conformance to applicable specifications and provide objective evidence thereof. The certificate of conformance must be dated and contain the signature of an authorized representative of the seller.

Meggitt (North Hollywood), Inc. Furnished Material: Each shipment must be accompanied by a signed, legible and reproducible copy of a conformance certification stating that the items were produced from materials furnished by Meggitt (North Hollywood), Inc. for the production of such items.

Distributor: The seller shall include documentation with each shipment that certifies items delivered under this contract conform to the requirements set forth in the procurement specification and any

applicable detail specifications. The seller shall deliver a certificate of conformance from the OEM or and OEM Authorized Distributor that identifies the locations of manufacture and procurement, applicable traceability information (i.e., date code, lot number, batch number, etc.), and part number. The certification must be dated and signed by an authorized representative of the seller.

Record Retention: The supplier shall retain records as required by this specification for minimum 10 years from the time of delivery, with a 90 day notification to the buyer prior to disposal. All records shall be made available upon request to the Buyer or Government Representative within 48 hours. Records shall provide evidence that the required inspections and tests have been performed, including part, component, or system identification, inspection or tests involved, number of items accepted or rejected. The records shall be suitable in format, accuracy, and completeness to permit analysis. Where numerical results are required, the actual values obtained shall be recorded. Where tape, film or other media are required, they shall be identified with the characteristics measured. Where defective or non-conforming material is involved, the records shall include the results on analysis and corrective action taken.

Q8. RAW MATERIAL CERTIFICATIONS

Each shipment must be accompanied by a legible and reproducible copy of all raw material mill certifications used to produce the items contracted for by this purchase order. In addition, a legible and reproducible copy of all chemical and mechanical analysis certification test reports shall be submitted for raw material. These reports must contain the signature and title of the authorized representative of the agency performing the test and must assure conformance for specification requirements.

Raw material certifications shall show clear traceability to the manufacturer(s) (Mill Certifications) of the raw material including ingot source, all thermos-mechanical processing (i.e. forging, rolling, drawing, etc.), heat treatment, chemical processing and inspections as required by applicable raw material specification requirements.

The raw material certification shall not disguise the pedigree of material or chain of custody by removal of a previous supplier's name, nomenclature or identification. Purchase order names / P.O. numbers and /or company names must flow directly through all sources on purchase orders or certification documents.

Commercial off-the-shelf and standard catalogue parts are exempt from this requirement unless explicitly required by drawing and/or PO. All certifications for objective evidence of conformance must be kept on file and available for review upon Meggitt request.

Material Deviations:

Unauthorized material substitutions are not permitted on Buyer's Goods. Unauthorized material substitution includes any deviation from the engineering definition of a raw material. Engineering definition includes Buyer design drawing and applicable specifications, product specification, form, size, shape, chemistry, melt method, origin, temper/condition, product testing or surface finish.

Q10. FUNCTIONAL TEST REPORT

Each shipment must be accompanied by a legible and reproducible copy of reports of actual test results identifiable with test parameters and products submitted. These reports must contain the signature and title of the authorized representative of the agency performing the test and must assure conformance to specified requirements. [NOTE: Functional tests are defined as operational inspections, e.g., mechanical, electronic, hydraulic, etc.]

Q11. SPECIAL PROCESS REQUIREMENTS

All special processes required by this purchase order shall be conducted by ISO/IEC 17025 Nadcap approved sources. Each shipment must be accompanied by a legible and reproducible copy of a certificate containing the signature and title of an authorized representative for all processes used such as heat treating, Non-destructive Evaluation [NDE], soldering, welding, environmental testing such as vibration, acoustic, shock, surface preparation and treatment, etc. The certificate shall include the processing used, the specification to which the special process conforms and the name of the agency that performed the process other than Seller.

When required, and as noted on the purchase order, Q-Codes for all special processing other than Q11, shall be performed only by those vendors approved for special processing and whose names appear on the approved vendors listings for the applicable specifications of the organizations listed below. *Processors not listed below shall be approved by Nadcap. Approved processors can be found by accessing web <https://www.eauditnet.com/eauditnet/ean/user/login.htm> or contacting your Meggitt (North Hollywood), Inc. buyer.

Commercial off-the-shelf and standard catalogue parts are exempt from this requirement unless explicitly required by drawing and/or PO. All certifications for objective evidence of conformance must be kept on file and available for review upon Meggitt request.

11a.	Boeing:	http://active.boeing.com/doingbiz/d14426/GetAllProcessors.cfm
11b.	Honeywell:	Use Nadcap https://www.eauditnet.com/eauditnet/ean/user/login.htm
11c.	Gulfstream:	Use Nadcap https://www.eauditnet.com/eauditnet/ean/user/login.htm
11d.	Raytheon:	http://qnotes.raytheon.com/
11e.	Northrop Grumman:	https://oasisext.myngc.com/sympreq/aspl/aspl.asp
11f.	Lockheed Martin:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm
11g.	Bell Helicopter:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm
11h.	General Dynamics Corp:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm
11i.	MD Helicopters:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm

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11j.	Hamilton Sundstrand:	Hamilton Sundstrand 80/85 Report - contact your MCS - Buyer
11k.	Kaman Aerospace:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm
11l.	BAE Aerospace:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm
11m.	Meggitt Defense Systems, Inc.	Contact your MCS – Buyer for MDSI approved special processor for Type III, CL 2 black anodize per Mil-A-8625, otherwise use Nadcap for other special processes. https://www.eauditnet.com/eauditnet/ean/user/login.htm
11n.	Sikorsky Aircraft:	Sikorsky Approved Processors List, contact your MCS - Buyer
11p.	GE:	Use Nadcap https://www.eauditnet.com/eauditnet/ean/user/login.htm unless otherwise specified on SSL for applicable part number Specifications S-1000, S-400 and S-450 requirements apply as applicable.
11q	Collins/RTX	Use Nadcap https://www.eauditnet.com/eauditnet/ean/user/login.htm Collins/RTX RTXCDL found in ASQR-01 section 104.1.3

**CONTACT QUALITY ASSURANCE FOR SPECIAL PROCESSORS OTHER THAN A MEGGITT SOURCE CONTROL DRAWING SPECIFICATION, I.E. BUILD-TO-PRINT FROM ORGANIZATION LISTED ABOVE.*

**See Q11-1 "SUPPLIER QUALITY SYSTEMS REQUIREMENTS" for organizations performing work in support of components or assemblies specific to COLLINS Aerospace, regardless of whether or not the work being performed falls under the designation of a "SPECIAL PROCESS".*

Q11-1. SPECIFIC TO COLLINS/UTC

When an organization is providing manufactured product components or assemblies to Meggitt North Hollywood specific to end customer "COLLINS Aerospace", the supplier SHALL Obtain and comply with the following Collins -AEROSPACE SUPPLIER QUALITY SYSTEM REQUIREMENTS:

- ASQR-01 "Supplier Quality System Requirements" – sections 10, and 11 of QA-016
- ASQR-09.2 "Production Part Approval Process (PPAP)" – sections 10, and 11 of QA-016
- ASQR-20.1 "Supplier Sampling Requirements" – sections 10, and 11 of QA-016
- UTCQR-09.1 "Process Control Requirements" – sections 10, and 11 of QA-016

➤ **SEE section 11 - Appendices**

Q12. CERTIFICATION OF Q.P.L. SOURCE

The supplier shall include with each shipment, a dated certified statement that the items on the purchase order were produced by manufacturer holding a current approval to a Qualified Products List. Objective evidence to support this certificate shall be on file and made available for review upon request. In the case that the Seller is a Distributor or other than the manufacturer, then the manufacturer's name and location (city and state) shall be identified within Seller's shipping documentation.

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Q13. REPORT OF DISCREPANCY – QUALITY NOTIFICATION (QN)

Departure from drawings, specifications or other Purchase Order requirements shall be reported to Meggitt (North Hollywood), Inc. via completion of a Preliminary Material Review Report Concern Resolution Problem Summary Form (PMRR). The PMRR is available from the Buyer and shall be submitted to the Buyer for processing. At no time is known discrepant material to be shipped to Meggitt (North Hollywood), Inc. with or without verbal instructions from any employee. Upon disposition of USE AS IS the PMRR will be returned to you for inclusion with the product for shipment and the PMRR number will need to be reference on the CoC shipped with the parts. Discrepant product sent without the completed and dispositioned PMRR Form will be subject to rejection. Scrap from machine shop which is Meggitt furnished material shall be returned to Meggitt and indicated as scrap on a packing slip.

If the seller discovers a discrepancy in material that has been shipped or delivered to Meggitt (North Hollywood), Inc., the seller shall notify Meggitt within 24 hours. A PMRR shall be obtained from the buyer to document the issue and shall clearly and concisely state the discrepancy. The PMRR must also include the Purchase Order Number, Part Number, Lot or Serial Number, and number of parts affected. The seller shall examine all stock and WIP for similar discrepancies.

It is responsibility of the seller to request a current Temporary Engineering Order (TEO) from Meggitt. A PMRR shall be submitted to Meggitt for approval prior to start the work when the seller receives an, expired Temporary Engineering Order (TEO). Seller shall not start the manufacturing process with an, expired Temporary Engineering Order (TEO) without receiving approval via a PMRR document from Meggitt.

Q16. REVIEW OF SUPPLIER'S DOCUMENTATION

The following data and documents in vendor's format shall be available for review by Meggitt (North Hollywood), Inc. at pre-shipping Source Inspection, if required, and shall accompany the hardware when it is shipped. This is not an all-inclusive list, but should be considered the minimum requirements.

1. Material Certifications and Test Reports [physical and chemical].
2. Inspection data consisting of the following as a minimum:
 - a. Actual measured values for 100% of the feature characteristics identified on the drawing.
 - b. Identification of traceable inspection tools and equipment used to verify acceptance.
 - c. Traceability to the individual performing the inspection.
 - d. Ultrasonic inspection certification to SAE AMS-STD-2154
 - e. NDT Test Personnel Certification.
 - f. Charts or other time/temperature data records for required processes.
 - g. Non-conformance reports.
 - h. Certification of Conformance

Q17. D5 PROGRAM

Frozen process requirements of Meggitt (North Hollywood), Inc.'s Quality Engineering Instruction 2-7 apply. All processing shall be performed per Fly Sheet (document) #QA4-104 which can be downloaded from the following web site address: <https://www.meggitt.com/products-services/flow-control-valves/> one lot delivery only, no partials accepted. Deviations from drawing requirements require prior Customer approval.

Q19. FIST ARTICLE INSPECTION REQUIREMENTS

First Article Inspection: The supplier is required to have a valid AS9102 First Article on file at all times and provide it to Meggitt upon request. Additionally, the supplier shall perform a First Article Inspection Report, **within Net-Inspect Website (see Q43)**, and provide documentation in accordance with specification SAE AS9102 when one of the following applies:

Full FAI:

- New part introduction
- New supplier or new location of manufacture
- Lapse in production for more than 2 years
- When required by the customer

Partial (Delta) FAI

- A change in the design characteristics affecting fit, form, or function of the part.
- A change in manufacturing source(s), process(s), inspection method(s), location of manufacture, tooling, or materials that can potentially affect fit, form, or function.
- A change in numerical control program or translation to another media that can potentially affect fit, form, or function.
- A natural or man-made event, which may adversely affect the manufacturing process.
- An implementation of corrective action required to complete a previous FAI.
- A lapse in production for two years shall require an update for any characteristics that may be impacted by the inactivity. This lapse is from the completion of last production operation to the actual restart of production.

The First Article Inspection Report [FAIR] must include all blueprint notes and dimensions. The supplier must use the FAIR forms contained within the SAE AS9102 specification and an itemized drawing must be included. The complete FAIR must accompany the part[s] shipment.

Commercial off-the-shelf and standard catalogue parts are exempt from this requirement unless explicitly required by drawing "Modification" and/or Explicit PO Instruction that modifies the Standard Catalogue Hardware. All certifications for objective evidence of conformance must be kept on file and available for review upon Meggitt request.

The following are additional requirements that suppliers must be compliant to:

- FAI must be completed using the latest AS9102 forms or equivalent. Equivalent form must cover all required fields within the latest revision of SAE AS9102.
- FAI must be submitted via Net-Inspect (see Q43) before the hardware is shipped.
- Digital copies of the supplier's certifications in the FAI package must be submitted to the "E-Source" Module in the Net-Inspect Portal; for those suppliers that have yet to gain access to Net-Inspect, you must get in contact with your specific Meggitt Procurement associate who will provide you an Email to submit your electronic documents. Hard copies must also be submitted with the shipment of parts.
- Parts must remain in the supplier's possession until an approval from Meggitt on the FAI submission has been received. The supplier may contact their buyer if no approval has been received within 48 hours.

Foundry Control: A full Foundry Control sample shall be submitted prior to release of production castings. Foundry Control shall consist of, but not be limited to Material Analysis, both Chemical and Physical, NDT Testing, and Dimensional Inspection. The Foundry Control sample must accompany the part[s] shipment and must be identified as such and include all required supporting documentation. Fabricators shall perform, document and make available on request, layout inspection data on all characteristics, hidden and exposed. The inspections shall demonstrate adequacy of gauging, completeness of manufacture and compliance to drawing. Tool acceptance is subject to first article approval by Meggitt (North Hollywood), Inc. and Tooling may be recalled at no cost or liability.

Q21. SHELF LIFE AND TEMPERATURE SENSITIVE MATERIALS

Synthetic rubber materials shall be packaged in either Kraft paper, or UV-resistant .075mm min thickness polyethylene, or salt-free metal-foil bags. Opaque packaging is preferred. Packaging materials shall be free of copper naphthenates or creosote preservatives. Package shall contain no more than 50 units.

Each package shall be identified with cure date (Quarter-Year), part number, manufacturer and/or distributor names. Unless otherwise specified, maximum age of elastomer at the time of acceptance at Meggitt (North Hollywood) shall be 90% of shelf life from the cure date. All temperature sensitive material shall be identified on the outside of the packaging.

All consumables (i.e. paint, adhesives, epoxies, potting, etc.) shall be 90% of shelf life from the cure date unless prior approval is received.

Q22. IDENTIFICATION, SERIALIZATION AND TRACEABILITY

All hardware shall be identified in accordance with drawing requirements, which include serial number, lot number or by a permanent part number, configuration, foundry identification and melt number, or by a traceable chemical, physical analysis and heat treat.

Contact Meggitt (North Hollywood), Inc. - Quality Department for assignment of proper sequence of serial numbers.

Q23. SPECIALTY METALS SOURCE OF SUPPLY

The supplier must provide "Specialty Metal Certificate of Conformance" which must be in compliance to DFARS 252.225-7009. The preference is for domestic specialty metals, when assemblies, sub-assemblies, component parts, or raw material delivered contain specialty metals. Refer to <https://www.meggitt.com/siteterms/> under the "Meggitt (North Hollywood), Inc." section for reference.

Q24. GOVERNMENT / CUSTOMER FURNISHED MATERIALS

The materials provided on this purchase order are furnished by the Government/ Customer. The supplier shall maintain a system that includes: Inspection for transit damage, completeness and type. Periodic inspection for handling damage and deterioration during storage. Functional testing when required. Proper identification and verification of quantity and protection from improper use or disposition. Non-conforming or damaged property shall be reported promptly.

Q25. MATERIAL SAFETY DATA SHEETS [MSDS]

The materials covered by this purchase order are subject special handling requirements. Hazardous materials handling procedures are applicable to this order. Please supply one copy of the Material Safety Data Sheets [MSDS] for any hazardous material used in completion of this order. This requirement must be passed on to any subcontractors.

Q26. PACKING FOR SHIPMENT

All items require protection from physical, environmental, and mechanical damage. Parts shall be free of foreign object debris and packaging protection shall be accomplished by wrapping, cushioning, part compartmentalization, cartonizing, or other means to keep the parts from making contact between parts and to mitigate shock and vibration during handling and shipment. Part surfaces must be protected at all times. No staples are allowed in the packaging of materials. The standard practice for commercial packaging, ASTM D3951, is recommended. Items which have critical surfaces shall be packaged by supplier for protection against damage. Suppliers shall also be compliant to International Standards for Phytosanitary Measures No 15 (ISPM 15) to comply with US Department of Agriculture law if wood is used in packaging.

Q27. WELDING PROCEDURES

Weld Procedures and welder qualification data shall be submitted and approved by Meggitt Control Systems PRIOR to performance on this purchase order.

Q30. SOLDERING REQUIREMENTS

All soldering operations shall be performed in accordance with the following standards, ANSI/J-STD-001, NHB

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5300.4 as applicable. Acceptability and workmanship shall comply with IPC-A-610 and IPC/WHMA-A-620.

Q31. SPECIAL CERTIFICATION REQUIREMENTS FOR ATEX/CSA/UL/IECEX) ATEX 2014/34/EU

Declaration of Conformity with ATEX and CE latest standards

CSA/UL (North America) CSA/UL Certificate and / Authorization to Mark IECE ISO 80079-34 QAR issued by third party

Note: All products marking shall be traceable to the certificates provided by the supplier

Q33. FAR and DFARS SUPPLEMENTAL FLOWDOWN PROVISIONS

Goods furnished under this Purchase Order are for use under a United States (US) Government prime contract or subcontract. Seller shall comply with all applicable US Government provisions and clauses identified by Buyer as flow-down provisions for any order, including Federal Acquisition Regulation (FAR), Department of Defense FAR Supplement (DFARS), or other agency supplement contract provisions (together "FAR Clauses"). Suppliers' supporting Meggitt North Hollywood must review the attached link to MCS NoHo Terms and Conditions, IAW Form SCP-006

<https://www.meggitt.com/siteterms/> and Select Meggitt North Hollywood Supplement terms of purchase.

Q34. COUNTERFEIT PARTS CONTROL

All suppliers that use lower tier suppliers, including distributors, are required to attest to the authenticity of products from your respective sources of supply. Suppliers receiving materials and parts from lower tier suppliers, including distributors, must take immediate steps to verify that the stated manufacturer of any component is the actual manufacturer. Compliance shall be stated in the supplier's Certificate of Conformance or by a separate certificate. Suppliers shall comply in accordance with AS5553, AS6174 Counterfeit Electronic Parts, Avoidance, Detection, Mitigation, and Disposition to ensure that Counterfeit Work is not delivered. Work consists of those commodities delivered under this Contract that are the lowest level of separately identifiable items (e.g., articles, components, standard hardware, goods, raw materials and assemblies). "Counterfeit Work" means Work that is, or contains, items misrepresented as having been designed and/or produced under an approved system or other acceptable method. The term also includes approved Work that has reached a design life limit or has been damaged beyond possible repair, but is altered and misrepresented as acceptable. Seller shall notify the Buyer in accordance with Clause Q13 with the pertinent facts if Seller becomes aware or suspects that it has furnished Counterfeit Work. This clause shall be flowed to any sub-tier supplier used. The Meggitt (North Hollywood), Inc.'s "Terms and Conditions for Supplier Purchase Orders" counterfeit goods section applies.

Q35. PRESSURE EQUIPMENT DIRECTIVE 2014/68/EU

Special Process requirements of Meggitt (North Hollywood), Inc.'s Quality Assurance Procedure 24 apply. All processing shall be performed per Fly Sheet (document) #QA4-105 which can be downloaded from the following web site address:

<https://www.meggitt.com/products-services/flow-control-valves/>

Request upload of Flysheets QA4-104 and QA4-105 to above Meggitt website. Flysheets available in SmarTeam.

1.0 Material certificate,

1.1 EN 10204, Type 3.1 Material certificate required from the material manufacturer

1.2 Material manufacturer to be ISO9000 certified by an organization accredited and registered in the European Union (EU).

2.0 Material Testing

When an outside laboratory is used for material testing, the testing laboratory must be approved by A2LA or PED. EN10204, 3.2 type certificate required by outside laboratory.

3.0 NDT (Non-Destructive Examination)

NDT (Non-Destructive Examination) shall be done by PED approved or by American Association for Laboratory accreditation (A2LA) laboratory.

4.0 Special Process

Special process other than welding and NDT, shall be done by Meggitt approved suppliers or by Nadcap approved supplier Note:

Material Specification and Revision shall conform to the specification and revision called out on the PEDPMAxxx.

Q36. KEY CHARACTERISTICS AND STATISTICAL PROCESS CONTROL

The supplier shall comply with AS9103 for all features identified on Meggitt Engineering drawings or Purchase Orders as a Key, Critical, or CTQ Characteristics.

All data in Microsoft Word or Excel format must be submitted via email to supplierdata@meggitt.com before the hardware is shipped and a hard copy must also be included with the hardware.

Q37. PPAP

The supplier shall implement processes and procedures to perform APQP per MCS-QA-007. All PPAP objective evidence is required and must be approved prior to first part delivery. This will affect delivery of parts and should be taken into consideration when stating the first part delivery date commitment for required APQP elements that apply contact your responsible Meggitt Quality Engineer.

Q38. GE PRODUCTS

- a. This material will be used or supplied to GE as the end user. Therefore, supplier will adhere / compliant to the requirements of: Q5, Q8, Q11, Q13, Q22, Q23, Q26, and S-1000, S-1001 and S-1002 applicable requirements.
- b. All suppliers for GE material end user shall be aware of GE, S –requirements and maintain records for training and applications of the applicable requirements. As well as retain the records for the Audit purposes.
- c. Supplier required to provide records of 100% inspection of all GE end user materials (unless specified by purchasing order)
- d. Supplier shall use the latest versions of GE S-Specification that provided by the GE program QE or SQE in Meggitt.

Q39. SUPPLIER ETHICAL BEHAVIOR

The supplier shall ensure right of access to the facility, aerospace customer, or regulatory agency to visit facility or review Quality Records. The supplier shall ensure that their employees are aware of:

- a. Their contribution to product conformity;
- b. Their contribution to product safety; manufactured product must be free of burrs and sharp edges per Meggitt North Hollywood applicable drawing requirements;
- c. The importance of ethical behaviour which is covered in MFT-31 SQRD revision 2. MFT-31 SQRD must be filled out and submitted by key suppliers on a yearly basis and by non-key suppliers every 3 years.

Q41. OBSOLETE SPECIFICATION

Supplier shall comply with all specification called out on Meggitt Engineering Drawing. In any case where Meggitt engineering drawing or PO agreement calls out a superseded or obsolete specification, latest revision of SPS718 must be consulted for the approved alternate/superseded specification use. If the specification in question is not listed in SPS718, a PMRR must be submitted to Meggitt to approve the use of an alternate or obsolete specification.

Q43. NET-INSPECT PORTAL

Supplier is required to complete the pre-shipment checklists and submit certification documentation package via the Net-Inspect portal for Meggitt North Hollywood shipment approval. Suppliers using

THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF MEGGITT AND SHALL BE USED ONLY BY THE RECIPIENTS FOR THE PURPOSE FOR WHICH IT HAS BEEN SUPPLIED AND SHALL NOT BE DISCLOSED TO ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF MEGGITT.

UNCONTROLLED IF PRINTED OR STORED LOCALLY

Net-Inspect are exempt from providing paper documentation with shipment, except for a packing list and Net-Inspect transmission sheet.

There will not be any license cost or fees to the Seller for access and use of Net-Inspect. Access to Net-Inspect can be requested here: <https://www.net-inspect.com/Contact/#request-account>.

Q44. DFARS 252.204-7012

This DFARS clause defines CDI to include four different categories: (1) covered technical information ("CTI"); (2) operations security; (3) export controlled information; and (4) any other information, marked or otherwise identified in the contract, that requires safeguarding or dissemination controls.

Q45. CASTING TOOL MAINTENANCE

Supplier is required to inspect casting tooling dimensionally and submit inspection report to Meggitt on a biannual basis. If any discrepancies to the drawing are discovered or if any wear and tear is observed on the tooling, supplier is to request Meggitt to place PO for tool repair or new tooling.

8. RECORDS

N/A

9. IMPORTANT NOTES

N/A

10. REFERENCED DOCUMENTS

Meggitt Global Supplier Quality Requirement Document (SQRD) MPRC-10. – Website:
<https://www.meggitt.com/about-us/our-responsibility/global-terms-conditions/>

Standards Substitution Specification SPS 718 – Request from Meggitt Buyer or Supplier Quality

QA-016 Website: <https://www.meggitt.com/products-services/flow-control-valves/>

Collins/ RTX documents link: <https://www.rtx.com/suppliers/united-technologies-suppliers/united-technologies-asqrd>

- **APPENDICES**

COLLINS Supplemental Q11-1

- (ASQR-01, ASQR-09.2, ASQR-20.1, UTCQR-09.1)

Appendices Q11-1

This supplemental is provided to guide suppliers in compliance to **“COLLINS /RTX”** - **(ASQR-01, ASQR-09.2, ASQR-20.1, and UTCQR-09.1)**. The Purchase Contract will flow down MEGGITT Quality Clause Q11-1 when the supplier is performing work in regard of a COLLINS/UTC contract.

REVISION RECORD SHEET

Revision	Date	Description	Author
NC	11/17/2022	Added Excerpt after Q11 as Q11-1, to incorporate Customer COLLINS/RTX Supplier Quality System Requirements (ASQR-01), Production Part Approval Process – PPAP (ASQR-09.2), Supplier Sampling Requirements (ASQR-20.1), and Process Control Requirements (UTCQR-09.1); with intent to drive supplier conformance	Carlton Hazelwood

1.0 SCOPE

<p>MEGGITT</p> <p>QA-016</p> <p>Section 2.0</p> <p><u>SCOPE</u></p>	<p>Only the Q codes that appear on purchase orders are applicable. When the following requirements are identified within a Meggitt Engine Systems - North Hollywood purchase order, they become a part of the contract requirements and must be satisfied by the Seller and it's sub-tiers to fulfil the complete contract Obligations of the purchase order. Where reference is made to specifications, standards or regulations noted in any of the requirements, the latest revision issued at the time of purchase order award shall be Applicable on the Seller unless otherwise specified.</p>
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2.0 QUALITY CLAUSE Q11

<p>MEGGITT</p> <p>QA-016 Q11</p> <p>Paragraph 2</p> <p><u>Special Processes</u></p>	<p>When required, and as noted on the purchase order, Q-Codes for all special processing other than Q11, shall be performed only by those vendors approved for special processing and whose names appear on the approved vendors listings for the applicable specifications of the organizations listed Below. *Processors not listed below shall be approved by Nadcap. Approved processors can be found by accessing web https://www.eauditnet.com/eauditnet/ean/user/login.htm Or contacting your Meggitt (North Hollywood), Inc. buyer. Commercial off-the-shelf and standard catalogue parts are exempt from this requirement unless explicitly required by drawing and/or PO. All certifications for objective evidence of conformance must be kept on file and available for review upon Meggitt request.</p>
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3.0 COLLINS, SPECIAL PROCESSOR LIST

QA-104 FLYOUT	TABLE 1	Special Processors for COLLINS
Special process	supplier	Facility
Heat treating	Bodycote Thermal Processing Burbank Steel Treating Inc. Continental Heat Treating Inc.	All NADCAP certified facilities* Burbank, CA Santa Fe Springs, CA
Passivation	Aero Chrome Active Magnetic Inspection	Van Nuys, CA Sun Valley, CA
Electro polish	Aero Chrome Active Magnetic Inspection Electrolurgy	Van Nuys, CA Sun Valley, CA
Fluorescent Penetrant and/or Magnetic Particle Inspection	B-G Detection Service Aero Chrome Active Magnetic Inspection	Burbank, CA Van Nuys, CA Sun Valley, CA

4.0 QA-016 "Revision "E" changes

QA-016 REV. E	<ol style="list-style-type: none"> Modified Table at Q11, added secondary asterisked denotation after same table and added Excerpt after Q11 as Q11-1, to incorporate Customer COLLINS/RTX Supplier Quality System Requirements (ASQR-01), Production Part Approval Process – PPAP (ASQR-09.2), Supplier Sampling Requirements (ASQR-20.1), and Process Control Requirements (UTCQR-09.1); with intent to drive supplier conformance
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5.0 Quality Clause Q11 revised @ 11q in table

11a.	Boeing:	http://active.boeing.com/doingbiz/d14426/GetAllProcessors.cfm
11b.	Honeywell:	Use Nadcap https://www.eauditnet.com/eauditnet/ean/user/login.htm
11c.	Gulfstream:	Use Nadcap https://www.eauditnet.com/eauditnet/ean/user/login.htm
11d.	Raytheon:	http://qnotes.raytheon.com/
11e.	Northrop Grumman:	https://oasisext.myngc.com/sympreq/aspl/aspl.asp
11f.	Lockheed Martin:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm
11g.	Bell Helicopter:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm
11h.	General Dynamics Corp:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm
11i.	MD Helicopters:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm

11j.	Hamilton Sundstrand:	Hamilton Sundstrand 80/85 Report - contact your MCS - Buyer
11k.	Kaman Aerospace:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm
11l.	BAE Aerospace:	Use Nadcap: https://www.eauditnet.com/eauditnet/ean/user/login.htm
11m.	Meggitt Defense Systems, Inc.	Contact your MCS – Buyer for MDSI approved special processor for Type III, CL 2 black anodize per Mil-A-8625, otherwise use Nadcap for other special processes. https://www.eauditnet.com/eauditnet/ean/user/login.htm
11n.	Sikorsky Aircraft:	Sikorsky Approved Processors List, contact your MCS - Buyer
11p.	GE:	Use Nadcap https://www.eauditnet.com/eauditnet/ean/user/login.htm unless otherwise specified on SSL for applicable part number Specifications S-1000, S-400 and S-450 requirements apply as applicable.
11q.	Collins/RTX	Use Nadcap https://www.eauditnet.com/eauditnet/ean/user/login.htm Collins/RTX RTXCDL found in ASQR-01 section 104.1.3

6.0 Second asterisked paragraph added

Denotations after table shown above from QA-016 Rev. E

**CONTACT QUALITY ASSURANCE FOR SPECIAL PROCESSORS OTHER THAN A MEGGITT SOURCE CONTROL DRAWING SPECIFICATION, I.E. BUILD-TO-PRINT FROM ORGANIZATION LISTED ABOVE.*

**See Q11-1 "SUPPLIER QUALITY SYSTEMS REQUIREMENTS" for organizations performing work in support of components or assemblies specific to COLLINS Aerospace, regardless of whether or not the work being performed falls under the designation of a "SPECIAL PROCESS".*

7.0 QUALITY CLAUSE Q11-1 ADDED

QA-016 REV. E Added Q11-1 COLLINS/RTX	If the organization is providing manufactured product components or assemblies to Meggitt North Hollywood specific to end customer COLLINS Aerospace", the supplier <u>SHALL</u> Obtain and comply with the following Collins/RTX-AEROSPACE SUPPLIER QUALITY SYSTEM REQUIREMENTS:
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	<ul style="list-style-type: none"> • ASQR-01 "Supplier Quality System Requirements" • ASQR-09.2 "Production Part Approval Process (PPAP)" • ASQR-20.1 "Supplier Sampling Requirements" • UTCQR-09.1 "Process Control Requirements"
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8.0 AUTHORITY DOCUMENT LINEAGE -A-

Meggitt_Global_Standard_Purchasing_Conditions_US_Singapore_India_1_April_2020	
"GLOBAL TERMS AND CONDITIONS – US"	
Section 15 QUALITY ASSURANCE	15.1 The quality assurance requirements of Goods shall comply with your quality procedures as authorized by us, and with our applicable quality requirements including those set out in our Supplier Quality Requirements Document MPRC-10 ("SQRD") accessible under "Meggitt Group Supplier Quality Requirements" at http://www.meggitt.com/commercial

9.0 AUTHORITY DOCUMENT LINEAGE -B-

MPRC-10	
SUPPLIER QUALITY REQUIREMENTS DOCUMENT (SQRD)	

<p>Section 1.2</p> <p>APPLICABILITY</p>	<p>This Meggitt Supplier Quality Requirements Document (SQRD) is applicable to all suppliers who furnish product, material, processes or services that contribute to product quality for any Meggitt sites within Meggitt PLC. The quality system requirements specified herein are intended to form part of Meggitt contract requirements, and are in addition to all (contractual or other) requirements which may need to be complied with by the supplier, including any legal, regulatory or administrative requirements. For the purposes of this document, a contract exists when the supplier accepts an obligation to supply products or services to any Meggitt site, whether under a purchase order, long term agreement or otherwise. The acceptance by the supplier of a contract stipulating application of this document (total or partial) indicates acceptance of the content of this document. It is a requirement for the supplier to communicate and flow down these requirements to its sub tier sources. The supplier shall be able to provide the relevant evidence of such communication upon request by Meggitt. It is the suppliers' responsibility to ensure it implements any revisions of this document and its content within its own organization. The latest version of this document is available via https://www.meggitt.com/commercial</p>
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10.0 AUTHORITY DOCUMENT LINEAGE -C-

QA-016 MEGGITT PROCEDURE QUALITY CLAUSES	
<p>Section 1</p> <p>PURPOSE</p>	<p>The purpose of this document is to establish additional Quality Assurance requirements from those stated in Meggitt Global Supplier Quality Requirement Document (SQRD) MPRC-10. This document applies to all suppliers performing work pursuant to Meggitt Engine Systems – North Hollywood purchase orders.</p>
<p>Section 10</p> <p>REFERENCES</p>	<p>Meggitt Global Supplier Quality Requirement Document (SQRD) MPRC-10. – Website: https://www.meggitt.com/about-us/our-responsibility/global-terms-conditions/</p> <p>Standards Substitution Specification SPS 718 – Request from Meggitt Buyer or Supplier Quality</p> <p>QA-016 Website: https://www.meggitt.com/products-services/flow-control-valves/</p> <p>Collins documents:</p> <p>https://www.rtx.com/suppliers/united-technologies-suppliers/united-technologies-asqrd</p>