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Supplier Quality Requirements Manual

Rexnord Aerospace – Downers Grove, IL

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1.0 Purpose

This document establishes product assurance requirements for all supplies ordered under the governing purchase order, referencing this document, to assure that such products or services conform to the required levels of quality and reliability. It is noted that products and services purchased on the relevant purchase order are intended for use in applications, such as Aerospace, that require a high level of quality and reliability. The following supplementary provisions shall be applicable to the furnishing of the goods and services covered by the governing purchase order. The Seller, in accepting the order, agrees to be bound by these requirements and comply with the required provisions in all respects.

2.0 Scope

External providers delivering materials, product, services, or secondary processes, to a Rexnord Aerospace purchase order, in one of the applicable categories defined in Section 9.0 of this manual. This manual only applies to purchase orders provided from the Downers Grove, IL facility.

3.0 Normative References

- ISO 9001:2015 Quality Management Systems- Requirements
- SAE AS9100 Quality Management Systems- Aerospace – Requirements
- SAE AS9102 (R) Aerospace- First Article Inspections – Requirement

4.0 Terms and Definitions

Acceptance Authority Media (AAM): Stamps, digital signatures, or other media used to authenticate information.

Buyer: A Rexnord Aerospace associate authorized to purchase materials, products, services and secondary processes on behalf of the organization.

Certificate of Conformance (CoC): A document furnished by the supplier certifying that, to the best of the organization’s knowledge, the parts or materials provided comply with all relevant purchase order requirements.

First Article: A product manufactured for the first time.

Foreign Objects and Debris (FoD): Any material or contamination that can inadvertently affect the safety or conformity of a product or material.

Product (alternate definition: article): A product is a component or assembly.

Purchase Order: The contractual document specifying to the supplier, at a minimum and where applicable, the part number(s), quantities(s), revision level(s) and special requirements of the materials/parts to be purchased.

Raw Materials: Materials used to fabricate a product.

Secondary Processes: Value-added processing, usually defined as a ‘special process’, such as heat treat, or chemical processing.

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Shelf Life-Sensitive: A description of product having an expiration date or use-by date.

Source Inspection: A required inspection is when Rexnord Aerospace elects to perform the incoming inspection of the purchased product or material at the supplier's site.

5.0 Introduction

Rexnord Aerospace is committed to aggressive business growth and cannot do so without suppliers that can be counted on to provide superior products delivered on time. Our goal is to set our suppliers up for success and reward high-performers accordingly. The intent of this manually is to communicate our supply needs consistently and as all-encompassing as possible. Any questions with regarding the interpretation of this manual should be addressed to your buyer or supplier quality engineer. Moreover, the key to a successful supplier-customer relationship is communication, which is the recurring theme within this manual.

6.0 Order of Precedence in Supplier Requirements (Class Applicability: All)

The order of documents defining supplier requirements with regards to supplying product or materials to a Rexnord Aerospace purchase order is as follows:

1. The Rexnord Aerospace purchase order
2. The relevant accompanying drawing provided by Rexnord Aerospace
3. This Supplier Quality Requirements Manual

7.0 Supplier-Rexnord Aerospace Communications (Class Applicability: All)

The Rexnord Aerospace Buyer shown on the purchase order is the supplier's primary point of contact with that regards to that order and any commercial details. Rexnord Aerospace QC inspectors are authorized to communicate product rejections and requests for corrected quality documents to suppliers. **Nonconformity Reports (NCRs)** communicated by Rexnord Aerospace QC inspectors do not imply a request for corrective action unless one is issued by Quality Assurance (see Section 11.0). These may be communicated to ensure the supplier the opportunity to correct the condition and prevent further escapes. Any questions or concerns regarding rejections, requests for deviations, supplier corrective action reports or other Quality-related communicates should be directed to the Supplier Quality Engineer.

It is the responsibility of the supplier to communicate any requirements outlined in this manual to any of their affected sub-tier external providers where applicable.

8.0 Purchase Order Requirements, Interpretation and Contract Review (Class Applicability: All)

- a. The Rexnord Aerospace purchase order communicates, at a minimum, the required part numbers, revision levels, quantities and on-dock delivery dates. Any special requirements in addition to these

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details will be provided elsewhere in the body of the purchase order (see Section 6.0 above for interpretation of requirements). These may include supplemental requirements flowed down from Rexnord Aerospace customers, which are noted in the appendix of this manual. These requirements apply when their respective appendix number(s) is noted on the purchase order. Where the primary requirements and those in the appendix of this manual conflict, the requirements in the appendix shall supersede.

- b. The supplier is expected to perform a contract review upon receipt of a Rexnord Aerospace purchase order. The Rexnord Aerospace Purchasing department is responsible for communicating all relevant technical data, and any subsequent revisions, necessary to support the purchase order. The supplier is responsible for confirming they possess all relevant technical data, at the revision level(s) specified on the purchase order, before committing to fulfilling that purchase order.

9.0 Supplier Classes (Class Applicability: All)

Suppliers are categorized into supplier groups based on the scope of products or services the supplier sells. Each Section of this manual notes its applicability to the different supplier classes. The criticality of the scope of the product or service classes to our end products dictates our criteria for selection, evaluation, and re-evaluation of suppliers. The acceptable initial selection criteria may vary at the discretion of the Rexnord Aerospace Supplier Quality Engineer. The criteria for each supplier class are as follows:

Class 1	
Supplier Groups:	Suppliers that provide engineered components (i.e.: product machined to Rexnord drawings) and/or perform special processes (i.e: heat treating, chemical processing, non-destructive testing, etc.).
Minimum Criteria for Initial Supplier Approval:	<ul style="list-style-type: none"> • Customer required source, • AS9100 certification, • ISO 9001 certification, • (Required for All Special Processes) NADCAP certification with the relevant processes within their certification scope, • A supplier audit conducted, by a supplier quality engineer (alternate: Quality Engineer, Quality Compliance Manager or Director of Quality) using form number F-Q-0059 (Supplier Audit and Evaluation Form). The audit must have no nonconformities or all corrective actions must be accepted and verified by the auditor prior to supplier approval, or • <i>Demonstrated supplier Quality and Delivery performance prior to JUL/23/2014.</i>
Evaluation Frequency and Method:	Supplier scorecards reviewed monthly.
Re-Evaluation Criteria:	Review of 3 rd -party QMS certification or supplier audit.

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Class 2	
Supplier Groups:	Suppliers that produce or distribute hardware (i.e. screws, nuts, washers, fasteners, etc), or raw materials.
Minimum Criteria for Initial Supplier Approval:	<ul style="list-style-type: none"> • Customer required source, • ISO 9001 certification, • AS9100 or AS9120 certification, • A completed Rexnord supplier survey (form number F-Q-0058) with no nonconformities evident, or • A supplier audit conducted, by a supplier quality engineer (alternate: Quality Engineer, Quality Compliance Manager or Director of Quality) using form number F-Q-0059 (Supplier Audit and Evaluation Form). The audit must have no nonconformities or all corrective actions must be accepted and verified by the auditor prior to supplier approval.
Evaluation Frequency and Method:	Supplier scorecards reviewed monthly.
Re-Evaluation Criteria:	Review of 3 rd -party QMS certification or supplier audit.

Class 3	
Supplier Groups:	Calibration, engineering and test services.
Minimum Criteria for Initial Supplier Approval:	<ul style="list-style-type: none"> • Customer required source, • Calibration Services – ISO 17025 or calibrated by the OEM, • Test Services - A2LA accreditation or ISO 17025, • Engineering Services – FAA DER or DAR certification as applicable, • Other: A completed Rexnord supplier survey (form number F-Q-0058) with no nonconformities evident, or • Other: A supplier audit conducted, by a supplier quality engineer (alternate: Quality Engineer, Quality Compliance Manager or Director of Quality) using form number F-Q-0059 (Supplier Audit and Evaluation Form). The audit must have no nonconformities or all corrective actions must be accepted and verified by the auditor prior to supplier approval.
Evaluation Frequency and Method:	Supplier scorecards reviewed monthly.
Re-Evaluation Criteria:	Review of 3 rd -party QMS (or FAA) certification or supplier audit.

10.0 Supplier Performance Expectations and Measurement (Class Applicability: 1 and 2)

- a. Quality: Suppliers are expected to deliver products, materials and services that comply with all design and workmanship requirements defined within the relevant part drawing(s) delineated from the Rexnord Aerospace purchase order. Current Objective: ≥ 95%.
- b. On-Time Delivery: Suppliers are expected to deliver products, materials and services by the on-dock date noted on the Rexnord Aerospace purchase order. Any deliveries received after the on-dock date will be considered late. Deliveries may be made up to, but no earlier than, 7 days early (*Applicability: Component and OSP Suppliers Only*). Current Objective: ≥ 95%.

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- c. Supplier performance is measured and reviewed monthly through supplier scorecards. Supplier performance is measured as follows:
 - i. Quality: A supplier's monthly Quality rating is measured in terms of lot acceptance. Lot acceptance is calculated by the percent of PO line items, among all lots delivered that month, having passed incoming inspection, and yielding further rejections during internal processing at Rexnord Aerospace.
 - ii. On-Time Delivery: A supplier's monthly OTD rating is measured by the percent of PO line item, among all lots delivered that month, delivered on the PO on-dock date or earlier.
- d. Supplier corrective actions requests (SCARs) may be issued by Rexnord Aerospace Quality Assurance to suppliers that have failed to meet one or both of the objectives. The supplier is expected to complete the SCAR addressing the root causes of the low performance and submit the completed report by the noted due date. The supplier may use their own form as long as it includes the required inputs of the Rexnord Aerospace SCAR form.

11.0 Supplier Corrective Actions (Class Applicability: All)

Supplier Corrective Action Requests (SCARs) may be issued to suppliers to address supplier performance below monthly objectives (see Section 9.0), supplier audit findings, or to address particular supplier nonconformities. Unless otherwise directed, the supplier is expected to submit the completed SCAR by the noted due date(s) (containment and long term corrective action) to the Rexnord Aerospace Supplier Quality Engineer copying the appropriate Buyer. The supplier may use their own form as long as it includes the required inputs of the Rexnord Aerospace SCAR form. If your corrective action investigation needs more time that allotted to submit the plan, you may request an extension in writing.

12.0 Product Conformance Requirements (Class Applicability: All)

- a. Quality (Design Requirements): Suppliers are expected to deliver products, materials and services that comply with all design requirements defined within the part drawing(s) delineated from the Rexnord Aerospace purchase order.
- b. Quality (Workmanship): Unless otherwise specified on the governing drawing, at a minimum, all components and special processing must comply with Rexnord Aerospace specification SP-Q-1000 (Visual Inspection Standard).
- c. Certificates of Conformity (CoCs): All suppliers are expected to maintain a system for controlling and assuring the quality of the products and materials they provide against a Rexnord Aerospace purchase order, and certify their products or materials to that fact. All products and materials shipped per a Rexnord Aerospace purchase order are required to be accompanied with a certificate of conformance (CoC). The CoC must certify that, to the best of the supplier's knowledge, the relevant products or

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materials have been produced within the requirements of the supplier's quality system and have been verified to meet all applicable design and workmanship standards (Note: see exception in Section 12.0(d) below). Certificates of conformance must be signed by authorized personnel within the supplier's quality assurance system, or supported by a documented process that ensures certificates of conformance can only be issued after the products or materials have passed through the supplier's quality system. Acceptable signatures include signatures in permanent ink, or digital signatures supported by recognized authentication systems (i.e.: Adobe®). One's name typed using a cursive font does not constitute an authentic signature. The CoC content must reference the relevant Rexnord Aerospace purchase order number, part/specification numbers, part/specification revision levels, representative lot numbers, serial numbers (if components are serialized), and quantities.

- d. Temporary Deviation Requests: Temporary deviation requests may be made in writing to the Rexnord Aerospace Supplier Quality Engineer, copying the appropriate Buyer, using form number F-Q-0202 (Deviation Request Form). The supplier may not ship product until the deviation request has been formally approved in writing by Rexnord Quality Assurance. When approved, the supplier must include a copy of the approved deviation with the shipment and make reference to it on their certificate of conformance. Requests for design changes may be formally submitted to the Rexnord Supplier Quality Engineer. Purchasing must be copied on all requests.

13.0 Inspection, Statistical Sampling, Calibration and AAM (Class Applicability: All)

Inspection:

The supplier is responsible for planning and implementing inspection and testing at appropriate stages of their processes with controls to ensure positive release of product only after all inspection requirements have been satisfactorily met. Where process validation is periodically required, or inspection/test results are not immediately available, the supplier shall have the ability recall product if inspection or test results are not acceptable.

Calibration:

Inspection and testing activities shall be performed using equipment calibrated to standards traceable to NIST. The supplier shall maintain a calibration program (or outsource such activity) in accordance with ISO17025 or an equivalent standard.

Statistical Sampling:

The ANSI/ASQC Z1.4 C=0 sampling plan may be used unless 100% inspection is required by the governing Rexnord Aerospace purchase order. AQLs and alternate sampling plans shall be approved by Rexnord Aerospace Quality Assurance prior to implementation.

Eye Examinations:

Those performing inspection, and the calibration of inspection equipment, shall be subjected to near-vision and color-vision eye exams at least annually. A medical professional must perform the eye examinations (eye clinic, occupational health clinic, onsite health clinic or medical department).

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Near vision must meet 20/25 Snellen or better at 16" ± 1" (42cm ± 2.54cm), in at least one eye, natural or corrected (calibration and inspection).

Color vision must meet the Ishihara 38-plate test (inspection only).

Measurement System Analysis:

Gage R&R studies (or other appropriate studies) shall be performed to validate the suitability of the measurement systems used to inspect product. ≤ 20% measurement error is allowable for the measurement of normal characteristics. ≤ 10% is allowable for special characteristics (i.e: those defined as major, critical, or flight-safety). At a minimum, such studies related to special characteristics shall be re-validated at least annually. *(Exception: Equipment used for monitoring and measuring special processes and their output shall be managed according to NADCAP requirements).*

Control of A c t a n c e p t a n c e u r a n c e u r a t i v i t y M e d i a (AAM):

Examples of acceptance authority media include inspector stamps, electronic signatures, and electronic system passwords.

The supplier is responsible for implementing a process, subject to the supplier's internal audit process, that ensures the control of AAM as well as promoting the control of AAM to ensure their authenticity and unintended use.

Visual Inspection (Class Applicability: 1):

Products subjected to secondary processing and manufactured components shall be subjected to visual inspection for workmanship and acceptable appearance in accordance with Rexnord Specification SP-Q-1000 (Visual Inspection Standard) and meet the defined criteria. This order of precedence shall apply where SP-Q-1000, relevant industry specifications or customer visual standards conflict: customer requirements, the industry specification, SP-Q-1000.

14.0 Competency and Awareness of Personnel (Class Applicability: All)

The supplier shall ensure those personnel performing work affecting the quality of materials, products and services intended for Rexnord Aerospace are competent and capable within the scope of their activities performed.

Additionally, the supplier shall ensure that all personnel (including their subcontractors) are aware of their contribution to product or service conformity, their contribution to product safety, and the importance of ethical behavior.

15.0 Document Control (Class Applicability: All)

The supplier shall implement and maintain a process for the control of external specifications. It is the supplier's responsibility to monitor and review changes to industry standards flowed down on Rexnord Aerospace purchase orders. The supplier shall conform to the latest released revision of the applicable

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industry standard. The supplier shall contact their Rexnord Aerospace buyer immediately, for confirmation, if revision levels noted on the purchase order and the provided specifications conflict.

Component Manufacturing Only: It is the supplier’s responsibility to confirm the Rexnord Aerospace specifications stated on the governing purchase order are available and current in conjunction with their contract review process. The supplier shall contact their Rexnord Aerospace buyer immediately if revision levels noted on the purchase order and the provided specifications conflict.

16.0 Control of Nonconforming Product (Class Applicability: 1 and 2)

The supplier shall implement a process for positively identifying, segregating, and disposing nonconforming product to prevent shipment to Rexnord Aerospace. Purchased products/materials, or processed Rexnord property, rejected for nonconformity to design or workmanship requirements may be disposed “Return to Vendor”. Such rejections will be communicated to the supplier with a request for RMA (Return Material Authorization) and a copy of the NCR. Suppliers are expected to issue the RMA or otherwise address the request with Rexnord Aerospace Purchasing within 2 business days (*Note: Issuing an RMA does not constitute the supplier’s acceptance of responsibility for the perceived nonconforming product or materials*).

In the event nonconforming product is inadvertently released and shipped from your facility, the supplier is required to immediately notify the Rexnord Aerospace Supplier Quality Engineer of the escape. This notification must be made with a written notice of escape. The supplier is expected to lead and support any containment action necessary.

17.0 Supplier Quality System Requirements (Class Applicability: All)

See Section 9.0 for recommended certifications by supplier class. The supplier is expected to maintain 3rd party certification to the QMS standard used as a basis for their initial approval. The supplier is required to notify their supplier quality engineer within 48 hours if there has been a change in their certification status including suspension, withdrawal, changes in scope, or changes in certification body. Please provide a copy of your renewed certifications to your supplier quality engineer after any re-certifications to ensure sustained supplier approval status.

18.0 Record Retention (Class Applicability: All)

The supplier is required to maintain quality records related to all products, materials and services supplied to a Rexnord Aerospace purchase order for a minimum of 15 years. If the supplier wishes to no longer maintain those records at their facility, they may request in writing that they be transferred to Rexnord Aerospace for storage. Supplier quality records include, but are not limited to, certificates of conformity for finished goods, certificates of conformity for special processing, raw material certificates, any nonconformity reports with resulting actions (i.e.: rework), incoming inspection reports, in-process inspection reports, final inspection reports, and first article inspection reports.

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19.0 Lot Traceability (Class Applicability: 1 and 2)

In accordance with the record retention requirements of Section 18.0, the supplier shall be capable of furnishing all quality records for a given lot of product shipped to Rexnord Aerospace within 48 hours of the request. Full traceability of quality records to each individual component shall be maintained when processing serialized components or providing of serialized products. This includes traceability to raw material lots, completed accountability to each reworked or scrapped component, and associated actual inspection results.

20.0 Right of Entry (Class Applicability: All)

Rexnord Aerospace, its customers, and the applicable civil aviation authority (i.e: United States FAA) shall have the right of access to the supplier's facilities, processes and records related to the production of any items produced to an Rexnord Aerospace purchase order.

21.0 Process and Facility Changes (Class Applicability: All)

The supplier shall notify Rexnord Aerospace Quality Assurance and Purchasing of any changes in key management personnel, company name, or company ownership.

Additionally, the supplier shall notify Rexnord Aerospace Quality Assurance and Purchasing of any intended changes of the location where the purchased products or materials are manufactured, or significant changes to the manufacturing process. Process changes require a new first article inspection report, in accordance with SAE AS9102, be submitted with the first representative shipment. Additional qualification requirements may be dictated by your supplier quality engineer. The intent to make a process change shall be submitted to your supplier quality engineer using form number F-P-1052 (Supplier Process Change Request) prior to implementation. The disposition of the process change will be communicated back to the supplier using this form. Rexnord Aerospace reserves the right to reject requested changes where notification, versus approval, is required prior to implementation. Requests shall be communicated as soon as possible to allow adequate time for Rexnord Aerospace to support qualification of the requested changes without causing undue burden or disruption to the supplier's timely provision of products and services. The follow types of process change require notification or approval prior to implementation:

- **Notification Required:**

- Change in address of the supplier's primary processing facility
- Change in key management personnel, company ownership or name.
- New equipment acquisitions for processing or inspection
- Changes in inspection devices or standards
- (Chemical Processing) New bath chemistry
- Combining/separating operations/changes in sequence of operations
- Changes in suppliers of chemicals, anodes, materials, tooling, etc.
- Suspension or withdrawal of 3rd-party QMS certification
- Changes to product specifications (applicability: catalog component and material suppliers)

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- **Approval Required:**
 - Deviation from agreed upon frozen control plans or frozen processes
 - Change in location of work performed (outsourcing/outsourcing changes)
 - Change in fundamental processing (examples):
 - Turning vs. milling or vice versa
 - Atmosphere settings (%carbon, type of quench, etc.)
 - Adding/deleting process steps that could impact fit, form or function
 - Changes to inspection methods
 - Changes in sample plans
 - Change in rust preventative substances or packaging used

22.0 Control of Shelf Life-Sensitive Materials (Class Applicability: 1 and 2)

The supplier shall implement a process to ensure shelf-life sensitive materials are controlled, properly stored, and only used within their expiration dates.

It is responsibility of the supplier to ensure such materials have at least 75% of their shelf life remaining at the time of shipment when providing shelf-life sensitive materials to a Rexnord Aerospace purchase order. The expiration date of the materials shall be clearly noted on their representative certificate of conformity or packing slip as well as on the material's packaging.

23.0 FOD (Foreign Objects and Debris) Prevention (Class Applicability: 1 and 2)

Foreign objects and debris are a particular threat to aviation safety. The supplier is responsible for ensuring the products and/or processing they provide to Rexnord Aerospace are free of FOD. The supplier shall implement a FOD prevention program in accordance with the AS9146 standard (Foreign Object Damage (FOD) Prevention Program - Requirements for Aviation, Space, and Defense Organizations); reference also NAS 412 standard (National Application Systems Foreign Object Damage/Foreign Object Debris Prevention).

24.0 First Article Inspection (Class Applicability: 1)

Products supplied to a Rexnord Aerospace purchase order must be delivered with a first article inspection report (FAIR) compliant to the latest version of the SAE AS9102 standard if one of the following conditions apply:

- a. The product(s) is being manufactured and delivered to Rexnord Aerospace for the first time.
- b. Design revisions have occurred after the first article was accomplished (only partial FAIR required).
- c. There has been a lapse in production \geq 2 years.
- d. A change in manufacturing source(s), process(es), inspection method(s), location of manufacture, tooling or materials, has occurred that can potentially affect fit, form or function. See Section 21.0.

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- e. A change in numerical control program or translation to another media that can potentially affect fit, form or function has occurred. See Section 21.0.
- f. A natural or man-made event has occurred, which may adversely affect the manufacturing process.

25.0 Packaging, Preservation and Identification (Class Applicability: 1 and 2)

Suppliers are responsible for packaging all products and materials for shipment in the manner necessary to ensure they arrive at the ship-to location with no damage or in any otherwise defective state.

Product shall be preserved to prevent corrosion during processing and shipment. Preservation media shall be approved by Rexnord Aerospace Quality Assurance prior to use.

Products and materials are required to have the secondary packaging identified with the following information:

- Part Number and Revision Level
- Quantity
- Rexnord Aerospace Purchase Order Number, PO Revision Level, and Line Item Number
- Expiration Date (if applicable)
- Supplier Lot Number.
 - This may be a job order number, batch number, etc. This number must provide traceability to the raw material, finishing batch numbers, inspection records, and any other records necessary to demonstrate conformity to the product's requirements.

26.0 Calibration Services (Class Applicability: 3)

- a. Calibration requirements for NDT equipment shall comply with Rexnord specification WI-NDT-0001 (MPI Materials and Calibration Purchasing Requirements).
- b. Standards used to perform calibration shall be traceable to NIST.
- c. Those performing calibrations shall be subjected to near-vision and color-vision eye exams at least annually. A medical professional must perform the eye examinations (eye clinic, occupational health clinic, onsite health clinic or medical department). Near vision must meet 20/25 Snellen or better at 16" ± 1" (42cm ± 2.54cm), in at least one eye, natural or corrected (calibration and inspection). Color vision must meet the Ishihara 38-plate test (inspection only).
- d. Calibration certificates shall state the as-found condition as well the results after adjustment.

27.0 Production Serialization (Class Applicability: 1)

The supplier is responsible for maintaining unique serialization, and associated quality record traceability, where required by the applicable part drawing. The supplier shall verify the serial numbers incoming and outgoing when processing serialized components. The supplier shall notify their Rexnord Aerospace buyer

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immediately if discrepancies are identified. If serial numbers are not assigned through the Rexnord Aerospace purchase order, the supplier shall maintain a process that ensures serial numbers applied are unique and traceability to all associated quality records retained. The serial numbering convention used shall comply with the relevant part drawing instructions.

28.0 Planned Obsolescence (Class Applicability: 1 and 2)

As dictated by civil aviation regulations, Rexnord Aerospace is obligated to strictly comply with its design data. To this end, Rexnord Aerospace must be made aware when products and materials are planned to be discontinued in order to make the necessary changes to our design data with ample time to prevent disruption to business.

Therefore, the supplier is responsible for notifying the appropriate Rexnord Aerospace Buyer, at a minimum, 6 months in advance of the planned obsolescence and is applicable to any part numbers purchased by Rexnord Aerospace in the past 2 years. The supplier is also responsible for flowing this requirement down to their sub-suppliers where appropriate.

29.0 Suspected Unapproved Parts (SUP) Programs (Class Applicability: 1 and 2)

The supplier shall implement a program in accordance with AS6174 for preventing SUP products and raw materials from entering their value stream (Prevention of Counterfeit Parts).

Approved parts are defined as: Parts manufactured in complete compliance with an established industry or U.S. Government or international specification that includes design, manufacturing, test and acceptance criteria, and uniform identification requirements (ex: NAS and MIL spec hardware).

Suspected unapproved parts are defined as: A part, component, or material that is suspected of not meeting the requirements of an approved part. A part that, for any reason, a person believes is not approved. Reasons may include findings such as different finish, size, color, improper (or lack of) identification, incomplete or altered paperwork, or any other questionable indication.

Suppliers providing standard parts shall only provide parts where they can demonstrate their lot's traceability to the OEM or their authorized distributors. Suppliers using standards parts as part of any assembly shall only use parts where they can demonstrate the lot's traceability to the OEM or their authorized distributors.

30.0 Export Administration Regulations (EAR). (Class Applicability: All)

Any technical data furnished to support a purchase order is subject to the controls defined in the EAR. This information shall not be provided to non-U.S. persons or transferred by any means to any location outside the United States contrary to U.S. Law.

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31.0 DFAR: (Class Applicability: 1 and 2)

Any specialty metal delivered shall be melted or produced in the United States or its outlying areas. A United States company can only use metal that was melted in the United States or a [qualifying country](#).
 (Reference DFARs 252.225)

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Supplemental Requirements

Please notify your buyer or supplier quality engineer to confirm or obtain the latest revisions of the specifications noted below.

0001 Rexnord Flight Safety: QM-Q-0103 (Rexnord Classified Parts Program)

0002 Moved to general requirements.

0003 ITAR: The technical data furnished with this purchase order is subject to the controls defined in the International Traffic in Arms Regulation (ITAR). This information shall not be provided to non-U.S. persons or transferred by any means to any location outside the USA contrary to U.S Law. Furthermore, the supplier is responsible for meeting all requirements of ITAR. Suppliers are responsible for vetting employees and ensuring that only U.S. persons and/or employees with legal residency are permitted to work with Rexnord product and/or prints if identified as ITAR-controlled.

0004 Frozen Process: The process agreed upon to fulfill this purchase order is frozen. Any changes that deviate from the approved control plan must be approved by Rexnord Aerospace prior to implementation. Changes shall be requested per Section 21.0 as required above.

0005 FAA Repair: Supplier shall screen and maintain an Antidrug and Alcohol Misuse Prevention Program. Supplier shall maintain records and make available for inspection by the FAA Drug Abatement Compliance and Enforcement Inspectors upon request.

0006 NDT-Related Materials and Equipment Calibration:

- a. Calibration requirements for NDT equipment shall comply with Rexnord specification WI-NDT-0001 (MPI Materials and Calibration Purchasing Requirements).
- b. Purchased magnetic particle inspection materials shall comply with Rexnord specification number WI-NDT-0001 (MPI Materials and Calibration Purchasing Requirements).
- c. All magnetic particle inspection materials furnished on a Rexnord Aerospace purchase order must be certified that it meets the requirements of ASTM E1444, AMS 3044. Magnetic Particle Inspection base oil must reference and meet the requirements of AMS 2641, A-A-59230, and/or DoD-F-87935.

0007 Single Lot Control: The supplier shall maintain Single Lot Control for each PO line. All material used for each PO line shall consist of the same origin of material (heat, batch, resin, etc.) If multiple lots are required to complete the order, the supplier shall contact Rexnord Aerospace and request adding additional PO lines. Product shall be clearly identified with corresponding line item.

0008 Statistical Process Control (SPC) Required: An SPC report for each key characteristic is required to accompany the represented product when shipped. Key Characteristics are identified on the relevant part drawings. This report shall demonstrate process control to an initial capability level of ≥ 1.67 Cpk and a ≥ 1.33 Cpk for follow-on production.

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Customer-Specific Requirements:

1000 Bell: SQRM-001 (Supplier Quality Requirements Manual) Revision: Latest

1001 Bell Flight Safety: QPS 102, QPS 200, and QPS 300 Revision: Latest

1002 GE Aviation: S-1000 Revision: Latest

1003 GE Aviation: S400 (Revision: Latest) – A five-inch raw material sample shall be submitted for testing to an approved General Electric source per GE S400 specification. Lab test shall be provided for the following:

- a. Code A - Room Temperature Tensile Test and S400
- b. Code D - Wet Chemical Analysis or S400
- c. Code F - Quantitative Spectroscopy.

1004 Honeywell: SPOC (Supplier Purchase Order Conditions) – 002 Revision: Latest

1005 Moog: SQR-1 (General Requirements) Revision: Latest

1006 Parker Hannifin: PH-SQRM (Supplier Quality Requirements Manual) Revision: Latest

1007 Pratt & Whitney - Canada:

- a. ASQR-01 (Supplier Quality System Requirements) Revision: Latest
- b. CPW543 (Visual Appearance Criteria) Revision: Latest
- c. SQOP 01-01 (PW&C Supplementary Supplier Quality Requirements) Revision: Latest
- d. Supply Disruption Clause: Supplier shall not make any decisions to interrupt flow of product or special process from any existing source until the organization's and P&WC approvals are granted.
- e. Communication and Documentation: If the supplier is located in a country that English is not the first language, then they shall have the capability to communicate in English. The following documents shall be in English: Quality Manual, First level Quality procedures, process documentation requiring Member approval, and all formal communication (e.g., ASQR, UTCQR and Member-specific Forms, FAI, UPPAP documents).

1008 Pratt & Whitney – LCS:

- All materials produced in support of this purchase order must be obtained from a source approved in accordance with Pratt & Whitney Laboratory Control at Source (LCS) program. Certification for such materials must clearly state compliance to it. Material shall be certified to the Pratt & Whitney MCL Manual, Section F-17 LCS requirements. Customer approved source required per Pratt & Whitney MCS Manual, Appendix 36.
- Pratt & Whitney LCS/MCS Testing requirements for NON LCS/MCS Suppliers:
 - All material purchased from a Non-Approved LCS/MCS supplier that requires Pratt & Whitney LCS/MCS material testing must be tested by a Pratt & Whitney LCS/MCS certified laboratory by Rexnord.
 - The test will be performed for each material in accordance with Pratt & Whitney MCL Manual, Section A-4, Supplements 3A, 3B, & 3C. In addition, any tests specifically required per the drawing shall be performed.

1009 Pratt & Whitney NDT: Non-Destructive Testing is required per specification PW-6078, Sec 6 Revision: Latest

1010 Rolls Royce: SABRe Revision: Latest

1011 Safran Group: GRP-0087 (General Supplier Quality Requirements) Revision: Latest. G005 (SafranHE Requirements for External Providers) Revision: Latest

1012 TAI: GRAMS (Airbus Quality System Requirements) Revision: Latest

1013 UTAS:

- a. HSM 19 (Hamilton Sundstrand Corporation Buy Requirements) Revision: Latest
- b. HSM 236 (Hamilton Sundstrand Corporation FAI Requirements) Revision: Latest

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1014 UTC ([access here](#)):

- a. ASQR-01 (Supplier Quality System Requirements) Revision: Latest
- b. ASQR-20.1 (Supplier Sampling Requirements) Revision: Latest

1015 Williams International: QC-397 (Supplier Quality Requirements) Revision: Latest

1016 Woodward Governor:

- a. WPQR-9100 (Supplier Quality Requirements) Revision: Latest

1017 Liebherr: Quality Assurance Requirements For Suppliers Developing And Supplying System – Components LAT7- 8205 Revision: Latest.

Revision History		
Revision Level	Revision Description	Revision Effective Date
NC	Initial Release	MAY/13/2019
A	<p>General Requirements:</p> <ul style="list-style-type: none"> • AS9146 was added to paragraph 23.0 • AS6174 was added to paragraph 29.0 • Supplemental Requirement 0002 was moved to paragraph 31.0 <p>Customer Specific Requirements:</p> <ul style="list-style-type: none"> • G005 was added to clause 1011 – Safran • LAT7-8205 was added to clause 1017 – Liebherr 	April/2020

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