



# Procurement Quality Requirements

## Scope

This document defines and contains Reinhold Procurement Quality Requirements (PQRs), which are applicable to Reinhold Suppliers selling the Commodities defined in Table 1. Purchase Order Clauses are shown in three sections.

## Requirements

- Section 1: General Requirements apply to all purchase orders.
- Section 2: Product Requirements are applicable to the Commodity or service that is being ordered. Suppliers are responsible for identifying applicable requirements per the Program and Commodity category listed in Table 1, and shall comply with all applicable requirements noted by “Asterisk = Applicable”
- Section 3: Specific Quality Requirements are additional clauses that apply if referenced on the purchase order.
- Section 4: Supplier Performance Rating

## Applicability

Suppliers shall identify the business sector that Reinhold’s Purchase Order is applicable to. PQRs fall into two Business sectors; “Space and Defense” and “Cabin Interiors”. The supplier’s organization shall review the PQRs prior to accepting the order. Acceptance of Reinhold’s Procurement Quality Requirements is provided via the supplier’s acknowledgement of the Purchase Order. Final validation of conformance to the applicable PQRs is provided via signature by the supplier’s Quality Assurance Rep.

PQRs apply as follows:

- Section 1: All Purchase Orders
- Section 2: Per Table 1.
- Section 3: As determined by Reinhold Quality Assurance.  
(Review PO for specific requirement)
- Section 4: Supplier Performance Rating

## **Section 1 General Requirements – Applies To all Purchase Orders**

**G-1 Quality Management System**- The supplier shall maintain a quality system which meets the applicable level of Quality System requirements as shown below:

- a. AS91XX series and/or ISO 9001 (latest revision) compliant system.
- b. Mil I 45208, Mil STD 45662 compliant system (or equivalent).
- c. A commercial QA program that shall provide as a minimum:
  - Verification that the supplied item was manufactured and inspected in accordance with purchase order requirements.
  - A calibration system to assure the accuracy of measuring equipment used for product acceptance.
  - Detection of nonconforming material. Such material shall be identified, and segregated
- d. Special Scope - (Service provider, cleaning of film processing equipment, maintenance on equipment and machinery etc.)



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**G-2 Sub-Tier Control-** The supplier shall control sub-tier procurements to the extent necessary to ensure conformance to the quality requirements of Reinhold's purchase order. The supplier is responsible for flowing down all requirements of Reinhold's purchase order through the sub-tier supply chain.

**G-3 Distributors** shall flow down purchase order requirements to their supply chain. The supplier shall maintain product identification and complete traceability from receipt; during splitting, storage, and packaging until delivery. Distributors shall provide manufacturer's certifications that list the nomenclature and revision level in effect as of the date of the purchase order. Complete traceability includes documenting material acquisitions through the distribution chain, from the distributor order to the raw material mill certification. Documentation shall include the manufacturer's certifications listing the nomenclature and latest revision as of the date of the purchase order.

**G-4 Responsibility for Conformance-** The supplier is responsible for identifying applicable specification requirements and furnishing material / service which conform to the requirements of the purchase order.

**G-5 Access to Facilities-** Reinhold, our customers and regulatory authorities shall have right of access to all facilities involved in the order at any level of the supply chain, and to all applicable records.

**G-6 Use of Qualified Product / Source List.** - The supplier must be listed on the applicable QPL or Approved Source List, and is responsible for flowing down the requirement for using approved sources for material and processes throughout their supply chain. Raw materials used must be obtained from suppliers listed on the applicable approved source list.

**G-7 Production Interruptions-** Notify the Reinhold buyer immediately of any interruptions or circumstance that will prevent shipment as specified.

**G-8 Documentation-** All documents must be **legible /reproducible**, computer generated documents must include an actual or facsimile signature, or must have on file a letter signed by the corporate or company officer. Documentation package must be provided at the point of receipt or material will not be processed through receiving, and may be returned.

**G-9 Identification-** Unique identification will be physically assigned to all items which will be traceable throughout the associated documentation (reports and certifications). Identification may be in the form of work order, lot, batch, or serial numbers.

**G-10 Reinhold / Customer furnished Material-** shall maintain "customer furnished" identification and traceability throughout all storage and processing, without substitution. All documents for the parts and materials shall show "as furnished" identification.

**G-11 Changes-** to the supplier's name, processes, materials, equipment, suppliers or location require advance notification to Reinhold 30 days in advance. Material contract is between Reinhold and supplier. Reinhold will be involved in all proposed material/process changes and receive directly from supplier any/all notifications at the same time as specification custodians are notified. Reinhold will not accept any future material from supplier, that does not have the appropriate change approval from the specification owners/custodians.

**G-12 Nonconforming Product-** The supplier shall immediately notify Reinhold of any nonconforming parts or material prior to shipment. Reinhold's **written** approval is required before shipment. A copy of the approved NCR form must accompany each affected shipment and be attached to each part/container. NCR forms are available from Reinhold Purchasing.

**G-13 Latent Defects (Escapes) -** Notify the buyer of any latent defects for products that were shipped prior to the discovery of the defects. Notification is by use of a cover letter including product description, shipper number, part number/revision, quantity, serial/lot number, and a corrective action statement.

**G-14 Supplier Corrective Action Request-** Reinhold may request a corrective action when a quality problem exists. Supplier Corrective Action Requests (SCARs) require complete and timely responses.

**G-15 Record Retention-** Maintain all documents associated with this purchase order for a minimum of Ten (10) years from the close of the purchase order or as required by the purchase order. Documented information (records) shall be disposed of only after the noted retention period, disposal can include defacing to illegibility and/or shredding, or other means of records disposal to ensure records cannot be rendered useful information.



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**G-16 FOD**- The supplier shall ship the product free of any Foreign Object Debris (FOD). Suppliers shall implement effective measures to prevent FOD.

**G-17 Hazardous Material**- The supplier shall provide applicable Material Safety Data Sheets (MSDS) for products designated by industry, state, or federal agencies as hazardous materials.

**G-18 Packaging & Preservation** - The supplier shall ensure that good commercial practice is used at a minimum, to prevent damage or deterioration during shipment to Reinhold.

**G-19 Specialty Metals**- Any specialty metals identified in DFARS Clause 225.872-1 which has been melted outside of the United States, its possessions, Puerto Rico, or qualifying countries (listed in DDARS 225.872.1) are prohibited. Supplier must comply and retain records that parts are in compliance with the above.

**G-20 Counterfeit Parts**- The supplier shall establish and maintain a Counterfeit Parts and Material Prevention Control Plan using AS6174 as a guideline to ensure that that Counterfeit parts are not delivered to Reinhold Industries. The purpose of the supplier's plan shall be to develop a robust process to prevent the delivery of counterfeit commodities and control commodities identified as counterfeit.

**G-21 Supplier Awareness** – The supplier will ensure that their personnel are aware of:

- their contribution to product or service conformity;
- their contribution to product safety;
- the importance of ethical behavior.



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## Section 2. Program/Commodity Requirements

Supplier shall use Table 1 below to determine the applicable Procurement Quality Requirements (PQR's) per the Program and Commodity and per the Reinhold Purchase Order, Asterisk = Applicable:

Table 1  Commodity	Space and Defense											
	PQRs											
	Certificate of Conformance	Certificate of Analysis	Supplier Certification Summary Sheet	Temperature Control for Shipment	Shelf Life	FAA Requirements	First Article Inspection	Dimensional Inspection	Measuring Equipment Availability	Traceability of Materials	Special Process Control	Special Process Technique Approval
	P-1	P-2	P-3	P-4	P-5	P-6	P-7	P-8	P-9	P-10	P-11	P-12
<b>Raw Material: Per Specification</b>												
Prepregs, adhesives, resins, molding compounds	*	*		*	*					*		
Fabrics	*	*								*		
Paints, Chemicals	*			*	*							
Metals	*	*								*		*
<b>Components, assemblies, fasteners:</b>												
Made to Print	*	*					*	*	*	*	*	*
Tooling	*						*	*				
Designated Hardware, Fasteners	*						*	*		*		
Commercial-Off-The -Shelf (COTS)/Including hardware	*											
<b>Outside Processing</b>												
NDT											*	*
Special Processes	*										*	*
	<b>Cabin Interiors</b>											
	P-1	P-2	P-3	P-4	P-5	P-6	P-7	P-8	P-9	P-10	P-11	P-12
Prepreg, adhesive	*	*		*	*	*				*		
Fabrics	*					*				*		
Machined parts per print	*	*	*				*	*	*	*		
Designed hardware, fasteners	*						*	*		*		
Outside Processing	*											
Proprietary /Supplier Designated Item	*											
Commercial-Off-The -Shelf (COTS)/Including hardware	*											



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**P-1 Certificate of Conformance-** An original Certificate of Conformance must accompany each shipment. The Certificate of Conformance must contain the purchase order number, a certification statement, a listing of specifications, drawings, technique cards, etc. with revisions levels as called out on the purchase order, and the name of the seller's representative. For hardware, documentation shall include the manufacturer's certification listing the nomenclature and latest revision as of the date of the purchase order. Complete traceability includes documenting all material acquisitions through the distribution chain, from the distributor order to the raw material mill certification except for the Commercial-Off-The-Shelf(COTS), Proprietary, and Supplier Designated products.

**P-2 Certificate of Analysis-** A report for applicable requirements for chemical, physical, or mechanical properties. Each test report will identify the specification, revision, and include material lot numbers, heat numbers, melt numbers, and grades when they apply. Test reports must be dated and signed or stamped by the seller's representative (state title). Reinhold prohibits transcribing of the original supplier's test report to another form.

**P-3 Supplier Certification / Traceability Summary Sheet-** is required. Reinhold will provide the blank F-7.4.3 SUPCERT form, and the supplier is responsible for entering data and forwarding the completed form to Reinhold with each shipment.

**P-4 Temperature Control.** - Material with a temperature requirement for storage shall be transported so that the maximum temperature during shipment does not exceed the required material storage temperature. This shall be confirmed by a calibrated temperature recorder that may be attached to either the outside or inside of one of the boxes of the shipment, placed in such a manner to be conveniently located upon receipt. Either a chart or a disposable recorder will be left at Reinhold with the shipment as objective evidence that the temperature requirement was met during shipment. The chart shall show the date and time started and a record of temperature. The Reinhold purchase order number and material lot numbers will be added to the chart upon arrival at Reinhold.

**P-5 Shelf Life** - Material that has shelf life expiration will be shipped in a temperature-controlled environment. The Certificate of Conformance shall identify the batch and/or lot numbers, quantity shipped, date of manufacture, date of expiration and storage conditions for the material. Do not ship material that has less than 75% of its shelf life remaining.

**P-6 FAA Part 25.853** - The supplier shall provide a certification showing acceptance for flammability, smoke and toxicity as required.

**P-7 First Article Inspection-** Reinhold requires acceptance of the first article before production begins. Subsequent shipment prior to acceptance requires Reinhold authorization. Label the first article part with the purchase order number, part number, and part name.

- *Complete a First Article Inspection Report with bubbled print in the AS9102 format listing each inspected characteristic and the actual results. When there are repeated characteristics of the same dimension identified on the drawing (Example: 17X  $\varnothing$ .502 To Depth Shown), each of the 17 measurements shall be recorded as individual results. The supplier will maintain the report at their facility and keep it up-to-date (delta FAI's). A copy of the FAI report must be sent with the first shipment, and whenever a new delta FAI has been performed.*

**P-8-Dimensional Inspection Report-** Provide a 100%-dimensional inspection report of actual dimensions, attributes, and applicable drawing notes. The report shall include a statement that all drawing requirements are acceptable.

**P-9 Measuring Equipment-** Gages, measuring and testing devices must be available for use by Reinhold personnel and/or Reinhold customers. Supplier personnel must be made available for the operation of supplier gage, measuring, and testing devices.



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**P-10 Traceability of Material-** Seller will provide copies of the raw material certs for the materials used, which are traceable to the manufacturer's records of acceptance, and to the original mill cert. Documentation shall include all material acquisitions through the distribution chain, from the distributor order to the raw material mill certification. Parts must be identifiable to the lot of material used. Seller shall maintain traceability data, on file, for all parts or materials supplied.

**P-11 Control of Special Processes-** The seller or seller's sub-tier must be approved to perform special processes per the prime contractor, Reinhold, or applicable third-party certification body (i.e. Nadcap). A report or signed certificate shall be provided for completion of special processes, with indication of acceptance/rejections for inspections.

**P-12 Special Process Techniques-** Procedures and applicable technique cards for the special processes performed require written approval by Reinhold or Reinhold's customer before the start of work.

## **Section 3. Specific Quality Requirements**

The following Specific Quality Requirements apply as specified in the purchase order:

**S-1 Statistical process control (SPC)** as per blueprint noted characteristics or PO text. If the characteristics or information is not identified, please contact Reinhold Industries quality engineering for instructions.

- a. A process capability index or Cpk must be determined for all specified characteristics.
- b. Measurement and recording of "Key Characteristics" is required. Key Characteristics shall be mutually agreed upon by Reinhold and supplier.

**S-2 Source Inspection- Reinhold-** Notify the Reinhold buyer of hidden dimensions and dimensions difficult to inspect at final inspection. These dimensions require "in-process" inspection.

- a. Material requires Reinhold source inspection before shipment. Notify the Reinhold buyer forty-eight (48) hours in advance of the required inspections(s).
- b. Prime Contractor - All supplies are subject to source inspection by Reinhold's customer. Notify the Reinhold buyer forty-eight (48) hours in advance of the required inspections.

**S-3 Source Inspection- Government-**

- a. The government reserves the right of surveillance inspection for any or all of the requirements of this purchase order.
- b. Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify the government representative who normally services your plant so that appropriate planning for government inspection can be accomplished.
- c. On receipt of this order, promptly furnish a copy to the government representative who normally services your plant, or if none, to the nearest Army, Navy, Air Force, or Defense Logistics Agency inspection office. In the event the representative or office cannot be located, our purchasing agent should be notified immediately.

**S-4 Serialization-** Unique identification will be assigned to articles and be noted and traceable throughout the associated documentation (reports and certifications).

- a. The seller will assign Reinhold provided serial numbers on each consecutive item as specified in the purchase order.



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## Section 4. Supplier Performance Rating and Expectations

The Supplier Performance Rating will be measured as outlined below.

### Quality Element

The quality rating X 0.70 is the **QUALITY ELEMENT**.

$$\frac{\text{TOTAL NUMBER OF PARTS ACCEPTED}}{\text{TOTAL NUMBER OF PARTS DELIVERED}} \times 100\% = \text{QUALITY RATING (\%)}$$

Note: Total number of parts delivered minus total parts rejected equals total parts accepted.

### Delivery Element

The delivery rating X 0.30 is the **DELIVERY ELEMENT**

- Deliveries more than 5 days late form the basis for this calculation.

### Approved

**Scores 80-100**

Supplier is maintained on the ASL.

### Provisional

**Scores 79 or Below**

Supplier is maintained on the ASL as Approved.

Purchase orders may be issued, but a risk mitigation plan could be imposed.

### Restricted

**Scores < 50**

Supplier is maintained on the ASL as Restricted under **(or special cause)** Risk Mitigation Plan or SCAR. Purchase orders must be authorized by QA.