

RRNMI – Quality Notes

DFARS 252.225-7009

Preference for Domestic Specialty Metals has the following basic requirements: any specialty metals incorporated in articles delivered under this contract must be melted in the United States or its outlying areas. This clause does not apply to specialty metals melted in a qualifying country or incorporated in an article manufactured in a qualifying country as identified in DFARS subsection 225.872.1. DFARS can be found in website searches of the applicable DFARS clause.

CERTIFICATES OF CONFORMANCE

- a. Be pursued to the maximum extent practical. Certificates of Conformance from the original manufacturer are preferred.
- b. Be acceptable only when it certifies conformity to the RRNMI drawing or purchase order line item extended description and material and physical requirements. In cases where the Certificates of Conformance from the original manufacturer are not available. Certifying conformance to the RRNMI Part number only is not acceptable.
- c. Be approved by the appropriate company representative.
- d. Indicate the successful completing of any testing required by the part drawing or specification.
- e. Reference any RRNMI approved concessions for the applicable part.
- f. Contain supplier name and address, RRNMI Purchase Order Number, RRNMI Part Number and Quantity. Age sensitive items having a shelf life such as rubber products, adhesives, sealants, gaskets (except Viton), hoses or chemicals must have a batch or lot number (and cure date for rubber products) and expiration date. Subject to US Export requirements, suppliers must email documentation at the time of shipment to RRNMI.certs@rolls-royce.com. Buyers may be copied on the email. The RRNMI purchase order and RRNMI part number shall be referenced in the email subject line in the following format: Report (s) for PO. XXXXX Part Number YYYYYYYY or Report(s) for PO. XXXXX, Multiple part numbers. Supplier emails with attached files must be less than 5mb in size due to RRNMI system limitations. Files cannot be compressed or “zipped.” We recommend the email subject line format: “Report(s) for PO. XXXXX, Part Number YYYYYYY 1st of X emails” should multiple emails be required due to file size limitations. Documentation must be legible and of reproducible quality. Suppliers may copy buyers on this email. Hard copy of faxed documents, only when requested by RRNMI, must be legible and of reproducible quality. No hard copy certification are required to accompany the shipment when emailed to RRNMI.

PRESERVATION AND PACKAGING

Unless otherwise specified, suppliers shall package parts, components, systems, and equipment for commercial shipment with appropriate preservation techniques and materials for a minimum of 12 month storage. Seller shall furnish the instructions for any preservative requiring removal prior to part

use. The seller shall furnish the buyer with instruction/recommendations for the care of equipment in storage prior to installation and operation. Suppliers shall package items to prevent damage to the part during transit and must be preserved and protected from the elements that may affect surface finish and impact future manufacturing steps. Suppliers must clearly identify parts by RRNMI or manufacturer part number.

FERROUS PARTS

The minimum preservation for ferrous parts will include, but not be limited to complete coating w/LPS-3 or equivalent preservative as RRNMI quality approved. All material, supports, braces, and spacers (including wood) must be pre-wrapped or covered with barrier material, resistant to grease and water, and flexible per MIL-PRF-121.

AGE SENSITIVE ITEMS

Age sensitive items having a shelf life such as rubber products, adhesives, sealants, gaskets, hoses or chemicals must be labeled with a batch or lot number (and cure date for rubber products) and expiration date. Product delivered per this order shall have no less than 75% of shelf life remaining, as calculated from the date of the delivery to the shelf life expiration of the material. The maximum shelf life must not be greater than 5 years unless otherwise certified by the manufacturer.

CHEMICALS

Material Safety Data Sheets (MSDS) must accompany chemicals.

ELECTRONIC PRODUCTS

Suppliers shall package products to prevent damage due to electrostatic discharge

DELIVERABLES

The supplier must provide deliverables embedded in any specification or contract referenced in this purchase order prior to supplier quality acceptance of the line item shipment. Deliverables may include items such as, but not limited to First article inspection, test, dimensional inspection, NDT, or qualification reports; ABS, heat treat, or raw material certifications, requests for deviations or weld repair maps

RECORD RETENTION

Suppliers must retain all records pertaining to parts provided for this purchase order for a minimum of 5 years. Suppliers shall provide copies of records upon request.

O RING REQUIREMENTS

Materials: o-rings shall be per ASTM 2000 (Current Year) M3CH 714 A25 B14 E016 E036 (tensile 2000 PSI minimum) unless otherwise specified. Age requirements: o-rings delivered per this order shall not be more than 8 quarters old upon receipt at RRNMI as calculated from the cure date. The maximum shelf

life will not be greater than 5 years unless the manufacturer certifies that the shelf life requirements per ARP 5316 apply. If ARP 5316 shelf life requirements apply, the maximum shelf life is 15 years (60 quarters) however RRNMI applies a maximum shelf life of 10 years (40 quarters). Special sized o-rings: In cases where special sized / spliced o-rings are used, the joints shall have a biased cut of 45 degrees and shall be vulcanized. No "butt" joints are allowed. All spliced joints shall be visually inspected. Any signs of joint separation will be cause for rejection. Steps in the joint are not to exceed .006". Cross section at any point in the joint shall not exceed the tolerance specified for the parent material. Special "fully molded" o-rings: The use of a "serpentine mold" to produce "fully molded" o-rings is not permitted. 100% dimensional inspection, in accordance with Mil STD 413, and 100% visual inspection using a 3x lighted glass is required. All "fully molded" o-rings shall be individually packaged in a heat seal Kraft bag marked with ASTM number, Batch number, and Cure date by quarter nad year. Packaging: O-rings over 13" shall be coiled and packaged as shown in Mil P4861B. All other standards o-rings may be bulk packaged. Dimensional Tolerances: "Special sized" and "fully molded" o-rings cross section and inside diameter tolerances shall be in accordance with RRNMI drawing number A000SK01-55 unless otherwise specified. Inspection: O-rings shall be dimensionally inspected. For special "fully molded" o-rings, each o-ring in the lot shall be dimensionally inspected (100%dimensional inspection). For all other o-rings, sample dimensional inspection methods shall be performed in accordance with Mil STD 413. Dimensional inspection results are to be reported to the buyer (See certification). As a minimum, the range of actual dimensions (high and low) is to be reported. Certification: With each lot of o-rings, the seller shall furnish the buyer certification of dimensional inspection and material characteristics as required by ASTM D2000. The certification document shall be the seller's format. It shall include as a minimum: purchase order number, quantity of o-rings being certified, ASTM number, material batch number, cure date by quarter and year, dimensional results. If more than one batch of rubber is used to produce the PO quantity, then certifications shall be provided for each batch. Each certificate shall be signed by the certified testing laboratory.