

Varda Space Industries Inc.

Quality Clauses

Purpose:

The purpose of this document is to specify purchase order or purchase order line specific requirements that assure the production of quality product. One or more of these clauses in this document may be applied to any Varda Flight or Non-Flight purchase order line providing production parts, materials, and services to Varda. The applicable clauses will be referenced on the Varda Purchase Order. All information referenced in this document can be found on www.varda.com/suppliers or as specifically referenced on the Varda Purchase Order.

QC-0: Varda General Requirements

Seller shall be in compliance with the following for all parts:

- **Workmanship**
 - For all parts shipped to Varda, the Seller shall perform 100% visual inspection for the entire lot, regardless of sample size. The supplier shall also verify that all features are free of burrs, including all internal features. Seller shall inspect 100% of form and depth of threaded features. Sampling is not permitted. Functional thread size gages shall be used to verify conformance on all threaded inserts that do not contain a thread-locking feature. If any conflict is found between drawing & model including part marking, Seller shall immediately contact the Varda Quality.
- **Varda Provided Material**
 - For all Varda provided material, Seller shall identify, handle, store, and protect from damage, deterioration, and loss. Seller shall maintain all traceability and ensure all required documentation (Varda packing slip, Certificate of Conformance) is provided with the material. Should any furnished material be found unsuitable for use, the Seller shall notify the Varda buyer immediately, mark the material, and segregate the material until disposition is made by Varda.
- **Varda Prohibited Material**
 - For all Varda products, the following materials are not to be used:
 - Cadmium parts
 - Cadmium plated parts
 - Zinc plating
 - Mercury, compounds contain mercury
 - Pure tin or tin electroplate (except when alloyed with lead, antimony, or bismuth)
- **Subcontractor Quality**
 - Seller shall only contract with NADCAP accredited third parties for any processes that is outside the Seller's capabilities. Seller shall provide evidence of subcontractor's NADCAP accreditation upon request made by Varda. Any deviations must be granted by Varda in writing.

- **Deviation Approval**

- Seller shall seek written approval via email or issue ticket from Varda for any sort of deviations (material, process, etc.). Written approval is to be printed & included in CoC packet for each part number. No approval can be used multiple times of the same part number unless otherwise specified by Varda.

- **First Article**

- A First Article Inspection Report (FAIR) shall be included the first time a Seller delivers a part or assembly to a given alpha (A, B, C, A1, B1, C1, etc.) revision of a Varda designed part. Seller is required to use AS9102 or equivalent for first article inspections.
- The FAIR shall list actual inspection results for complete product definition. Drawing dimensions, applicable notes, and non-dimensioned characteristics per the drawing notes must be extracted and measured within the FAIR.
- A FAIR is not required for numeric revisions of Varda part numbers (1, 2, 3, etc.), development, research and development hardware, standard, commercial off the shelf (COTS) parts, standard catalog items, or delivered software.
- The part that receives First Article Inspection shall be labelled with "FAI" on a non-permanent marking or FOD causing method. Complete traceability of the FAI piece with label is to be maintained during Seller's all processes and through shipping to Varda. A delta FAIR is acceptable on a part for which a similar FAIR has already been delivered to Varda, with written approval from Varda.

- **Packaging**

- All items must be adequately preserved, packaged, handled, and contained to prevent deterioration and damage during shipment.
- Packaging shall not be overly used in relation to the size of the part.
- Documentation shall be included in the packaging unless authorized by Varda to digitally send documentation.
- Parts must be individually bagged & tagged, and the entire lot must be bagged/boxed with identification.
- When shipping multiple Purchase Order line items, Seller shall segregate different lots of the same part number with identification. If applicable, part mark with Varda Purchase Order & line or Supplier lot/date code.
- All Silver-plated parts shall be packaged with anti-tarnish material such as but not limited to 'Silver Saver Paper'.
- All electronic parts shall be packaged with ESD safe wrapping and/or bags. Airtight vacuum or inert gas containers shall be used for those chemicals which may react with air, or which are pyrophoric.
- Varda reserves the right to charge back for shipping in excess or not following written instruction from Varda or the purchase order.

- **Shipment**

- Seller shall do their best to consolidate parts from a Purchase Order in fewer shipping boxes. Parts shall have identification and lot number listed if multiple part numbers are shipped in one box.
- Seller is to ship one Purchase Order per shipment box but permitted to ship multiple lines of the same Purchase Order together.

- Seller is to use corrugated packaging material to adequately withstand transportation from the supplier's shipping dock to Varda receiving dock. Packaging shall be taped closed.
 - Maximum weight capacity of a corrugated package is to be up to 50 lbs. If package is > 50 lbs., it must be noted outside the package.
 - Palletized shipments - Standard sized pallets (48" x 40") are preferred to be used. Pallets need to be in decent shape, no broken or missing boards. Shipments should be processed without over-hang. If there is an over-hang on a standard size pallet, a large pallet is allowed for use. Pallets should have a 4-way entry unless otherwise specified by Varda representative. Shrink wrapping or strapping of pallet is recommended to secure load. Straps should not damage primary packaging when secured.
 - At time of shipment, Seller shall identify every package that is being shipped with Varda Purchase Order & Line Number on the shipping label or outside of package. Seller shall also select shipping method and carrier as advised on the Varda Purchase Order. Seller shall copy to notify shipping@varda.com under shipment notifications and select all 'notification type' (Ship, Tendered, Exception, Estimated Delivery, Delivery) for all packages.
- **On Time Delivery**
 - Seller shall meet all scheduled delivery dates as specified on Varda Purchase Order. If Seller becomes aware of any circumstances that are likely to give rise to a delay in promised delivery date, the Seller shall immediately notify their Varda buyer, in writing, stating the reason for the delay and the new time for delivery.
- **Cleanliness**
 - Unless otherwise noted on the drawing or purchase order, Seller shall meet general cleanliness guidelines upon delivery. Parts shall be free of coolant, oils, marking, or debris. Parts shall be wiped down prior to shipment.
- **Protection of Proprietary Information**
 - The information shared with the Supplier shall be considered Proprietary Information of Varda Space Industries. This information, including images, drawing, part numbers, distinguishing characteristics is provided in confidence under existing laws, regulations, and/or agreements covering the release of commercial, competition sensitive, and/or proprietary information, and shall be handled accordingly.
- **Order of Precedence for Technical Documents**
 - In the event of a conflict in technical requirements, the Seller should verify intent ahead of manufacturing, but the following order of precedence shall prevail otherwise:
 1. Issue Tickets / Varda written approval of deviation
 2. Drawings
 3. Specifications cited on the drawings
- **Manufacturing Readiness Review**
 - Varda reserves the right to request and conduct a Manufacturing Readiness Review (MRR) with the Seller prior to commencing manufacturing on an alpha revision of a flight unit. The Varda subcontractor or critical component supplier will be notified of the requirement to perform a MRR via the Purchase Order or its attached documents.

- Representatives from manufacturing, inspection/test, design, and quality shall participate as appropriate. Government representatives shall be allowed to participate in the MRR as appropriate.
- Topics covered shall include, but not be limited to drawing availability and acceptability, configuration status, manufacturability of parts and materials, adequacy of manufacturing processes/certifications, manufacturing planning, current manufacturing trend data, personnel experience and training/certifications, tooling, facilities, inspection points, test equipment availability and calibration status, corrective action status, and manufacturing lessons learned from prior like hardware builds and schedule.
- **Quality Monitoring / Supplier Audit**
 - Varda reserves the right to visit Supplier facilities for audit purposes, on-site failures and/or cause and extent of nonconformance investigations on short notice (24 hours).
 - Supplier quality and performance will be monitored through inspection, test, and review of products/services. Quality monitoring may result in performance reviews, including but not limited to audits, SCAR requests, and/or visits.

QC-1: Certificate of Conformance (CoC)

A certificate of conformance shall be included with shipments certifying all materials and processes supplied are in accordance with requirements. The certificate shall indicate at a minimum the following:

- Part Number
- Revision (if Revision Controlled)
- Quantity
- Supplier Lot / date code / work order
- Material Heat/lot number from mill/distributor
- Serial Number (if applicable)
- Varda Purchase Order Number
- Varda Purchase Order line number
- Outside process lot code (if applicable)
- Expiration Date (if applicable)

Seller shall provide a Certificate of Conformance listing all processes in compliance to Varda Purchase Order. The document shall be signed and dated by the Seller's quality assurance or management representative. Certification packages shall be included with the respective part. Seller shall distinguish heat/lot numbers on the part bag/physical part (if applicable) if multiple lots of material has been used for a single part number. Seller shall clearly reference supplier lot/date code and material heat/lot on every document of CoC packet for traceability.

QC-2: As-Built Configuration Report

The Seller shall furnish Certificate of Conformance (QC-1) information for the as-built configuration of the parts included in this parent assembly (-5xx). The as-built configuration report shall include, at a minimum, the bill of materials, revisions, and traceable paperwork.

QC-3: Dimensional Inspection Report

The Seller shall furnish an inspection report for each lot of part(s) submitted. The report shall include drawing characteristics and recorded values for the range of measurement(s) of this lot as required by the seller's inspection sampling requirement.

The Seller shall follow at a minimum the inspection requirements specified below, unless otherwise specified in other technical documents including the purchase order/contract, drawing, and specifications cited on the drawing, and/or Varda-provided inspection plan. Such inspection reports shall be traceable to the provided certificates of conformance.

Dimensions reported should match the feature identifier numbers located on the drawing. If the drawing does not include key/major/minor identifiers, seller shall include internally created drawing to relate to dimensional report.

Dimensional inspection report shall consist of records of actual readings taken during the inspection of each part with the dimension, tolerances, and tool number/name noted. Unit of measure specified on Varda drawings shall be used on all measurement reports, dimensional inspection plans, and/or FAIR. Dimensions shall be verified with that gaging, fixturing, and/or test equipment properly calibrated for measurement with an accuracy ratio of at least 4:1.

For one piece per lot of each unique part number submitted on a purchase order, the Seller shall inspect all dimensions on drawing callouts. Inspection reports shall include 100% inspection results the following criteria for all other parts on the purchase order:

- All dimensional with total tolerances of 0.004 / 0.10 mm or less
- Position tolerances of 0.005 inches / 0.13 mm or less
- Flatness tolerances of 0.001 inches / 0.025 mm or less
- Angularity tolerances of 0.5 degrees or less
- Surface finishes of 32 μ in / 0.8 μ m or less

For 100% inspection results, the actual range of dimensions shall be reported on the dimensional inspection report. Any lot sample inspection performed shall be reported at what AQL sample was used on the dimensional inspection report.

The seller shall adhere to the following minimum probe density requirements when programmable or manual coordinated measurement machine (CMM) are used.

Feature	Size Reference and Level Requirement	Probe Density
Cone	3 levels required if cone length > .250 in	Reference Diameter Requirements
	2 levels required if cone length ≤ .250 in	
Cylinder	Minimum 5 levels if length is ≥ 2.00 in	Reference Diameter Requirements
	Minimum 3 levels if length is .500 – 2.00 in	
	Minimum 2 levels if length is < .500 in	
Diameter	Diameter ≥ 4.00 in Minimum 2 levels if depth ≥ .250 in	Minimum 11 points
	Diameter .625 – 4.00 in Minimum 2 levels if depth ≥ .250 in	Minimum 7 points
	Diameter ≤ .625 in Minimum 2 levels if depth ≥ .250 in	Minimum 5 points
Line	All lengths	2 points per inch Minimum 3 points per measurement
Surface	Surface ≥ 4.00 in ²	1 point per in ²
	Surface < 4.00 in ²	4 points per in ²
Slot	Radius ≥ .500 in Minimum 2 levels required for slot depth ≥ .250 in	Minimum 3 points per radius Reference Line Requirement for Length
	Radius < .500 in Minimum 2 levels required for slot depth ≥ .250 in	Manual measurement for each radius Reference Line Requirement for Length
Radius	Radius ≥ .500 in	Minimum 5 points
	Radius < .500 in	Manual measurement

QC-4: Full Dimensional Inspection Report (Serialized Parts Only)

For each serialized part submitted on a purchase order, the Seller shall furnish an inspection report including 100% inspection of all dimensions on drawing. Dimensional inspection report shall consist of records of actual readings during the inspection of each part, with the dimension and tolerance. Such inspection reports shall be traceable to provided certificates of conformance. Dimensions reported should match the feature identifier numbers located on the drawing.

QC-5: Raw Material Traceability

The Seller shall furnish a complete set of material certifications traceable to lot, batch, block, or heat number of the mill or original material manufacturer. For non-proprietary materials, the Seller shall furnish all chemical and physical test reports and results applicable to the material specification.

Certifications generated by the supplier shall be signed by the material supplier's authorized quality representative's title. The seller shall provide material to specification with no exceptions or addendums. The Seller's certification shall confirm that all parts shipped are of the correct material as specified on Varda Purchase Order or Varda drawing (as applicable).

Seller is strictly prohibited from the use of any material or goods in fulfillment of the Purchase Order originating from Russia or People's Republic of China ("PRC"), or produced or acquired by any organization, entity, or element of the Russian Federation or PRC, or by any entity that is owned or controlled by the Russian Federation/PRC or that has been organized under or is otherwise subject to the laws of the Russian Federation or PRC.

QC-6: Heat Treat Traceability

The Seller shall furnish a complete set of heat-treating certifications for all parts on the purchase order. The Seller shall furnish heat treating and test data that objectively demonstrates the validity of the heat-treating process. Heat treating shall be done per the specification provided on the drawing, engineering specification, or purchase order. Certifications generated by the supplier shall be signed by the heat treater's authorized quality representative.

QC-7: Supplier Revision Critical Part

The Seller shall provide a revision-controlled drawing with all relevant specifications and maintain revision control. Any changes to fit, form, or function of the Varda ordered part or any change to functional testing must be submitted for approval. Changes to fit, form, or function of a component part do not need to be submitted for approval at the component part level. However, such changes shall be considered a revision of the Varda ordered part if they affect its Form, Fit, or Function. Such changes must be submitted and approved. Approved changes will require revision increase. Form, Fit, and Function are defined as follows:

- **Form** - The physical characteristics of the part including shape, size, and mass. Varda must be informed if any change is proposed altering any aspect of the part's form including changes to the dimensional tolerance.
- **Fit** - The ability of the part to integrate with or become an integral part of another component. Varda must be informed if any change is proposed that affects the part's ability to integrate.
- **Function** - The actions the part is designed to perform in fulfilling its function. Varda must be informed if any change is proposed could alter any aspect of the part's functionality including material changes.

QC-8: Drop Shipments

The purchase order may require drop shipment of Varda owned material to a location other than Varda's receiving inspection. The receiving party shall check quantity and conditions of product and perform receiving inspection and/or test to verify compliance to requirements. Upon delivery of material, the receiving party shall contact the purchasing specialist to inform Varda of receipt and condition of material. The receiving party shall treat all received Varda Provided Material as defined in QC-0.

QC-9: Functional Test Results

The Seller shall provide for each delivered unit, a report documenting the results of any testing performed on the unit, including both the test procedure revision and all test results.

QC-10: Manufacturing Readiness Review

The Seller shall conduct a Manufacturing Readiness Review (MRR) with Varda prior to commencing manufacturing on an alpha revision of a flight unit.

- Representatives from manufacturing, inspection/test, design, and quality shall participate as appropriate. Government representatives shall be allowed to participate in the MRR as appropriate.
- Topics covered shall include, but not be limited to drawing availability and acceptability, configuration status, manufacturability of parts and materials, adequacy of manufacturing processes/certifications, manufacturing planning, current manufacturing trend data, personnel experience and training/certifications, tooling, facilities, inspection points, test equipment availability and calibration status, corrective action status, and manufacturing lessons learned from prior like hardware builds and schedule.
- Proprietary information maybe requested and viewed by Varda through on-site reviews.

QC-11: Temperature and Shelf-Life Sensitive Material Requirements

For temperature, perishable, and age sensitive material (e.g., epoxies, paints, bonding agents, prepregs, adhesives, etc.), Seller shall include as part of the Certificate of Conformance, or in a separate certificate, the following information for each Lot/batch:

- Date of Manufacture
- Date of Test (if specific test requirements are defined)
- Lot/batch number(s)
- Shelf Life
- Date of Shipment
- Expiration Date
- Storage Temperatures (if temperature requirements are defined)

Seller shall provide expiration date in the format of "Month-Day-Year, such as "MM-DD-YY" or "MM-DD-YYYY". In cases where the Seller is unable or does not provide Day in the expiration date, Varda will interpret Day to refer to the 1st of the month. Product labels must have lot/batch and part number clearly identified. All material must have at least 75% of the storage life remaining upon receipt.

Revision Tracking:

Rev. Level	Rev. Date	Description
0	7/3/2023	Initial Release
1	4/23/2024	Complete revision