

ARVAN, INC.
FLY WITH THE BEST

ENGINEERING MANUFACTURING

AIRCRAFT CONTROL PULLEYS / CUSTOM MOLDING PRECISION
MACHINING / TERMINAL BLOCKS / AN. MS, NAS HARDWARE
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Procurement Quality Requirements

This document establishes the quality requirements for supplies purchased by ARVAN, Inc. This form is a part of the purchase order. It contains **General Quality Requirements**, which apply to all purchases unless they are specifically excluded. The **Selected Procurement Quality Requirements** (PQR's) apply as shown on the purchase order. ARVAN, Inc. is referred to as ARVAN throughout the remainder of this document.

Section I: General Requirements

- **Responsibility for Conformance** – The seller is responsible for furnishing supplies, which conform to the requirements of the purchase order. Surveillance, inspections, and tests performed by ARVAN, Arvan's customer, or the government do not relieve the seller of this responsibility.
- **Documentation** – ARVAN may refuse to accept delivered items if the seller does not submit the certifications, test data, reports, NDT technique card references, and/or documentation as required in the purchase order. Computer generated documents must include an actual or facsimile signature, or ARVAN must have on file a letter signed by the corporate or company officer. The letter must state the company is using a computerized system, the typed name on the document is an authorized employee, and the contractor is liable for the information it contains.
- **Repairs** – Repairs of damaged or defective items require written approval from ARVAN after formal MRB submittal. You must have written approval from ARVAN prior to repairs being started.
- **Design, Process, Material, or Procedure Changes** – Changes to designs, processes, materials, and/or procedures originally approved or qualified by ARVAN or our customers require written approval. Approval is required before the start of the production cycle in which the changes would take place. Arvan is responsible for flow down of this requirement to all sub tier external providers.
- **Right of Access** – is reserved by Arvan, Inc. our customers and regulatory authorities to the applicable areas of all facilities, at any level of the supply chain, involved in the order and to all applicable documented information. **The FAA may review your facility or products as necessary.**
- **Control of Special Processes** – are customer and/or NADCAP approved.
- **Notification of Facility Change** – Notify the ARVAN buyer immediately of changes to facility location.
- **Nonconformance Report (NCR)** – Nonconforming parts or material require Arvan's **written** approval before shipment. Record any deviations from drawings, specifications, or other requirements. Submit the NCR to the ARVAN Plant or QA Manager. **A copy of the approved NCR form must accompany each affected shipment and be attached to each part/container.**
- **Latent Defect** – Notify the ARVAN Plant or QA Manager of any latent defects for products that were shipped prior to the discovery of the defects. Notification is by use of an NCR and a cover letter including product description, shipper number, part number, revision and a corrective action statement as required by our customers and any regulatory authorities.
- **Supplier Corrective/Preventive Action Request (SCPAR)** – ARVAN may request corrective action when a quality problem exists. SCPAR's require complete and timely responses. Coordinate corrective action with the government Quality Assurance Representative assigned to your plant when supplies are government source inspected.
- **Record Retention** – Maintain all documented information associated with this purchase order for a minimum of (10) years from the close of the purchase order, **unless otherwise specified on the purchase order.**
Exceptions: MBDA - 20 years after end of contract, Rockwell Collins - First Article Inspection Reports and related documented information shall be retained by the supplier for 99 years plus the current year and are required to be kept in the format in which they originated. All requested information shall be provided in the language required by the contract. Working paper documents such as raw material certifications, first articles and testing documentation shall be protected from damage and physically stored in a temperature controlled environment. Obsolete data shall be retained for a minimum of 5 years for products and articles manufactured under FAA approval and at least 10 years for critical components identified under FAA AC21-43 ss 45.15(c).
Documented information is legible, stored with easy accessibility, and maintained to prevent damage, deterioration & loss.

(2) Documented information that is retained shall include, but is not limited to, inspection and test records, calibration records, external provider records, special process certifications, MRB records, and production travelers.

(3) Documented information should be legible, complete, and accurate. Any storage media used for the retention of documented information shall exhibit legible data, acceptance stamps, and required signatures.

All documented information after achieving obsolescence will be held until customer disposition is attained as required, otherwise records will be stored off –sight until a disposition can be determined by upper management.

Arvan reserves the right to request proof of document control when needed, supporting documentation may be requested at any time but generally during external provider re-approval audits and attached as supporting documentation for re-approval.

Upon completion of operations (i.e., either shipped to a customer or sent to stock) the record is maintained in accordance with the Arvan, Inc and/or the customer documented information retention process.

- **Standard Measuring Equipment** – Use of alternative inspection equipment in place of standard measuring equipment requires the approval of the ARVAN Quality Assurance manager or his designee. Submit an alternative inspection plan to the ARVAN Plant or QA Manager before fabrication or use of the alternative inspection equipment.
- **FOD Control program** – Maintain a “Foreign Object Control Program” also by delivering Items to Arvan, the external provider is deemed to have certified that such Items are free from any foreign materials that could result in FOD.
- **All external providers are expected to maintain their quality and on-time performance per Arvan’s customers requirements.**

The following thresholds are consistent for all Spirit locations and will allow better management of external provider performance. PLEASE NOTE: PQA thresholds for Quality, to determine External provider Surveillance requirements will remain at 98%.

Performance Thresholds

DELIVERY	
Effective January 1, 2007	Performance Threshold (%)
Gold	100
Silver	99.99 - 99.00
Green	98.99 - 98.00
Yellow	97.99 - 96.00
Red	95.99

QUALITY	
Effective January 1, 2007	Performance Threshold (%)
Gold	100
Silver	99.99 - 99.80
Green	99.79 - 99.55
Yellow	99.54 - 98.00
Red	97.99

- **Application of Acceptance Authority Media (AAM)**

The Seller shall comply with the AS/EN/JISQ 9100 requirements and 14CFR Part 21.2 regarding the application of the Acceptance Authority Media (AAM) requirements.

The Seller shall, within its organization and its supply chain, ensure that the use of AAM is clearly defined within its Quality Management System (QMS).

The Seller shall, upon Boeing request, be able to demonstrate evidence of communication to its employees and to its supply chain; use of AAM must be considered as a personal warranty of compliance and conformity.

The Seller shall maintain compliance to the AAM requirements by assessing its process and supply chain as part of its internal audit activities. The areas of focus of this assessment shall include but not limited to:

- Authority Media Application Errors (i.e. Omission, Typos, Legibility, etc.)
- Authority Media Application Untimely Use (i.e. Documentation is not completed as planned, “Stamp/Sign as you go”, etc.)
- Authority Media Application Misrepresentation (i.e., Uncertified personnel, Falsification of documentation, Work not performed as planned, etc.)
- Authority Media Application Training Deficiencies (i.e. Ethics, Culture awareness, Proper use of authority media, etc.) AS9100<8.4.3>

Section II: Selected Procurement Quality Requirements – The following Selected Procurement Quality Requirements apply when specified by number and letter in the purchase order.

1. **Control of Quality** – Provide and maintain the quality control system shown on the purchase order. ARVAN may audit your quality system for compliance.
 - a. ISO 9001 or AS9003, AS 9100 (latest revision) for calibration/verification services ISO/IEC 17025 accredited.
 - b. When required for Boeing associated parts must also meet the requirements of document X31764 per Boeing clause Q29 (Boeing requires that the provisions/requirements set forth in FORM X31764 be included in Seller's direct supply contracts as well as the obligation that they be flowed to the Seller's sub-tier supply chain. Boeing requires that the provisions/requirements set forth in AS/EN/JISQ 9100, as determined by the Seller to be applicable, be flowed to the sub-tier supply chain as specified in AS/EN/JISQ 9100.) You may download from Boeing website (<http://www.boeingsuppliers.com/X31764.pdf>) or request a copy form Arvan, Inc.
 - c. Standard Inspection and Calibration System – Provide and maintain an inspection system acceptable to ARVAN. Provide and maintain complete inspection records. Maintain a calibration system which meets the requirements of ANSI/NCSL Z540-3 and/or ISO10012-1, or the equivalent (latest revision)
 - d. Contractor Inspection – Provide the necessary inspections and tests to assure supplies conform to the requirements of this purchase order.
 - e. Other _____ (requirements to be cited on the purchase order)

2. **Test Reports/Certifications** – a report providing required data, per any of the following categories:
 - a. Chemical test reports
 - b. Physical and/or mechanical test reports
 - c. Non Destructive Test (NDT) or Process certifications, i.e. x-ray, prime, anodize, paint, etc.
 - d. Functional test reports
 - e. Copies of original **Mill** certifications for a. & b., above.

A **legible/reproducible** test report and/or certification will accompany each shipment. Each test report will identify the **specification** and **revision** as stated on the ARVAN purchase order. Include material lot numbers, heat numbers, melt numbers, batch numbers, types, and grades when they apply. Each test report must identify the serial numbers of serialized parts. Test reports must be dated and signed or stamped by the seller's representative (state title). ARVAN prohibits transcribing of the original external provider's test report to another form. Distributor shall submit legible/reproducible manufacturer's test reports.

3. **Shelf Life and Storage Requirements** – Shelf life and storage requirements set by specification require a shelf life statement. The statement will contain the Date of Manufacture (DOM), Date of Shipment (DOS), and/or Date of Test (DOT), as applicable. Include the ARVAN purchase order number, material lot or batch number, and the storage requirements. **Do not** ship supplies having less than 75% shelf life remaining without the written approval of ARVAN.

4. **First Article Inspection** – ARVAN requires acceptance of the first article before production begins. Processing of items before ARVAN acceptance is at seller's risk. Label the first article part with the purchase order number, part number, and part name.
 - a. Perform the first article inspection to the drawing requirements and notes. Complete a First Article Inspection Report listing each inspected characteristic and the actual results. Submit the first article and the report to ARVAN. Ref.
 - b. Notify the ARVAN Plant or QA Manager when the first article is ready for inspection. ARVAN will witness the first article inspection at the seller's facility.
 - c. Arvan will perform the first article inspection at our own facility. Submit the first article part and all associated documents to ARVAN.

5. **Source Inspection** – Notify the ARVAN Plant or QA Manager of hidden dimensions and dimensions difficult to inspect at final inspection. These dimensions require "in-process" inspection.
 - a. Supplies require ARVAN source inspection before shipment. Notify the ARVAN Plant or QA Manager forty-eight (48) hours in advance of the required inspection(s).

- b. Plaster masters and epoxy tooling require ARVAN "in-process" inspections. ARVAN will verify template filing and rigging, fairing, scribe lines and any coordination activities taken from a master. Notify ARVAN forty-eight (48) hours in advance of the required inspection.

6. 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 Defense Logistics Agency inspection office. In the event the representative cannot be located, our purchasing agent should be notified immediately.
- d. The government has imposed mandatory inspection requirements on this purchase order and a letter of delegation will be sent to the government representative who normally services your plant.

7. Dimensional Inspection Reports – Document the results on your standard inspection report form or request a First Article Inspection Report form from the ARVAN QA Manager. The report will include as minimum the part name, drawing number, revision, serial number and the ARVAN purchase order number.

- a. Provide a 100% dimensional inspection report of actual dimensions, attributes, **and** applicable drawing notes. Document the minimum to maximum range of the actual dimensions for all parts inspected.
- b. Provide a dimensional inspection report containing a statement that all drawing requirements are acceptable. Record only those dimensions having a tolerance of plus or minus (+ or -) 0.030 or less, and any attributes and applicable drawing notes.
- c. Perform sample inspection in accordance with ASQC-Z1.4, latest revision, Dimensions with a tolerance of 0.010 or less will have an AQL of 1.0% and dimensions with a tolerance of .011 to .030 will have an AQL of 4.0% and >.030 is not required, unless otherwise specified. Sample size will be based on the Special Inspection Level Table S-3. Accept on zero and reject on one. This means any defect is cause for the entire lot to be rejected.

8. 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.

9. Identification – Unique identification will be assigned to articles and be noted and traceable throughout the associated documentation (reports and certifications).

- a. The seller will assign serial numbers. The digits of the purchase order are the digits of the serial number. A dash and consecutive numbers beginning with 001 will follow. For example Purchase Order 0-12345 yields serial numbers 0-12345-001, 0-12345-002, 0-12345-003, etc.
- b. The seller will assign serial numbers on each consecutive item as specified in the purchase order.
- c. Work order, lot, batch, or serial number identification is required for all items. This identification shall be noted and traceable throughout the associated documentation (reports and certifications).

10. Traceability of Materials

- a. ARVAN Supplied Material – All parts or materials furnished by ARVAN will maintain the "as furnished" identification. Do not substitute materials without **written authorization** from ARVAN. All documents for the parts or materials will show the "as furnished" identification.
- b. Seller's Material – Seller shall maintain traceability data, on file, for all parts or materials supplied, which identifies the parts/materials to the seller's point of origin.
- c. Seller will provide copies of the raw material certifications for the materials used in the products produced for ARVAN.

11. Control of Special Processes – A special process is a physical, metallurgical, or chemical change to a product. Normal inspection methods cannot assure conformance to a specification. Examples of special processes are casting, forging, heat treating, welding, plating, surface finishing, coating, treating, and testing, NDT, chemical, physical, etc..

- a. Arvan uses only customer or NADCAP approved sources for special processes

- b. Provide Process Certifications with each shipment. Certifications will list the special processes performed and the applicable specifications/drawings/technique cards with revisions. Include the class, type and grade of the material and the serial numbers of serialized parts. Certifications will be dated and signed or stamped by an authorized external provider representative (state title).

12. Documentation Package Review –

- a. The completed documentation package (cert.s, test reports, dimensional data, etc.) must be submitted to and approved by ARVAN prior to shipment of parts or materials.
- b. A copy of the completed documentation package (cert.s, test reports, dimensional data, etc.) must be faxed to ARVAN at the same time as the shipment of parts or materials. A full documentation package must also be shipped with the parts or materials.

13. Insurance Requirements-

- a. Commercial General Liability: Throughout the period of performance of this Purchase Order and until final acceptance by ARVAN, external provider may be required to carry and maintain General Liability Insurance with limits of not less than One Hundred Thousand Dollars (\$100,000).
- b. Certificates of Insurance: Prior to commencement of the period of performance, External provider may be asked to provide for ARVAN's review and approval Certificates of Insurance reflecting full compliance with the requirements set forth in paragraph 13a "Commercial General Liability".

14. Request for Compliance to DFARS 252.225-7000 clauses.

- a. Especially noting DFAR clause 252.225-7014 "Preference for Domestic Specialty Metals" and
- b. DFAR clause 252.225-7016 "Restriction On Acquisition of Ball And Roller Bearings".

15. Request for Compliance to European Union Directive 76/769/EEC, 2002/95/EC (RoHS – Restriction of Hazardous Substances) & 2015/683/EU (also known as RoHS3) - All parts delivered under this order will meet the Directive requirements restricting the use of Lead, Mercury, Cadmium, Hexavalent Chromium, Polybrominated biphenyls and Polybrominated diphenyl ether. We are requesting that all formal declarations, which ensures that all the raw materials used to manufacture Arvan's products are free of those ten (10) restricted substances. Raw material external provider's own certification and/or lab testing must support this declaration.

16. External provider will adhere to the directions provided in Executive Order (EO) 13224. - "Executive Order: Termination of Emergency with Respect to the Taliban and Amendment of Executive Order 13224 of September 23, 2001". To view the contents of this EO, please access the following website:
www.whitehouse.gov/news/releases/2002/07/20020703-1.html.

17. Counterfeit - External provider shall establish and maintain a Counterfeit Parts Prevention/Avoidance and Control Plan using Industry Standard AS5553 (Counterfeit Electronic Parts; Avoidance, Detection, Mitigation and Disposition) and AS6174 (Counterfeit Material; Assuring Acquisition of Authentic and Conforming Material) as guidelines. The process shall be to prevent and control the delivery of counterfeit parts.

18. Conflict Minerals "The Dodd-Frank Wall Street and Consumer Act" - The Security and Exchange Commission (SEC) has imposed that publicly traded companies report of any product containing Tantalum (and all it's derivatives), Tin, Tungsten or Gold from the Democratic Republic of Congo, Angola, Burundi, Central African Republic, Rwanda, Tanzania, South Sudan, Uganda and Zambia. Arvan, Inc. is expecting you as a external provider to perform a due diligence effort to make these determinations. *It will be required that you do not **knowingly** supply any product that contains these minerals from the above listed countries* based on the concerns that the revenues obtained from the mining and transport of conflict minerals aid in financing the ongoing conflict in the Democratic Republic of Congo (DRC) and the surrounding countries.

19. REACH: Registration, Evaluation and Authorization of Chemicals (REACH) compliance: If raw materials, parts or assemblies contain substances of very high concern (SVHCs) as prescribed by EU directive EC No. 1907/2006, Registration, Evaluation and Authorization of Chemicals, identification shall be included with the shipment. This identification should list the SVHC-designated chemicals present in the purchased article and the conditions under which handling precautions should be taken.
http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm is the European Community Regulation on chemicals and their safe use ([EC 1907/2006](http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm)). It deals with the Registration, Evaluation, Authorization and Restriction of Chemical substances. The law entered into force on 1 June 2007. The aim of REACH is to

improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. At the same time, REACH aims to enhance innovation and competitiveness of the EU chemicals industry. The benefits of the REACH system will come gradually, as more and more substances are phased into REACH. Manufacturers and importers are required to gather information on the properties of their chemical substances, which will allow their safe handling, and to register the information in a central database run by the [European Chemicals Agency \(ECHA\)](#) in Helsinki. The Agency acts as the central point in the REACH system: it manages the databases necessary to operate the system, co-ordinates the in-depth evaluation of suspicious chemicals and is building up a public database in which consumers and professionals can find hazard information. The Regulation also calls for the progressive substitution of the most dangerous chemicals when suitable alternatives have been identified. For more information read: [REACH in Brief](#).

20. Tooling Manufacturers

Compliance with government, regulatory and customer requirements for tooling manufacture.

- a. Per Boeing Document D950-11059-1 (if you do not have access please request from Arvan Quality).
- b. Are you DPD/MBD compliant to the Boeing D6-51991 specification (if you do not have access please request from Arvan Quality).