



AVK Supplier Quality Clauses Revised July 20, 2011

Q01 – Packaging and Handling

All parts must be protected at the supplier facility prior to shipping as applicable to the commodity being shipped. Parts must be returned in the original containers in which they were received. Depending on the services/processes performed at the supplier's facility, special attention may be required to prevent damage where applicable.

Parts shall be handled to prevent scratches, nicks and dings, or any other type of surface damage. Protective materials such as butcher paper, plastic netting or bubble wrap may be utilized as appropriate. However, the use of newspaper is not allowed due to the corrosive nature of the ink.

Q02 – Certificate of Compliance (C of C)

A Certificate of Compliance shall accompany all shipments. C of C's must be signed by an authorized representative and must reflect all AVK Purchase Order information necessary to identify the product, quantity, current revision, and the specific services/processes that have been performed. If products are serialized, the applicable serial numbers must also be listed.

Q03 – First Article Inspection (FAI) or Final Inspection

A First Article Inspection is required. FAI must be performed at the supplier facility and may be documented on supplier's form(s) as appropriate, provided it contains the same information indicated on the print. FAI information must include as a minimum the material identification, the heat lot number, general notes, flag notes and title block notes.

First Article Inspection shall be performed on all production lots of a specific part number prior to shipment. A First Article or Final Inspection Report shall accompany each shipment. The First Article Part must be identified (tagged) as "First Article Part."

Q04 – Latest Revisions

The product manufactured and/or service performed must be performed per the latest drawings or specifications. At no time will the supplier use a revision other than what is indicated on the print or Purchase Order without the express written permission of an authorized AVK representative.

Q05 – Certifications / Test Report Requirements

Chemical and mechanical test reports from the original mill or foundry are required for material used in fulfilling this order and must be maintained on file for a period of ten years. The heat lot of each test report must be traceable to the material. Any reprocessed raw material must be traceable to the original mill test report and must include objective evidence (e.g., mechanical tests) of compliance to the material's reprocessed condition.

Special process certifications must reflect all AVK's Purchase Order requirements including specification numbers, revisions, quantities, serial numbers processed, types, and any other information necessary to substantiate the process performed.

Copies of test reports must be submitted with each shipment and must be traceable to the original AVK Purchase Order including any applicable serial numbers.

Q06 – X-Ray

When x-ray is required per the drawing, x-ray film and an x-ray inspection report shall be included with each shipment.

Q07 – Inspection Check Fixture

AVK has provided inspection check fixtures that must be used for product acceptance for those features only. The use of the acceptance check fixture does not absolve supplier from assuring all dimensions and requirements are produced to drawing and specification requirements.

Q08 – Traceability / Lot Shipment Requirements

Lots shall not be intermingled. A production lot shall consist of parts that are all the same configuration, fabricated from the same conditions and material, processed (including heat treat) together and produced as one continuous run.

A plating lot (zinc, tin zinc, zinc nickel, cadmium, anodize, chemical milling, etc.) shall consist of treated articles on the same order treated under the same conditions from the same chemical composition from the same tank.

A coating lot (paint, dry film lube, etc.) shall be processed as one batch on the same part on the same order. A batch is defined as the end product of all the raw materials mixed or blended in a single or continuous operation.

Q09 – Shelf Life

When products from the supplier are materials with a limited shelf life, the supplier shall include the expiration date of the materials used and batch identification of the required certifications.

Q10 – Key Characteristics (KC's)

Statistical Process Control is required on this order. The supplier is required to submit SPC charting information in accordance with Purchase Order instructions on the identified Key Characteristic. The supplier shall identify the statistical techniques in establishing, controlling and verifying process capability and product characteristics.

Q11 – Approved Sources – Special/Certified Processes

Any Special or Certified Process (Heat Treat, Plating, NDT, etc.) specified on AVK drawings must be performed by an AVK-Approved Source as listed on AVK's Approved Vendor List and indicated on the AVK Purchase Order. Only AVK-Approved Sources shall perform special or certified processes.

Q12 – Product Sampling

Unless otherwise directed by AVK's Quality Department, a sampling plan for the inspection of product may be used. ANSI/ASQ Z1.4 Level II – AQL 1.0 may be used except "C" must = 0 (No defects allowed, Reject on 1). Otherwise, all parts shipped to AVK shall be 100% inspected. One hundred percent inspection may be required due to other restrictions in which case sampling is not allowed.

Q13 – Quality System Requirements

A quality system certified or compliant to ISO 9000 is required to perform any work for this Purchase Order or certain portions therein. AVK must approve the supplier's system through quality audits performed by quality personnel.

Q14 – AVK-Supplied Material/Products

Raw material or products (assembly items, component parts, hardware, tooling, fixtures, etc.) were provided as indicated on the Purchase Order. The supplier is required to verify any raw material or products through the normal receiving inspection process including verifications of, but not limited to raw material chemical and physical certifications, dimensional and visual requirements, damage, FOD (Foreign Object Damage), configurations, expiration dates, calibration due dates, types, classes, and any other identifying information to assure that AVK-supplied products are as required in order to complete the contracted services or processes.

Q15 – Notification of Facility or Ownership Change

Supplier shall not run or relocate any AVK-approved production, manufacturing, testing or processes to non-approved facilities during performance of the work specified in the procurement document.

Supplier shall notify AVK's Purchasing Manager in writing when a significant change in facility, management or ownership has occurred, prior to performing against an AVK procurement document, to provide AVK the opportunity to examine and approve any such change for compliance with quality requirements.

Q16 – Specialty Metals

Material supplied must be in accordance with Domestic Specialty Metals Regulation DFARS 252.225-7014, Alternate 1. The country of origin must be declared on the certificate.

Q17 – Grain Flow

Grain flow direction is a requirement of this Purchase Order. Control of grain flow direction should be specified on the purchase order and be as noted on the art drawing. The supplier shall certify to the grain flow direction of the parts produced. If there are any questions or concerns, contact the AVK Purchasing Department for resolution before proceeding with manufacturing the product.

Q18 – Machined Surface Workmanship

The machined surface shall be free of scratches, chatter marks, nicks or dings (visible in un-highlighted condition and can be easily felt with a fingernail) or non-uniform appearance. The curve, radius or diameter surface shall achieve a min. finish as called out on the print.

Q19 – Foreign Object Damage – FOD

All parts received by Supplier must be free of Foreign Object Damage. This includes but is not limited to any possible damage from manufacturing environment, handling damage, unknown or unwanted items left in part, packaging, etc. Supplier shall have a FOD Prevention Program in place.

Q20 – Mandatory Flow Downs

Seller and its subcontractors shall comply with any and all mandatory flow down clauses including but not limited to configuration management requirements, design changes, etc., whether pursuant to a U.S. government contract or otherwise, applicable to Buyer for goods that are the subject of any AVK Purchase Order.