



## **QUALITY ASSURANCE CLAUSES (QA Clauses Revision Date 10/05/2020)**

QA Clauses are mandatory and applicable to all purchase orders issued by KAM Solutions. An explanation of each QA Clause requirement is contained herein. Supplier audits may be performed at KAM Solution's discretion to verify conformance to the stated quality requirements.

### **QA1 – NOTIFICATION OF CHANGES BY THE SUPPLIER**

During performance of the purchase order, the Supplier is required to give KAM Solutions written notice when making any changes for the following: manufacturing locations; change in key suppliers; owner & executive management; machines and equipment changes or changes in quality management personnel that have responsibility for quality of product or service furnished to KAM Solutions.

KAM Solutions at its option, may elect to conduct an on-site evaluation to determine the impact of such changes on previous approvals or potential effect on product or service quality levels including name change.

### **QA2 – QUALITY SYSTEM**

Requirements shall be in effect for all suppliers who directly supply materials, items, services, and/or special processes to KAM Solutions for production parts. Suppliers must have an established, documented, implemented, and maintained a Quality Management System in accordance with the requirements of ISO9001:2015, AS9100/D and/or NADCAP.

Suppliers not meeting the above Quality System requirements may be assessed at any time for reasons not limited to performance and may be liable for actual costs of the assessment.

Suppliers will ensure that employees working on its behalf are competent and trained in accordance with the requirements.

### **QA3 – CONTROL OF RECORDS**

Records shall be established and maintained to provide evidence of conformity to the QC's and revision date as stated on the purchase order. Records shall be legible, readily identifiable, and retrievable. Procedures shall be established to define the control necessary for the storage, protection, retention periods and disposal of records.

### **QA4 – RETENTION OF RECORDS**

Records such as Purchase Orders, Traceability, Approvals of Special Processes, Inspection & Test, Calibration Records and Non-Conforming Material shall be retained for 10 years unless otherwise specified on the purchase order.

### **QA5 – NON-CONFORMING MATERIAL**

Upon detection of any non-conformances or deviations to the purchase order requirements, the supplier, including all sub-tiers, shall notify KAM Solutions within 24 hours. Suppliers must receive approval for non-conforming material product disposition prior to continuing work on product.

The supplier may be issued Root Cause Corrective Action as warranted.

All nonconforming product (i.e. scrap) **shall** be rendered useless or destroyed beyond its usage.

Y:\2100 Purchasing, Shipping & Receiving\KAM-2100-P05 KAM Solutions PO Quality Assurance Clauses Revision Dated October 5, 2020



#### **QA6 – SUPPLIERS USING SUB-TIERS**

KAM Solutions **must** be notified in writing when a sub-tier to the supplier will be used. Prior to proceeding, the supplier must provide to KAM Solutions Quality Assurance Manager, evidence that the requirements of this purchase order have been flowed down to the sub-tier.

#### **QA6 – TRACEABILITY**

Traceability shall be maintained from receipt of raw material through finished product. Records and material must be identified by Job Number, material type, specification and applicable revision level, heat number, serial number, etc., as required to maintain traceability. In the event a document has been superseded, the latest revision of the superseding document shall apply.

#### **QA7 – RIGHT OF ENTRY**

KAM Solutions, its customers, and regulatory agencies, have the right of entry, through prior notification, to determine and verify the quality of work, applicable records and materials at all facilities involved in the order.

#### **QA8 - GOVERNMENT RATED CONTRACTS**

Rated orders are identified in the purchase order by a priority rating consisting of the rating – either DX or DO and a program identification symbol. Rated orders take preference over all unrated orders as necessary to meet required delivery dates. Among rated orders, DX rated orders take preference over DO rated orders.

Suppliers are required to flow the rating to sub tiers for the item they need to fill the orders. This provision ensures that suppliers will give priority treatment to rated orders from contractor to subcontractor to suppliers throughout the procurement chain.

**Export Compliance** - Some of the purchase orders issued by KAM Solutions are in support of government contract programs. The technical data provided by KAM Solutions for these programs is subject to the restrictions and regulations of either the International Traffic in Arms (ITAR) or Export Administration Regulations (EAR) jurisdiction. The supplier hereby represents and agrees that all technical data provided by KAM Solutions in support of these programs will be used in strict compliance with the regulations set forth in the ITAR or EAR regulations and solely used for the performance of the work hereunder. The supplier further agrees to implement any necessary procedures for restricting access to said technical data to U.S. Persons only. If during the performance of the contract, the supplier is required to provide such technical data, or part thereof, to a sub-tier supplier, the supplier may do so provided that the sub-tier supplier is considered to be a U.S. Person and that the supplier imposes all the same restrictions contained herein upon the sub-tier supplier. Disclosure and access to said technical data by a foreign national is subject to any restrictions or licensing requirements of the organization with jurisdiction over the program (ITAR or EAR). Supplier shall, upon completion of the contract hereunder, including any warranty period, ensure that any technical data is either destroyed or returned in whole to KAM Solutions.

#### **QA9 - SPECIAL PROCESSING SUB TIERS**

When required by KAM or by KAM's customers, suppliers **shall** use customer-specified sources. Ensure specification listed is being performed to the latest revision within 90 days of the latest change.



#### **QA10 - UNAUTHORIZED USE OF NONCONVENTIONAL MACHINING METHODS**

Unless otherwise specified on the engineering drawing, specification or purchase order, supplier or sub tiers shall not use any non-conventional manufacturing or processing methods, such as electrical discharge machining (EDM), electro chemical machining (ECM), laser or abrasive water jet cutting, flame spray coatings, etc., without proper written authorization from KAM Solutions.

#### **QA11 – CURE DATES FOR ELASTOMERS/EXPIREABLES**

Elastomers - Unless otherwise specified on the purchase order or contract, cure date must be eight (8) quarters or less.

Expireables (Paints, Primers, Adhesives, Epoxies, Sealants, etc.) - 100% -80% of shelf life must be remaining upon date of receipt at KAM Solutions.

#### **QA12 – Supplier Sampling Plan**

KAM Solutions reserves the right to review and approve sampling plans and/or process controls used for product acceptance. Submittal of such plans and controls must be approved by KAM Solutions Quality Assurance Manager. At a minimum, a first piece inspection shall be completed and signed by an authorized quality representative.

Supplier shall use 100% inspection, unless otherwise specified or agreed upon in writing by KAM.

When requested by KAM or its customers, supplier will provide test specimens for inspection/verification, investigation and/or auditing purposes.

#### **QA13 – ETHICS**

It is KAM Solutions policy to enter into supplier and sub-contractor agreements only with companies that have a demonstrated record of and a commitment to the highest ethical standards. The supplier **shall** conduct itself fairly, impartially and in an ethical manner and **shall** adhere to a reasonable code of ethical standards.

#### **QA14 – PRODUCT SAFETY**

The supplier **shall** ensure product safety by ensuring robust Management of special requirements, critical items, and key characteristics.

The supplier will ensure that employees are aware of their contribution to product conformity, product safety and the importance of ethical behavior.

If there are concerns to product safety, the supplier shall communicate them to KAM Solutions.

#### **QA15 – Counterfeit Parts**

The seller agrees and **shall** take reasonable actions to ensure that Counterfeit Parts are not delivered to KAM Solutions. Refer to AS6174 for guidance. Original Equipment Manufacturer (OEM) certification is required for each item delivered to ensure that the product provided is as specified on the purchase order. Material and part substitutions are not allowed.



### **QA16 – Foreign Object Debris (FOD)**

Supplier is required to establish and maintain a Foreign Object Debris (FOD) prevention program that employs appropriate housekeeping practices.

### **QA17 – Packaging, Packing, Marking Requirements**

Material Handling: Parts/Materials **shall** be protected in all phases of processing to eliminate handling damage. Once raw materials begin their process into parts, part-to-part contact is prohibited. Care and use of protective devices **shall** be considered.

Cleanliness: Ensure all parts/materials shipped to KAM Solutions are free from foreign material, debris and contaminants on all surfaces, particularly internal machined and cores passages and crevices, which may result in potential FOD. Part openings **shall** always be controlled during processing to prevent introduction of foreign objects.

Storage: Storage facilities shall be provided as necessary to isolate and protect KAM Solutions materials pending use or shipment. Condition of material in stock shall be assessed for degradation periodically.

Preservations: When preservation of parts/materials is a requirement, of the drawing, fluids shall be checked regularly for contaminants and maintained free from contaminants through the use of filtering or replacement of the fluids.

Packaging: Packaging methods shall take into consideration the weight, physical configuration, and method of transportation to preclude damage to parts. Ensure packing materials do not induce FOD to parts or assemblies.

### **QA18 – Confidentially, Agreement**

By accepting the Terms of a KAM Solutions Purchase Order, the supplier agrees to adhere to the confidentiality agreements stated herein. "Confidential Information" considered confidential may include but not limited to:

1. Customer supplied documentation/records.
2. Customer supplied product/property.
3. Customer furnished data used for design, production and /or inspection.

No Use – Supplier agrees not to use Confidential Information in a way or to manufacture, test and/or distribute any product embodying Confidential Information, except for the purpose set forth in this Purchase Order.

No Disclosure – Supplier agrees to use its best practices to prevent and protect Confidential Information, or and part thereof, from disclosure to any persons other than suppliers employees having a need for disclosure in connection with the suppliers authorized use of Confidential Information and production/process activities.

Cyber Security – Supplier is required to follow policies and procedures for cyber security-based industry standards (e.g. ISO2700, NIST 800-35) when sensitive information is shared.

Protection of Secrecy - Supplier agrees to take all steps necessary to protect the secrecy of the confidential, and to prevent the Confidential Information from falling into the public domain or into the possession of unauthorized persons.

Terms and Termination – The obligations of this agreement shall be continuing until the confidential Information disclosed to suppliers is no longer confidential.



## QA19 Substance Regulations

Keselowski Advanced Manufacturing (KAM) is required to comply with an increasing number of substance regulations (REACH, RoHS, Conflict of Minerals) around the world in order to sell our products. We ask that our supplier's and their sub-tier/subcontractors be observant and fully comply with these relevant regulations.

The supplier **shall** have in place a Supply Chain Policy to undertake reasonable inquiries into the country of origin of conflict minerals incorporated into product/services it provides to Keselowski Advanced Manufacturing (KAM).

The supplier **shall** also notify KAM, without delay, should substances contained in deliverables to KAM be considered substances of very high concern (SVHC).

The supplier **shall** ensure all goods comply with the requirements on restrictions and use of certain hazardous substances in electrical and electronic equipment (RoHS).

## QA20 - CERTIFICATE OF CONFORMANCE

Each shipment **shall** be accompanied by (1) legible and reproducible copy of a Certificate of Conformance that includes:

1. Suppliers name and address.
2. KAM Solutions purchase order number.
3. Quantity shipped.
4. Country of Origin
5. KAM Solutions part number and vendor part number (if applicable) and revision number.
6. Serial Numbers, Batch Numbers, Cert Numbers, Heat Numbers or Cure Dates (as applicable).
7. Signature and Title of Authorized Representative.
8. The Certificate of Conformance **must** contain a statement that all inspections, processing and tests have been performed as required and meet the drawing requirements and/or purchase order.
9. Products controlled by heat numbers, cert. numbers, batch numbers or cure dates **must** be linked to the certificate of conformance by the controlling number.
10. An original signed Certificate of Conformance with the title of the Authorized Representative **must** be submitted with each shipment.
11. KAM Solutions requires that when a part is ready to ship to KAM Solutions, your Quality Department will scan the certifications and email it to: **certs@kamsolutions.com**

The cert package shall be named as follows: Part Number.Purchase Order. Packing Slip. Date  
(123456789.123456.12345.08182020)

## QA21 - CALIBRATION SYSTEM

Calibration suppliers **shall** have a Quality Management System that is registered to ISO/IEC 17025 or ANSI/NCSL Z540.

All calibration certifications **must** specifically state traceability to a NIST standard.

## QA22 - DIMENSIONAL FIRST ARTICLE INSPECTION

KAM Solutions requires full compliance to **SAE AS9102 using the latest revision**, "Aerospace First Article Inspection Requirement. The supplier **shall** provide a copy of the Ballooned Drawing with each characteristic and/or requirement clearly marked with unique identifier number. The number may be circled or boxed for easy visual identification.



**QA23 – SUPPLIER PERFORMANCE REQUIREMENTS**

KAM Solutions monitors Supplier Performance and provides Key Performance Indicators (KPI) used to evaluate suppliers.

While KPI's Metric below is a targeted goal for acceptable performance, it is expected that KAM Solutions suppliers will strive for continuous improvement to meet ZERO DEFECTS for Quality and 100% On-Time Delivery.

Supplier Performance **shall** be monitored by measuring Part Acceptance, On-Time Delivery and Supplier Corrective Actions.

Acceptable Quality Performance 98%      Number of Defective Parts/Number of parts received

Acceptable Delivery Performance 90%      10 days early. 0 days late.

Purchase Order line item quantity on time/Total Purchase Order line item quantity due

Example: 93 of 100 parts accepted, 1 of 10 shipments was late and the supplier received 1 Corrective Action.

Part Acceptance	93/100	93%
On-time Delivery	1/10	90%
	Subtotal	92%
Supplier Corrective Action	One SCAR – Deduct one (1%) for each SCAR	1%
	Target is 95%	91%

Quality KPI metric is calculated monthly. Suppliers with a total score below 95% shall be notified.

In addition to these performance metrics, the supplier is also responsible to provide timely corrective action plan for unacceptable Quality and Delivery Performance. A supplier may be unapproved until an acceptable corrective action plan is received, reviewed, and approved by KAM Solutions. A supplier that fails to show improvement may be removed from the approved suppliers list.

**QA24 – PREFERENCE FOR DOMESTIC SPECIALTY METALS.**

The seller agrees to incorporate into any articles to be delivered under this purchase order specialty metals melted in the United States, its possessions, or a qualifying country.

Specialty metals are defined in:

**Defense Federal Acquisition Regulation Supplement DFAR 252.225-7009 and its Alternate 1, restrictions on Acquisition of Ball and Roller Bearings in DFAR 252.225-7009, and Qualifying Countries are listed in DFAR 225.872-1(a).**

In addition to information related to this purchase order, and as a minimum, certification for specialty metals shall include the following:

- 1 Raw Materials Suppliers:**
  - a. Material Specification.
  - b. Origin or name and location of melting facility.
  - c. Lot, heat, or batch number.

- 2 Fasteners**  
Statement:  
"This shipment of product contains DFAR Compliant Material"



**3 Needle and Roller Bearings Suppliers**

Statement:

"This shipment of product contains DFAR Compliant Material"

**4 Source Control Design Suppliers**

Statement:

"This shipment of product contains DFAR Compliant Material"

**NOTE:** By order of the Under Secretary of Defense on January 29, 2008, DNADs for fasteners and needle roller bearing are to be canceled and therefore no longer applicable.

**END OF QUALITY (QA) REQUIREMENTS**

REVISION RECORD CHANGES

10/05/2020 Retired old Purchase Order requirements. Introduced Quality Assurance (QA) Clauses QA1 thru QA24