

Quality Assurance

:: Supplier Quality Assurance Codes

PURCHASE ORDER ATTACHMENT A QUALITY ASSURANCE CODES

EFFECTIVE: June 26, 2009.

NOTE: The following codes are applicable to purchase orders issued to “**Approved**” suppliers of Klune Industries Inc., herein after called “Klune”. The supplier shall be responsible for full compliance with each code assigned within the purchase order by Klune Quality Engineering. Should the supplier have any questions regarding compliance to the assigned codes, the supplier shall contact the Klune buyer for clarification.

CODE REQUIREMENT

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| Q1 | Deleted |
| Q2 | GOVERNMENT SOURCE INSPECTION -
Government Inspection is required prior to shipment from your facility. 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. In the event the Government office cannot be located, you must notify the buyer at Klune Industries for instructions. The Government Representative, who services the supplier’s plant, shall be notified at least forty-eight (48) hours in advance of the time the article(s) are ready for inspection and/or tests. |
| Q3 | GOVERNMENT RIGHT OF ENTRY -
All work on this purchase order is subject to inspection and/or test by the Government at all times and places (including the complete performance period) and, in any event prior to shipment. <i>The information in the Q2 Codes, in red, was removed from this statement.</i> |
| Q4 | Deleted |
| Q5A | INSPECTION SYSTEM REQUIREMENTS -
Suppliers shall have an Inspection System conforming to the minimum requirements of ISO 9001 (latest revision), and/or AS 9100 (latest revision). All provisions therein apply to this purchase order. Substantiating information shall be made available to the Government and/or Klune, upon request. |
| Q5B | QUALITY ASSURANCE REQUIREMENTS -
Suppliers shall have a Quality System conforming to the minimum requirements of ISO 9001 (latest revision) and/or AS 9100 latest revision).. All provisions therein apply to this purchase order. Substantiating information shall be made available to the Government and/or Klune, upon request. |
| Q6A | SPC -
Statistical Process Control techniques shall be employed on key, critical, or controlling characteristics, as specified within the drawing(s), and/or within |

this purchase order.

- Q6A1 SPC PLANS -
The supplier must submit an acceptable method of determining Cpk for Klune's approval. The supplier shall be responsible for submitting Cpk values for each characteristic charted with each lot of parts shipped to Klune.
- Q6B SPC PROGRAM APPROVAL -
Klune's approval of the supplier's SPC program is required prior to First Article of Klune parts. Supplier shall submit SPC procedures, including methods of selecting Key or Controlling Characteristics and control charts used.
- Q6C INSPECTION SAMPLING PLAN -
Sampling procedures employed by the supplier must be in compliance with ANSI/ASQC1.9-1993, or ANSI /ASQC Z1.4.1993.

NOTE: Sampling is not allowed on Boeing programs or parts, unless the supplier is Boeing approved to D1-8007.

- Q7 CALIBRATION SYSTEM -
The supplier must maintain a calibration system that is in compliance with ANSI/NCSL Z 540-1-1994. Calibration records must show traceability of the standards used for calibration to the National Institute of Standards and Technology (NIST).

- Q8 PART / LOT TRACEABILITY -
The individual parts or parts in the lot shall carry specific, assigned serial numbers, traceable back to the material heat lot.

All certifications, manufacturing and quality documents relating to parts supplied or manufactured on this order must be retained and be available for inspection by Klune Industries, Inc. or their customer for a minimum of (7) seven years. Identify in accordance with drawing, specification or purchase order requirements.

- Q8A INSPECTION DATA -
Verifiable, quantitative inspection data must be furnished with each lot of parts furnished for this purchase order. Actual dimensions for each characteristic, on a minimum of the sample size of the parts, per shipment, must be part of the inspection data. The inspection data must also, indicate the total number of parts accepted and/or rejected for each characteristic. The inspection data must be signed and/or stamped by a member of the Quality Assurance group at the supplier facility.

- Q8B LOT SERIALIZATION -
Parts shall be lot serialized. Supplier's processing records shall be maintained at all times by the lot serial number. The serial numbers for each lot must be reflected on the applicable certification(s).

- Q8C PART / LOT TRACEABILITY -
The individual parts or parts in the lot shall carry specific, assigned serial numbers, and/or Control numbers, traceable back to the material heat lot. Identify in accordance with drawing, specification or purchase order requirements.

- Q8D MECHANICAL/ELECTRICAL TESTING AND ASSOCIATED DATA -
Each part/assembly must have a unique serial number assigned to it, with verifiable test results indicating the ability to meet designed functional requirements. This test data must be furnished with each part/assembly. This test data must be signed and/or stamped by a Quality Representative at the supplier facility.
- Q9 FIRST ARTICLE INSPECTION -
The first production piece, must have a complete, 100% First Article Inspection (FAI) done on it and documented, to become part of the First Article package, to be submitted to Klune for review/approval prior to continuation of production. The First Article Package, must consist of the first production piece, the documented inspection results, material certs, and special processing certs. If the processing is altered, after the original First Article approval, a Delta First Article, as a minimum, will be required with the first production piece after the alteration. The FAI part(s) must be segregated and marked as being the FAI part(s). Continuing Production without Klune Industries approval will be at the supplier's risk, should the parts be found discrepant.
- Q10 CERTIFICATION OF COMPLIANCE -
A Certification of Compliance (C of C), signed by a suppliers Quality Representative, must accompany each lot of parts shipped to Klune. This C of C is an indication that all requirements of the associated purchase order, drawing(s), and specification(s) have been met.
The C of C must contain, as a minimum,:
- Name & address of supplier.
 - Description of part.
 - Part number and revision.
 - Quantity of acceptable parts.
 - Klune's PO Number.
 - Shipper number, if applicable.
 - Serial/Lot number, if applicable.
 - Shop Order number, referenced on the P.O, if applicable.
 - Conformance Statement.

NOTE: Q13A Applies: MSDS Sheets must be included when applicable.

- Q10A KLUNE SUPPLIED, CERTIFICATE of CONFORMANCE -
A Klune supplied C of C has been attached to this purchase order. The supplier is responsible for providing the necessary information required and sending a copy with each shipment of parts to Klune. This document must be signed by a Quality Representative, as an indication that all the requirements, associated with this purchase order, drawing(s), and specification(s) have been met.
- Q11 CERTIFIED PHYSICAL & CHEMICAL TEST REPORTS -
Certified Physical and Chemical test reports as well as Rockwell Hardness results are required for each shipment of material on this purchase order and must be traceable to each heat lot involved. The documentation must be stamped or signed by a member of the supplier's Quality Assurance group.

- Q11A Deleted
- Q11B SPECIAL PROCESS CERTIFICATION -
Any special processing performed on the material/parts associated with this purchase must be individually certified. Including related data, such as thickness, temperatures, and hardness results. These processes shall include but are not limited to Heat Treat, Plating, Paint, Welding, NDT and etc; .
- Q11C FUNCTIONAL TEST -
Each completed part/ assembly delivered on this purchase order, must be functionally and/or electrically tested, as applicable. Each item tested must be identified with, as a minimum, part number, revision and a unique serial number. The test data, which has the actual results of each parameter tested, will also have the part number, revision and the associated serial number. Each data packet must be signed and dated by the Test Engineer doing the testing, as certification that the unit in question, has been functionally tested and has met all of the requirements of the functional test. A copy of this data packet must accompany each item being delivered.
- Q12 CURE DATES -
All parts/material delivered on this purchase order, must be coded with an applicable cure date and accompanied by cure date certification. The cure date certification must specify the applicable military, prime contractor, and or Klune specification number.
- Q13 EXPIRATION DATE -
The material delivered on this purchase must be identified with Klune Industries purchase order number, date of manufacturing, expiration date and applicable military, prime contractor and/or Klune specification number. NOTE: As a minimum, 50% of the original shelf life must be remaining on the product.
- Q13A MATERIAL SAFETY DATA SHEET -
Material Safety Data Sheets are required with each item delivered on this purchase order.
- Q14 CATALOG INFORMATION -
Complete catalog and/or drawing data/information for all: (a) electrical, (b) dimensional, (c) physical, and (d) chemical properties, as applicable, shall be furnished with each lot shipped to Klune Industries.
- Q15A SOLDERING CERTIFICATION -
All soldering performed as a result of this purchase order shall be in compliance with the process and personnel certification requirements of Joint Industrial Standard J-STD-001 , class 3. (latest revision).
- Q15B WELDING CERTIFICATION -
All welding required for this purchase order, shall be in compliance with the process requirements and personnel certification requirements of MIL-STD 1595, (latest revision) or the welding specification(s) identified on this purchase order
- Q16 ESD PROGRAM -
Supplier shall conform to the requirements of Mil-STD-1686, (latest

revision) Electrostatic Discharge Program (ESD). Certification of compliance must accompany each shipment.

Q17 KLUNE SOURCE INSPECTION -
Klune Source Inspection at suppliers facility is required prior to shipment of any parts/material on this purchase order. Supplier shall notify the Klune buyer of the required date for Klune source inspection. Adequate time for arrangement must be allowed.

Q18 PRESERVATION/PACKAGING -
Parts and/or material furnished on this purchase order shall be preserved, packed, and packaged in a "Best Commercial" manner, to prevent deterioration or damage during shipment. Specific requirement deviating from "Best Commercial" method shall be defined within the purchase order. Bare part to part contact is **not allowed** under any circumstances, except for hardware, bolts, screws, nuts, washers, etc...

Q19
&
Q20 Deleted

Q21 RIGHT OF ENTRY -
All processing performed against this purchase order may be subject to review by Klune, Klune's customer, and/or the Government at any time during the duration of the purchase order. Adequate notice will be given to the supplier, in the event this should occur.

Q22 IDENTIFICATION -
Parts and/or material provided for this purchase order shall be identified with the part number, revision, and Federal Manufacturer Code in accordance with MIL-STD-130 and/or drawing/ specification requirements.

Q23 -
Q27 Deleted

Q28 SPECIAL PROCESS APPROVAL FLOWDOWN -
Supplier shall be responsible for using Klune, Klune's Customers and/or Government approved sources, for performance of special processing. Contact the buyer for names of the approved suppliers.

Q29 APPROVED SUPPLIER -
All items supplied on this purchase order, must be purchased from only those suppliers approved by Klune, Klune's customer. and/or the Government. Contact Klune buyer for a list of approved suppliers.

Q30 Deleted

Q31 FLIGHT SAFETY CRITICAL -
Items furnished under this purchase order are Flight Safety Critical. The supplier must currently be Boeing Military Helicopter approved for the processing involved. All requirements of EPB 17-119 and applicable sub-tier specifications are imposed. The initial planning for manufacturing/processing must be submitted to Klune Industries, for Boeing approval. Once the planning package has been approved by Boeing, the process is "Fixed" and will require re-submittal before any process changes can be incorporated

into the already approved process. Part serialization and traceability must be strictly maintained throughout all processes. All critical characteristics must be inspected 100%.

- Q32 BOEING HARDWARE -
All hardware purchased on this purchase order must be obtained from a Boeing approved manufacturer per D1-590. If a distributor is used the distributor must be Boeing approved per D1-4426 sec. III b.
- Q33 BOEING APPROVED PROCESSOR -
All processing on this purchase order is to be in accordance with D1-4426 Boeing approved processors.
- Q34 FASTENER QUALITY ACT -
Articles purchased on this Purchase Order must be produced in accordance with the Fastener Quality Act (FQA) of July 26, 1998. All test laboratories must be approved by NIST or their authorized designees and be listed on the NIST's list of Approved Laboratories. In addition to your company's Certificate of Conformance, Certified Test Reports are required to accompany this order. Additionally, your Certificate of Conformance must include one of the following statements:
- (A) All fasteners meet the requirements of the (FQA) and records of compliance are on file or,
- (B) All fasteners were produced prior to the implementation of the FQA and are therefore exempt.
- Q35 GRAIN DIRECTION -
Grain Direction identification is required on this order. All pieces of raw stock shall be identified with an arrow or other means denoting the grain direction. Failure to identify grain direction shall be cause for rejection.
- Q36 PROPER REVISION LEVEL -
All items produced for this purchase order must be of the same revision listed on the purchase order. In the event there is a conflict between the revision stated on the purchase order and the revision on the print, supplied your facility, immediately notify your Klune Buyer for resolution.
- Q37 BOEING D6-82479, AS9100, or D1-9000 FLOWDOWN -
The supplier is required to be BOEING approved to D6-82479, AS9100, or D1- 9000 (latest revision),. For Basic Quality System Requirements for work performed on this purchase order. Proof of approval is required.
- Q38 CAD/CAM QUALITY SYTEM FLOWDOWN -
Supplier is required to be BOEING approved to D6-51991 (latest revision), CAD/CAM Quality Assurance System Requirements for work performed on this contract. Proof of approval is required.
- Q39 PROCESS CHANGE CONTROL -
All processes which require Klune and or Customer Process Approval prior to activity shall be considered frozen. Any change in: Procedure, Personnel, Equipment (including electronic hardware, software, or firmware), Material, Tooling, Cleaning, Handling, etc. shall require written change approval prior to further processing.

- Q40 NON-CONFORMING MATERIAL -
The supplier shall notify Klune Industries of nonconformance products as soon as discovered by the supplier and arrangements requirements to be applied to the products by the assignment of the appropriate quality code. Authority to ship discrepant material must be obtained by the seller prior to shipment. Discrepant material shipped without prior approval shall be rejected and returned at the seller's expense.
- Q41 The supplier shall not subcontract any part of the manufacturing process or finishing process of any part on this order without prior written approval from Klune Industries Inc. Supplier is also responsible to ensure flow down of Klune Industries purchase order requirements to any and all sub-tier suppliers.
- Q42 UNAUTHORIZED CHANGES -
The Supplier shall make no changes to work under this purchase agreement, including design, manufacturing processes, materials, or otherwise, which may affect Form, Fit or Function of the items, without prior approval by Klune Industries.
- Q43 Customer/Government Furnished Property Administration and Flow Down - is essential in the performance of this contract. In addition to Klune Industries Purchase Order Terms & Conditions ([Form KII-600-11](#)) Paragraph numbers 16 and 24, The Klune Industries Purchase Order Attachment "CFM" for Customer/Government Furnished Property administration and Flow down are required.
- Q44 Foreign Object Debris (FOD) Program. Klune Industries suppliers shall ensure work is accomplished in a manner preventing foreign objects or material in deliverable items. Klune Industries supplier's shall maintain material handling, parts protection, work area housekeeping, tool accountability, hardware accountability, parts and materials in a manner sufficient to preclude the risk of FOD incidents. The supplier's FOD Program shall be subject to audit and Klune Industries or Klune Industries Customers review and/or approval.
- Q45 Buy American Act - FAR 252.225-7014 Preference for Domestic Specialty Metals (Jun 2005) and subcontractor Flow Down (all tiers) of this FAR clause are essential in the performance of this contract.

(a) Definitions. As used in this clause—

(1) "Qualifying country" means any country listed in subsection [225.872-1](#) of the Defense Federal Acquisition Regulation Supplement. (225.872-1) Australia, Belgium, Canada, Denmark, Egypt, Federal Republic of Germany, France, Greece, Israel, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom of Great Britain, and Northern Ireland.

(2) "Specialty metals" means— Steel

(i) Steel with a (A) maximum alloy content exceeding one or more of the following limits:

Manganese (Mn), 1.65%; Silicon (Si), 0.60%; Copper (Cu), 0.60 percent; or

(B) Steel with a maximum content of one or more of the following limits:

Aluminum (Al) > .25%; Chromium (Cr) > .25%; Cobalt (Co) > .25%;
Columbium (Cb) > .25%

Molybdenum (Mo) > .25%; Nickel (Ni) > .25% ; Titanium (Ti) > .25% ;
Tungsten (W) > .25%

Vanadium (V) > .25%

(ii) Metal alloys consisting of nickel, iron-nickel, and cobalt base alloys containing a total of other alloying metals (except iron) in excess of 10 percent;

(iii) Titanium and titanium alloys; or

(iv) Zirconium and zirconium base alloys.

(b) Any specialty metals incorporated in articles delivered under this contract shall be melted in the United States or its outlying areas.

(c) (Alternate 1, APR 2003) This clause does not apply to specialty metals melted in a qualifying country or incorporated in an article manufactured in a qualifying country.

(d) (Alternate 1, APR 2003)The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts for items containing specialty metals.

Use the clause in solicitations and contracts exceeding the simplified acquisition threshold requiring delivery, for one of the following major programs, of an article containing specialty metals: (i) Aircraft, (ii) Missile and space systems, (iii) Ships, (iv) Tank-automotive, (v) Weapons, and (vi) Ammunition.

Q46 STANDARD HARDWARE FOR GOVERNMENT PROGRAMS. DFAR 252.225-7014 Preference for Domestic Specialty Metals (Jun 2005) and subcontractor Flow Down (all tiers) of this FAR clause are essential in the performance of this contract. The Standard Hardware Supplier, Distributor, or Manufacturer shall supply a certification statement to Klune Industries, Inc. that the standard hardware they have supplied, distributed, and/or manufactured are compliant to DFAR 252.225-7014. You are to certify that the hardware you have supplied contains specialty metals *ONLY* from the United States of America or a qualifying country as listed in subsection [225.872-1](#) of the Defense Federal Acquisition Regulation Supplement. Failure to include the substance of the required certifying statement will deem the subject hardware unusable for the product for which it is intended and shall result in return of the subject hardware.

Q47 OUTSIDE CALIBRATION SOURCE REQUIREMENTS -
Outside Calibration Sources must maintain a calibration system that is in compliance with ANSI/NCSL Z 540-1 or ISO 17025. Calibration records/certifications must show traceability of the standards used for

calibration to the National Institute of Standards and Technology (NIST) and indicate a minimum of three points within the range of the instrument being calibrated. Calibration of NDT equipment also requires a minimum of three points within the range-of-use* of the instrument being calibrated.

*Contact Klune Industries purchasing if you were not provided the NDT instruments range-of-use requirements.