

Supplier Quality Control System. Each purchase order specifically states which of the following Quality Assurance codes are applicable to the supplier. The supplier shall establish and maintain a system that complies with the imposed requirements.

100 QUALITY SYSTEM. The supplier shall establish and maintain a system that complies with applicable industry or regulatory standards and is deemed acceptable by CHAMPION AEROSPACE Quality Assurance. When registered, a copy of the approval certificate from a third party shall be forwarded to CHAMPION AEROSPACE Supplier Quality Assurance including all renewals and/or updates. The supplier is responsible for informing CHAMPION AEROSPACE when there are changes to the approval status. Quality records must be stored in an environment that will prevent deterioration, damage, or loss and retained for a period of ten (10) years. Quality records shall be made available within 24 hours upon request by CHAMPION AEROSPACE for its customers or regulatory bodies such as the FAA. Suppliers must maintain qualifications for sub-tier suppliers and the products purchased through them. It is the suppliers' responsibility to ensure and control the quality of all raw materials, components and special processes that are purchased to manufacture components and parts for CHAMPION AEROSPACE. Suppliers are responsible to ensure that product(s) manufactured utilize only authentic, conforming and specified material requirements. Prior to implementing changes, including changes requested by sub-tier suppliers, suppliers must notify CHAMPION AEROSPACE for approval.

110 CALIBRATION SYSTEM. The supplier is required to establish and maintain a calibration system that conforms to the applicable requirements of ISO 10012, ISO/IEC 17025 or ANSI/NCSL Z540.3.

120 GAGE CALIBRATION AND TEST LABORATORIES. Gage Calibration and Test Labs. must maintain accreditation to the applicable requirements of ISO/IEC 17025. For MATERIAL TESTING LABS. only, Nadcap or GE S-400 certification is required. CHAMPION AEROSPACE must be notified if accreditation or certification expires or is withdrawn. Quality Clause 180 (Right of Access) and ten (10) year quality record retention applies.

130 PREFERENCE FOR DOMESTIC SPECIALTY METALS. Supplier agrees to comply with Defense Federal Acquisition Regulation Supplement DFAR 252.225-7009, Restriction on Acquisition of Certain Articles Containing Specialty Metals, when this clause is specified in the purchase order. Use of foreign specialty metals may only be used with written authorization from CHAMPION AEROSPACE.

140 MATERIAL PROHIBITION SUBSTITUTION.

A. Unauthorized Material Substitution (General)

Unauthorized material substitutions are not permitted on Champion product. Unauthorized material substitution includes any deviation from the engineering definition of a raw material.

Supplier agrees and understands that such deviations only apply to this purchase contract, and only as indicated in the Champion authorized document.

B. Metallic Materials (Specific)

Temper or Condition Conversion - Unless specifically authorized by the engineering definition, conversion of a raw material (i.e. heat treat to change the temper or condition of the material) constitutes material substitution of the condition provided by the manufacturer.

Metallic Raw Materials - Supplier shall ensure that metallic materials covered by current or obsolete/superseded specifications are produced using standard industry practices. Raw material must not be re-certified. Raw material certifications for material or parts shall reflect the form and size of the raw material as originally manufactured by the raw material producer.

C. Specification Supersession - For government specifications and standards canceled after June 1994, supplier shall submit a Request for Deviation/Waiver to use appropriate current industry standard specifications.

D. Reports - Raw material certifications as required by First Article clause 220

E. Chain of Custody (Disguising intermediate ownership) - Suppliers shall not disguise the pedigree of material or chain of ownership by removal of a previous supplier's name, nomenclature or identification.

150 SOFTWARE QUALITY ASSURANCE. All nondeliverable software used in the manufacture, inspection or acceptance of product must be under configuration control.

160 MATERIAL REVIEW BOARD. MRB authority for use-as-is and repair dispositions is not granted on CHAMPION AEROSPACE designed products.

170 NONCONFORMING MATERIAL. Authority to ship nonconforming material must be obtained through CHAMPION AEROSPACE. Nonconforming material shipped without prior approval is subject to return at the supplier's expense. The supplier must gain approval to ship nonconforming product via Supplier Request for Deviation/Waiver Form 113008. Each supplier is required to report to Champion if a product or article has been released from that supplier and subsequently found not to conform to the applicable design data.

180 CHAMPION AEROSPACE/CUSTOMER/GOVERNMENT/REGULATORY BODIES/FAA SURVEILLANCE. CHAMPION AEROSPACE, its customers, the Government, Regulatory Bodies and FAA reserve the right to audit any and all systems, processes and materials in accordance with the purchase order, contract and FAR requirements.

190 CHAMPION AEROSPACE SOURCE INSPECTION AND SURVEILLANCE. CHAMPION AEROSPACE source inspection and surveillance of system, procedures, facilities, and parts covered by this purchase order are mandatory prior to shipment of purchased items. Use of supplier's equipment, gages and measuring and testing devices shall be made available at the supplier's facility for use by the CHAMPION AEROSPACE Source Inspector when required to determine conformance to contractual requirements. If conditions warrant, the supplier's personnel shall be made available for operation of such devices and for verification of their accuracy and condition.

200 GOVERNMENT SOURCE QUALITY ASSURANCE (GSQA). GSQA is required prior to shipment from the supplier's plant. Upon receipt of this purchase order, the supplier shall promptly furnish a copy to the Government Inspector who normally services the supplier's plant. In the event that delivery of the items will be delayed due to GSQA requirements, the supplier shall contact CHAMPION AEROSPACE Purchasing immediately. Evidence of GSQA must be indicated on all shipping documents.

210 TRACEABILITY. Traceability shall be maintained from receipt of raw material through finished product. Records and material must be identified by lot number, material type, specification and applicable revision identifier or date of issue, heat number, serial number, etc., as required to maintain traceability. Records shall be maintained on file at supplier's facility. If a time limit is not specified, records shall be kept for ten (10) years subsequent to completion of purchase order deliveries.

220 FIRST ARTICLE INSPECTION (FAI). Submit First Article sample with report for first build, revisions, and after 2 year lapse in production. AS9102 First Article Inspection is the preferred format. The supplier shall furnish first article sample(s) produced using the material, tooling, processes, and

planning to be used for subsequent deliveries. The first article samples(s) shall be identified and submitted with a FAI report. The FAI report shall include the CHAMPION AEROSPACE drawing with numbered characteristics corresponding to an itemized layout reflecting actual readings and shall show compliance to all drawing characteristics, blueprint notes and specifications. Include the method of measurement for dimensional characteristics. For subsequent revisions to the drawing, only those characteristics, notes or specification affected by the revision require reporting. A copy of the raw material C of C is required for an initial build first article and a first article submitted after a two year lapse in production. For special process first articles, follow instructions on Form 106009 attached as part of the purchase order and submit for approval with first article sample(s).

NOTE: Submit initial build first article prior to production run shipment unless otherwise directed by CHAMPION AEROSPACE buyer.

230 NO LONGER APPLICABLE

240 SPECIAL PROCESSES. The designated special process must be documented with methods of control in a technical plan format. The technical plan must be submitted with First Article parts for approval by CHAMPION AEROSPACE prior to submitting the first production order. Once approved by CHAMPION AEROSPACE, revisions or variations to this fixed process shall not occur unless CHAMPION AEROSPACE has been notified and has approved the revisions in writing.

250 CERTIFICATION OF COMPLIANCE.

All parts/processes supplied by the supplier must be certified as to their compliance with all purchase order requirements. The certification must contain, as a minimum:

- A) The CHAMPION AEROSPACE purchase order number.
- B) The CHAMPION AEROSPACE part number and drawing revision level.
- C) Quantity supplied.
- D) Supplier's name and if applicable, suppliers part number.
- E) For Age Sensitive Material (Shelf Life) reference manufacture/cure date, lot/batch code, and expiration date. Note: A minimum of 75% of the shelf life must be remaining at date of shipment.
- F) Material and/or special process specifications (CHAMPION AEROSPACE, Military, Government, or Commercial) that appears on the PO or drawing callout.
- G) Verifiable results (usually numerical results or observed visual criteria) of all testing/inspections required by PO or drawing specifications for special processes and other applicable products.
- H) Certification of 100% inspection or Cpk data when Quality Clause 310 or 360 is stated on the purchase order.
- I) Attached copy of authorized deviations/waivers when applicable.
- J) Company representative signature and title. Computer generated signatures are acceptable.

STANDARD OFF THE SHELF (CATALOG) ITEMS: Packing list type certification is acceptable provided a signed statement is included. Reference CHAMPION AEROSPACE PO number, manufacture name and part number (no revision level required) for each item listed.

NOTE: Statement including phrases such as "to the best of my knowledge and belief" are not acceptable. The statement "the material meets all applicable specifications, drawings, and PO requirements" (or similar statement) is not acceptable in lieu of supplying the information required in F) and G) above for manufactured parts and processes.

260 MATERIAL TEST REPORTS. Supplier shall include a copy of the mill test report which contains the complete chemical and mechanical test data that has been verified by the supplier as meeting the acceptance requirements of the applicable raw material specification and/or engineering drawing. It is acceptable to have actual test values or range limit data from the raw material producer.

270 GENERAL REQUIREMENTS FOR AVIATION PRODUCTS. All parts and processes must conform to CHAMPION AEROSPACE Specification P&M 1.29.2. All parts shall be packaged for shipment to CHAMPION AEROSPACE using any suitable means that will prevent damage or as specified in PO or specifications.

280 SAMPLING. CHAMPION AEROSPACE reserves approval authority over sampling plans used for product acceptance. All sampling plans will have an accept number of "0" and reject number of "1". (No defects are permitted.) CHAMPION AEROSPACE reserves the right to require justification for sampling in lieu of 100% inspection.

290 NO LONGER APPLICABLE

300 THREADS - EXTERNAL. Specified plated thread dimensions are after plating or coating using functional gaging practice. All openings must be suitably protected against entrance of foreign material. Use suitable packaging to protect against staining.

310 THREAD INSPECTION/ACCEPTANCE REQUIREMENTS

SCOPE: This purchase order clause applies to all external threads unless otherwise specified or excepted in writing by CHAMPION AEROSPACE Product Assurance Manager.

REF: FED-STD-H28/20  
ANSI/ASME B1.3M  
MIL-S-8879

CHAMPION AEROSPACE requires that suppliers of threaded parts possess screw thread gaging systems capable of complying with ANSI/ASME B1.3M, System 22.

The supplier will conduct variables measurement of external threads for the following characteristics:

- 1. Pitch diameter size.
- 2. Functional size.
- 3. Major diameter.
- 4. Minor diameter (UNJ external only).
- 5. Root radius (UNJ external only).

The supplier will perform 100% inspection as described below or may sample inspect when calculated process capability index (Cpk) is maintained at 1.33 or greater with no inspection points out of control.

Cpk must be calculated for the above characteristics as follows:

THE LESSER OF:  $\frac{USL - MEAN}{3 \text{ SIGMA}}$  OR  $\frac{MEAN - LSL}{3 \text{ SIGMA}}$

The supplier must provide certification of 100% inspection or provide the actual calculated Cpk values for required characteristics.

Supplier gaging and statistical calculation methods must be able to demonstrate correlation with those methods used by CHAMPION AEROSPACE.

CHAMPION AEROSPACE Receiving Inspection will reject lots which do not meet the Cpk requirements of 1.33 or greater for required characteristics.

320 PRATT & WHITNEY (USA). Supplier must certify that plating process conforms to the latest revisions of PW Material Control Lab Manual, sections F-22 and F-44, in addition to other cert. requirements.

330 PRATT & WHITNEY (CANADA). Supplier must certify that plating process conforms to the latest revisions of PWC Material Control Lab Manual, sections FC-22, FC-23, and FC-44, in addition to other cert. requirements.

340 CRITICAL ITEMS Item being ordered is a critical item having a significant effect on the product realization and use of the end item product; which may include safety, performance, form, fit, function, producibility, service life, etc.; and requires specific actions to ensure it is adequately managed.

350 QUALIFIED PRODUCTS LIST (QPL). Supplier must state manufacturer of items ordered and certify that manufacturer is on U.S. Government Qualified Products List.

360 KEY CHARACTERISTICS FLOWDOWN. Item ordered may have requirements for statistical control of selected "KEY" characteristics. Supplier must maintain a system for control and provide Cpk data on certification. The KEY characteristics Cpk must be maintained at 1.33 or greater. When applicable, CHAMPION AEROSPACE will identify KEY characteristics on the drawing and/or in the PO comments. Contact CHAMPION AEROSPACE buyer for advice if required. Sampling inspection may only be used within the guidelines specified in Quality Clause 280. These KEY characteristics shall be flowed down to sub-tier suppliers where applicable.

Alternate acceptance method: 100% - KEY characteristics must be within 75% of B/P tolerances and centered.