

**1. Propose**

To provide instruction on Precision Advanced Machining's supplier quality assurance requirements

**2. Scope**

These requirements apply to all Precision Advanced Machining Aerospace suppliers.

**3. Responsibilities**

Acceptance of Precision Advanced Machining's purchase orders constitutes acceptance to the requirements set forth within this work instruction.

**4. Requirements****4.1 Supplier Quality System Requirements**

4.1.1 The supplier shall develop and maintain fundamental Quality Systems that provide for continuous improvement and ensure product or services provided to Precision Advanced Machining meet all applicable drawing, specification, purchase order, and quality requirements. Suppliers shall be compliant to the latest revision of AS9100, ISO9001, ISO17025, Nadcap or any quality system acceptable to Precision Advanced Machining's customers as appropriate or have an approved audit/survey on file.

4.1.2 In addition to basic Quality System requirements, Precision Advanced Machining contractually mandates that requirements and procedures defined below are complied with.

**4.2 Documents and Data**

4.2.1 Precision Advanced Machining supplied blueprints and sketches will be considered uncontrolled. It is the supplier's responsibility to ensure the blueprint revision coincides with the P.O.

4.2.2 Whenever a specification or drawing is called out on a P.O., it should be interpreted to mean the latest revision issued at the date of the P.O. issuance, unless otherwise specified on the P.O.

**4.3 Precision Advanced Machining Surveillance and Access**

4.3.1 Precision Advanced Machining, its customers, and regulatory agencies reserve the right to access the supplier's facilities for monitoring and inspecting of products and services supplied to Precision Advanced Machining.

**4.4 Non-conformances**

4.4.1 Any product not conforming to drawings or specifications found by the suppliers require disposition in advance of shipment to Precision Advanced Machining. All non-conformances of Precision Advanced Machining controlled requirements must be submitted to the appropriate facilities' MRB.

4.4.2 The supplier may submit a deviation request through Precision Advanced Machining's Quality Department, via an email or electronic communication. The supplier shall submit the request prior to performing any rework or repair. Acceptance by Precision Advanced Machining is only for the specified quantity and does not establish any criteria for future shipments.

4.4.3 Any costs incurred due to a nonconformance caused by a supplier may be assessed back to that supplier.

4.4.4 The supplier shall notify Precision Advanced Machining Quality, within 24 hours, upon determining that nonconforming product, or items containing latent defects, have been shipped to Precision Advanced Machining.

4.4.5 Nonconforming material found by Precision Advanced Machining may be reported to the supplier on a Nonconformance Report (NCR).

4.4.6 Material may be classified as Return to Vendor (RTV) via a Return Purchase Order and returned with notification from Precision Advanced Machining Quality Assurance Department.

4.4.7 Where warranted by the type of nonconformance, a Supplier Corrective Action Request may also be issued. Failure to complete and return the SCAR by the requested due date will affect the supplier's performance rating and may result in Precision Advanced Machining withholding quotation opportunities.

#### **4.5 Record Retention**

4.5.1 Suppliers shall establish procedures to ensure Quality records are, unless otherwise specified, maintained for a minimum of fifteen (15) years after delivery of material and material certification. Quality records are those records which demonstrate conformance to specified requirements and effective operation of the quality system.

4.5.2 Records shall be made available for Precision Advanced Machining review upon request.

#### **4.6 Notification of Changes**

4.6.1 The supplier shall notify Precision Advanced Machining Purchasing of changes to product and/or Process definition a minimum of 2 months prior to incorporation, or as required by Purchase Order, drawing, or specification.

4.6.2 Suppliers shall notify Precision Advanced Machining Purchasing of any management changes or certification status changes within 30 days of such change occurring.

#### **4.7 Foreign Object and Debris (FOD)**

4.7.1 Suppliers shall maintain procedures to control FOD (Foreign Objects, Damage) for all products and services delivered to Precision Advanced Machining.

#### **4.8 Counterfeit Parts**

4.8.1 Suppliers shall maintain adequate procedure to control Counterfeit Parts., including (but not limited to) avoidance, detection, mitigation, and disposition per the requirements of AS9100D 8.1.4

4.8.2 Suppliers shall notify Precision Advanced Machining Purchasing, within 24 hours, upon determining that counterfeit materials have been shipped or previously shipped to Precision Advanced Machining.

#### **4.9 Requirements Flow Down**

4.9.1 Suppliers shall flow down to sub-tier suppliers all applicable purchase order requirements. This flow down shall include all key characteristics when specified.

#### **4.10 Certificate of Conformance**

4.10.1 Each shipment to Precision Advanced Machining must be accompanied by a Certificate of Conformance. At a minimum, the following information must be included in the certificate of conformance:

- Precision Advanced Machining Purchase Order Number
- Precision Advanced Machining Part Number/Item Number, Revision Level, and Part/Item Description
- Serial number or Lot number as applicable
- Supplier Part Number and Revision Level, if applicable.
- Standard / Specification and Revision Level, including Amendments, Notices, etc.
- Quantity shipped • Statement of conformance to all purchase order and drawing requirements.
- Signature and Title of a responsible representative of the supplier.

4.10.2 In addition to 4.10.1 Calibration related C of Cs must include as applicable:

- Procedure or standard used for calibration
- Equipment used for calibration (Instrument, Model, Serial Number, Traceability)
- Points of calibration (As received, after calibration and deviation)
- Environmental conditions (i.e. Temperature and Humidity)
- Calibration is traceable to NIST
- Weather the equipment was found in tolerance or out of tolerance as received
- Was there repair required to achieve in tolerance condition

#### **4.11 Government, Safety, and Environmental Regulations**

4.11.1 All purchased materials used in part manufacturing shall satisfy current governmental and safety constraints on restricted, toxic and hazardous materials; as well as environmental, electrical and electromagnetic considerations to the country of manufacture and sale.

#### **4.12 First Article Requirements**

4.12.1 For certain processes or products, Precision Advanced Machining may request a FAI to be submitted. This will be specified on the initial Purchase Order. The supplier will be required to submit a new FAI provided that the process or product has not been produced within the two-year time frame.

#### **4.13 Supplier Performance Rating**

4.13.1 Precision Advanced Machining shall monitor Outsource suppliers, Raw Material Suppliers, Tooling Suppliers, and Gaging Suppliers for delivery and quality. The frequency of monitoring suppliers is established by Precision Advanced Machining's management team.

4.13.2 Suppliers are expected to maintain an acceptable on time delivery, quality, and order accuracy as determined by the management team. The yearly targets will be provided to each supplier. Precision Advanced Machining will monitor and take appropriate action as necessary.

4.13.3 Suppliers continually receiving unacceptable rating values will be notified and may be removed from Precision Advanced Machining's Approved Suppliers List. Unacceptable ratings will be determined upon management input.

#### **4.14 Outsource Suppliers**

4.14.1 Outsource Suppliers shall provide a certificate of conformance with each shipment of product to Precision Advanced Machining, as defined in Section 10.

4.14.2 Outsource suppliers will be monitored for OTD, and quality.

#### **4.15 Raw Material Suppliers**

4.15.1 Raw Material Suppliers shall provide the following with each shipment:

- Chemical analysis report for each piece of bar stock.
- All test results showing conformance to the specification requirements and purchase order.
- Safety Data Sheets

4.15.2 Raw material suppliers will be monitored cost, quality and OTD.

#### **4.16 Tooling Suppliers**

4.16.1 Tooling suppliers will be monitored for OTD and order accuracy.

#### **4.17 Gage Suppliers and Gage Calibration Services**

4.17.1 New gages must be traceable to NIST. Long form certifications must be included with all new gage purchases.

4.17.2 Suppliers that provide dimensional gage calibrations must be ISO17025 certified, unless the supplier is the manufacturer of the gage, other vendors may require other certifications.

4.17.3 Gage suppliers and Gage Calibration service suppliers will be monitored for OTD and order accuracy.

#### **4.18 Inspection Services**

4.18.1 Suppliers that provide dimensional inspection services must be ISO17025 certified or equivalent.

4.18.2 Inspection services suppliers will be monitored for OTD and order accuracy.

#### **4.19 Confidentiality**

4.19.1 Suppliers will maintain confidentiality regarding customer specific designs, prints and proprietary information. The supplier will request written authorization from Precision Advanced Machining when it is necessary to share such information with other entities.

#### **4.20 Awareness**

4.20.1 Supplier shall ensure their employees are aware of the following:

1. Their contribution to product conformity
2. Their contribution to product safety
3. The importance of ethical behavior

#### **4.21 Ethical Policy**

4.21.1 It is expected for suppliers to comply with the Aerospace Industries Association of America (AIA) Global Principles of Ethics in the Aerospace & Defense Industry.