



## PRECISION OPTICAL QUALITY ASSURANCE NOTES

The Quality Assurance Notes herein are applicable to Precision Optical Purchase Orders when referenced as a requirement therein. Compliance to the designated Quality Assurance Notes is necessary to meet contractual requirements.

**QP1 ISO 9001 REQUIREMENTS**

The Supplier shall maintain a quality program that meets the requirements of ISO9000. This program will be subject to review and approval by Precision Optical Quality Personnel at all times during the period of performance of this purchase order.

**QP2 DELETED**

**QP3 STATISTICAL PROCESS CONTROL**

Supplier shall have a documented SPC program in effect in their facility which is acceptable to Precision Optical. Statistical data shall be submitted as evidence that the Supplier's parts and processes are within process control limits and within specification tolerances when requested by this purchase order.

**QP4 PRECISION OPTICAL SOURCE INSPECTION**

Precision Optical Source Inspection is required prior to shipment from Supplier's plant. Supplier is to notify Precision Optical 5-days prior to material availability for source inspection to effect timely scheduling and planning. The source inspection by Precision Optical personnel shall in no way relieve Supplier of the responsibility for furnishing the specified supplies and services that meet the requirements of the purchase order. The inspection facilities, personnel, and equipment the Supplier normally uses are to be made available to the Precision Optical inspector to recheck parts the Supplier's inspection department has inspected and accepted. Supplier shall have available and present upon demand, documented evidence of the inspection/test performance including in-process and/or final test. Required documentation for shipment shall be completed and signed by the Supplier's authorized quality personnel.

**QP5 ACCEPTANCE TEST PROCEDURES**

The Supplier shall prepare detailed test procedures, encompassing test required for in-process and final acceptance. Each item of hardware, or part thereof, which requires acceptance testing, shall be covered by an acceptance test procedure. Final and in-process acceptance test procedures require Precision Optical Quality approval prior to the delivery of the first unit of hardware. Subsequent changes are subject to Precision Optical Quality approval prior to incorporation.

**QP6 INSPECTION/TEST DATA**

Each shipment of material on this order shall be accompanied by inspection and/or test data showing compliance to drawing of specification requirements. The reports shall contain the purchase order number, Supplier's name and address, part number and name, serial number (if applicable), test conducted, actual results of test or variable measurements and approval signature of the Supplier's quality representative.

**QP7 DELETED**

**QP8 FIRST PIECE/PRODUCTION SAMPLE INSPECTION**

The Supplier is required to perform a First Piece/Production Sample Inspection of each item (or each designated item if specific items are designated in the body of this PO) and provide verifiable evidence to the buyer's representative to assure compliance with the requirements of this PO. The article to be inspected shall be either the first production article or an article selected at random from production articles. Whichever is chosen, the article shall be representative of the Supplier's manufacturing process. The Supplier's report shall provide as a minimum: PO number, part number, revision level, part name, Supplier's name, drawing requirements (including tolerances), method used to obtain results and actual results or each measurement.



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### QP9 TEST REPORTS

The supplier shall provide actual quantifiable test data or indication of pass/fail test results (when applicable). The Supplier's format is acceptable but must be legible and shall reference the PO number, Supplier's name and/or independent laboratory's name, product number, serial number or lot date code(s), if applicable, and the date of the test. An authorized Supplier's representative shall validate all submitted reports and signify such through approval.

### QP10 CERTIFICATE OF CONFORMANCE

The Supplier shall submit a Certificate of Conformance (C of C) with each shipment, stating that the product(s) or services furnished on this PO conforms to the applicable specifications or requirements (i.e. quality assurance provisions, drawings, material, process, test specifications, etc.). The Supplier shall maintain quality records to substantiate product compliance to the PO and must be capable of furnishing copies of these records immediately upon request.

Certification shall include:

- Contract Purchase Order number.
- Part number and revision level.
- Quantity and if applicable, serial numbers.
- Manufacturer's name and if applicable, manufacturer's part number.
- Applicable date code or lot number.
- Statement that parts, materials, or services fully conform to the applicable drawings, specifications, and purchase document requirements.
- Attach Material Certification and/or Special Process Certification documentation
- Date, signature, and title of authorized representative of the supplier.

Material certifications are required whenever a first article inspection is required otherwise the certificate of conformance suffices.

### QP11 CERTIFICATE OF ANALYSIS

Each shipment on this PO shall be accompanied by physical and chemical reports of analysis or tests conducted to assure that raw materials delivered or used in parts conform to the specifications required by this order. If the Supplier does not have the facilities for performing the required analysis, an independent laboratory must be used.

### QP12 CONTROL OF LIMITED SHELF-LIFE AND STORAGE CRITICAL MATERIALS

The material associated herein is deemed to require special controls to ensure its usability throughout the manufacturing cycle and beyond. Therefore all product certifications must include, as applicable: shelf life start date, expiration date, storage conditions, handling requirements, and lot/batch identification to include the material specification identification.

Items shall have a minimum shelf life remaining of 75% at time of receipt

When storage temperature requirements other than ambient  $25^{\circ} \pm 5^{\circ} \text{C}$  are required, they shall be clearly marked on the outermost shipping container.

### QP13 CERTIFICATE OF GLASS TO MIL-G-174

Supplier shall obtain certification of his compliance with Amendment 2 of MIL-G-174. Each and every melt of glass used in the fabrication of finished optics shall be tested and certified by the raw glass material manufacturer.

### QP13a CERTIFICATE OF GLASS TO ISO 12123

Supplier shall obtain certification of his compliance. Each and every melt of glass used in the fabrication of finished optics shall be tested and certified by the raw glass material manufacturer.



## **PRECISION OPTICAL QUALITY ASSURANCE NOTES**

**QP14 CALIBRATION TRACEABILITY**

Calibration accuracy of this instrument shall be accomplished using master instruments whose accuracy is traceable to the National Institute of Standards and Technology (NIST). A test report of Certificate of Compliance to this requirement must be furnished with NIST traceability number required.

**QP15 RIGHT OF ACCESS**

Precision Optical reserves the right to review the process controls and quality of work in process at any time during the performance of this order. Such review may take place at the Supplier's facilities and may include personnel from Precision Optical and its customers.