Quality Clause Q2A Revision 12 06 October 2015 Page **1** of **6** 

#### I. PURPOSE:

The purpose of First Article Inspection (FAI) is to validate (1) Seller's product realization processes are capable of producing parts and assemblies that meet all engineering and design requirements, and (2) those processes are stable and repeatable. A well planned and well executed FAI will provide objective evidence that Seller's processes can produce compliant product and Seller understands and has incorporated all product requirements.

### II. SCOPE:

- A. The requirements of this Quality Clause and AS9102 are applicable in full to the PO. The requirements of this Quality Clause and AS9102 are also applicable to all lower-level detail parts which comprise the part on the PO. This includes parts manufactured, processed, assembled, tested or inspected at sub-tier suppliers.
- B. Copies of AS9102 may be obtained from the Society of Automotive Engineers at <a href="www.sae.org/aaqg/publications/AS91020faq.htm">www.sae.org/aaqg/publications/AS91020faq.htm</a>.
- C. References to AS9102 in this document refer to the revision in effect at the time of the PO. Seller may work to the latest version of AS9102, if desired, at no additional cost, price or fee to the P., 3D solid mode

FAI Planning - Those ac

First Production Run Pa process designed to be

Sub-Tier Supplier – For that perform manufactur tn12.8un12.g5.[m [(t)-1

Quality Clause Q2A Revision 12 06 October 2015 Page **4** of **6** 

- N. Once AS9102 forms have been completed for one (1) part, Seller shall use internal processes / procedures, as defined in Seller's Quality Management System, to verify product conformance to the FAI Exit Criteria requirements of Q2A.
- O. Buyer reserves the right to require Seller to perform a partial or full FAI at no additional cost, price or fee to the PO.

### V. DETAILED REQUIREMENTS OF SELLER:

# A. FAI Planning:

Seller shall take the following actions prior to the start of manufacturing or subcontracting of the item on Buyer's PO:

- 1. All characteristics from the engineering (e.g., drawings, specifications, DPD, Production Outsource Instruction Sheet (POIS), Procurement Data Sheets (PDS), etc.) and PO shall be accounted for during the FAI planning. The method of documentation for this reconciliation shall follow the best practice of "ballooning" the drawings, specifications and other requirements and providing traceability of each characteristic to the FAI report. The "ballooned" documents shall become part of the FAI documentation package.
- 2. All specifications, including referenced specifications within parent specifications, shall be reviewed, mapped and reconciled to each applicable work instruction / operation planning card to ensure no product requirements have been overlooked.
- 3. Reconcile the engineering bill of material against the released configuration effective at the time of PO acceptance.
- 4. Determine the method for validating all DPD requirements and objective evidence of that validation.
- 5. Review

Quality Clause Q2A Revision 12 06 October 2015 Page **5** of **6** 

- 11. Create a process flow matrix for the part or part family and a plan for validating the capability and stability of each process step.
- 12. Document a process for packaging and shipping in accordance with PM-5010, "Supplier/Seller Shipping Instructions",

Quality Clause Q2A Revision 12 06 October 2015 Page **6** of **6** 

# E. Post FAI Sustainability:

- 1. After FAI is complete, Buyer expects all subsequent production parts will be defect free. If nonconformances to Buyer's requirements are discovered after FAI, Seller shall conduct RCCA analysis to determine root causes for each nonconformance. RCCA shall be provided to Buyer's assigned SQE within 30 days of the discovery of the defect, or as otherwise agreed to by Buyer's assigned SQE. While performing RCCA, Seller shall consider the following elements for applicability as part of the RCCA: special causes; process changes that require a partial or full FAI; the need for variation reduction actions based on statistical analysis; the need to perform a Process Failure Mode and Effects Analysis (PFMEA); etc.
- 2. Seller shall provide documented evidence for the RCCA analysis and the actions Seller is taking for any failure following FAI completion, upon written request by Buyer.
- 3. Seller shall accomplish a partial or full FAI for all characteristics affected by any defect. Buyer may require Seller to perform a partial or full FAI at no additional cost, price or fee to the PO if nonconformances to Buyer's requirements are discovered after the FAI.
- 4. Nonconformances discovered after the completion of the FAI are subject to the Performance Assurance Warranty clause in the PO.