



BDS Common Quality Clauses

Q070 First-Piece Inspection - rev 10/1/01

During the performance of this contract your quality assurance or inspection system and manufacturing processes are subject to review, verification, and analysis by the Federal Aviation Administration (FAA). FAA inspection or release of product prior to shipment is not required unless you are otherwise notified.

- (a) To ensure process capability prior to production, a first-piece inspection requirement is imposed. This requirement does not relieve Seller from verifying that all goods meet purchase order/contract requirements. In the case of numerical control (NC) operations, every effort shall be made to fully qualify NC software prior to production use. When software on complex parts cannot be fully qualified prior to use, cutter path simulation software and/or substitute material shall be employed to minimize nonconformances in the production lot.
- (b) The first piece machined or formed will be inspected (all machined/formed characteristics) for acceptance to the design requirements by Seller, prior to fabricating the remainder of the lot deliverable under this purchase order/contract. The inspection results shall be documented (e.g., inspection point on the traveler) and maintained with the lot records by Seller. Seller is not required to record actual measurements unless this data is required to satisfy First Article Inspection requirements.
- (c) If Seller utilizes a process to fabricate multiple pieces at the same time on the same machine as in the case of a multiple spindle NC machine, the first-piece inspection shall include units from each spindle machined at that time. If Seller uses multiple machines, the first piece from each machine shall be inspected.
- (d) If the first piece(s) is nonconforming, Seller shall make the necessary adjustments and fabricate another first-piece part. Seller shall continue this first-piece process until an acceptable first-piece part is fabricated. Seller shall proof its process sufficiently prior to the first piece to ensure minimal nonconformances. Evidence of this proofing must be maintained as required in the second paragraph above.
- (e) If the design involves multiple operations (e.g., machining, heat treating, forming), first-piece inspection shall be required immediately following machining and forming operations.
- (f) All non-deliverable software used to produce or test production items shall be placed under internal configuration control prior to its use.