

#### Clause

**Document Number** 

Deliverable Prototype Inspection, Testing and Data Submission Requirements

QX1

Effective Date Revision No. Responsible Organization Approved by

8/4/20/5 Initial Quality Angshare

#### 1.0 Purpose

- 1.1 This Quality Clause is a supplement to, and does not replace or alter other terms and conditions covered by purchase documents, procedures or requirements of drawings or specifications within the purchase order.
- 1.2 It is the expectation of L-3 CPS for suppliers to comply with the requirements identified and communicate with the L-3 CPS design activity team when technical requirements cannot be met. The close working partnership will allow L-3 development programs to determine final product quality requirements for hardware.
- 1.3 It is the Supplier's responsibility to flow down relevant inspection requirements to their sub-tier suppliers and validate their sub-tier's compliance.

## 2.0 Scope

- 2.1 This document applies to non-production manufacturing where suppliers are partnering with L-3 CPS to develop programs or products by providing deliverable prototype hardware.
- 2.2 Inspection and/or Performance Testing is required when defined by the Statement of Work, Purchase order, or Drawing.

#### 3.0 Requirements

#### 3.1 Frequency

- 3.1.1 For prototype hardware all drawing characteristics are to be verified for the first part produced, and 100% on each characteristic thereafter identified by the design activity as Key Characteristics.
- 3.1.2 If the characteristic to be verified requires a destructive inspection or test, the supplier is to coordinate with the L-3 CPS design activity team for direction.

### 3.2 Balloon Drawing

- 3.2.1 The balloon drawing shall be representative of the part produced, to the current revision of the purchase order, and has all characteristics identified by a unique item number.
- 3.2.2 Balloon characteristic item numbers have to correlate to the item numbers in the inspection report. Unless otherwise arranged, the supplier is responsible to prepare the balloon drawing and inspection report.
- 3.3 Key Characteristics, where required, are identified on drawings.
  - 3.3.1 Data submitted for Key Characteristics shall be variable data, unless otherwise approved by the design activity.

#### 4.0 Data Submission

- 4.1 An inspection report is used to document all part characteristics identified on the drawing. Material, gage, functional checks, weld seam length, weld seam quality, hardness, dimensions, notes, etc.
- 4.2 The inspection report may be in a document format with the company information that meets the requirements. Minimum information on the inspection report shall include:



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- Characteristics / Dimensions
- Gage
- Accept/Reject Status
- Date
- Lot Number
- Signature of quality representative
- 4.3 Any measurement method is acceptable which is shown to be capable of producing consistent measurement results and can be verified by an alternate inspection method.
- 4.4 For dimensional verifications, either hard gages or a CMM report is acceptable documentation. At a minimum the inspection report has to provide the following information:
  - Nominal value
  - Actual value
  - Tolerance
  - Accept/Reject status
- 4.5 Material Certification
  - 4.5.1 Supplier to submit material and special processing certifications for each lot of parts produced by one particular lot of material within the shipment. When parts from multiple material or special processing lots are sent with one shipment, the parts shall have unique lot numbers identified on the labels and the individual parts either packaged or clearly marked to indicate the unique lot number.
  - 4.5.2 Material certification is required (mechanical, chemical), and statement of conformance for all cast, sheet metal, tube, and wire material, according to specification listed on the drawing or agreed upon by L-3 CPS design activity. Material certifications require batch/lot traceability. Mill certificates are required for material.
- 5.0 Documents required for delivery to L-3 CPS
  - 5.1 Shipping Documentation
    - 5.1.1 Any delivery requires shipment documentation. International shipments must comply with the applicable customs regulations and documentation. The supplier's format is acceptable. All shipment documentation shall comply with L-3 Terms and Conditions to allow receipt at L-3 CPS.
    - 5.1.2 Packaging & Delivery of Measured Hardware
      - All measured parts have to be physically separated from the rest of the lot. The samples
        used for measurement shall be numbered and correspond to the test report.



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### 6.0 HISTORY OF CHANGES

Revision Number	Revision Date	Revision Summary	
Initial	8/4/15	Initial Release	