1.0 PURPOSE

- To establish close control on the quality level of all procured parts, materials, and services.
- To inspect, test, and identify product according to a documented plan.
- To identify nonconforming product.
- To ensure that inspection and tests have been performed to meet compliance to all contract specifications and drawing requirements.
- To ensure that inspection and testing activities are prevention-based.
- To ensure that the incoming inspection system reviews subcontractor inspection data when determining the amount of incoming inspection to perform.
- To conduct layout inspection according to customer requirements.

2.0 SCOPE

This procedure applies to all parts, components, and materials received from suppliers or manufactured by the company and used in the manufacture, assembly, and shipment of products. This procedure covers all work or rework performed by an outside source.

3.0 RESPONSIBILITIES

The QA/Engineering manager, Project Manager or designee trains the operators to perform the tests.

The QA/Engineering manager, Project Manager or designee ensures that the quality levels required by contract specification are in place and that compliance to documentation is met.

The QA/Engineering manager, Project Manager or designee develops inspection and test plans to inspect parts at certain points in the operation.

The QA/Engineering manager, Project Manager or designee inspects work at the completion of an operation. Additionally, each employee will cross-check each other's work as a form of validation.

The Project Manager or designee conducts layout inspections with the assistance of the operator.

4.0 PROCEDURE

4.1 Test Verification

See QAP 11.0, Inspection, Measuring, and Test Equipment for additional detail.

The QA/Engineering Manager or designee is responsible for maintaining the necessary gages, tools, meters, instruments, and equipment in the calibration system. Calibration records are stored on line in the Master Calibration Schedule Log per WI-10.0, Master Calibration Schedule Log, Us of.

4.2 Receiving - General

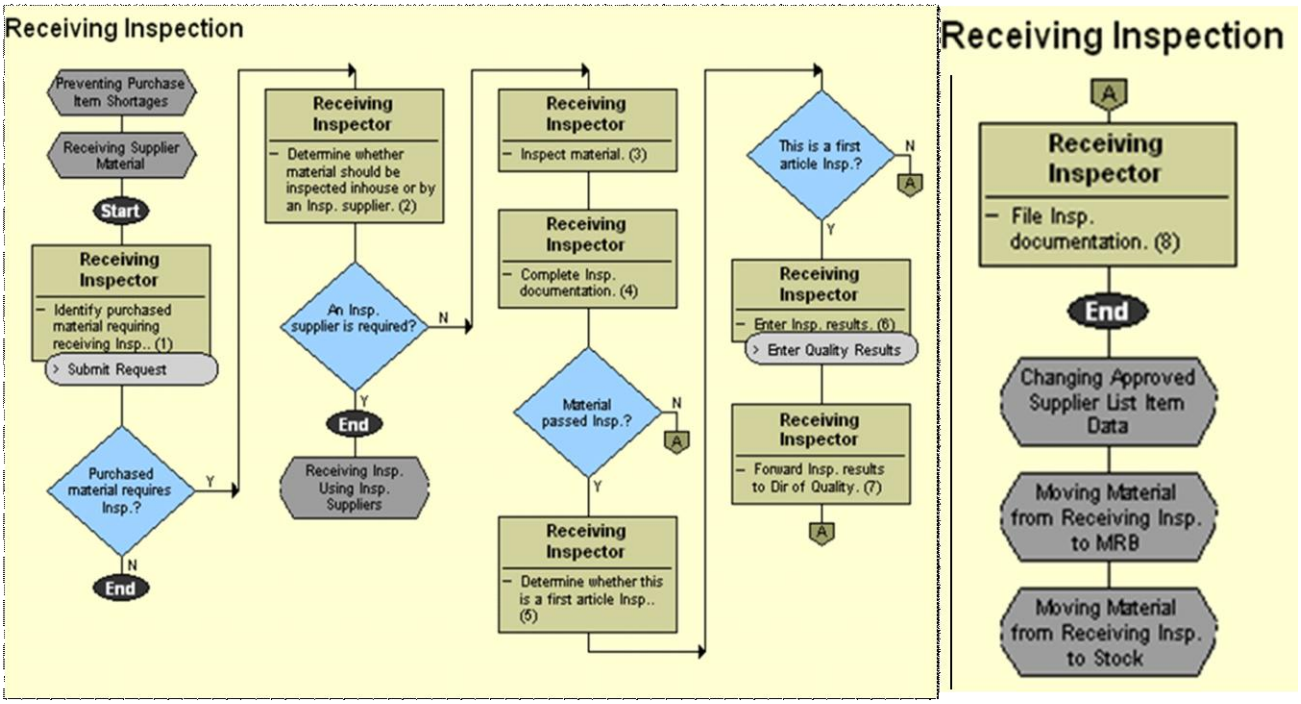
C=0 and MIL-STD-105 are used to inspect in-coming material or supplies, if authorized per PO/contract.

Suppliers are required to supply inspection records according to customer and internal quality requirements and as noted in the Supplier Quality Assurance Manual (SQAM).

The QA Manager, Project Manager or an assigned designee reviews the inspection data and approves the inspection data. The status of the inspection data is recorded on form QA 015a and/or QA 015b, Inspection Data Sheet and filed in the Master Job Folder Quality Folder as defined in WI-1.0, Master Job Folder Setup.

Parts ordered from subcontractors certified for ship-to-stock do not require incoming inspection.

If applicable, the supplier identifies in advance nonconforming material and makes special arrangements as noted in QAP 13.0, Control of Nonconforming Product.



4.3 Incoming Inspection

See QAP 6.0, Purchasing for added detail.

The QA Manager, Project Manager or designee performs incoming inspections or is responsible for holding parts until the required inspection and tests are complete and/or validated.

The Project Manager and/or inspection verify the received product using and recording all data on form QA 015a and/or QA 015b, Inspection Data Sheet and files a copy of the completed data entered in the Quality Folder of the Master Job Folder on line.

The Project Manager and/or inspection identify the inspection status on the inspected item as required per contract.

4.4 Emergency Release

Product that is released for urgent production and that is not fully inspected is identified by recording as noted information on form QA 015a and/or QA 015b, Inspection Data Sheet and files a copy of the completed data entered in the Quality Folder of the Master Job Folder on line.

4.5 Incoming Inspection - Defective and Discrepant Parts

See QAP 13.0, Control of Nonconforming Product for details.

Inspection status is indicated by recording data on form QA 015a and/or QA 015b, Inspection Data Sheet. Defective or discrepant parts are held in the Material Review Hold Area (MRB) hold area. The Quality Manager or an assigned designee initiates a Quality Discrepancy Report (QDR), form QA 005.

The Engineering Manager, Project Manager via concurrence of the customer are the only authorized MRB agents that can make dispositions of defective items and completes the QDR form QA 005 to initiate the disposition, which is processed per QAP 13.0, Control of Nonconforming Product. If required, a Corrective Action Report (CAR) form QA 001 can be initiated and processed per QAP 14.0, Corrective and Preventative Action.

4.6 In-process Inspections and Testing

See QAP 20.0, Statistical Techniques (NOTE: SPC is not a normal process as repeat jobs are minimal.)

In-process tests are performed following QAP 9.0, Process Control, QAP 12.0, Inspection and Test Status and as defined on form QA 015a and/or QA 015b, Inspection Data Record/QA Planning.

The procedures include a checklist of inspection items and are under document control.

The Engineering Manager, QA Manager, Project Manager or an assigned designee will be responsible for ensuring test procedures are current.

If the contract requires, the results are measured using Statistical Process Controls (SPC) per normal industry standards with reference to MIL-STD-105

The QA Manager, Project Manager or designee.

4.7 In-process Inspections

The QA Manager, Project Manager or designee inspects that the set-up piece matches the specifications and approves the set-up piece and initials or stamps the form QA 015a or QA 015b, Inspection Data Record.

If the set-up piece is rejected, the following occurs:

- When required, set-up instructions are modified.
- The Engineering Manager, QA Manager, Project Manager or designee are responsible for approving any change to the form QA 015a/b and setup and the QA Manager or designee will release any revised documentation. At the same time, the Master Job Folder File is update for record.

The inspector records the inspection results onto form QA 015a/b and indicates the inspection results/status and approves the report and release the job for its next operation.

4.8 Final Inspection, Testing and Test Results

Final Inspection and Testing are performed according to form QA 015a/b definition and quality plan. The procedures include a checklist with test items.

If a special test procedure is required, Engineering and the Project Manager are responsible for writing the test procedure. The test procedure is maintained as defined per QAP 5.0, Document and Data Control.

The QA Manager, Project Manager or designee is responsible for holding parts until the required final test is complete and approves the final inspection and test results.

The QA Manager, Project Manager or designee completes the form QA 015a/b indicating the final inspection status.

Once approved by the Quality Manager, all final records are forwarded to the Project Manager and processed per WI-1.0, Master Job Folder Setup, and section 2.

After final acceptance, completed product is sent to shipping for final identification, packaging and shipping per QAP 15.0 - Handling, Storage, Packaging, Preservation, and Delivery.

Defective units are held in MRB and processed per QAP 13.0, Control of Nonconforming Product.

4.9 Layout Inspection

The Engineering Manager, QA Manager, Project Manager or designee conducts layout inspection per customer-specific requirements. Results of layout inspections are recorded on form QA 015a or QA 015b, Inspection Data Record and maintained by the Project Manager per WI-1.0, Master Job Folder Setup and QAP 5.0, Document and Data Control.

4.10 Training

If training is required for special testing and/or inspection processes, training will be per QAP 18.0, Training

5.0 RELATED DOCUMENTS

QAM
Supplier Quality Assurance Manual (SQAM)
QAP 5.0, Document and Data Control
QAP 6.0, Purchasing
QAP 9.0, Process Control
WI-10.0, Master Calibration Schedule Log
QAP 11.0, Inspection, Measuring, and Test Equipment
QAP 12.0, Inspection and Test Status
QAP 13.0, Control of Nonconforming Product
QAP 14.0, Corrective and Preventative Action
QAP 15.0 - Handling, Storage, Packaging, Preservation, and Delivery
QAP 18.0, Training
QAP 20.0, Statistical Techniques
QA 001, Corrective Action Report (CAR)
QA 005, Quality Discrepancy Report (QDR)
QA 015a and/or QA 015b, Inspection Data Sheet
MIL-STD-105