

AEROSPACE PROCEDURE FOR RECEIVING INSPECTION



1.0 **PURPOSE**

The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for performing and recording the receiving inspection of purchased items used in the manufacture of Kavlico products.

2.0 **SCOPE**

This procedure applies to chemicals, gases, raw materials, components and other items that are purchased or are received from customers for incorporation into the final products sold by Kavlico Corporation.

3.0 **DEPARTMENTS RESPONSIBLE**

- Director of Quality: Development
- Supervisor of Inspection: Administration
- Receiving Inspectors: Implementation

4.0 **REFERENCE DOCUMENTS**

- AF017 - Rejection Report Form
- AP0406 - Purchasing
- AP0410 - Receiving Inspection
- AP0410-1 - In-process Inspections
- AP0410-2 - Final Inspection
- AP0413 - Control of Nonconforming Product
- AP0416 - Quality Records
- WI003- Sample Inspection Criteria
- WI015 - First Article Work Instructions
- WI032 - Receiving Inspection and Identification of Raw Material
- AF329 - Receiving Inspection Records
- AF284/QSC115/790 - Receiving Inspection Raw Material Tag
- AF285/QCF115-2 - QC Inspection Tag

5.0 **RECORDS**

AF329 - Receiving Inspection Records (Historical records created under QCF107 are acceptable, format has not changed).



6.0 PROCEDURE

- 6.1 All materials and other supplies received for the purpose of incorporation into Kavlico's products are subject to receiving inspection. These requirements are extended to include any materials, gases and/or chemicals used in processes which have a direct impact on product quality. Received goods are identified and counted by receiving personnel. Items designated as "Ship to Stock" are directly moved to the Stock Room and accepted as inventory, only after receiving inspection has determined that material certifications, test data and item marking requirements meet all drawing requirements. All other items not part of the "Ship to Stock" program are moved to Receiving Inspection for further evaluation. For items not designated as "Dock to Stock", Receiving Inspection gathers the Receiving Inspection record (Form AF329), the appropriate drawing(s) and any other applicable documents necessary for the inspection. Appropriate measuring instruments, fixtures and tools per Table 1 are by the inspector, and inspection begins in the sequence determined by the inspector.

All direct suppliers must be on the Approved Supplier List (ASL). If the supplier is not on the ASL, the parts will be placed in MRB. Engineering builds are excluded.

Inspect dimensions per print in accordance with AF329/(QCF107) and record data, unless otherwise specified.

Unless otherwise specified in the drawing or router, refer to the following workmanship standard when inspecting parts:

WI412-1 -Cadmium Plate Finish

WI412-2 – Solid Film Lubricant Coating

WI412-3 – Uncoated Metal Surfaces

Unless otherwise specified by the customer, inspection occurs using WI003 statistical sampling plan.

First Article Inspection, when required, is to be performed following guidelines set by WI015.



Table 1: Receiving Inspection Tool List

Tool Number	Tool Name
1	Coordinate Measuring Machine
2	Profile Projector
3	Tool Makers Microscope
4	Digimatic Indicator (Drop)
5	Height Gage/Indicator
6	Depth Gage
7	Micrometer (Inner Diameter)
8	Micrometer (Outer Diameter)
9	Micrometer (Pitch)
10	Micrometer (Blade)
11	Micrometer (Disk)
12	Caliper
13	Caliper Gage (Inner Test)
14	Deltronic Pin
15	Gage Pin
16	Radius Gage
17	Thread Gage
18	Hex Gage
19	Surface Roughness Tester
20	Surface Roughness Standard
21	Engineering Fixture
22	Hardness Tester
23	Tri-Roll
24	Micrometer (Uni)
25	Microscope
26	Concentricity Gage
27	Bore Gage

- 6.2 At the completion of inspection, acceptable product is moved to the stock room accompanied by completed tag AF285/QCF115-2 (one QCF115-2 tag per lot) and the

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE IF EXPORTED FROM THE UNITED STATES MUST BE IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW IS PROHIBITED.



Receiving Inspection Record completed and filed in the Receiving Inspection files. Non-conforming material shall be moved to MRB accompanied by the appropriate Reject Report and the discrepancies noted in the Receiving Inspection Record. All accompanying documentation (P.O., Cert's, and Test Data) are scanned and retained IAW AP0416.

6.3 Receiving Inspection

- 6.3.1 All incoming machined parts and raw materials shall be accompanied by a Certificate of Conformance and/or Chemical and Physical Properties Report with each shipment. Items or detailed parts fabricated from Kavlico furnished material shall require sub-contractors Certification as called out on the Purchase Order, stating "Materials Used for Part Number XXX have been furnished by Kavlico". These are evaluated by the inspector for completeness and accuracy and filed by document control, per AP0416.
- 6.3.2 Where Sub-Contracted items require special processing; such as plating, heat treatment, non-destructive testing, paint, etc., only approved sources shall be used, unless customer contract states to use one of their controlled suppliers. All special processes must be accompanied by a Certificate of Conformity or chemical and physical test reports.
- 6.3.3 Form AF329(QCF107): It is the responsibility of the Receiving inspector to inspect the submitted product in accordance with the revision letter indicated on the Purchase Order submitted with the parts. It is also the responsibility of the receiving inspector to go to the Item Master and to verify the existence of any changes introduced after the existing rev. letter. If a later revision exists, then the ECO is to be reviewed for affectivity and product disposition (Use as is, rework, scrap).

6.4 Raw Material

- 6.4.1 Raw Material is handled as stated above in paragraph 6.2. In the event a required certification and/or test report is not received or is not available, the material is held in a hold area and a sample sent to an independent laboratory for analysis. The certified results are compared with the required specifications and/or purchase order to substantiate acceptance or rejection of material, or the material is rejected and returned to supplier. Raw material test reports shall be randomly and periodically validated per WI032.
- 6.4.2 Each lot of material shall be identified with a tag, AF284/QSC115/790; showing size, material type, purchase order number and date received. Bar stock and tubing will also be identified by color coding on one end of the material (see attached pages). Sheet

stock shall be tagged. Small diameter tubing is painted along the side at one end or tagged for identification. Non-controlled material is segregated.

6.5 Ship to Stock Items (STS)

6.5.1 Per AS9102 and IAQG definition: Any item purchased from a catalog available to the public is considered Standard Catalog Hardware. A part or material that conforms to an established industry or national authority published specification, having all characteristics identified by text description, National/Military Standard Drawing, or catalog item.

A Kavlico drawing that indicates a manufacturer's part number, a MS/NAS/AN standard for hardware, or has a text catalog description is considered Standard Hardware. These prints may have dimensions on them. These dimensions are meant for reference only and the applicable standard should be used to determine the correct dimensions, tolerances, and requirements if needed.

Standard Hardware items shall be inspected by receiving inspection for proper identification, damage, shelf life (where applicable) and proper certification. Upon completion of this process the hardware certification shall be dated, signed, stamped signifying acceptance, and items shall be routed as "Ship to Stock" for storage.

Potting Compounds, gases, chemicals, wiring, cabling, tapes, solder, fluxes, fuses, etc. shall be inspected by receiving inspection for identification, damage, shelf life, physical properties, and proper certification. Upon completion, the material certification shall be dated, signed, and stamped signifying acceptance, and the parts released to the Stockroom.

Per AS9102, a First Article Inspection Report is not required for Standard Hardware. If a Standard Hardware item is modified, only the modifications are subject to a FAI.

Where Standard Hardware is purchased through a distributor, the suppliers C of C and OEM certification must be provided.

6.6 Non-Conforming Material

6.6.1 Any material not conforming to the specification shall be rejected following AP0413.

6.7 Light Intensity

6.7.1 All inspection areas shall maintain a light intensity of 125 ft. candles over work areas.



6.8 Visual Acuity Testing

6.8.1 All personnel performing receiving inspections shall be tested annually for visual acuity, by an accredited eye examiner, to the following requirements:

6.8.1.1 20/30 vision or better in both eyes

6.8.1.2 Capability of reading, with natural or corrected vision, the Jaeger No 2 chart at 16", .5mm letters.

6.8.2 The accredited eye examiner shall complete the visual acuity form, AF081, for each receiving inspector.

6.8.2.1 The receiving inspector supervisor shall keep the completed visual acuity forms on file.