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1.0 Revision History

Revision:	Released Date:	Description of Change:	Process Owner:	Approved By:
-	06-28-2011	Reformat and replaced legacy documentation system 200-131-0603 Rev A	Todd Coletti	Debra Cabrera
A	11-14-2017	Revised sections 2, 3, and 9	Chris Taylor	Harold Julander
C	4-22-2020	Legal name change from Icore International, Inc. to Safran Electrical Components USA, Inc.	Anne-Lise Taine	Dianela Maya

2.0 **Purpose**

This document outlines the procedures to be followed by all suppliers to perform and record in-process and final inspection(s) for Safran Electrical Components USA, Inc. (SEC) products to assure product conformance.

3.0 **Scope**

Safran Electrical Components USA, Inc. (SEC) imposes quality system requirements on suppliers that manufacture to SEC specifications, prints and /or drawings. These suppliers must meet inspection requirements established within this document as well as provide inspection data, process certificates of conformance, etc. with each lot or shipment. Suppliers that do not conform to this requirement may have product returned to them at the supplier's cost and will be required to perform 100% inspection. Any supplier that consistently does not meet SEC supplier requirements may be removed from SEC Approved Supplier List.

4.0 **Responsibility**

The Supplier is responsible for the implementation, maintenance, audit and enforcement of this procedure.

5.0 **Definitions**

100% Inspection

Performing inspection on each characteristic of every part within the lot, using appropriate inspection techniques.

Classification of Characteristic

1. "Critical Characteristic": A feature on the part that has a tolerance less than $\pm .005$ ". Note: these features may also be identified as a "key characteristic".
2. "Major Characteristic": A feature, other than critical, that if not maintained, would reduce the suitability of product and could cause an unsafe condition in the end product. Note: this sometimes also referred to as a "key characteristic".
3. "Minor Characteristic": A characteristic that, if not maintained, would not reduce the suitability of product and would have no adverse effect on safety.

Escape

A defective part that continues to subsequent processes that is undetected by the inspection process.

Inspection

The act of measuring, examining, testing or gauging a part characteristic and comparing the results to specified requirements in order to determine conformity.

Random sample

A sample selected in such a way that each unit of the population has an equal chance of being selected.

Sample

Part of a population selected according to some rule or plan.

Sample size

The number of units selected a representative of a population.

Sample Plan

The instructions given to the inspectors for performing acceptance sampling.

Sampling Procedures

The policies governing acceptance sampling.

6.0 Reference Documents

D1-8007 Boeing Approval Guide for Supplier Sampling Plans

7.0 **Procedure**

7.1 **Sample Inspection**

Statistical Sampling has been determined to be the acceptable inspection method for inspection of detail parts unless otherwise specified by the Quality Manager. For detailed parts with “teeth” 100% inspection is required. Statistical Sampling has been determined an acceptable inspection process based SEC Quality Systems requirements for suppliers and on the following analytical process:

7.2 **Decide on the Appropriate Type of Inspection**

For inspection of detailed components, a lot by lot plan should be used. When products are produced one unit at a time, a continuous sampling plan shall be used.

7.3 **Quality Levels**

SEC purchase orders may take precedence over the following guidelines.

The table below represents critical characteristics, features or dimensions that require inspection on every lot produced.

Reference D1-8007 **Table 1**

Part, Process, or Characteristic
Machined parts (general features) Tol. < .005
Machined parts (face teeth)
Machined parts (retaining groove)
Special Processes (Welding, Anodize, passivation, and plating)
All Angles
Connector assemblies
Burrs on metal parts

If a part, process, or characteristic is not listed, choose the closest related part, process or characteristic.

This table, along with other sampling requirements contained in this document shall not be construed as permitting defective parts to be sold to SEC. SEC continues to expect all purchased parts to be 100% conforming to all engineering requirements.

Note: For destructive tests or extraordinarily expensive inspection on products, special inspection levels may be used with SEC approval.

8.0 Sampling Tables

Reference Source D1-8007 **Table 2**

95% Reliability	
Lot Sizes	Sample Sizes
Up to 10	All
11 to 22	10
23 to 33	11
34 to 80	12
81 to 4371	13
4372 and up	14

9.0 Records

A record of all inspection details and results shall be completed for each line item of a SEC Purchase Order that is subject to inspection criteria. All relevant data and results shall be provided for the item purchased with each shipment and shall be maintained on the supplier's computer server or in inspection files. Lower level components inspection data and results must also be recorded. Data and results for these lower level components are not required upon receipt of a purchased top level assembly but must be available for review if necessary.

If more than one characteristic is nonconforming at the same time, there will be a separate recording for each characteristic. In the case of there being a non-conformance and there is a question, a variance will be requested from SEC prior to the shipping of product. Products shipped without variance or with nonconformities will be dispositioned and returned at the supplier's expense.

9.1 First Article Inspection

A First Article Inspection Report is required on new Product representative of the First Production Run. The report shall be completed on AS9102 Form and submitted with shipment of parts.