

Counterfeit Risk Management for Non-Electronic Parts and Materials

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Document Number	AEP 40-029	Revision	NEW
Original Release Date	5/23/2017	Revision Release Date	
Business Process	40 - Supply Chain Management		
Sub Process	Procurement		
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Reason for Revision			



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1. Introduction

1.1 Purpose

The purpose of this instruction is to provide uniform rules for managing the risk of purchasing non-authentic parts and materials for use in the manufacture of Crane Aerospace & Electronics assemblies. It covers non-electronic parts and materials such as fasteners, hardware, raw materials and chemicals. Electronic components will be covered under another procedure, AEP 40-011. The primary strategy for risk mitigation is mandating the use of approved suppliers throughout all levels of the supply chain. Existing procedures to ensure authentic and conforming materiel is procured shall be utilized to the greatest extent possible. SAE AS6174 is the basis for most of the practices specified herein.

1.2 Applicability

This instruction applies to all Crane Aerospace and Electronics Solutions that have customer requirements in accordance with SAE AS6174. The procedures described herein are considered industry best practice and should be followed by any of the Crane Aerospace & Electronics business units, subject to the requirements of existing plans or customer agreements that address this issue. It also applies to subcontractors who are buying parts for use in Crane Aerospace and Electronics products, including contract assembly houses, machine shops, and distributors.

1.3 Policy

All non-electronic component parts and materials shall be purchased from approved suppliers and require traceability to the Original Component Manufacturer or material producer by means of a Certificate of Conformance or equivalent document for commercial items, or a Certificate of Conformance and Traceability for military QML/QPL items. Any such certification must originate from the OCM or material producer, or a distributor that is no more than one transaction removed from the OCM. When justification and approval is given authorizing purchases that lack this traceability, additional conformance verification measures as described in this document shall be employed.

1.4 Abbreviations and Acronyms

The following definitions and abbreviations apply to this document. Additional definitions may be found in SAE AS6174:

Approved Supplier: A supplier that is formally assessed by the current design activity or the original equipment manufacturer, and is determined to be a trusted source that will reliably provide authentic and conforming materiel. Approved suppliers may be entered on a register of approved suppliers, and or listed on the part or material specification.

Authentic Produced with legal right or authority granted by the legally authorized source.

Authorized Supplier: A supplier authorized by the current design activity or the original manufacturer to produce and/or sell materiel (i.e. Franchised Distributor).

Broker: For the purpose of this plan, the term broker refers to an independent distributor or any distributor who resells products from sources for which they do not have formal authorization or franchise agreements, or an Approved Supplier relationship.

Certificate of Authenticity (C of A): A statement provided by the supplier to the effect that all listed materiel items furnished on the contract are genuine, new, and unused unless otherwise specified in writing; are suitable for the intended purpose; are not defective, suspect, or counterfeit; have not been provided under false pretenses; and have not been materially altered, damaged, deteriorated, or degraded.

Certificate of Conformance (C of C, CoC): A document provided by a supplier formally declaring that all buyer purchase order requirements have been met. The document may include information such as manufacturer, distributor, quantity, lot and/or date code, inspection date, etc., and is signed by a responsible party for the supplier.

Certificate of Conformance and Traceability (CoCT): A certificate of conformance required by certain U.S. military specifications which provides documented traceability from the QPL/QML manufacturer through delivery to the U.S. Government if the materiel is not procured directly from the approved manufacturer.

Counterfeit Materiel: Fraudulent materiel that has been confirmed to be a copy, imitation or substitute that has been represented, identified, or marked as genuine, and/or altered by a source without legal right with intent to mislead, deceive or defraud.

Franchised Distributor: A distributor with which the original manufacturer has a contractual agreement to buy, stock, re-package, sell and distribute its product lines. Franchised distributors normally offer the product for sale with full manufacturer flow-through warranty. Franchising contracts may include clauses that provide for the original manufacturer's marketing and technical support inclusive of, but not limited to, failure analysis and corrective action, exclusivity of inventory, and competitive limiters.

Note: Authorized, Franchised distributors are not always available for some types of simpler components, such as hardware and fasteners. In those cases a distributor who maintains an Approved Source list may serve as an Authorized/Franchised distributor without a formal authorizing agreement.

Fraudulent Materiel: Suspect materiel misrepresented to the customer as meeting the customer's requirements.

Identity: Information such as the current design authority, original manufacturer, trademark or other intellectual property, performance, unique item identifier, part number, date code, lot number, testing methods and results, inspection, documentation, warranty, origin, ownership history, packaging, storage, handling, physical condition, previous use, etc.

Manufacturer: Manufacturer refers to the point of origin of any materiel covered by the standard, including factories, mills, foundries, mines, chemical plants, laboratories, etc.

Materiel: Materiel refers to material, parts, assemblies, and other procured items (except for electronic parts, which are covered elsewhere). Use of the term "materiel" within this document is consistent with usage in AS6174.

Original Manufacturer: An organization that designs and/or engineers and produces materiel and is pursuing or has obtained the intellectual property rights to that materiel. Notes:

- a. The materiel and/or its packaging are typically identified with the original manufacturer's trademark.
- b. Original manufacturers may contract out manufacturing and/or distribution of its product.
- c. Different original manufacturers may supply product for the same application or to a common specification.

Suspect Materiel: Materiel, items, or products in which there is an indication by visual inspection, testing, or other information that it may meet the definition of fraudulent materiel or counterfeit materiel provided above.

1.5 Related Documents

SAE AS6174, Rev. A Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel

For other internal documents used at individual sites or Solutions, see Appendix A

2. Process Overview

Inputs	Purchase orders, component specifications, Approved Source lists
Outputs	Procured material and components, certification evidence, material test reports
Accountable	Component Engineering
Responsible	Supplier Quality, Supply Chain Management, Purchasing
Related Processes	Electronic Parts Counterfeit Risk Mitigation (see Appendix A)

3. Instructions

3.1 Materiel Authenticity Assurance Plan

This materiel authenticity assurance plan shall consist of the requirements defined in 3.1.1 through 3.1.7 below.

3.1.1 Authentic and Conforming Materiel Availability

All production materiel shall be purchased from approved or authorized suppliers to the maximum extent possible. To support this goal, accurate requirements planning to reduce the incidence of shortages shall be performed in accordance with accepted practices (see Appendix A). Supplier approval status shall be maintained in accordance with an established Supplier Approval and Performance Measurement procedure (see Appendix A).

3.1.2 Purchasing

The procurement and purchasing processes shall be in accordance with the following:

3.1.2.1 Sources of Supply

Potential sources of supply shall be assessed in accordance with an adopted Supplier Approval Process (see Appendix A). Suppliers shall be selected that are capable of providing authentic and conforming materiel.

3.1.2.2 Approved Supplier List

Approved Suppliers shall be selected from those maintained within the Enterprise Requirements Planning system, or from an Approved Sources List, as applicable.

3.1.2.3 Procurement From Authorized Sources

Materiel shall only be procured from Approved Suppliers, their Franchised Distributors, or other Authorized Suppliers. Materiel procured to specifications that list specific Sources of Supply may only be procured from one of those listed sources, a Franchised Distributor for that source, or their authorized resellers.

3.1.2.4 Procurement From Non-Authorized Sources

In the case where an Authorized Supplier is unavailable or not specified, product verification in accordance with 3.1.4.1 shall be completed prior to acceptance of any materiel.

Materiel shall not be procured from Brokers or other non-authorized suppliers without prior, documented approval from Supply Chain management.

3.1.2.5 Sub-tier Supplier Flowdown of Purchasing Requirements

Supplier flowdown shall be in accordance with accepted practices (See Appendix A). In addition, the relevant requirements of this plan shall be flowed down directly through PO terms and conditions and/or Statements of Work, or indirectly through reference to this plan. As a minimum, the following requirements shall be included:

1. Supplier shall have a Materiel Authenticity Assurance Plan or equivalent processes in place.
2. Supplier shall purchase materiel only from Authorized Sources, when specified by the original component manufacturer.
3. Supplier shall maintain a list of Approved Sources
4. Supplier shall provide certification wherever possible.
5. Supplier shall provide evidence of authenticity (normally material composition or properties testing) absent relevant certification.
6. Supplier shall have a process to control disposal of nonconforming or suspect materiel.

3.1.2.6 Flowdown of Crane Standard Counterfeit Terms and Conditions

In addition to the items listed in 3.1.2.5, the Crane Standard Counterfeit Terms and Conditions (Appendix B) are automatically applied to all purchase orders.

3.1.3 Purchasing Information

Purchased materiel shall be specified on purchase orders and associated documentation to the extent necessary to maximize the likelihood of procuring authentic and conforming materiel.

3.1.3.1 Supplier Quality Assurance

Supplier Quality Assurance provisions shall be as specified in accepted practices (see Appendix A).

3.1.4 Verification of Purchased Product

Purchased materiel shall be evaluated for compliance to all specified requirements in accordance with established processes as applicable (see Appendix A)

3.1.4.1 Verification of Materiel From Non-Authorized Sources

Verification of materiel purchased from non-authorized sources shall consist of testing or certification from a recognized third party, or traceable to the original manufacturer, for material composition and/or physical properties such as hardness, conductivity, etc., sufficient to determine conformity to the specified requirements. Crane facilities may be used for testing or inspection as long as the necessary equipment and expertise is available.

3.1.5 In-Process Investigation

Production and in-service failures caused by defective materiel shall be investigated for potential fraudulent or counterfeit issues. Production and in-service failures shall be monitored in accordance with established processes for Corrective and Preventive Action (see Appendix A).

3.1.6 Materiel Control

Nonconforming or suspect materiel shall be controlled in accordance with established processes (see Appendix A). Scrap or surplus materiel shall be controlled and or disposed of in such a way as to prevent deficient or nonconforming materiel to be returned to the supply chain. Materiel identified as Suspect Counterfeit or Fraudulent shall be subject to reporting in accordance with 3.1.7.

3.1.7 Reporting

Upon identification of suspect or confirmed counterfeit or fraudulent materiel, reporting shall be made to one or more of the following organizations, as applicable.

1. Government Industry Data Exchange Program (GIDEP)
2. FAA Suspected Unapproved Parts Program
3. Product Data Reporting and Evaluation Program (PDREP)
4. Joint Deficiency Reporting System (JDRS)
5. Local Law Enforcement or other Authority Having Jurisdiction

3.1.7.1 Customer Notification

If suspect counterfeit or fraudulent materiel has been provided to customers, they shall be notified using the procedures in place for Notification of Escapes (see Appendix A).

4. RACI

Responsibilities, Accountabilities, Consult or Inform Chart

Accountable: Delegates and Assigns Work *Responsible: Those Who Do the Work*
Consult: Subject Matter Experts *Inform: Kept Up-to-date on Progress*

Tasks	Design Engineering	Component Engineering	Supply Chain Management	Supplier Quality	Buyer	Receiving Inspection	Quality Assurance
1. Specify Approved Sources	A	R	C	C	-	-	I
2. Maintain Approved Source List	C	C	A	R	-	-	I
3. Purchase only from approved/authorized suppliers	-	C	A	C	R	I	-
4. Flow down requirements to subcontractors	C	C	A	I	R	-	-
5. Verification of products	C	C	I	A	I	R	-
6. Control of nonconforming materiel	C	C	I	I	I	C	A
7. Reporting of suspect counterfeit materiel	-	R	A	I	I	C	-
8. Customer Notification	C	C	I	-	-	-	R, A

Appendix A

External Document References

These referenced documents form a part of this procedure to the extent that they relate to requirements defined by the reference paragraph listed.

Reference Paragraph	Related Processes	Historical Instructions (Note 1)		Product Group Specific Instructions		
		AGIS	CEG	Power and Sensing & Utility Systems	Landing Systems	Other
2.	Counterfeit Risk Management for electronic Components	40-011	CEG-703			
3.1.1	Authentic and Conforming Materiel Availability	40-011	CEG-703	EIS 0811-011	Work Instruction PUR-06	
3.1.1	Supplier Approval and Performance Measurement	40-001				
3.1.2.1	Sources of Supply	40-001				
3.1.2.5	Sub-tier Supplier Flowdown of Purchasing Requirements	40-002				
3.1.3.1	Supplier Quality Assurance	40-002				
3.1.4	Verification of Purchased Product	40-002		EIS 0715-009	SOP 10.1	
3.1.5	Corrective and Preventive Action	74-004				
3.1.6	Non-Conforming Material	74-012				
3.1.7.1	Notification of Escape (NOE) and Product Recall	74-017				

Notes: 1: Historical Instructions are those that are scheduled for replacement by the new AEP procedural documents. The listed instructions remain in force until the new AEP procedures are available.

Appendix B

Crane Standard Counterfeit Terms and Conditions

3.04 NO COUNTERFEIT PARTS.

Seller warrants that all Ordered Items delivered to Buyer will (i) be new; (ii) be and only contain materials obtained directly from the original equipment manufacturer (“OEM”) or an authorized OEM reseller or distributor; (iii) not be or contain Counterfeit Items; and (iv) contain only authentic, unaltered OEM labels and other markings.

As used in this Section 3.04, “Counterfeit Item” means a copy or substitute supplied without the legal right or authority to do so, or an item the material, performance or characteristics of which are knowingly misrepresented by a supplier, distributor or manufacturer at any level in the supply chain. Examples include, but are not limited to, parts that have been re-marked to conceal that they are different from those offered by the OEM; previously used parts salvaged from scrapped assemblies; and defective parts scrapped by the OEM.

(i) Unless first approved in writing by Buyer, Seller may purchase Ordered Items only from sources which Seller can show comply with a recognized international standard relating to combatting Counterfeit Items and which ensure that the items purchased from such source are new, unused and authentic Ordered Items.

(ii) Seller shall maintain a method of tracking of the supply chain back to the manufacturer of all items included in the Ordered Items. This tracking method must clearly identify the name and location of all supply chain intermediaries from the manufacturer to the direct source of each item for Seller and shall include the manufacturer's batch identification for the item such as date codes, lot codes, serializations, or other batch identifications. Full supply chain traceability documentation includes but is not limited to OCM, OEM and authorized (i.e. franchised) supplier certificates of conformity, purchase orders and test/inspection data and/or certificates.

(iii) If Counterfeit Items or items suspected to be Counterfeit Items are furnished under this Purchase Order such goods shall be impounded by Buyer. Seller shall promptly replace such goods with Ordered Items acceptable to Buyer and Seller shall be liable for all costs relating to such impoundment, removal and replacement. Buyer may turn Counterfeit Items over to Government authorities for investigation, and Buyer reserves the right to withhold payment pending the results of the investigation.

(iv) This warranty applies in addition to Section 1.04 above.

(v) Seller shall include the substance of this Section 3.04, including this sentence, in favor of Buyer, in its subcontracts issued at all tiers pursuant to this Purchase Order. Buyer must be notified promptly in writing of any inability or unwillingness of a lower-tier supplier to comply with this provision.

(vi) Seller is reminded that any knowing or willful act to falsify, conceal or alter a material fact, or any knowingly false statement or representation in connection with the performance of work under the Contract, may be punishable in accordance with applicable law.