



Supplier Quality Codes

Core Quality Assurance Instruction CQAWI-049		Revision: A	Page 1 of 4
Originated By: Fernando Quintero		Approved By: Jim Pacheco	

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1.0 PURPOSE

This Work Instruction identifies the QA codes that shall be identified on purchase orders to suppliers of products and services to Merrimac Industries Inc. A Crane Company. Reference should be made on the purchase order or request for quote, which incorporated this attachment, to determine which of the codes listed below are applicable.

2.0 SCOPE

This Work Instruction is applicable to all RFQs and Purchase Orders to suppliers that provide materials and services for Merrimac Industries Inc. products.

3.0 REFERENCE DOCUMENTS

The following documents are applicable to this process:

CSOP-07-P Purchasing

4.0 Requirement

CODE A – SOURCE INSPECTION is required prior to shipment from your plant. Notify the cognizant Merrimac Industries Inc. A Crane Company, buyer four (4) days in advance of date material is ready for our inspection/test.

CODE B - The supplier system shall have in place the requirements for an ESD control program in accordance with ANSI/ESD-S-20.20 to minimize the effects of ESD on parts, assemblies, and equipment.

CODE B1 – The supplier shall have in place the requirements and training for a "zero" ESD control program in accordance with ANSI/ESD-S-20.20 to eliminate the effects of ESD on parts, assemblies & equipment.



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CODE C - CERTIFICATES OF CONFORMANCE - required from the supplier stating that the shipment of articles on this order conform to applicable material and/or process specifications. Supplier must retain on file, material test results and process records, as applicable, including his supplier and their supplier certifications. These records must be maintained for ten (10) years, and available upon request or as required on the purchase order.

CODE D - TEST/ INSPECTION DATA - Supplier shall provide a complete set of Test/Inspection Data as recorded during acceptance test for purpose of quality analysis with each shipment.

CODE E - FIRST PIECE INSPECTION - Supplier first piece inspection is required on three (3) pieces of the first lot to be shipped on this order. Vendor is to submit a complete inspection report with the parts.

CODE F - CONFIGURATION CONTROL - No changes to product drawings or processes are to be made without Merrimac Industries Inc. A Crane Company approval.

CODE G - STATISTICAL PROCESS CONTROL - Supplier shall provide with each shipment, evidence of variable or attribute measurements, as applicable, for the purpose of quality analysis.

CODE H - SHELF LIFE MATERIALS - Supplier shall provide shelf life materials with a life duration beginning on receipt date at Merrimac Industries Inc, A Crane Company. Shelf life shall be noted on Certificate of Conformance by the supplier. MSDS required.

CODE J - CERTIFIED PROCESSES – Contract manufacturers shall have personnel performing special processes, such as Soldering and Bonding, certified for proof of proficiency.

CODE K - The requested method by Merrimac Industries Inc., A Crane Company, of shipping/storing of raw piece parts is to use anti-static bags, metal in, type bags. The bag(s) shall meet or exceed the requirements of MIL-PRF-81705D Type III, EIA 625, MIL-HDBK-263, MIL-STD-1686, ANSI/ESD-S20.20, and EOS/ESD standards. All product packaging shall prevent damage to the product; physically and environmentally.



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CODE L – PREFERENCE FOR DOMESTIC SPECIALTY METALS

This purchase order incorporates Crane Electronics Group Purchase Order Terms and Conditions which impose requirements with which you must comply when filling this purchase order. These can be found at <http://www.craneae.com/suppliers/Suppliers.aspx>. These terms reference and this purchase order incorporates the contract clause at DFARS 252.225-7009, modified to represent the proper relationship of the parties. You must flow down this clause to all of your vendors that supply any articles delivered under this purchase order that include specialty metals. The clause prohibits Crane and all of its suppliers at every tier from incorporating specialty metals into military parts, components and end item deliverables unless the specialty metals have been melted or produced in the United States, its outlying areas, or a qualifying country listed in DFARS 225.003. Exemptions outlined in the clause may apply to you. If you believe an exemption applies, please provide Crane with documents and information sufficient to demonstrate the exemption.

CODE M – The use of pure tin as a finish is prohibited. Finishes containing tin must have a minimum of no less than 3% lead.

CODE N – The supplier shall comply with the following unless otherwise approved by Crane.

NADCAP Approved Processor

Plating, surface finishes or conditioning shall be performed by an approved NADCAP (National Aerospace and Defense Contractors Accreditation Program) ** processor in the applicable plating, surface finish or conditioning process.

**List of NADCAP approved can be found at www.eauditnet.com by creating an account. Upon access, refer to Buyer’s Guide in the Public Documents.



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CODE P – All components, equipment or materials used in the procurement of stated purchased items must not result in the evidence of fungus growth on any surface. This requirement must be verified by analysis and/or test. The analysis to include supplier certifications of potentially fungus nutrient materials, if supplier certifications are unavailable a representative sample of exposed coatings, cables, gaskets, and other potentially fungus nutrient materials shall be subjected to MIL-STD-810, Method 508.5.

CODE R – The Supplier shall establish and maintain an effective Foreign Object Damage (FOD) Prevention Program to reduce FOD using NAS412 as a guideline. The material supplied on this PO shall be manufactured in an environment free of foreign objects. Additionally, the material supplied shall be free of foreign objects.

Revision History				
Revision	Date	Change	Originated	Approved
A	06/30/10	Original Release	FG	JP

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