



Date : August 17 2009

RoHS Compliance Testing.

Purpose:

RoHS regulates present levels of the following chemicals: lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants. To test for the presence of the above chemicals on a chrome plated 17-4 stainless steel coupon approximately 1 inch wide by 4 inches long by 0.04 inches thick. The chrome plate thickness to be 0.0001" to 0.0003" thick. The coupons are to be processed in three different methods to re-produce ECO'S normal chrome plating process.

a) Triple/ Hot Rinse

Coupon (A) was glass beaded before plate using A-H grade glass bead in an Empire blasting cabinet Model PF-3648 @ 25 - 30 psi @ 6 to 8 inches for 1 minute. The coupon was then plated in Tank C52 on a pinch rack with a 1 minutes reverse etch. Once the plate sequence is complete the part was rinsed in Tank C710A for 10 seconds, then Tank C710B for 10 seconds, then Tank C710C for 10 seconds. The part was transferred to a hot city water rinse for 10 seconds then air dried. The coupon was bagged up and sent out for testing.

b) Ceramic Hone

Coupon (B) was glass beaded before plate using A-H grade glass bead in an Empire blasting cabinet Model PF-3648 @ 25 - 30 psi @ 6 to 8 inches for 1 minute. The coupon was then plated in Tank C52 on a pinch rack with a 1 minutes reverse etch. Once the plate sequence is complete the part was rinsed in Tank C74A for 10 seconds, then Tank C74B for 10 seconds, and then placed in the ceramic hone cabinet which is a Pressure Blast unit model # A45P-C using Zirblast media @ 50 psi @ 6 to 8 inches for 1 minute. The coupon was rinsed with Hot City Water and then air dried. The coupon was bagged up and sent out for testing.

c) Glass Bead

Coupon (C) was glass beaded before plate using A-H grade glass bead in an Empire blasting cabinet Model PF-3648 @ 25 – 30 psi @ 6 to 8 inches for 1 minute. The coupon was then plated in Tank C52 on a pinch rack with a 1 minutes reverse etch. Once the plate sequence is complete the part was rinsed in Tank C74A for 10 seconds, then Tank C74B for 10 seconds, then air dried. Once the coupon was dry it was then placed in the glass bead cabinet using A-H grade glass bead in an Empire blasting cabinet Model PF-3648 @ 20 – 25 psi @ 6 to 8 inches for 1 minute and then air dried. The coupon was bagged up and sent out for testing.

Below is a copy of the results showing all methods detailed above are RoHS Compliant



LABORATORY TESTING INC.

2331 Topaz Drive, Hatfield, PA 19440
Phone: 800-219-9095 • Fax: 800-219-9096

Certified Test Report

ECO001-09-07-22889-1



SOLD TO

Electrolizing Corporation of Ohio
1325 East 152nd Street
Cleveland, OH 44112

SHIP TO

Electrolizing Corporation of Ohio
1325 East 152nd Street
Cleveland, OH 44112
ATTN: Mark Stover

CUSTOMER P.O.

110141

CERTIFICATION DATE

8/5/2009

SHIP VIA

FAX AND MAIL

DESCRIPTION

Quantity: 3
Sample ID: Coupon A (Triple/Hot Rinse),
Coupon B (Ceramic Hone),
Coupon C (Glass Bead)
Material: Chromium Plated Coupons

Three pieces of the referenced samples were submitted to chemical content evaluation and (3) pieces were found to be in conformance to RoHS Compliance with the following results:

ELEMENT	REQUIREMENTS			A	B	C
	MIN	MAX				
Cd		100.	<	1. ppm	<	1. ppm
Hexavalent Cr		1000.	<	1. ppm	<	1. ppm
Hg		1000.	<	1. ppm	<	1. ppm
Pb		1000.	<	1. ppm	<	1. ppm
Br		658.	<	1. ppm	<	1. ppm

Procedures/Methods: MAS-ICP, Rev. 6, Analysis of Metals & Their Alloys by ICP

The provisions of 10CFR21 and 10CFR50, Appendix B apply to this order. The services performed above were done in accordance with LTI's Quality System Program Manual Revision 18 dated 7/27/07 and ISO/IEC 17025. These results relate only to the items tested and this report shall not be reproduced, except in full, without the written approval of Laboratory Testing, Inc. L.T.I. is accredited by PRI to ISO17025 and by Nadcap for NDT and Materials Testing for the test methods and specific services as listed in the Scopes of Accreditation available at www.labtesting.com and www.eAuditNet.com. The results reported on this test report represent the actual attributes of the material tested and indicate full compliance with all applicable specification and contract requirements.

MERCURY CONTAMINATION: During the testing and inspection, the product did not come in direct contact with mercury or any of its compounds nor with any mercury containing devices employing a single boundary of containment.

NOTE: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under Federal Statutes.

Sherri L. Scheifele
QA Specialist

Sherri L. Scheifele

By: _____
Authorized Signature