

**Test Report** No. SHAEC1307267613 A01 Date: 22 May 2013 Page 1 of 6

SHANGHAI MEISHAN IRON&STEEL CO.,LTD XINJIAN, ZHONGHUAMEN, NANJIN, JIANGSU, CHINA

### THIS REPORT IS TO SUPERSEDE TEST REPORT NO.SHAEC1307267613 DATE: 2013/05/15

The following sample(s) was/were submitted and identified on behalf of the clients as : CONTINUOUSLY HOT-DIP ZINC COATED STEEL SHEET&STRIP,OILING

SGS Job No.: SP13-011742 - SH

Date of Sample Received: 26 Apr 2013

Testing Period: 26 Apr 2013 - 06 May 2013

Test Requested: Selected test(s) as requested by client.

Test Method: Please refer to next page(s).

Test Results: Please refer to next page(s).

Conclusion: Based on the performed tests on selected part of submitted sample(s), the

results of Lead, Mercury, Cadmium, Hexavalent chromium comply with the limits

in RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.

Signed for and on behalf of SGS-CSTC Ltd.

JJ Fan

Approved Signatory

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In less otherwise stated the results shown in this test report refer only to the sample(s) tested.

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Test Results:

### **Test Part Description:**

Specimen No.	SGS Sample ID	Description
1	SHA13-072676.011	Silvery metal board
2	SHA13-072676.012	Silvery metal board

#### Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL)
- (4) "-" = Not Regulated

### RoHS Directive 2011/65/EU

Test Method: (1) IEC 62321:2008 application of modified digestion by surface etching for Cadmium, Lead and

Mercury, analysis by ICP-OES

(2) With reference to IEC 62321:2008 for Hexavalent Chromium by spot test / Colorimetric

Method.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>011</u>
Lead (Pb)	1000	mg/kg	10	22
Cadmium (Cd)	100	mg/kg	10	ND
Mercury (Hg)	1000	mg/kg	10	ND
Hexavalent Chromium (Cr(VI))	_	_	$\Diamond$	Negative

### Notes:

- (1) The maximum permissible limit is quoted from directive 2011/65/EU, Annex II
- (2) \$Spot-test:

Negative = Absence of Cr(VI) coating, Positive = Presence of Cr(VI) coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result is Negative or cannot be confirmed.)

♦Boiling-water-extraction:

Negative = Absence of Cr(VI) coating

Positive = Presence of Cr(VI) coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm<sup>2</sup> sample surface area.

Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

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### Perfluorooctane Sulfonates (PFOS) and Perfluorooctanoic Acid (PFOA)

Test Method: With reference to US EPA 3550C: 2007, analysis was performed by HPLC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>012</u>
Perfluorooctane Sulfonates (PFOS) and related Acid.Metal Salt and Amide	1	μg/m²	1	ND
Perfluorooctanoic Acid (PFOA)	-	μg/m²	1	ND

#### Notes:

Max. limit specified by commission regulation (EU) No. 757/2010 amending regulation (EC) No 850/2004.

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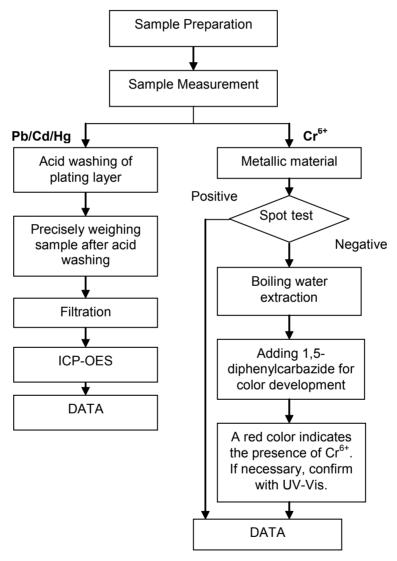
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#### **ATTACHMENTS**

# Plating Pb/Cd/Hg/Cr<sup>6+</sup> Testing Flow Chart

- 1) Name of the person who made testing: Yoyo Wang/Allen Xiao
- 2) Name of the person in charge of testing: Jeff Zhang/George Xu
- 3) Acid washing testing of Pb, Cd and Hg reach total dissolution



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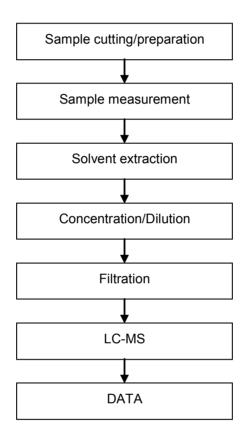
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### **PFOS/PFOA Testing Flow Chart**

- 1) Name of the person who made testing: Judy Li
- 2) Name of the person in charge of testing: Myra Ma



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Sample photo:





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\*\*\* End of Report \*\*\*

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