

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018853**Date Inspected:** 23-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China**CWI Name:** Tian Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

**Bay 1**

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; Barrier Rail, on item number 1~5 of NWIT tracker document # 07903,

Heat straightening of PCMK, E2-SB1-024, under approved Heat Straightening procedure, HSR 1(B)-9389, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Tian Lei. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 8mm.

**Bay 3**

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Tian Lei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

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Components: Side plate  
PCMK: SP-3082A-PL3263A  
Welder: 050977  
Report: B-CWR-2390  
WPS-345-FCAW-1G (1F)-ESAB-Repair

This QA Inspector observed the following work in progress for Bay 3.  
ZPMC was using the Shield Metal Arc Welding (SMAW) process.  
ZPMC QC is identified as Tian Lei.  
Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).  
Listed below are the locations that were identified by this QA inspector

Components: Architectural Housing  
PCMK: AH3150-004,005  
Welder: 058102  
WPS-B-P-2213-TC-U4b

Bay 8

Heat straightening of PCMK, BK004A3-060, under approved Heat Straightening procedure, HSR 1(B)-9608, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Liu Fa Wen. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 8mm.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



## Summary of Conversations:

No relevant conversations

## Comments

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Shin,DJ	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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