

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015784**Date Inspected:** 21-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Mr. Qiu Wen	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:	Tower	

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector observed the following work in progress:

BAY 11: SMAW Process.

This QA Inspector observed ZPMC qualified welding personnel identified as 040614, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as ESD1-SPSA5-12-4B. ZPMC QC Identified as Shao Hai Long, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040656, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as WSD1-SPSA5-7-4A. ZPMC QC Identified as Shao Hai Long, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 046704, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as WSD1-SPSA5-12-4B. ZPMC QC Identified as Shao Hai Long, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

This QA Inspector observed ZPMC qualified welding personnel identified as 054460, Perform Shielded Metal Arc Welding (SMAW) on Interior splice plate. Joint identified as WSD1-SPSA5-17-3A. ZPMC QC Identified as Shao Hai Long, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U5b-1.

SMAW Process Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 040655, Perform Shielded Metal Arc Welding (SMAW) on Tower Strut, Joint identified as ND1-STSA4-6-143M-2-74A. ZPMC CWI Identified as Yu Dong Ping with temporary welding repair report. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-2G (2F) FCM-Repair-1.

BAY 11 OBG Lift 13, SAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 047304, Perform Submerged Arc Welding (SAW) on Bike Path of OBG lift 13. Joint identified as BK004A1-005-009, ZPMC QC Identified as Ma Qianli Ma. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

BAY 10,

SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 500363, 040280, Perform Shielded Metal Arc Welding (SMAW) on South Tower lift 5 Grillage plate, Joint identified as SSD1-TL5-1F-F-19, 20. ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3313-Tc-P5.

This QA Inspector observed ZPMC qualified welding personnel identified as 050289, 057258, Perform Shielded Metal Arc Welding (SMAW) on South Tower lift 5 Grillage plate, Joint identified as SSD1-TL5-1E-F-7, 8. ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3313-Tc-P5.

BAY 10 OBG Lift 13, FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040533, 053869, Perform Flux Core Arc Welding (FCAW) on Edge plate of OBG lift 13. Joint identified as EP3025-001-011, 012, 017, 018, 020, 009, 010, 007, 008. ZPMC QC Identified as Sun Tian Liang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

BAY 10 OBG Lift 13.

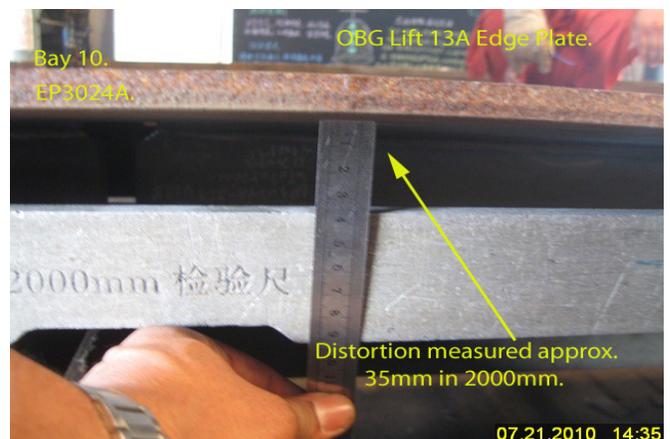
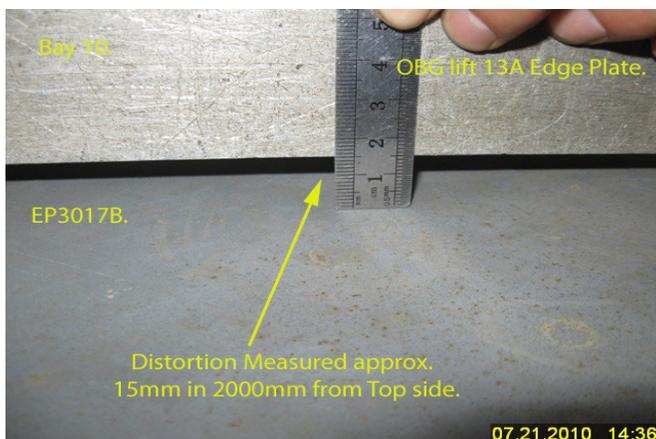
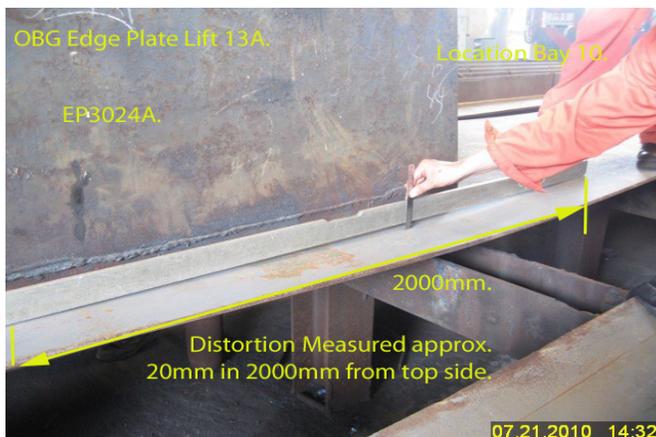
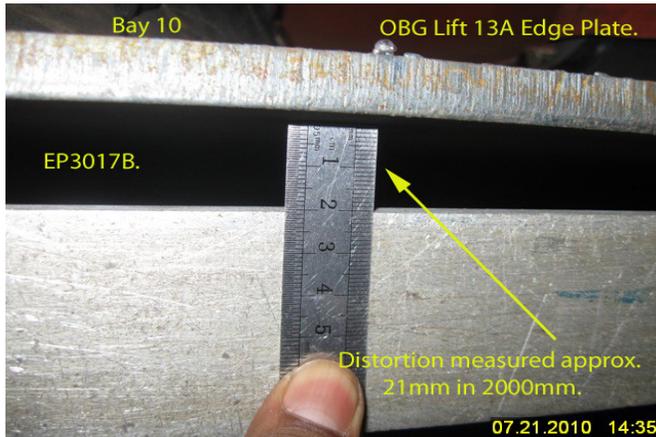
During the Caltrans Quality Assurance in-process observations of the fabrication of Edge Plate EP3017B, and EP3024A, this Quality Assurance Inspector (QA) discovered the following issue that the ZPMC personnel heat straightening excessive distortion on non Seismic Performance Critical Material (NON SPCM) material distorted by welding without the Engineers approval. The effected Edge Plates are identified as EP3017B (PL3209A) and EP3024A (PL3353A). The deviation from flat as measured by this QA inspector is 35mm per 2000mm in Edge Plate (EP3024A). The deviation from flat as measured by this QA inspector is 21mm per 2000mm in Edge Plate (EP3017B). The Material thickness for both panels is 12 mm. This Edge Plate is located in Sub assembly Bay#10.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

For further information, please see the attached pictures below. This QA inspector generated incident report for this date.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Only general conversation was held between QA and QC concerning this project.

Comments

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 Michael Ng Phone: 15921845703, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
