

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014567**Date Inspected:** 31-May-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:** Li Yang**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:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar 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:

TRIAL ASSEMBLY YARD

ULTRASONIC INSPECTION

OBG SEGMENT 8AW

ABF Report No: UT-8W-026

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as weld between side panel and bottom panel (Counter weight side) OBG segment 8AW. The weld designations are as follows.

SEG043A-043 (OBG 8AW-SP to B.P, Counter weight side)

ULTRASONIC INSPECTION

OBG SEGMENT 8AW

WELDING INSPECTION REPORT

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ABF Report No: UT-8W-027

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as weld between side panel and bottom panel (Cross beam side) OBG segment 8AW. The weld designations are as follows.

SEG043A-021 (OBG 8AW-SP to B.P, Cross beam side)

ULTRASONIC INSPECTION

OBG SEGMENT 8BW

ABF Report No: UT-8W-026

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as weld between side panel and bottom panel (Counter weight side) OBG segment 8BW. The weld designations are as follows.

SEG045A-013 (OBG 8BW-SP to B.P, Counter weight side)

ULTRASONIC INSPECTION

OBG SEGMENT 8BW

ABF Request No: 05312010-1

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as weld between deck panel and edge panel (Counter weight side) OBG segment 8BW. Inspection was carried out on repair areas. The weld designations are as follows.

CA049-002 (OBG 8BW-DP to E.P, Counter weight side)

MAGNETIC PARTICLE INAPECTION

OBG SEGMENT 8BW

ABF Request No. 05312010-1

This QA Inspector Witnessed ABF personal performing Magnetic particle Testing (MT) on the weld between deck panel and edge panel (Counter weight side). Weld identification number was.

CA049-002 (OBG 8BW-DP to E.P, Counter weight side)

No relevant indications were observed.

This QA Inspector randomly observed the following work in progress.

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OBG SEGMENT 8BW-8CW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067588 performing Shielded Metal Arc Welding process for weld 021 located on PCMK. BP095-001. ZPMC QC Mr. Yuan Wen Jie monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2213-b-u2-fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 048696 performing Flux Cored Arc Welding process for weld 045 located on PCMK. BP095-001. ZPMC QC Mr. Liu Hua Jie monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132.

OBG SEGMENT 9AW-9BW

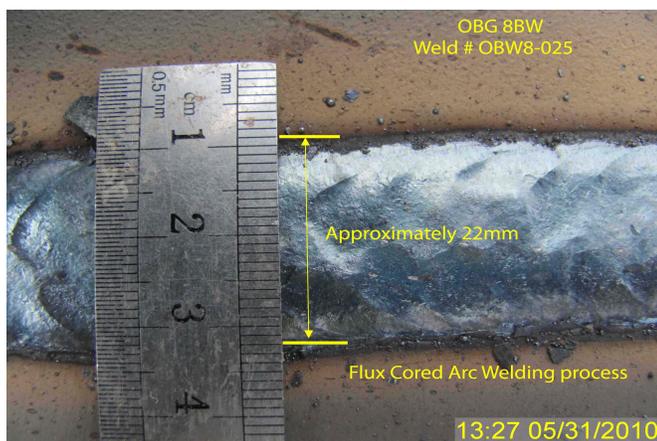
This Quality Assurance (QA) Inspector observed ZPMC qualified welders 045270 and 045265 performing Submerged Arc Welding process for weld 003 located on PCMK. OBW09. ZPMC QC Mr. Zhu Yuan Yuan monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-223 (2) 1T-2.

INCIDENT

OBG 8BW

During random in process visual inspection of OBG segment 8BW this Caltrans Quality Assurance Inspector (QA) observed the contractor personnel performed flux cored arc welding (FCAW) for the weld between deck plate and counter weight connection plate. The width of a single weld pass was measured to be approximately 22 mm. This welding was performed in the flat (1G) position. The maximum single weld pass width allowed in this position is 16mm. The weld is identified as OBW8-025. Incident report was issued for this issue. For additional information see attached photos.

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



Summary of Conversations:

This QA Inspector informed ZPMC QA and ABF QA regarding incident report and other general conversation was held between ZPMC QA and QC .

WELDING INSPECTION REPORT

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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 Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
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Reviewed By:	Dawson,Paul	QA Reviewer
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