

**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-000552**Date Inspected:** 25-Sep-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Bing**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:** Mock Up**Summary of Items Observed:**

Elevation 77:

The QA Inspector randomly observed ZPMC Non Destructive Testing (NDT) Technician Zhou Dongyun, utilizing the Magnetic Particle Testing Method (MT) to examine 3 excavations on the outside of Complete Joint Penetration (CJP) Weld Joint (WJ) number 2 and 1 excavation on the inside of WJ number 4, attaching longitudinal stiffeners piece marks MP2-3 and MP2-1 respectively, to SA MUSA-MA2 Face A (Skin Plate A), prior to performing second time weld repairs. There appeared to be no indications.

Elevation 114:

Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding being performed for the fabrication of the Mock Up at elevation 114. The QA Inspector randomly observed ZPMC qualified welders Chen Ruyang and Bo Wenming utilizing the Flux Cored Arc Welding process to weld longitudinal stiffener MP1010 to Sub-Assembly (SA) MUSC-MA 109 Face E (Skin Plate E) on the Partial Joint Penetration (PJP) WJ number 4 and WJ number 7. Mr. Chen and Mr. Bo were utilizing ZPMC WPS-B-T-2332-TC-P5-F-1. The QA Inspector observed ZPMC CWI Xu Bing monitoring weld parameters. The QA Inspector also performed random verification of the weld parameters and documented them as follows: welding amperage 298 amps, welding voltage 31 volts with a travel speed of 327 millimeters per minute for Mr. Chen and 299 amps, 30.2 volts with a travel speed of 339 millimeters per minute for Mr. Bo. Weld parameters appeared to comply with the above approved ZPMC WPS.

---

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

The QA Inspector observed a ZPMC helper blending welds attaching longitudinal stiffeners to SA MUSC-MA113 Face D (Skin Plate D).



## Summary of Conversations:

There were no relevant conversations.

## 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Franco,Charlie

Quality Assurance Inspector

**Reviewed By:** Cochran,Jim

QA Reviewer

---