

**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-000950**Date Inspected:** 19-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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, 89 & 114 Meter Mock-Up**Summary of Items Observed:**

CWI Names: Lee Chan Woo, Lu Jian Ping, Fu Guo Gang, Xu Lefeng

## Mock-Up 89

This Quality Assurance Inspector observed welding by ZPMC welder Li Shuqiang, welder identification 053609 using the flux cored arc welding process in the flat position. Welding was being carried out on MUSB MA21. Some of the essential welding variables were checked and found the voltage to be 31.5, the amperage 309, the travel speed 333 millimeter per minute and the pre-heat 130 degrees Celsius.

This Quality Assurance Inspector observed welding by ZPMC welder Li Zhao Xian, welder identification 048810 using the flux cored arc welding process in the flat position. Welding was being carried out on MUSB MA38 A/B weld 9. Some of the essential welding variables were checked and found the voltage to be 30, the amperage 302, the travel speed 308 millimeter per minute and the pre-heat 155 degrees Celsius.

This Quality Assurance Inspector observed welding by ZPMC welder Lei Lichao, welder identification 053619 using the flux cored arc welding process in the flat position. Welding was being carried out on MUSB MA21. Some of the essential welding variables were checked and found the voltage to be 31.5, the amperage 306, the travel speed 318 millimeter per minute and the pre-heat 135 degrees Celsius.

## Mock-Up 114

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## WELDING INSPECTION REPORT

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This Quality Assurance Inspector observed welding by ZPMC welder Chang Chuancang, welder identification 053870 using the flux cored arc welding process in the flat position. Welding was being carried out on MUSC A67. Some of the essential welding variables were checked and found the voltage to be 31.6, the amperage 323, the pre-heat 140 degrees Celsius.

This Quality Assurance Inspector observed the ZPMC ultrasonic technicians performing ultrasonic testing from face C on a repair to MUSC MA108 Skin E lower weld number 2. No unacceptable defects were reported by the technicians.

This Quality Assurance Inspector observed the ZPMC ultrasonic technicians performing ultrasonic testing from faces A & B on a repair to MUSC MA106 Skin A lower weld number 4. No unacceptable defects were reported by the technicians.

This Quality Assurance Inspector observed the ZPMC ultrasonic technicians performing ultrasonic testing from faces A & B on a repair to MUSC MA101 Skin B upper weld number 8. No unacceptable defects were reported by the technicians.

OBG

Bay 3

This Quality Assurance Inspector observed ZPMC welder Xiang Jing Teng, welder identification 046830 welding in the flat welding position with the flux cored arc welding process. Welding was being carried out on the OBG Bottom Plate 004-01 and weld joint 011. Essential welding variables were checked and found that the voltage was approximately 29.3, the amperage 547, travel speed 409.3 millimeters per minute and the pre-heat temperature was found to be 66 degrees Celsius.

This Quality Assurance Inspector observed ZPMC welder Li Shuliang welder identification 048801 welding in the flat welding position with the flux cored arc welding process. Welding was being carried out on the flange for t-stiffener 003 OBG Bottom Plate 004-01. Essential welding variables were checked and found that the voltage was approximately 25.8, the amperage 195, travel speed 100.8 millimeters per minute and the pre-heat temperature was found to be 65 degrees Celsius.

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

No conversations held today.

## 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.

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<b>Inspected By:</b>	Berger, Bruce	Quality Assurance Inspector
<b>Reviewed By:</b>	Cochran, Jim	QA Reviewer

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