

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-000515**Date Inspected:** 24-Sep-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**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:** Bing Xu & Lu Lefeng**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:** 77 & 114 Mock-Ups**Summary of Items Observed:**

This Quality Assurance Inspector observed welding of 114 Meter Mock-Up; Face D Skin Plate; MUSC-MA-113, complete joint penetration T-joint weld number 14. Covers were being welded with welding procedure specification WPS-B-T-2232-U5-F by welder Wen Yanyan, welder identification 066734. The volts were checked and found to be 30.2, the amperage 310 and the travel speed 320 millimeters per minute.

This Quality Assurance Inspector observed welding of 114 Meter Mock-Up; Face D Skin Plate; MUSC-MA-108, complete joint penetration T-joint weld number 1. Covers were being welded with welding procedure specification WPS-B-T-2232-U5-F by welders Jiang Zhou, welder identification 040261 and Bai Wenming, welder identification 040434. The volts were checked and found to be 31.3 and 31.9, the amperage's 305 and 312 and the travel speed 310 millimeters per minute. Partial penetration weld joints number 3 and 4 were started and the voltage was found to be 32.2 and 31.5, the amperage was 317 and 305 and the travel speeds were 336 and 320 millimeters per minute.

Excavation were being carried out on various longitudinal stiffener welds on the 77 Meter Mock-Up, Skin A and E in the shop.

The American Bridge Quality Control Inspectors were Huang Li and Zhang Xu Liang with the ZPMC Certified Welding Inspector being Bing Xu and Lu Le Feng.

Summary of Conversations:

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

A conversation was held with Shen Xue Jun of the ZPMC Quality Control Department and one of the magnetic particle testing technicians. The conversation concerned the method of yoke placement on the weld during testing. QA observed the technician placing the yoke at 45 degree angles to the weld. When asked why they were using a 45 degree angle to the weld instead of a zero and 90 placement Mr. Shen stated that it was at the direction of an individual named Kevin, an American Bridge personal. It is this QA inspector opinion that this method should be looked at as cracking in this material would typically run longitudinal with the weld or at right angles where a zero and 90 degree method of yoke placement would be more suitable.

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:	Berger, Bruce	Quality Assurance Inspector
Reviewed By:	Cochran, Jim	QA Reviewer
