

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-002061**Date Inspected:** 24-Apr-2008**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:	Chen Chih Ming & Zhonghai Zhu			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 & Tower		

Summary of Items Observed:

New Tower Shop

This Quality Assurance Inspector (QAI) observed root welding on SSD1-SA173 J/H 7b & 8b complete joint penetration (CJP) welds & K/H 2, 4 & 14 partial joint penetration (PJP) welds by Zhenhua Port Machinery Company (ZPMC) welder. . . . welder identification 052917 was observed performing the welding. Some of the essential welding variables were observed and found to be; amperage 622, voltage 33.2, travel speed 600 millimeters per minute and preheat temperature 140° Celsius. Magnetic Particle Testing (MT) by ZPMC Technician Cao Xinxin of the root weld was observed. Mr. Cao reported finding the root weld to be in compliance with the code and specifications.

This QAI observed root welding on SSD1-SA16 F/G-1, 3, 8 & 110 PJP and 5A, 7A, 109A & 112A CJP. Some of the essential welding variables were observed and found to be; amperage 645, voltage 33, travel speed 640 millimeters per minute and preheat temperature 142° Celsius.

This QAI also observed Shen Mei, welder identification 041716 performing submerged arc welding (SAW) on ESD1-SA216 A/K 17b complete joint penetration weld. Some of the essential welding variables were observed and found to be; amperage 647, voltage 32.5, travel speed 620 millimeters per minute and preheat temperature 118° Celsius.

This QAI also observed Cao Xiaohua, welder identification 056975 performing submerged arc welding (SAW) on ESD1-SA210 B/K 7b complete joint penetration weld. Some of the essential welding variables were observed and

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found to be; amperage 650, voltage 32.4, travel speed 610 millimeters per minute and preheat temperature 140° Celsius.

Heat straightening was also observed being carried out on SA80 (W) with HSR (T) 816

New OBG

This QAI observed welding by Wang Lanying, welder identification 045265 with the SAW process on SEG017A-006 between SP60A & SP48A. Some of the essential welding variables were observed and found to be; amperage 634, voltage 33, travel speed 480 millimeters per minute and preheat temperature 45° Celsius.

This QAI observed for weld SEG020A-003 problems were being had with the SAW welding crawler being out of balance and running at uncontrolled varying speeds. Maintenance was on site working on the equipment. Also on site dealing with the issue was Mr. Peter Shaw and Wang Wen Bin of American Bridge/Fluor and Shen Xue Jian of ZPMC.

Bay 3

This QAI performed ultrasonic testing (UT) on 900 millimeters of weld on joint SP 529-001-064 which had been previously found unacceptable by QAI Paul Dawson. ZPMC shop personnel ground the weld flush prior to re-examination and no further indications remained. For details of ultrasonic testing see TL-6027 dated April 24, 2008.

GE Inspection Technologies USN 60; Serial No. 01R4BF/ dB cal due date 06/22/08; Transducer 70 degree 01R76L; Probe Delay 13.7569 uS, velocity 3244 M/S, Display Delay 0, Reject 0, dB ref 52.6, Damping 500 OHM, TM16mm, 0 degree Transducer 01RRF7, AWS D1.5 Table 6.3, IIW 3684, Y-90-990mm



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

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for your project.

Inspected By:	Berger, Bruce	Quality Assurance Inspector
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Reviewed By:	Carreon, Albert	QA Reviewer
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