

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-002697**Date Inspected:** 28-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Chen Chih-Ming, An Qingxiang			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 side and bottom panels and tower skin p**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall 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:

OBG new assembly bay 2

QA observed ZPMC personnel fitting side panels to bottom panels BP-016 to SP-078 joint SEG-018A-007 and BP-018A to SP-031A joint SEG-018A-008.

QA observed ZPMC personnel splicing deck panels DP-063-001 to DP-062-001.

QA observed ZPMC personnel straightening side panels SP-017 and SP-009 SEG -13A-001 using heat and mechanical force following the guide lines of heat straightening report identified as HSR1(B)-997.

QA noted that there was no welding being performed in this bay at the time QA was present.

Other general observations include ZPMC personnel grinding side and bottom panels and weld bevel prep.

New Tower Bay 1

QA observed ZPMC qualified welding personnel perform SAW welding on skin plate joint# SSD1-SA173K/K-6, 13B, 4, 12B, 11B, 2, and 9B following the guide lines of approved WPS# WPS-B-T-2321-B-P3-S, WPS-B-T-2321-B-P3-S-1, WPS-B-T-2221-B-U3c-S and WPS-B-T-2221-B-U3c-S-1.

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QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 33.5 Amps: 690 Travel speed: 615mm/min

QA observed ZPMC qualified welding personnel perform SAW welding on skin plate joint# SSD1-SA13A/F-34A following the guide lines of approved WPS# WPS-B-T-2221-B-U3c-S and WPS-B-T-2221-B-U3c-S-1. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 32.6 Amps: 682 Travel speed: 620mm/min

QA observed ZPMC qualified welding personnel perform SAW welding on skin plate joint# SSD1-SA159A/T-11A following the guide lines of approved WPS# WPS-B-T-2221-B-U3c-S and WPS-B-T-2221-B-U3c-S-1. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 33.1 Amps: 667 Travel speed: 588mm/min

New Tower Bay 2

QA observed ZPMC qualified welding personnel perform SAW welding on tower skin plate joint ESD1-SA107E/J-22A-1 following the guide lines of WPS# WPS-B-T-2221-B-U3c-S-1 and WPS-B-T-2221-B-U3c-S. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 29.5 Amps: 500 Travel speed: 450mm/min

QA observed ZPMC qualified welding personnel perform SAW welding on tower skin plate joint ESD1-SA80B/E-15 following the guide lines of WPS# WPS-B-T-2321-B-P3-S-1 and WPS-B-T-2321-B-P3-S. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 32.8 Amps: 658 Travel speed: 600mm/min

Other general observations in the New Tower bays include weld bevel preparation, flame straightening, CNC parts cutting, hole drilling and grinding.

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Summary of Conversations:

Only general conversations were held between QA and QC concerning this project.

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 Patrick Lowry (858)-344-2712, who represents the Office of Structural Materials for your project.

Inspected By:	Hall, Steven	Quality Assurance Inspector
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Reviewed By:	Cuellar, Robert	QA Reviewer
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