

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-004604**Date Inspected:** 13-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei**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:** Tower**Summary of Items Observed:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

East Shaft Lift 1

The Quality Assurance Inspector observed ZPMC performing in process welding between Skin Plate A to Skin B. ZPMC was utilizing the shielded metal arc welding process to produce the complete joint penetration weld in overhead position. The Quality Assurance Inspector witnessed Quality Control measure the parameters at the welder's stations and the parameters appeared to be within the requirements of WPS-B-P-2214-C-U2 SMAW 4G.

South Shaft, Lift 1, Skin C

The Quality Assurance Inspector observed ZPMC continuing to perform fit-up and tack welding operations to the brace plate stiffeners between the longitudinal stiffeners. ZPMC was utilizing several ten ton jacks to aid in the fit-up. Please note the nondestructive testing was completed and accepted by ZPMC for the longitudinal stiffener to skin plate partial and complete joint penetration welds, where the jacks force is being applied.

South Shaft, Skin D, Lift 1

The Quality Assurance Inspector observed ZPMC performing fit-up and tack welding operations of the connection plate to longitudinal stiffener partial joint penetration connection. ZPMC was utilizing the shielded metal arc welding process to produce the tack weld in the horizontal position. The Quality Assurance Inspector measured the

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bevel angle of the partial joint penetration weld to be approximately 45 degrees as illustrated in the digital photograph below.

South Shaft, Skin B, Lift 1

The Quality Assurance Inspector observed ZPMC removing temporary lifting attachments from the skin plate utilizing the air carbon arc welding process and grinders.

South Shaft, Skin D, Lift 1

The Quality Assurance Inspector witnessed ZPMC performing magnetic particle inspection to the bracing plate partial joint penetration welds. Numerous indications were marked for repair and immediately a ground and retested.



Summary of Conversations:

As stated in the contents of the above report.

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 Joshua Ishibashi 137.6471.0411 , who represents the Office of Structural Materials for your project.

Inspected By:	Bertlesman,Greg	Quality Assurance Inspector
Reviewed By:	Wright,Mark	QA Reviewer
