

**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-004948**Date Inspected:** 01-Dec-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, Skin A, Lift 2**

The Quality Assurance Inspector observed ZPMC performing in process grinding the profiles of the complete and partial joint penetration welds joining the longitudinal stiffeners to skin plate.

**East Shaft, Skin E, Lift 2**

The Quality Assurance Inspector observed ZPMC performing heat straightening operations of longitudinal stiffeners. Quality Control was present utilizing an infra-red temperature gun to monitor the temperature.

**East Shaft, Lift 1**

The Quality Assurance Inspector observed ZPMC surveying personnel surveying the shaft in the rotating device. ZPMC was also observed assembling scaffolding to either end of the shaft for access.

**South Shaft Lift 1**

The Quality Assurance Inspector observed ZPMC cutting temporary attachments from the jig in preparation for erecting into the rotating device. No work was being performed in the confined space.

**North Shaft, Skin B, Lift 1**

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The Quality Assurance Inspector observed ZPMC performing in process fitting and tack welding of the longitudinal stiffeners to skin plate partial and complete joint penetration welds utilizing the shielded metal arc welding process.

North Shaft, Skin A, Lift 1

The Quality Assurance Inspector observed ZPMC performing in process welding of the partial joint penetration weld joining the longitudinal stiffeners to skin plate on the semi automated flux cored arc welding gantry system. The skin plate has numerous jacks on the part in an effort to minimize distortion from the welding. ZPMC Quality Control was present monitoring the welding in accordance with WPS-B-T-2332-Tc-P5-F.

**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 Josh Ishibashi 1.376.647.10411, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bertlesman,Greg	Quality Assurance Inspector
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<b>Reviewed By:</b>	Wright,Mark	QA Reviewer
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