

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-002192**Date Inspected:** 16-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1330**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:** An Qing Xiang**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 Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

New Tower Shop Bay 1:

The QA Inspector randomly observed ZPMC welder Xu Xiushui ID Number 040489, utilizing the Submerged Arc Welding (SAW) Process in the 1G Position (Flat Groove) with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2221-B-U3c-S, to weld the fill pass in Weld Joint (WJ) SSD1-SA16E/G-1B on Tower Skin Plate E Sub-Assembly SA16(S) piece mark p123 to p124(S). The QA Inspector randomly observed ZPMC CWI An Qing Xiang monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 668 amps, 32.3 volts with a travel speed of 600 millimeters (mm) per minute. The weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed a ZPMC Carbon Air Arc Gouging Operator utilizing the Carbon Air Arc Gouging Process to back gouge WJ SSD1-SA173A/K-18A of Skin Plate E. The attached photograph provides additional detail.

New Tower Shop Bay 2:

The QA Inspector randomly observed ZPMC welder Xue Yian ID Number 040634, utilizing the SAW Process in the 1G Position (Flat Groove) with ZPMC WPS WPS-B-T-2221-B-U3c-S, to weld the fill pass in WJ

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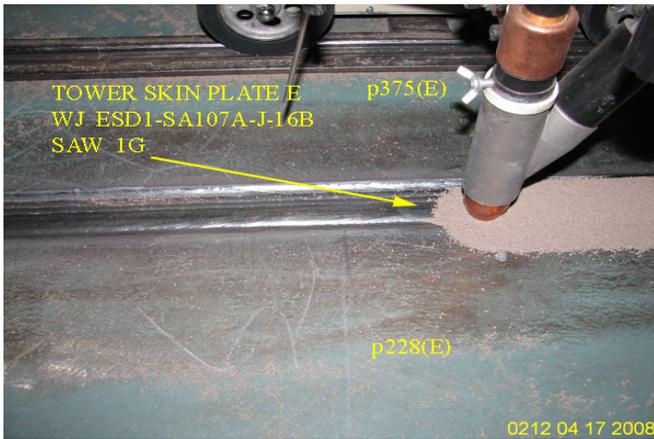
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ESD1-SA107A/J-18B on Tower Skin Plate A Sub-Assembly SA107(E) piece mark p375(E) to p456(E). The QA Inspector randomly observed ZPMC CWI An Qing Xiang monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 700 amps, 34.4 volts with a travel speed of 625 mm per minute. The weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Lin Juan ID Number 047481, utilizing the SAW Process in the 1G Position (Flat Groove) with ZPMC WPS WPS-B-T-2221-B-U3c-S, to weld the fill pass in WJ ESD1-SA107A/J-16B on Tower Skin PLate A Sub-Assembly SA107(E) piece mark p375(E) to p228(E). The QA Inspector randomly observed ZPMC CWI An Qing Xiang monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 703 amps, 33.2 volts with a travel speed of 620 mm per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

Heat Treatment Shop:

The QA Inspector randomly observed ZPMC personnel performing hot bending operations on Tower Diaphragm Flange Sections piece marks p653(N), p625(E), p625(W) and p625(S). The QA Inspector randomly observed the parts being heated up to 640 degrees Celsius, with a minimum soak time of 10 minutes. The attached photograph provides additional detail.



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Summary of Conversations:

There were no relevant conversations.

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:	Franco,Charlie	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer
