

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-002777**Date Inspected:** 28-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 800**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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 Yun Chuan Jin ID Number 0503060, 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-SA173K/K-12B(CJP), J/K-6(PJP), K/K-11B(CJP), K/K-2(PJP) and J/K-9B(CJP) on Tower Skin Plate E Sub-Assembly SA173(S) piece marks p147(S) + p146(S) + p144(S) + p32(S) + p37(S) + p351(S). The QA Inspector randomly observed ZPMC CWI Liu Hua Jie monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 698 amps, 32.9 volts with a travel speed of 565 millimeters (mm) per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

New Tower Shop Bay 2:

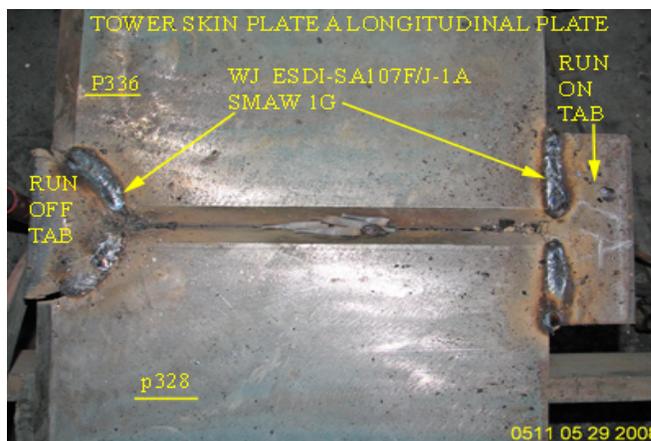
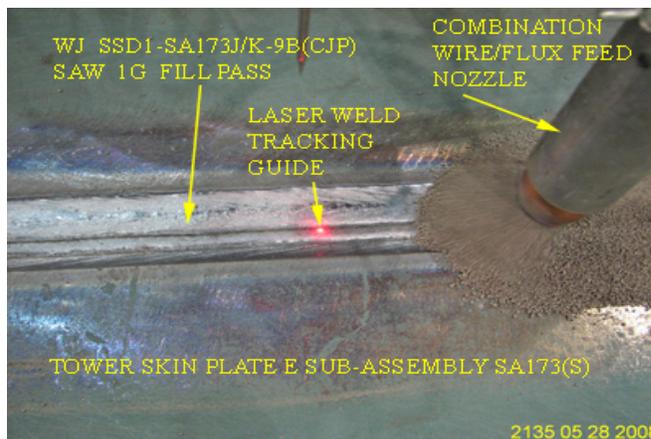
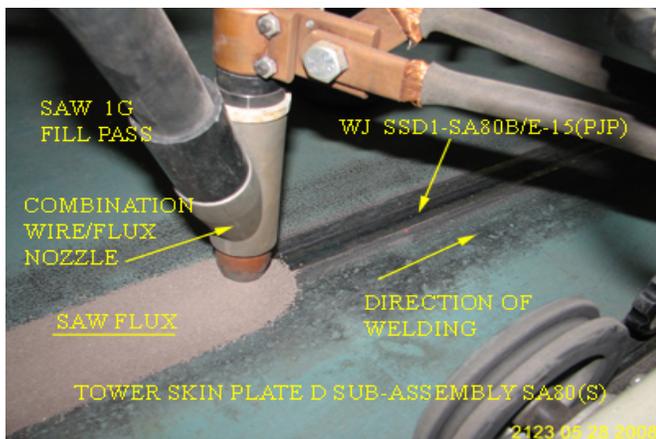
The QA Inspector randomly observed ZPMC welder Sun Bingfa ID Number 062046, utilizing the SAW Process in the 1G Position (Flat Groove) with ZPMC WPS WPS-B-T-2221-B-U3c-S, to weld the fill pass in WJ ESD1-SA80B/E-10B(CJP), -15(PJP) and -9B(CJP), on Tower Skin Plate D Sub-Assembly SA80(E) piece marks SA80(E) and p1284(E). The QA Inspector randomly observed ZPMC CWI Jiang Jian Fei monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 667 amps,

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32.3 volts with a travel speed of 610 mm per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Lang Lei ID Number 040690, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 1G (Flat Groove) Position, with ZPMC WPS WPS-B-P-2211-B-U3b, to tack weld Run On/Run Off Tabs to the start and stop edges of Skin Plate A Longitudinal Plate Sections p336 and p328, WJ ESD1-SA107F/J-1A and p328 to p326, WJ SSD1-SA107F/J-2A. The QA Inspector randomly observed ZPMC CWI Jiang Jian Fei monitoring weld parameters. The weld parameters appeared to comply with contract requirements. The attached photographs provide additional detail.



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

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Reviewed By: Cochran,Jim

QA Reviewer