

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-002775**Date Inspected:** 30-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**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-SA173J/K-9A(CJP), K/K-1(PJP), K/K-11A(CJP)/K-5(PJP), K/K-12A(CJP), K/K-3(PJP), K/K-13A(CJP) and K/K-5(PJP), on Tower Skin Plate E Sub-Assembly SA173(S) piece marks p147(S) + p146(S) + p146(S) + p144(S) + p32(S) + p37(S) and 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: 655 amps, 33.3 volts with a travel speed of 600 millimeters (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 Chen Hongxia ID Number 040460, 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 SSD1-SA159G/J-21A(CJP), J/K-6(PJP), K/K-11B(CJP), K/K-2(PJP) and J/K-9B(CJP) on Tower Skin Plate A Sub-Assembly SA159(S) piece marks p39 + p327A(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: 661 amps, 33.1 volts with a travel speed of 540 mm per minute. The weld parameters appeared

WELDING INSPECTION REPORT

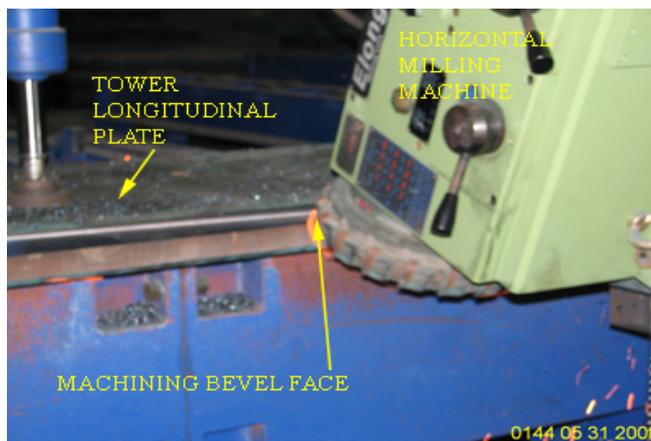
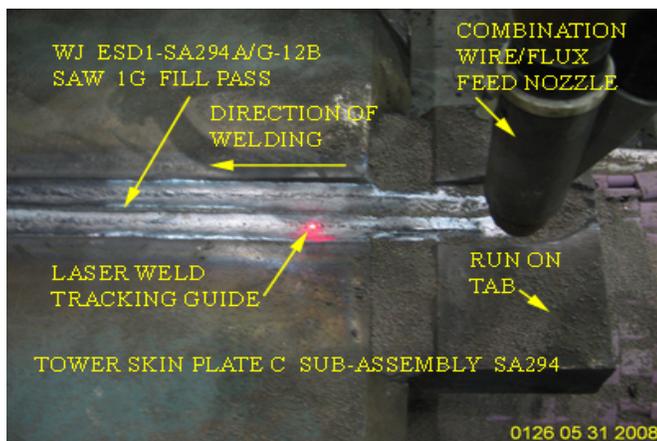
(Continued Page 2 of 3)

to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC Machine Operators utilizing a horizontal milling machine to machine the bevel face on various Tower Longitudinal Plates. The attached photograph provides additional detail.

New Tower Shop Bay 2:

The QA Inspector randomly observed ZPMC welder Cao Guimei ID Number 047304, 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-SA294A/G-12B(CJP), on Tower Skin Plate C Sub-Assembly SA294(E) piece marks p1405(E) + p1401(E) + p1431(E) + SA294(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: 630 amps, 33.5 volts with a travel speed of 612 mm per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides 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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

for your project.

Inspected By: Franco,Charlie

Quality Assurance Inspector

Reviewed By: Cochran,Jim

QA Reviewer