

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-002759**Date Inspected:** 27-May-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 and OBG**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.

Bay 2

No ZPMC personnel were observed working on the SAS project.

Bay 3

The Quality Assurance Inspector observed numerous side plates in various stages of fabrication ranging from fit-up to in progress welding.

SP-309-001

The Quality Assurance Inspector observed ZPMC welding operator Li Meng Qian, welder identification number 0544602, performing in process tack welding of side plate SP-428-001. Quality Control Inspector Au Xu Xiangping was monitoring the welder. The welder was using the flux cored arc welding process to produce the tack weld in the flat position. The Quality Assurance Inspector witnessed the Quality Control Inspector measure the welding parameters at the welder's station and found the parameters to meet the minimum requirements of welding procedure specification WPS-B-T-2233-B-U2-F. The Quality Assurance Inspector witnessed Quality Control measuring the interpass temperature using a calibrated infra-red temperature measuring device.

Gantry 1 was idle on this shift.

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Gantry 2

The Quality Assurance Inspector observed ZPMC performing flux cored arc welding on the automated gantry, welding Bottom Plate BP-032-001. The plate is stationary while the welding heads are on a gantry to facilitate the fillet weld along the length of the stiffeners.

Bay 4

The Quality Assurance Inspector observed ZPMC in the process of splicing various internal diaphragm plates. The Quality Assurance Inspector observed the diaphragm plates in various stages of fabrication from fit-up to in process welding.

Diaphragm Flanges

The Quality Assurance Inspector observed 5 sets of diaphragm flanges in various stages of fabrication from fit-up to in process welding. Below is a digital photograph illustrating ZPMC welding the run-off tabs in preparation for the complete joint penetration weld.

Bay 7

The Quality Assurance Inspector observed ZPMC performing base metal repairs to Floor Beam FB-036-001. The welding was being performed in accordance with welding procedure specification WPS-345-SMAW-1G-FCM-Repair. The Quality Assurance Inspector measured the depth of the ground excavations prior to welding to be a maximum of 2.5 millimeters. Below is a digital photograph illustrating the base metal repairs in progress.



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 Mazen Wahbeh (916) 227-5719, who represents the Office of Structural Materials for your project.

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Inspected By: Bertlesman, Greg

Quality Assurance Inspector

Reviewed By: Cuellar, Robert

QA Reviewer