

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-001956**Date Inspected:** 29-Mar-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:** Xu Le Feng, Ye Yong Jun**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:** 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 7

The Quality Assurance Inspector observed seven ZPMC Quality Control personnel performing various Quality Control functions.

The Quality Assurance Inspector observed ZPMC grinding cap plates on tube steel members measuring 300mm x 300mm x 10mm in thickness previously welded.

The Quality Assurance Inspector observed two ZPMC welders tack welding and fitting up flange to web plate connections on various floor beam assemblies.

Floor Beam FB-003-048

The Quality Assurance Inspector observed ZPMC welding operator Huang Xin Lang welder identification number, 04780 performing in process welding of Floor Beam FB-003-048-006 butt weld connection. Quality Control Inspector Ye Yong Jun was monitoring the welder. The welder was using the submerge arc welding process to produce the complete joint penetration weld in the flat position. The part was stationary while the welding machine was on tracks to facilitate welding along the length of the part. The Quality Assurance Inspector measured the welding parameters at the welder's station and found the parameters to meet the minimum

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

requirements of welding procedure specification WPS-B-T-2221-B-L2C-S-1. The Quality Assurance Inspector witnessed Quality Control measuring the interpass temperature using a calibrated infra-red temperature measuring device.

Floor Beam FB-025-02

The Quality Assurance Inspector observed ZPMC welding operator Zhang Qing Quan, performing in process welding of Floor Beam FB-025-02 weld number 25, flange to web plate connection. Quality Control Inspector Ye Yong Jun was monitoring the welder. The welder was using the flux cored arc welding process to produce the partial joint penetration weld in the flat position. The Quality Assurance Inspector measured the welding parameters at the welder's station and found the parameters to meet the minimum requirements of the posted welding procedure specification. The Quality Assurance Inspector measured the welding the amperage to be approximately 300, the voltage at approximately 29, and the travel speed at approximately 300 millimeters per minute. The Quality Assurance Inspector witnessed Quality Control measuring the interpass temperature using a calibrated infra-red temperature measuring device.

Bay 8

The Quality Assurance Inspector observed ZPMC performing heat straightening operations to diaphragm plate SA344. The Quality Assurance Inspector observed ZPMC Quality Control measuring the heat with an infra-red temperature indicating device.

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 Patrick Lowry, 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 |
