

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-000776**Date Inspected:** 25-Oct-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**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:** Zhu Zhong Hai**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:** 89 Meter Mock-Up**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Roscoe Dixon arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions. While on site the QA Inspector observed and/or discovered the following:

The Caltrans Quality Assurance (QA) Inspector Roscoe Dixon accompanied by ZPMC Personnel Mr. Fu Yuong randomly observe welding being performed for the fabrication of the 89 Meter Mock-Up.

This QA Inspector randomly observed ZPMC qualified welder Mrs. Wu Zhibin ID Number 049804, utilizing the Submerged Arc Welding (SAW) process to place the fill pass # 5 on side (25) of Complete Joint Penetration (CJP) Weld Joint (WJ) Number 25/26 on Skin Plate C, Sub-Assembly MUSB-MA23-25.

Mrs. Yan was utilizing ZPMC approved Weld Procedure Specification (WPS) WPS-B-T-2221-B-U3C-S.

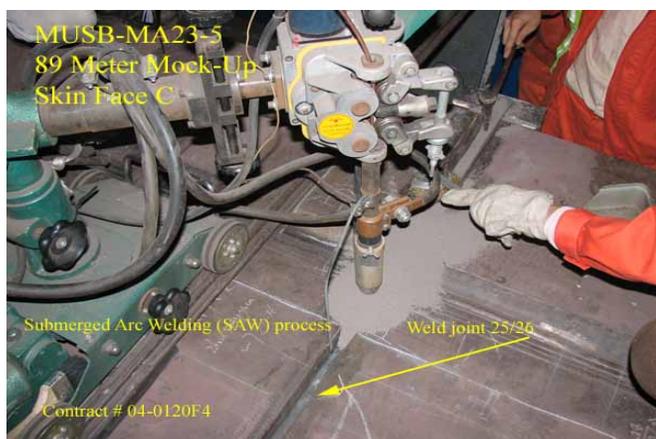
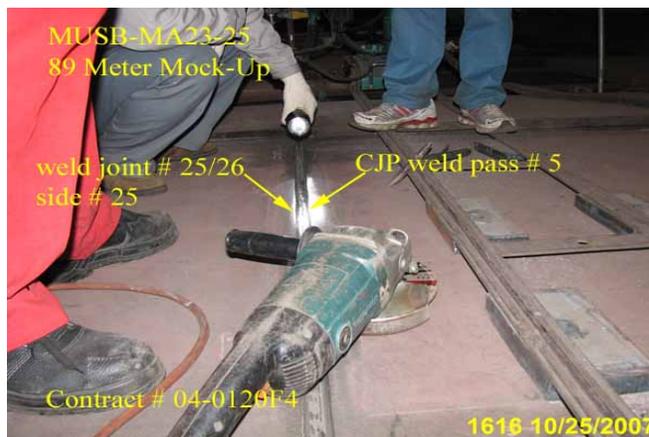
This QA Inspector observed ZPMC CWI Zhu Zhong Hai monitoring weld parameters. The QA Inspector also performed random verification of the weld parameters and documented them as follows: welding amperage 635 amps, welding voltage 33.0 volts with a travel speed of 580 millimeters per minute.

This QA Inspector randomly observed ZPMC qualified welder Mr. Dai Lu ID Number 048659, utilizing the SMAW process with ZPMC approved WPS WPS-B-P-3211-TC-U5b, to place the fill passes in WJ's 12A MUB-MA21 F/J splice plates piece # 3 and 4 SA-4 to P913-4. Mr. Dai was placing the fill pass # 2 in WJ 12A. The QA Inspector observed ZPMC CWI Zhu Zhong Hai monitoring weld pass # 2 welding machine parameters.

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This QA Inspector also performed random verification of the weld parameters and documented them as follows: welding amperage 190 amps, welding voltage 24.5 volts with a travel speed of 130 millimeters per minute. Weld parameters appeared to comply with the above-approved ZPMC WPS. The attached photograph provides additional detail.



Summary of Conversations:

As noted above and basic communication between QC Inspector and QA inspector when and where welding inspections are to be performed

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: Dixon, Roscoe

Quality Assurance Inspector

Reviewed By: Cochran, Jim

QA Reviewer