

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002355**Date Inspected:** 28-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1630**Contractor:** Japan Steel Works, Ltd.**Location:** Muroran, Japan

CWI Name:	Makhmud Ashadi and Chung Kua			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, Jacking and Deviation Saddles		

Summary of Items Observed:

On this date OSM Quality Assurance Representative Daniel L. Reyes observed the testing and the inspections relative to the Saddle Castings and Procedure Qualification Record (PQR) Test Plate for this project. The following was observed:

Fabrication Shop # 4

Procedure Qualification Test Plate-SW-7-2

At the start of the shift this QA inspector observed the continued welding and inspection of the Procedure Qualification Record (PQR) test plate identified as SW-7-2. The welding was performed by Japan Steel Works, Ltd. welding personnel Kouzou Kobayashi ID 08-5023 with the 50 millimeter thick test plate placed in the vertical plane with the welding performed in the upward progression (3G). Mr. Kouzou utilized the Shielded Metal Arc Welding (SMAW) process as per the Welding Procedure Specification (WPS) SJ-2942 WP-11 which was also used by Intertek Testing Services (ITS) Quality Control (QC) Inspector Makhmud Ashadi as a reference. The consumable utilized during the welding of the test plate was identified as a Hobart Electrode product identified as LB52A with a diameter size of 4.0 millimeters which appeared to comply with the AWS A5.1 specification and the E7016 Classification.

The QC inspector Mr. Makhmud Ashadi verified the minimum preheat temperature of 110 degrees Celsius and at the conclusion of verifying the surface temperature the welder Mr. Kouzou commenced the welding of the fill passes. At this time this QA inspector observed the QC inspector verifying the amperage and voltage utilizing a Hioki 3109 Clamp On Hi Tester, Model RMS. The average welding parameters were observed by this QA inspector as follows; 160 AC amps, 22.5 volts with a travel speed measured at 67 mm/m.

The above observations performed by this QA inspector were performed at random intervals and later in the shift

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performed a verification of the welding parameters utilizing a Fluke Clamp Meter 337. The verification results for the weld layers 114 through 119 were as follows; 158 AC amps and 22 AC volts with a travel speed measured at 65 mm/m.

The welding of the PQR Test Plate identified as SW-7-2 was not completed during this shift on this date.

Machine Shop No. 4

Later in the shift this QA inspector was escorted by Japan Steel Works, Ltd. (JSW) Deputy Manager Bridge Group Steel Products Department personnel Kazunori Sato to the JSW No. 4 Machine Shop and observed the rough machining of the tower saddle casting identified as T1-2. There were no other activities observed at this facility by this QA inspector relative to this project on this date.

Summary of Conversations:

There were general conversations with Japan Steel Works, Ltd. (JSW) Bridge Group Steel Products Department personnel Kunio Nagaya regarding the locations of inspection personnel.

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 Venkatesh Iyer, (858) 967-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes,Danny	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer
