

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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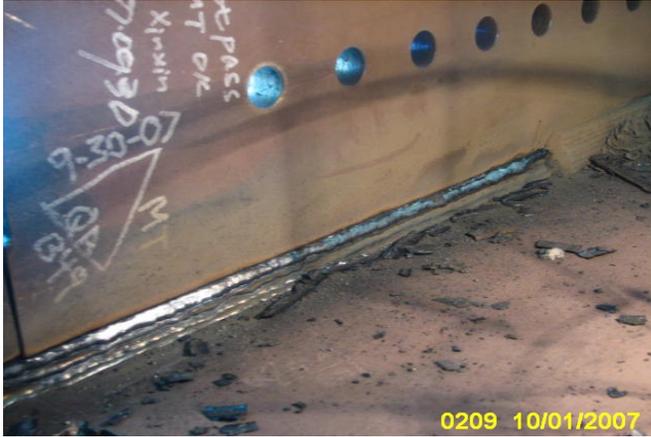
Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000559**Date Inspected:** 01-Oct-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 2330**Prime 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:** Xu Lefeng, Haung Li**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:** CalTrans-mock up**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Dan Hernandez was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Mock-up 114.00, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item	Description	WBS	Dwg No.	Status
1	Mock-Up 114.00, skin plate D Assembly (Lower Section): Caltrans QA Inspector observed flux cored arc welding (FCAW) in progress at stiffener plate mp1008 to skin plate MA110. The weld joints are identified as MUSA-MA110 #13 and #14 Partial Joint Penetration (PJP), double bevel T-joint. The welder is observed welding fill passes in the 2G horizontal position using a chipping hammer and wire brushing during interpass weld cleaning. The approved welder is identified as Mr. Jiang Zhou, welder stamp 040261. The welder is using welding procedure specification WPS-B-T-2232-TC-P5-F Revision 0. Caltrans QA observed ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Xu Lefeng and Bureau Veritas Inspector, Mr. Haung Li monitoring welding activities at the workstation. Caltrans QA measured current welding parameters at approximately 288 amps, 32.1 volts and 226 millimeters per minute (mm/min) travel speed. Preheat and interpass temperatures were verified during welding activities. The preheat temperature prior to the start of welding measures more than 110 Celsius (230 degree Fahrenheit) but less than 232 Celsius (450 degrees Fahrenheit) during maximum interpass temperature verification. FCAW welding consumable is verified and identified as Supercored 71H, classification E71T-1, diameter 1.4 mm (.055 inches).			In Progress

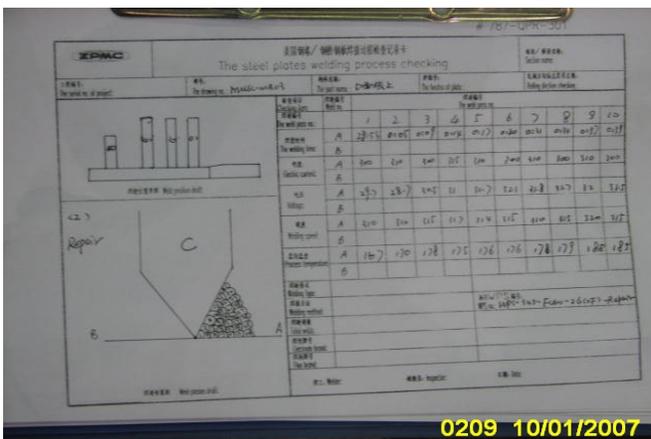
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2 Mock-Up 114.00, skin plate D Assembly (upper Section): In Progress

Skin Plate D (upper section): Caltrans QA Inspector observed the FCAW in progress at stiffener plate mp1004 to skin plate MA113. The weld joint was identified as MUSA-MA113 #11 Complete Joint Penetration (CJP), double bevel T-joint. The welder is observed welding fill passes welding in the 2G horizontal position using a chipping hammer and wire brushing during interpass weld cleaning. The weld was identified as an Ultrasonic Testing (UT) reject the weld was excavated to a depth approximately 45 mm and a length of 580mm. The approved welder is identified as Mr. Bai Wenming, welder stamp 040434. The welder is using welding procedure specification WPS-345-FCAW-2G(2F)-repair Revision 1. Caltrans QA observed ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Xu Lefeng and Bureau Veritas Inspector, Mr. Haung Li monitoring welding activities at the workstation. Caltrans QA measured current welding parameters at approximately 305 amps, 31.5 volts and 250 millimeters per minute (mm/min) travel speed. Preheat and interpass temperatures were verified during welding activities. The preheat temperature prior to the start of welding measures more than 110 Celsius (230 degree Fahrenheit) but less than 232 Celsius (450 degrees Fahrenheit) during maximum interpass temperature verification. FCAW welding consumable is verified and identified as Supercored 71H, classification E71T-1, diameter 1.4 mm (.055 inches). QA Inspector observed QC record the readings of weld parameters in the designated log book.



Summary of Conversations:

Comments

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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:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
