

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-000394**Date Inspected:** 29-Aug-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 2330**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Ye Young Jun & Hou Jing Yao	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 77.00	

Summary of Items Observed:

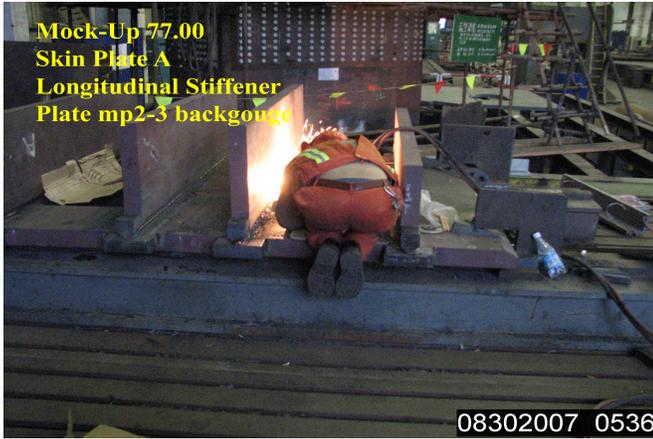
Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup and welding of the Caltrans Mock-up #77.00, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector observed flux cored arc welding (FCAW) complete joint penetration (CJP) root pass and two fill pass welds in the horizontal position. The subassembly is identified as Skin Plate A; longitudinal stiffener plate piecemark mp2-3, weld number MA2-2. The approved welder is identified as Mr. Zhou Shijie. The welder is using welding procedure specification WPS-B-T2232-T-U5-F, Revision 1. The weld is being deposited at designated face A side of the stiffener plate and weld joint preparation prior to welding appears to be ground and wire brushed. Caltrans QA observed ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Ye Yong Jin and Bureau Veritas inspector, Mr. Hou Jing Yao monitoring welding activities at the workstation.

Caltrans QA Inspector measured current welding parameters at approximately 295 amps, 32.5 volts and 268 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). After the completion of the root and two fill pass welds. The weld was then air carbon arc backgouged to sound metal. It appears that the following ZPMC work shift change will be completing the weld joint preparation of this backgouge. Following digital picture illustrates welding and air carbon arc backgouging in progress.

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Summary of Conversations:

ZPMC Quality Assurance (QA) inspector, Mr. Xu Jun reported that ZPMC would be welding on Skin Plate A assembly and would accompany Caltrans QA to the shop where the fabricating of the subassembly is being 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:	Hasler, Mike	Quality Assurance Inspector
Reviewed By:	Cuellar, Robert	QA Reviewer
