

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-000654**Date Inspected:** 18-Oct-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Ye Yongjun, Zhang Xu Kiang	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 and 114 meter mock-up	

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector Sherri Brannon 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.

89M mock-up Skin Plate B:

QA Inspector Brannon randomly observed ZPMC qualified welder's Mr. Han Xiaofeng ID #054467 and Mr. Wang Zhonghua ID#053753 tack welding joining longitudinal stiffener plate to the skin plate B, sub assembly. Mr. Xiaofeng and Mr. Zhonghua was observed welding in the 2G (horizontal) position utilizing a shielded metal arc welding (SMAW) process with a 5.0mm diameter electrode, filler metal brand TL-508, class E7018 manual. QA Inspector Brannon observed the ZPMC QC Inspector Ye Yongjun and Bureau Veritas Mr. Zhang Xu Kiang verifying that the welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector Brannon also verified the preheat temperature to be a minimum of 110°C and measured the welding parameters to be 215/198 amps respectively. Welding parameters measured by QA Inspector Brannon appear to be in general compliance with the approved WPS-B-P-2312-TC-P5, Revision 0.

NDT (VT/MT):

QA Inspector Brannon observed ZPMC Magnetic Particle Testing Technician Mr. Li Li Ming, at the 89 Meter Mockup-Edge plates (flange), MA21A/J-3 weld joints #62, 63 & 64, MA21J/J-68 weld joints 68, 69 & 70 performing magnetic particle testing (MT) on the cover pass of the complete joint penetration welds for the 89 meter mock-up skin plate C, sub assembly MA23 weld joints #1, 2, 3 & 4, one hundred percent of the weld lengths was inspected by Mr. Li Li Ming. ZPMC Quality Assurance stated to QA Inspector Brannon that Mr. Ming did

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not observe any indications.

114M mock-up Skin Plate B:

QA Inspector Brannon observed ZPMC Ultrasonic Testing Technician Mr. Li Liming, at the 114 Meter Mockup Interior corner Splice Assembly A119 weld joint #1, performing Ultrasonic Testing (UT) on the completed joint penetration weld joint #1 after heat straightening had been completed, one hundred percent of the weld length was inspected by Mr. Li Liming. ZPMC Quality Assurance stated to QA Inspector Brannon that Mr. Liming did not observe any indications.

114M mock-up Temporary Diaphragm Plates:

QA Inspector Brannon randomly observed ZPMC personnel surveying temporary diaphragm plate's part 1 and part 2 after machining had been completed.

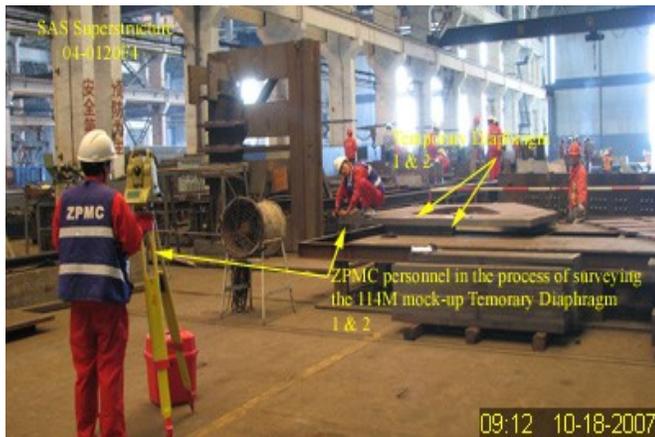
89M mock-up

QA Inspector Brannon randomly observed ZPMC personnel beveling longitudinal stiffener plates for the 89 meter mock-up.

Electrode storage

QA Inspector Brannon visited the electrode storage area and was informed by ZPMC Quality Assurance Mr. Zhang Tiadi that they had lost power in the storage room for approximately 15 minutes today. Electrode storage room appears to comply to contract documents.

The following digital photograph below illustrates observation of the activities being performed.



Summary of Conversations:

No relevant conversations on this date.

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.

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Inspected By:	Brannon, Sherri	Quality Assurance Inspector
Reviewed By:	Cuellar, Robert	QA Reviewer
