

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-001512**Date Inspected:** 27-Feb-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1600**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Yi**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:** OBG**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Tim McClendon 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.

Caltrans QA Inspector McClendon observed the Production Monitoring Test (PMT) for Production Panel DP031-001, closed rib welds in Bay #1. ZPMC welding personnel performed Gantry Machine Gas Metal Arc Welding (GMAW) for the root pass on gantry machine number 1. Dual process WPS-B-T-2342-U1 (U-rib)-3 was posted as the Welding Procedure Specification (WPS) for closed rib welding. The following weld joint and welder were recorded for the PMT, weld joint (wj) wj # 1 Mr. Yuan Fengchuan, wj # 2 Mr. Chen Jie, wj # 3 Mr. Gao Xin Dong, wj # 4 Mr. Jiang Ting Guang, wj # 5 Mr. Zhang Shao Hui and wj # 6 Mr. Jong Yi Gun. Welding operator was Mr. Li Xide. The following welding variables of the PMT were recorded, amperage 343 to 360, voltage 30.4 to 31.4 with a travel speed of 529 mm/min. The closed ribs were welded independently of each other in three separate groups and not according to Caltrans Special Provision which requires if the equipment is used in production to simultaneously weld multiple ribs, then at least two ribs shall be welded during the test. An incident report will be written on this issue.

The ambient temperature in bay # 1 was recorded at 7 degrees Celsius with the production panel temperature recorded at 11 degrees Celsius prior to welding.

After completion of the PMT GMAW pass ZPMC personnel performed the GMAW pass on Production Panel DP031-001. The following welders were observed welding production deck plate u-ribs welds, Mr. Yuan

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Fengchuan wj-1 and 3, Mr. Chen Jie wj- 2 and 4, Mr. Guo Xin Dong wj-5 and 7, Mr. Jiang Ting Guang wj-6 and 8, Mr. Zhang Shuo Hui wj-9 and Mr. Dong Yi Qun wj-10. The following welding variables of production panel U-ribs was recorded, amperage 340 to 387, voltage 30.6 to 31.4 with a travel speed of 529 mm/min.

Caltrans representatives observed tears and fins on weld joints prior to GMAW welding. Areas were shown to ZPMC personnel prior to welding. ZPMC performed GMAW on DP031-001 before completing SAW on the PMT.

Summary of Conversations:

No relevant conversations spoken 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.

Inspected By:	McClendon,Timothy	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
