

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-003072**Date Inspected:** 12-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China

CWI Name:	Huang Wen-Pang / Lv LiQing	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 / OBG	

Summary of Items Observed:**Bay 3**

This Quality Assurance (QA) inspector arrived at ZPMC in Shanghai China for observation of Orthotropic Bridge Girders (OBG) and Self Anchored Suspension (SAS) Bridge. During this QA inspector's observation in bay 3 it was noted that ZPMC was in process for fit-up at multiple stages on side and bottom plates. ZPMC Certified Welding Inspector Wu Ming Kai and Xu Xian Ping was present at the time of observation and this QA inspector spoke with Mr. Kai on the work in process for bay 3. It was stated that tack welding for side, bottom and edge plates were in different stages of fit up. Component numbers DP024-001 and DP022-001, Shielded Metal Arc Welding (SMAW) was observed for the above location being utilized by ZPMC welders Zhang Feng and Yang Gencheng. Multiple WT stiffeners were being spliced together for side plates using the Flux Cored Arc welding (FCAW) process under WPS-B-T-2233-B-U2-F with welder Li Zhao Qian also being spliced in this bay was deck panel DP012-001-010 flat plate CJP weldment with welder Wa Zhibin under WPS B-T-2233-B-U2-F. The CWI was monitoring the welding parameters and in process welding throughout this bay assisted by ZPMC Quality Control personnel.

Bay 4

During observations by this QA inspector it was noted in bay 4 that ZPMC was performing the Submerged Arc Welding Process (SAW) for diaphragm plate splice using a Complete Joint Penetration (CJP) under WPS-B-T-3221-B-U3c-S-1. The component number which was observed at this location was WSD1-SA287 (W) - 3/4A with ZPMC welding personnel Jing Jingteng performing this operation. Also noted was ZPMC fabricating internal diaphragm rings welding using the FCAW process in the vertical position (3G). This QA inspector observed 7 rings in multiple stages of fabrication for this location that included "dry Fit" of the rings to perform dimension checks for proper fit and tolerance. This QA inspector observed 2 rings that ZPMC was welding, the

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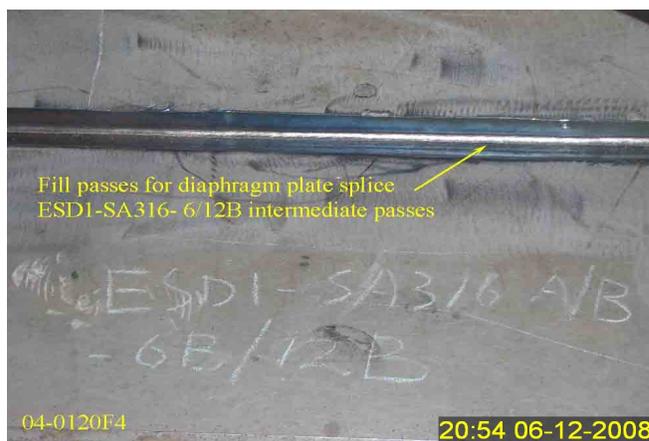
component numbers were NSD1-SA276-3B and SSD1-SA335-17B welder observed was Li Meng Qian for ZPMC. ZPMC Certified Welding Inspector Zhao Chen Sun was observed as being present during these operations and monitoring the progress and welding parameters, along with the CWI it was also noted that ZPMC had QC personnel to assist the CWI with the monitoring.

Bay 7

This QA inspector observed ZPMC in bay 7 performing fit up operations in multiple stages for floor beam components. The following floor beams were observed by this QA inspector FB012-001, FB015-006 and FB012-004 being fit using the FCAW process. ZPMC welding personnel Liu Kiage was using approved Welding Procedure Specification (WPS) WPS-B-T-2132-3 for the fit-up of floor beams. The SAW process was also being used within this bay for the welding of web plate splices on web plate FB036-001-081 for the intermediate and cover passes being welded by ZPMC welding operator Huang Xin Lan under WPS-B-T-2221-B-L2c-S-1. It was noted that ZPMC's CWI Huang Wen-Pang was present during the welding operations in this bay and monitoring welding parameters and in process progression. Also present to assist Mr. Jing was ZPMC QC personnel for monitoring.

Bay 8

This QA inspector observed ZPMC in bay 8 was in the process of welding diaphragm plate splice for component number ESD1-SA316-6/12B under approved Welding Procedure Specification (WPS), WPS-B-T-3221-B-U3c-S-1 for the CJP weldment ZPMC Welding personnel noted at this location was Xu PeiPei for the SAW process. This QA inspector observed monitoring by ZPMC CWI Lv LiQing for preheat, welding parameters and progression for these locations who was also assisted by ZPMC QC personnel.



Summary of Conversations:

As Noted Above.

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:	Riley, Ken	Quality Assurance Inspector
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Reviewed By:	Carreon, Albert	QA Reviewer
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