

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-002739**Date Inspected:** 26-Apr-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:** Chen Xi**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:**

Deck Panel Repairs

This Quality Assurance (QA) inspector arrived at ZPMC for observation of the SAS super structure fabrication. During his observations it was noted that in tower bay 3 ZPMC was performing weld repairs to deck panels by grinding on DP060-001 at various locations that was marked by ZPMC. Welder Xu Guoyin was using the Flux Cored Arc Welding (FCAW) process placing weld metal at marked locations that were excavated by grinding. ZPMC Certified Welding Inspector Chen Xi was noted as being present with ZPMC Quality Control personnel monitoring the repair process. Supercored 71H 1.4 mm electrode was observed being used in the horizontal position (2G) for the repairs.

Bay 4

This Quality Assurance (QA) inspector arrived at ZPMC for observation of the SAS super structure fabrication and observed ZPMC welding in bay 4 where ZPMC CWI Zhao Chen Sun was observed monitoring the welding of diaphragm plate splices using the Submerged Arc Welding (SAW) process for component number ESD1-SA238 3 A/B and 4 A/B. During this QA inspectors observation it was noted that ZPMC was using WPS-B-T-2221-B-U3c-S-1 with welding operator Jiang Jingteng (046830) performing the SAW welding process for this location. ZPMC and this QA inspector verified the welding parameters as being within the tolerances of the above noted WPS along with preheat and interpass temperatures. ZPMC was using thermal heating blankets for preheat and interpass temperatures and appeared to be within the tolerances of the above noted WPS.

Tower Shop

During this QA inspectors continued observations at ZPMC it was noted that in the tower shop bay 1 ZPMC was using heat striating procedure HSR1 (T)-1025 for stiffener plates that were out of flatness by 2-3 mm. ZPMC QC personnel was observed as being present and monitoring the heat input which had a maximum tolerance of 630°C.

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Also noted was the welding of skin plate SSD1-SA16 F/G-1 with welder Chen Hung Xia (040460) using the Submerged Arc Welding process in the flat position 1G. ZPMC CWI Xu Le Fong was observed as being present during the welding operations on a periodic basis throughout the shop for the welding and heat straightening processes. Mr. Fong also had 4 ZPMC QC personnel assisting him in the monitoring of the welding progress.

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.

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