

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-002476**Date Inspected:** 03-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Zhao Chen Sun, and See Below			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:	See Below		

Summary of Items Observed:

The Caltrans Quality Assurance (QA) Inspector, M. Paul Stovall, was present at Zhenhua Port Machinery Company (ZPMC) on Changxing Island, Shanghai, China to monitoring Quality Control (QC) functions during the fabrication of the Self Anchored Suspension (SAS) section of the San Francisco/Oakland Bay Bridge.

New Tower Shop

The QA Inspector observed ZPMC personnel backgouge, grind, preheat, and start the Submerged Arc Weld (SAW) process on Tower Skin plate Complete Joint Penetration (CJP) weld joint number ESD1-SA107-A/J-16B. The QA Inspector observed Welding Procedure Specification (WPS) WPS-B-T-2211-B-U3c-S used. The QA Inspector at different times verified the welding parameters as 678 amperes, 34.2 volts, and 683 amperes, 33.2 volts.

The QA Inspector observed ZPMC personnel complete the fit up and tack welding of Tower Skin plates SA107 and 882, which is now weld number WSD1-SA107-D/J-16A. ZPMC personnel then welded on run off lugs.

The QA Inspector observed ZPMC welding personnel Yun Chuanjin, ID #0503060 performing welding on Tower Skin plate seam weld joint number SSD1-SA16-F/G-6A.

The QA Inspector observed ZPMC personnel start the fit up on Tower Skin plate numbers P219 to SA173.

The QA Inspector observed ZPMC personnel grinding the weld cap on Tower Skin plate seam weld joint number

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SSD1-SA16-F/G-88B.

The QA Inspector observed ZPMC personnel heat straightening various Tower Skin plates, cutting plate material for use on the Tower on two (2) separate cutting tables, and machining bevels on Tower Skin plates using the horizontal mill.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

OBG Preassembly Bay 2

The QA Inspector observed ZPMC personnel flame cutting plate material for the Tower.

OBG Preassembly Bay 3

The QA Inspector observed ZPMC welding personnel Wang Zhonghua, ID #053753, Zhang Feng, ID #049769, Cao Tao ID #070301072, and Du Henghua, ID #037779 fit and tack weld WT stiffeners on Bottom Plates (BP) and Side Plates (SP): BP165-001, SP410-001, SP424-001, and SP410-001.

The QA Inspector observed ZPMC personnel grinding tack welds on Bottom Plate number BP165-001.

The QA Inspector observed ZPMC personnel heat straightening various Side Plates, cutting W21 x 57's to be used as WT's, and ZPMC QC inspecting and marking WT's for grinding surface irregularities from the cutting process.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

OBG Preassembly Bay 4

The QA Inspector observed ZPMC welding personnel Jiang Jingteng, ID #054467 performing Submerged Arc Welding (SAW) using WPS-B-T-3221-B-U3c-S-1 on Tower Diaphragm Plate weld joint number ESD1-SA317-4A.

The QA Inspector verified the welding parameters as 629 amperes and 31.4 volts.

The QA Inspector observed ZPMC personnel heat straightening various Tower Diaphragm plates and grind the weld cap on Tower Diaphragm plate weld joint number ESD1-SA234-A/B-10B.

The QA Inspector observed that ZPMC personnel grinding fillet welds on Side Plates and Bottom Plates that have been moved into Bay 4.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

Summary of Conversations:

The QA Inspector had no significant conversations.

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

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remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Stovall,Paul	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer
