

**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-001964**Date Inspected:** 10-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** FU Guo**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**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Mock-up, 77M, 89M, 114M, Orthotropic Box Girders (OBG) and Tower, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item Description	WBS	Dwg No.	Status
1 Tower Skin Plate New Tower Shop: The Caltrans QA Inspector observed ZPMC performing flame heat straightening operations on tower skin plates for mill distortion. The tower skin plate and heat straightening procedure are identified as skin plate P144 (S), procedure HSR1 (T) 619, revision (0). Caltrans QA observed ZPMC heating the plate manually with a rose-bud torch. Caltrans QA observed ZPMC Quality Control Inspector, Mr. Qiu Wen monitoring the heat straightening of the plate using a calibrated infra-red temperature indicating device to monitor the heat and being witnessed by ABF Inspector, Mr. Mike Williams.	NA	NA	ZPMC Heat Straightening
2 Tower Skin Plate New Tower Shop Bay 1: Caltrans QA Inspector observed submerged arc welding (SAW), complete joint penetration (CJP) skin plate splice, fill pass weld. The subassembly is identified as skin plate P56 (S) to P58 (S), weld location SSD1-SA159 D/J -4B. The welder operator is identified as Mr. Xu Xiu Shui, welder stamp 040489. The welder is observed using welding procedure specification, WPS-B-T-2221-B-U3c-S, revision 1. Caltrans QA measured current welding parameters at approximately 680 amps, 33.0 volts and 620mm/min (millimeters per minute) travel speed. Caltrans QA verified the preheat and interpass temperatures during the welding activities. The preheat temperature prior to the start of welding measures more than 110 degrees Celsius but less than 230 degrees Celsius during maximum interpass temperature verification. Caltrans QA observed ZPMC Quality Control (QC/CWI), Mr. Fu Guo monitoring the	NA	NA	Welding in Progress

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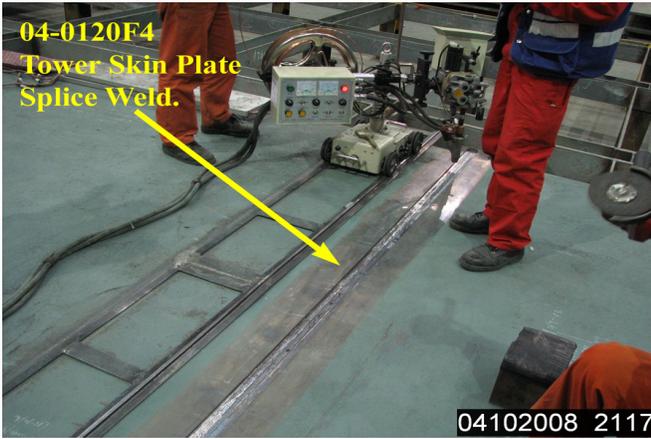
# WELDING INSPECTION REPORT

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welding activities at the work-station. The following digital photograph illustrates welding in progress at the work-station.



### Summary of Conversations:

As identified within the contents of this report.

### 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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<b>Inspected By:</b>	Hasler, Mike	Quality Assurance Inspector
<b>Reviewed By:</b>	Cuellar, Robert	QA Reviewer

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