

**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-000129**Date Inspected:** 25-Apr-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Song Wei min**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:** PQR Test**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe quality control functions related to welding, testing and fabrication procedures at the Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

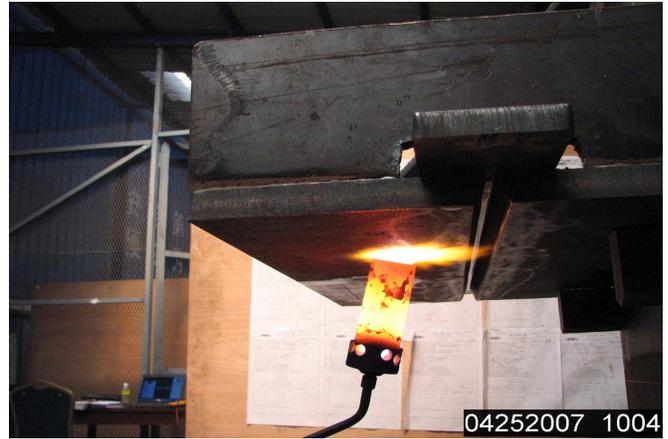
At 0930 hours, Caltrans QA Inspector witnessed ZPMC, welder, Mr. Zhu Hai Ping perform shield metal arc welding (SMAW) procedure qualification record (PQR) test. Caltrans QA observed ZPMC QA Inspector, Mr. Hu Gang and American Bridge/Fluor, Quality Control (QC) subcontractor, Bureau Veritas (BV) inspector, Mr. Song Wei min Bing monitoring and supervising the testing per AWS 5.13 criteria; amperages, voltages, travel speeds, preheat and interpass temperatures. The PQR is identified as HP200778, WPS PWPS-B-T-3214. The test plate type and thickness is identified as A709 Grade HPS485W, heat number 06103565N, 25 mm with A709 Grade HPS485W, 20 mm heat number 06103565N backing meeting the fracture critical requirements. The root opening of the joint measured approximately 6 mm. The PQR testing was performed in the 4G position. The welding consumable is identified as a 4.0 mm electrode, classification E9018M-H4R. Caltrans QA inspector recorded welding parameters for a total of 1 through 7 weld passes, which took five electrodes to complete. Caltrans QA verified that the welding parameters taken by ZPMC QC inspector appeared to be accurate and in accordance with the contract documents. At 1600 hours ZPMC QA Inspector, Mr. Hu Gang terminated welding after the completion of the 7th weld pass. Mr. Gang stated that there is not enough time to complete the welding of the test plate during this work shift. Mr. Gang also stated that welding would be resumed on the test plate the following work day.

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---



## 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.

---

**Inspected By:** Hasler, Mike

Quality Assurance Inspector

**Reviewed By:** McClary, David

QA Reviewer

---