

**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-000264**Date Inspected:** 04-Jul-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

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	A709M 345 Plate for U-rib	

**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Bruce Berger 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.

Caltrans Quality Assurance (QA) Inspector Bruce J. Berger witnessed the selection of sites for magnetic particle testing on the U-Rib Bending Procedure with Structural Materials Representative Ady Valesco. The two ribs being tested by the visible wet magnetic particle testing procedure were U-01 & U-05. There were four approximately 1 meter long sites selected on U-01 in the radios area which had the paint removed by power wire brushing. During magnetic particle testing the following items were noted. One, there was no calibration sticker on the magnetic yoke and there was no calibration paper work available for review. Two, pie gauge was not initially used and it had to be asked about prior to its being used. Three, it was noted during testing that the yoke was being walked producing a 45 degree angle to the direction of rolling and that only one direction was tested and that was not complete. Four, the technician was moving along with haste and it was felt that he was moving too fast and not giving time for any possible indications to form. It was also observed that he did not appear to be looking for indications until after the magnetic yoke had been turned off. They were observed using a white contrast background with a red ink and they were using the yoke with the AC setting. There was no magnetic testing procedure available at the test site.

Caltrans Quality Assurance (QA) Inspector Bruce J. Berger witnessed the side bend testing of 79 shield metal arc, flux cored arc and submerged arc welding qualification tests or 158 actual side bends. Of the 79 welder qualification test one welder, Lv Peng, number 070601204 failed. There were a total of 28 shield metal arc

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

welders, 39 flux cored arc welders and 12 submerged arc welders. ZPMC presented the Bending Test Record of Welder Qualification Report for the testing carried out today at the Testing Center.



### Summary of Conversations:

No relevant conversations took place on this date.

### 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.

---

<b>Inspected By:</b>	Berger, Bruce	Quality Assurance Inspector
<b>Reviewed By:</b>	McClary, David	QA Reviewer

---