

**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-001003**Date Inspected:** 07-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Lee Chan Woo, Xu Xian Ping**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 Fabrication**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Orthotropic Box Girder Mock Up:

Orthotropic Box Girder Mock Up:

CWI Lee Chan Woo

Bay 3:

The Caltrans QA Inspector observed ZPMC welder Mr. He Yumei using welding procedure specification WPS-B-T-2132-1 to make flux cored fillet welds on OBG plate 35A weld BP-003-009 stiffener. The QA Inspector observed a welding current of approximately 275 amps, 28 volts and the base material had been preheated to a minimum of 65 degrees C. Items observed by the QA Inspector appear to comply with project specifications.

The Caltrans QA Inspector observed ZPMC welder Mr. Liu Zihong using welding procedure specification WPS-B-T-2132-1 to make flux cored fillet tack welds on OBG plate 33B stiffener weld BP006-01-13 stiffener. The QA Inspector observed a welding current of approximately 260 amps and 28.4 volts and the base material had been preheated to a minimum of 65 degrees C. Items observed by the QA Inspector appear to comply with project

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# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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specifications.

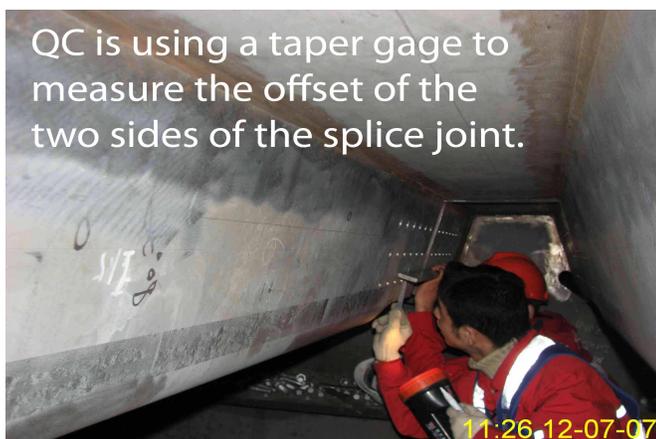
The Caltrans QA Inspector observed ZPMC welder Mr. Wei Dashuai using welding procedure specification WPS-B-T-2132-1 to make flux cored fillet tack welds on OBG plate 33A stiffener welds BP001-1-037. The QA Inspector observed a welding current of approximately 280 amps and 28.6 volts and the base material had been preheated to a minimum of 65 degrees C. Items observed by the QA Inspector appear to comply with project specifications.

Bay 1:

The Caltrans QA Inspector performed random dimensional inspections of the alignment between orthotropic box girder 1.7 meter long and 13 meter long splice connections in Bay 1 fabrication area. A straight edge was held against each of the ten splice plate surfaces and nine offset measurements were taken on each of the surfaces near to the nine closest holes. The maximum offset that was measured is listed below. See the photographs below for additional information.

	1.7 meter long	13 meter long
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Plate 1	0	- 2.9(mm)
Plate 2	0	- <1 (less than one)
Plate 3	5.2	- 0
Plate 4	0	- 2.4
Plate 5	5.7	- 0
Plate 6	0	- 2.8
Plate 7	5.2	- 0



### Summary of Conversations:

See above for summary of conversations.

### Comments

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# WELDING INSPECTION REPORT

*( Continued Page 3 of 3 )*

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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>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Cochran,Jim	QA Reviewer

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