

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-000345**Date Inspected:** 08-Aug-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	N/A	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:	Procedure Qualification Record	

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector Chuck Franco was present at the time requested to observe welding being performed on a Procedure Qualification Record (PQR). The welding is being performed with the submerged arc welding (SAW) process by ZPMC welder Xang Xin Jin in the 1G or flat groove position. The PQR weld joint is a single V groove with a 20 degree included groove angle, a 16 millimeter root opening with a 20 millimeter thick by 200 millimeter wide steel backing strip. ZPMC QA Representatives Huang Wei and Fu Jin were observed monitoring weld preheat, welding amperage, welding voltage and travel speed. The QA Inspector also randomly observed the above welding parameters. Welding was discontinued at the end of the shift after completing weld pass.

The Caltrans Quality Assurance (QA) Inspector was present at the time requested to observe welding being performed on a Procedure Qualification Record (PQR). The welding is being performed by ZPMC welder with the submerged arc welding (SAW) process in the 1G or flat groove position. The PQR weld joint is a single V groove with a 20 degree included groove angle, a 16 millimeter root opening with a 20 millimeter thick by 200 millimeter wide steel backing strip. ZPMC QA Representatives Huang Wei and Fu Jun were observed monitoring preheat, welding amperage, welding voltage and travel speed. The QA Inspector also performed random verification of the above welding parameters. The test was discontinued at the end of the shift after completing weld pass.

WELDING INSPECTION REPORT

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Summary of Conversations:

A conversation was held with Mr. Dustin Brungradt of American Bridge/Fluor (ABF) regarding levels of Vanadium in plates for Material Test Reports (MTR's) line numbers 249 through 310 of Caltrans Lot Number B72-072-07. Mr. Brungart stated that the Vanadium percentage in ASTM A709 GR50 Type 3 steel, is a combined percentage with Columbium (Cb) if it is listed on the MTR. The above listed MTR's do not list Cb but instead list Niobium (Nb) which is the equivalent of Cb. With the combination of those 2 percentages, the above listed plates conform to the specification for ASTM 709 GR 50 Type 3.

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:	Franco,Charlie	Quality Assurance Inspector
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Reviewed By:	McClary,David	QA Reviewer
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