

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-000253**Date Inspected:** 22-Jun-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:** Wei Huang**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:** HP2007153, 145 & 146**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 witnessing ZPMC performing submerged arc welding (SAW) procedure qualification record for (PQR) HP2007153, PWPS-B-T-3221 test. The welder is identified as Mr. Jiang Xiao Hu, welding passes one through nine. The test plate material type is identified as A709 Grade HPS485W and thickness, 90 mm. The PQR complete joint penetration weld joint testing was performed in the flat (1G) position. The welding consumable is identified as 4.8 mm electrodes, classification EM12K filler metal brand JW-3, specification AWS A5.17 with flux JF-B. Caltrans QA observed ZPMC QA Inspectors, Mr. Wei Huang and Xia Hu along with two associates monitoring and supervising the testing per AWS 5.13 criteria; amperages, voltages, travel speeds, preheat and inter-pass temperatures. Also present at the test site was American Bridge/Fluor (ABF) quality control (QC) inspectors, Mr. Kevin Dye and Song Wei Min. QA observed that the wind velocity at the ZPMC testing site appear to be in conformance with AWS D1.5, paragraph 4.14.3 requirements. Welding was not completed and will continue through out the week-end.

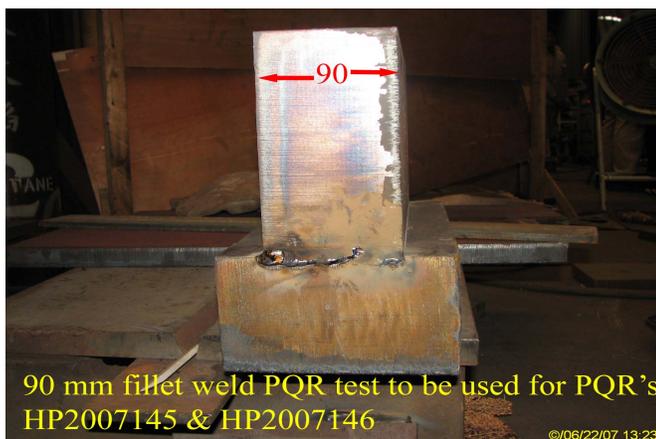
Caltrans Quality Assurance (QA) Inspector Bruce J. Berger witnessing ZPMC performing shield metal arc welding (SMAW) procedure qualification record (PQR) HP2007145 PWPS-B-T-3112 test. The welder is identified as Mr. Zhu Hai Ping, welding passes one through three. The test plate material type is identified as A709 Grade HPS485W and thickness, 90 mm. The PQR fillet weld joint testing was performed in the horizontal (2F) position. The welding consumable is identified as 4.8 mm electrodes, classification E9018M-H4R, specification

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AWS A5.5. Caltrans QA observed ZPMC QA Inspector, Mr. Wei Huang and two associates monitoring and supervising the testing per AWS 5.13 criteria; amperages, voltages, travel speeds, preheat and inter-pass temperatures. Also present at the test site was American Bridge/Fluor (ABF) quality control (QC) inspector, Mr. Kevin Dye and Song Wei Min. QA observed that the wind velocity at the ZPMC testing site appear to be in conformance with AWS D1.5, paragraph 4.14.3 requirements. Welding was completed and accepted by QC so Caltrans lot number B72-051-07 was assigned to the PQR

Caltrans Quality Assurance (QA) Inspector Bruce J. Berger witnessing ZPMC performing shield metal arc welding (SMAW) procedure qualification record (PQR) HP2007146 PWPS-B-T-3113 test. The welder is identified as Mr. Zhu Hai Ping, welding passes one through three. The test plate material type is identified as A709 Grade HPS485W and thickness, 90 mm. The PQR fillet weld joint testing was performed in the vertical up (3F) position. The welding consumable is identified as 4.0 mm electrodes, classification E9018M-H4R, specification AWS A5.5. Caltrans QA observed ZPMC QA Inspector, Mr. Wei Huang and two associates monitoring and supervising the testing per AWS 5.13 criteria; amperages, voltages, travel speeds, preheat and inter-pass temperatures. Also present at the test site was American Bridge/Fluor (ABF) quality control (QC) inspector, Mr. Kevin Dye and Song Wei Min. QA observed that the wind velocity at the ZPMC testing site appear to be in conformance with AWS D1.5, paragraph 4.14.3 requirements. Welding was completed and accepted by QC so Caltrans lot number B72-053-07 was assigned to the PQR



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.

Inspected By: Berger, Bruce

Quality Assurance Inspector

Reviewed By: McClary, David

QA Reviewer