

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-004578**Date Inspected:** 09-Nov-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Chih-Ming / Chen Xi**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:** deck panels**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG assembly bay 2

QA Performed Gate to Gate (G2G) preliminary UT following the guide lines of UT procedure titled "Ultrasonic Testing for the Detection of Suspected Planar Discontinuities (Cracks) in PJP Welds" at the tacked areas on u-rib to deck plate PJP welds for the following deck panel:

DP-190-001:

Weld# 1 – 23 tacks UT'ed – 5 indications

Weld# 2 – 23 tacks UT'ed – 7 indications

Weld# 3 – 23 tacks UT'ed – 5 indications

Weld# 4 – 23 tacks UT'ed – 5 indications

Weld# 5 – 23 tacks UT'ed – 6 indications

QA did not complete the G2G UT on this deck panel. 3 tack areas on each of the above mentioned welds and welds 6 thru 10 require G2G UT.

OBG sub-assembly bay 1

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Due to ZPMC 22:30 ferry cancelation this QA monitored the Production Monitoring Test (PMT) for deck panels DP-367-001 and DP-178-001 on Gantry #2. QA observed ZPMC Quality Control (QC) Certified Welding Inspector (CWI) identified as Mr. Chen Xi rejected PMT #1 due to overlap in excess of 5% of the weld length as specified in the PMT acceptance criteria. The area of overlap was found on weld 6 and appeared to be approximately 350mm to 400mm in length.

ZPMC successfully completed the second PMT shortly after 02:00. QA observed ZPMC QC CWI identified as Mr. Chen Xi and American Bridge Fluor (ABF) QA inspector identified as Mr. Wang Zhenhua perform and accept the Visual Test (VT) on the completed welds. This QA concurred that the welds appeared to comply with the latest revision of the PMT acceptance criteria. QA completed a U-Ribs PMT inspection report for this date and gantry. The report is on file in the Caltrans QA office. QA observed ZPMC QC UT technician perform and accept the UT inspection for Depth Of Penetration (DOP) on 100% of each weld. Caltrans QA waived the right to perform DOP UT verification on this PMT. QA laid-out, match marked and stenciled 5 macro-etch samples on each PMT rib for a total of 15 samples.

ZPMC QA identified as Mr. Shen Xuejun contacted this QA to examine the 15 macro-etch samples cut from the above mentioned PMT panel at 04:15. All of the macro-etch samples examined appeared to meet the requirements of the contract documents. QA logged the results in on the Team China Server.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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 Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
