

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-014420**Date Inspected:** 25-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang.**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**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad 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:

BAY 11

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as West tower lift 4 skin A, B, C, D, E, fit lug and diaphragm to skin weld at 123M. The weld designations reviewed are as follows.

WSTL4-2F/L-39, 37, 38, 30, 27, 29, 21, 23, 20, 13, 138, 11, 9, 8, 70, 68, 64, 59, 60, 150, 57, 56, 54, 100, 101, 99, 98, 96, 134, 92, 90, 142, 84, 81, 82, 79, 132, 131, 128, 126, 1123, 119, 118, 120, 117L

NDT Notification No-005819

BAY 10

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Shear plate A21 Bearing plate. The weld designations reviewed are as follows.

WD1-A21A/B-29, 27, 26, 23, 22, 21

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

NDT Notification No-005828

This QA Inspector observed the following work in progress:

BAY 11:

SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 044551, 046709. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ND1-STSA4-6-127M-1-83, 79. ZPMC QC Identified as Mao Bin Bin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2113.

This QA Inspector observed ZPMC qualified welding personnel identified as 040611, 046704. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ND1-STSA4-6-127M-2-90, 84, 96, 80. ZPMC QC Identified as Mao Bin Bin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4113-1. For more information see below attach photo.

This QA Inspector observed ZPMC qualified welding personnel identified as 046769, 040655. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-135M-2-43, 44, 41, 42. ZPMC QC Identified as Mao Bin Bin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2113.

This QA Inspector observed ZPMC qualified welding personnel identified as 206189. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-131M-1-93, 94, 13, 14. ZPMC QC Identified as Mao Bin Bin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2112.

SAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 044550, 042195. Perform Submerged Arc Welding (SAW) on Saddle grillage plate. Joint identified as GTSA5-B/G-6A, 3A, ZPMC QC Identified as Shao Hao Long, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2221-B-U3c-S-2.

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053486, 040704, 040723, 049541, Perform Flux Core Arc Welding (FCAW) on Shear plate bearing stiffener weld. Joint identified as WD1-A25B/B-84, 81, 73, 76. ZPMC QC Identified as Xu Jie. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2331-Tc-P4-F.

Repair Welding, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040724, Perform Shielded Metal Arc Welding (SMAW) on Tower strut. Strut identified as ND1-A468-28M-1 buttering up to 7 to 15mm, ZPMC QC Identified as Shao Hao Long, with Critical welding repair report CWR-T-CWR627. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-1G (1F) Repair-1.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

This QA Inspector observed ZPMC qualified welding personnel identified as 202100, Perform Shielded Metal Arc Welding (SMAW) on Tower strut. Strut identified as ND1-A468-23M-1 buttering up to 10 to 30mm, ZPMC QC Identified as Shao Hao Long, with Critical welding repair report CWR-T-CWR626. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-1G (1F) Repair-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 251194, Perform Shielded Metal Arc Welding (SMAW) on Tower strut. Strut identified as ND1-A468-33M-1 buttering up to 5 to 13mm, ZPMC QC Identified as Shao Hao Long, with Critical welding repair report CWR-T-CWR628. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-1G (1F) Repair-1.

BAY 10:

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053869, 040533, 057266, 057244, 040302, 057258, Perform Flux Core Arc Welding (FCAW) on Shear plate bearing stiffener weld. Joint identified as ED1-A27B/E-90, 84, 80, 77, 72, 69. ZPMC CWI Identified as You Qi Guo. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2331-Tc-P4-F.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



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 Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
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Reviewed By:	Clifford,William	QA Reviewer
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