

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017937**Date Inspected:** 14-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:****Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:****Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China**CWI Name:** 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:** OBG**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

Bay 1

This QA Inspector observed the following work in progress for Bay 1.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Tian Lei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Barrier rail

PCMK: E2-SB5-001-132~155

Welder: 059450

WPS-B-T-2132-3

Components: Traveler rail

PCMK: 20TR2-042-013

Welder: 215397

Report: B-WR15165

WPS-B-T-2132-3

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Bay 2

This QA Inspector observed the following work in progress for Bay 2.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Tian Lei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Floor Beam

PCMK: FB3343-001

Welder: 045227, 045240, 045175

WPS-B-T-2232-TC-U5-F-2

PCMK: FB3316-001-074,075

Welder: 045203

WPS-B-T-2132-3

Heat straightening of PCMK, VP3012-002,004,005 under approved Heat Straightening procedure, HSR (B)-421, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Tian Lei. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 45mm.

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; FB3345-001 item number 3 on NWIT tracker document # 06954.

Bay 3

ZPMC performed fit up and tack welding on FB3266 stiffener to floor beam plate.

Bay 4

Heat straightening of PCMK, SA3360-001 under approved Heat Straightening procedure, HSR 1(B)-9618, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Zhang Ya Xu. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 10mm.

Bay 6

This QA Inspector observed the following work in progress for Bay 6.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Shen Jian Guo.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Cross Beam

PCMK: CB3003E-019-013,014

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Welder: 048625
WPS-B-T-2132-3

PCMK: CB3002K-004-046
Welder: 215083
WPS-B-P-2213-B-U2

PCMK: CB3002J-001-045
Welder: 053609
WPS-B-P-2233-TC-U4b-F

Bay 7

This QA Inspector observed the following work in progress for Bay 7.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Liu Chuan Gang

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Barrier Rail
PCMK: W2-SB10-007
Welder: 062447
WPS-B-T-2132-3

Components: Deck Plate
PCMK: DP3168-001-123
Welder: 204342
WPS-B-T-2232-TC-U4b-F

This QA Inspector observed the following work in progress for Bay 7.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Liu Chuan Gang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Cross beam
PCMK: X4253A-001-001
Welder: 057795
Report: B-CWR-2028
WPS-345-SMAW-1G (1F)-FCM-Repair

PCMK: X4253A-003-001
Welder: 049769
Report: B-CWR-2030
WPS-345-SMAW-1G (1F)-FCM-Repair

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

PCMK: X4253B-003-001

Welder: 053753

Report: B-CWR-2034

WPS-345-SMAW-1G (1F)-FCM-Repair

Heat straightening of PCMK, W2-SB9 under approved Heat Straightening procedure, HSR 1(B)-9592, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Liu Chuan Gang. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 8mm.

Bay 8

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; BK004A1-054 Item number 1 on NWIT tracker document # 06954 and BK004A8-054 Item number 2 on NWIT tracker document # 06954.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations

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 Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Shin,DJ	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
