

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017828**Date Inspected:** 02-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China**CWI Name:** Tian Lei**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

Heat straightening of PCMK, ES-SB4-001 under approved Heat Straightening procedure, HSR 1(B)-9389. The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Xiang Feng Feng. 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 2

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

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

ZPMC QC is identified as Zhu Jun.

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: E5-SB3AA-001-022,023

Welder: 045227

WPS-B-T-2132-3

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PCMK: E5-SB1-050-001-022,023,053,054

Welder: 045203

WPS-B-T-2132-3

PCMK: E5-SB1-001-022, 023, 053, 054

Welder: 045227

WPS-B-T-2132-3

PCMK: E5-SB1-046-001,002,032~043

Welder: 068445

WPS-B-T-2132-3

PCMK: E5-SB1B-002-001~012, 032~043

Welder: 045276

WPS-B-T-2132-3

Components; Vertical Plate Sub-Assembly

PCMK: VP3014-001-030

Welder: 045240

WPS-345-FCAW-2G (2F)-FCM-Repair

Heat straightening of PCMK, LD3501-001-001,002,003,004 under approved Heat Straightening procedure, HSR 1(B)-6506. The in process temperature was at the time of this observation witnessed at 420°C. The ZPMC QC was identified as Xiang Feng Feng. 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 3

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Flux Cored 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: FB3272-001-016

Welder: 055491

WPS-B-T-2232-TC-U4b-F

Heat straightening of PCMK, LD3042-001-003 under approved Heat Straightening procedure, HSR 1(B)-9477.

The in process temperature was at the time of this observation witnessed at 520°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 9mm.

Bay 6

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Heat straightening of PCMK, SP3150A under approved Heat Straightening procedure, HSR 1(B)-9455. The in process temperature was at the time of this observation witnessed at 410°C. The ZPMC QC was identified as Huang Min. The approved HSR procedure stated that a maximum temperature of 600°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 20mm.

Bay 7

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

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

ZPMC QC is identified as Wang Liang.

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; Side Plate Sub-Assembly

PCMK: SP3146-001-013,014

Welder: 062447

WPS-B-T-2132-3

Components; Longitudinal Shear Plate

PCMK: X4253C-002-001,004

Welder: 053742

WPS-B-T-2231-TC-U4b-F-2

Heat straightening of PCMK, W2-SB4-001 under approved Heat Straightening procedure, HSR 1(B)-9357. The in process temperature was at the time of this observation witnessed at 280°C. The ZPMC QC was identified as Huang Min. 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

Heat straightening of PCMK, BK-004A-055,058 under approved Heat Straightening procedure, HSR 1(B)-9401, 9400. The in process temperature was at the time of this observation witnessed at 350°C. The ZPMC QC was identified as Huang Min. 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 6mm.

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

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Remove out defect by use Air Arc
Gouging on Floor beam at bay 2



Repair Welding on Floor beam at Bay 2



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