

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-017814**Date Inspected:** 08-Nov-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:** 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 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 Chen Xi.

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: Longitudinal Diaphragm

PCMK: LD3409-001-035,041

Welder: 045209

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

Components: Floor Beam

PCMK: FB3343-001-395

Welder: 070006

WPS-B-T-2233-TC-U4b-F

PCMK: FB3343-001-401

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Welder: 068859
WPS-B-T-2233-TC-U4b-F

PCMK: FB3343-001-037
Welder: 067520
WPS-B-T-2232-TC-U4b-F

PCMK: FB3343-001-402
Welder: 066763
WPS-B-T-2232-TC-U4b-F

PCMK: FB3343-001-403
Welder: 067877
WPS-B-T-2232-TC-U4b-F

PCMK: FB3343-001-019
Welder: 066239,067947
WPS-B-T-2232-TC-U4b-F

Heat straightening of PCMK, SA3445-001-001, under approved Heat Straightening procedure, HSR 1(B)-9810, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Chen Xi. 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 7mm.

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member(s) is/are identified as follows; FB3316-001, for item number 1 of NWIT tracker document # 07280

Bay 3

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

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

ZPMC QC is identified as Chen Xi.

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: Longitudinal Diaphragm

PCMK: LD3043-001-011,015

Welder: 206623

WPS-B-T-2232-TC-U4C-F

PCMK: LD3043-001-034,036

Welder: 055564

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

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Components: Floor Beam
PCMK: FB3286-001-125
Welder: 069469
WPS-B-T-2233-TC-U4b-F

PCMK: FB3286-001-131
Welder: 068501
WPS-B-T-2233-TC-U4b-F

PCMK: FB3286-001-091
Welder: 067036
WPS-B-T-2233-TC-U4b-F

PCMK: FB3286-001-077
Welder: 067876
WPS-B-T-2233-TC-U4b-F

PCMK: FB3286-001-049
Welder: 055491
WPS-B-T-2233-TC-U4b-F

PCMK: FB3286-001-063
Welder: 050242
WPS-B-T-2233-TC-U4b-F

PCMK: FB3286-001-398
Welder: 052696
WPS-B-T-2232-TC-U4b-F

PCMK: FB3286-001-388
Welder: 067876
WPS-B-T-2232-TC-U4b-F

Bay 4

Heat straightening of PCMK, SA3337C-001, under approved Heat Straightening procedure, HSR 1(B)-9820, 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 3mm.

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

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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