

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-014791**Date Inspected:** 16-Jun-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:** Chen Shi Gang**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:** Bay 9**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Christopher D'souza was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

Bay 9, Gantry 2

DP 3145 – 001 (PL 3341A, PL 3341B, PL 3341C)

This Inspector performed In- Process inspections of production welding of deck panels in Bay 9. Welding was being performed on panel DP 3145 – 001 (PL 3341A, PL 3341B, PL 3341C). The weld procedure was found to be WPS-B-T-2342-U1-(U-rib)-5. The welding operators were identified as follows:

Weld 1, Weld 281, Weld 291 – 201788

Weld 2, Weld 282, Weld 292 – 059416

Weld 3, Weld 283, Weld 293 – 059421

Weld 4, Weld 284, Weld 294 – 059418

Weld 5, Weld 285, Weld 295 – 059421

Weld 6, Weld 286, Weld 296 – 059418

Weld 7, Weld 287, Weld 297 – 059378

Weld 8, Weld 288, Weld 298 – 203805

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Weld 9, Weld 289, Weld 299 – 059378
Weld 10, Weld 290, Weld 300 – 203805

During FCAW root welding process, the welding parameters were verified by this inspector and were as follows:

Head 1 ~ Head 6

Pass 1

Current 365 ~ 378 Amps
Voltage 30.5 ~ 31.1 Volts
Travel Speed 530 mm/min

Pass 2

Current 360 ~ 385 Amps
Voltage 30.4 ~ 31.0 Volts
Travel Speed 528 mm/min

During SAW welding process, the welding parameters were verified by this inspector and were as follows:

Head 1 ~ Head 6

Pass 1

Current 670 ~ 682 Amps
Voltage 24.9 ~ 25.3 Volts
Travel Speed 510 mm/min

Pass 2

Current 672 ~ 686 Amps
Voltage 24.7 ~ 25.1 Volts
Travel Speed 512 mm/min

DP 3147 – 001 (PL 3343A, PL 3343B, PL 3343C)

This Inspector performed In- Process inspections of production welding of deck panels in Bay 9. Welding was being performed on panel DP 3147 – 001 (PL 3343A, PL 3343B, PL 3343C). The weld procedure was found to be WPS-B-T-2342-U1-(U-rib)-5. The welding operators were identified as follows:

Weld 1, Weld 281, Weld 291 – 201788
Weld 2, Weld 282, Weld 292 – 059416
Weld 3, Weld 283, Weld 293 – 059421
Weld 4, Weld 284, Weld 294 – 059418
Weld 5, Weld 285, Weld 295 – 059421
Weld 6, Weld 286, Weld 296 – 059418
Weld 7, Weld 287, Weld 297 – 059378

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Weld 8, Weld 288, Weld 298 – 203805
Weld 9, Weld 289, Weld 299 – 059378
Weld 10, Weld 290, Weld 300 – 203805

During FCAW root welding process, the welding parameters were verified by this inspector and were as follows:

Head 1 ~ Head 6

Pass 1

Current 365 ~ 378 Amps
Voltage 30.5 ~ 31.1 Volts
Travel Speed 530 mm/min

Pass 2

Current 360 ~ 385 Amps
Voltage 30.4 ~ 31.0 Volts
Travel Speed 527 mm/min

During SAW welding process, the welding parameters were verified by this inspector and were as follows:

Head 1 ~ Head 6

Pass 1

Current 673 ~ 685 Amps
Voltage 24.5 ~ 25.8 Volts
Travel Speed 510 mm/min

Pass 2

Current 670 ~ 681 Amps
Voltage 24.4 ~ 25.1 Volts
Travel Speed 510 mm/min

ZPMC and ABF QC were present during the welding process and identified as Zhu Zhong Jie and Cao Hai Zhou respectively. The ZPMC CWI was present during the welding process and identified as Chen Shi Gang.

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

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your project.

Inspected By:	Dsouza,Christopher	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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