

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-003254**Date Inspected:** 12-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Keng Chan**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 date, Caltrans Office of Structure Materials (OSM) Quality Assurance Inspector (QA) Raymond Lara was present at jobsite in Zhenhua Port Machinery Company facility on Changxing island, China for the purpose of observing and monitoring the fabrication of the SAS Superstructure.

Bay 1

The Quality Assurance Inspector observed ZPMC utilizing a milling machine in the beveling process on skin plate D South Tower Assembly.

Skin Plate A South Tower Assembly

The Quality Assurance Inspector observed ZPMC Caltrans approved welders 047338 and 068924, utilizing shielded metal arc welding process tack welding longitudinal stiffeners plate to skin plate A South Tower Assembly. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-P-2312-TC-PS.

SSDI-SA178 A/D 17A

The Quality Assurance Inspector observed ZPMC welder 040434, utilizing the flux cored arc welding process on a complete joint penetration in the flat position on longitudinal stiffener weld number SSDI-SA178 A/D 17A. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2231-B-U3-F.

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Bay 2

The Quality Assurance Inspector observed ZPMC utilizing a milling machine in the beveling process on skin plate D East Tower Assembly. See digital photograph.

ESDI-SA216 H/K 3A

The Quality Assurance Inspector observed ZPMC welder 053316, utilizing the flux cored arc welding process on a complete joint penetration in the flat position on longitudinal stiffener weld number SSDI-SA216 H/K 3A. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2231-B-U3-F.

The Quality Assurance Inspector observed ZPMC performing heat straightening operations on longitudinal stiffeners P587A(B).

The Quality Assurance Inspector observed ZPMC performing thermal cutting operations on diaphragm plate P830. See digital photograph.

The Quality Assurance Inspector observed longitudinal stiffener P589B received 14mm was butter up along the bevel. The Quality Assurance Inspector observed ZPMC preparing the bevel angle on P589B by grinding.

Skin Plate B East Tower Assembly

The Quality Assurance Inspector observed ZPMC welder 056975, utilizing the submerged arc welding process on complete joint penetration weld number ESDI-SA49 A/D 28B on skin Plate B South Tower Assembly. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2221-B-V3C-5-1.

Skin Plate A East Tower Assembly

The Quality Assurance Inspector observed ZPMC Caltrans approved welders 040611 and 048532, utilizing shielded metal arc welding process tack welding longitudinal stiffeners plate to skin plate A East Tower Assembly. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-P-2312-TC-PS.

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Summary of Conversations:

American Bridge/Fluor Enterprises Quality Control Inspector Keng Chan informed the Quality Assurance Inspector, skin plate E South Tower Assembly is the next skin plate to be fit up after the fit up on skin A is completed.

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 Joshua Ishibashi, (707) 649-5453, who represents the Office of Structural Materials for your project.

Inspected By: Lara, Raymond

Quality Assurance Inspector

Reviewed By: Lanz, Joe

QA Reviewer
