

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029681**Date Inspected:** 13-Jun-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** USA Hoist**Location:** Crest Hill, IL

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|------------------------------------|--------------|----|-----|
| CWI Name: | Robert Zimny | | |
| Inspected CWI report: | Yes | No | N/A |
| Electrode to specification: | Yes | No | N/A |
| Qualified Welders: | Yes | No | N/A |
| Approved Drawings: | Yes | No | N/A |

| | | | |
|----------------------------------|-----|----|-----|
| CWI Present: | Yes | No | |
| Rod Oven in Use: | Yes | No | N/A |
| Weld Procedures Followed: | Yes | No | N/A |
| Verified Joint Fit-up: | Yes | No | N/A |
| Approved WPS: | Yes | No | N/A |
| Delayed / Cancelled: | Yes | No | N/A |

Bridge No: 34-0006**Component:** SAS Tower Elevator**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at USA Hoist, Crest Hill, IL as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

Today at USA Hoist assembly shop, around 60 pieces out of 146 pieces of front tie-in brackets have returned from the shop where they were bent. This QA randomly observed USA Hoist qualified welder Jose Dominguez perform fit up and tack welding the 13 1/2" long x 5 1/2" wide x 3/8" thick stiffener plate to 14" x 6" x 1/2" thick bent plate front tie-in bracket per USA Hoist shop drawing #914204-14. The welder was noted tack welding the stiffener plate using gas shielded FCAW-G with 1.1mm E71T-1C Familiarc DW-50 wire electrode implementing USA Hoist Welding Procedure Specification FCAW 3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 35 CFH. During the shift, fit up/tack welding of the above mentioned bracket was still continuing and should remain tomorrow.

At the same assembly shop, another USA Hoist qualified welder Matt Wasiqi was observed fillet welding the same front tie-in brackets for the tower elevator as the other welder was performing fit up and tack welding. The welder was noted using the same process and implementing the same welding procedure specification. The welder was noted using gas shielded FCAW-G with 1.1mm E71T-1C Familiarc DW-50 wire electrode implementing USA Hoist Welding Procedure Specification FCAW 3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 38 CFH. During the shift, the working welding parameters were measured 29 volts and 230 amperes which deemed in compliance to the project requirements. This QA randomly checked the workmanship and measured the required 1/4" fillet on all sides of the stiffener which it was found in

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compliance to the requirement. As of today, the welder has finished fillet welding 10 brackets out of the 146 pieces required.



Summary of Conversations:

No significant conversation occurred today.

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 SMR Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Foerder, Mike

QA Reviewer