

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-029682**Date Inspected:** 14-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

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, this QA randomly observed USA Hoist qualified welder Jose Dominguez continuing to perform fit up and tack welding the 13 1/2" long x 5 1/2" wide x 3/8" thick triangular shape stiffener plate to 14" x 6" x 1/2" thick 90° 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 continuing to perform 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 compliance to the requirement. With the number of brackets to be welded, fillet

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welding should continue until next week.

Another USA Hoist qualified welder Andres Luna was observed perform fillet welding the same front tie-in brackets for the tower elevator as mentioned above. 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 40 CFH. During the shift, the working welding parameters were measured 26 volts and 200 amperes which deemed in compliance to the project requirements. This QA randomly checked the workmanship and measured the required ¼” fillet on all sides of the stiffener which it was found in compliance to the requirement. With the two welders welding side by side on the front tie-in brackets, approximately 40 pieces were completed as of to date.



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