

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-029097**Date Inspected:** 06-Feb-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:** USA Hoist, 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
Weld Procedures Followed:	Yes	No
Verified Joint Fit-up:	Yes	No
Approved WPS:	Yes	No
Delayed / Cancelled:	Yes	No

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.

At USA Hoist fabrication shop, this QA randomly observed USA Hoist certified welder Manolo Luna continuing to perform fillet welding stiffener plate to C-channel intended for tower elevator door enclosure stops 1, 4 and 5 and door enclosure stops 2, 3 and 6. The welder was noted welding at 2F (horizontal) position utilizing gas shielded Flux Cored Arc Welding (FCAW-G). The fillet welding connection is between the C-channels C200 x 20.5/C180 x 18.2 inside web/flange and 10mm thick stiffener plate. The 6mm fillet is being welded on six (6) sides of the stiffener to the channel per USA Hoist shop drawing 914911 and 914925.

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 FCAW3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 35 CFH. During the shift, the welding parameters were measured 26 volts and 190 amperes which deemed in compliance to the project requirements.

After the welding completion of the two stiffener plates welded on C200 x 20.5 on one side and C180 x 18.2 on the other side, the welder performed another fillet welding on four (4) 90 long x 40 wide x 5mm thick brackets to the C200 x 20.5 web plate. The four 5mm thick bracket plates are intended for holding the tower elevator door lock in place and they are being welded per USA Hoist shop drawing number 914910. The welder was noted 1/8" fillet welding all around the bracket to the web plate using the same process and implementing the same welding

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procedure mentioned above.

At the same fabrication shop, this QA randomly observed USA Hoist certified welder Matt Wasqi tack welding/fillet welding door lock lever connection piece to connection bracket intended for tower elevator door enclosure stops 1 thru 6. The welder was noted welding at 2F (horizontal) position utilizing gas shielded Flux Cored Arc Welding (FCAW-G). The 3mm fillet is being welded all around to one side of the connection bracket (piece mark 914864-01) to lever connection piece (piece mark 910864-01 and fillet weld on two sides to the other piece shop marked 910864-03 per USA Hoist shop drawing 914864.

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 FCAW3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 35 CFH. At the end of the shift, all six (6) door lock mounting weldments were completed.



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