

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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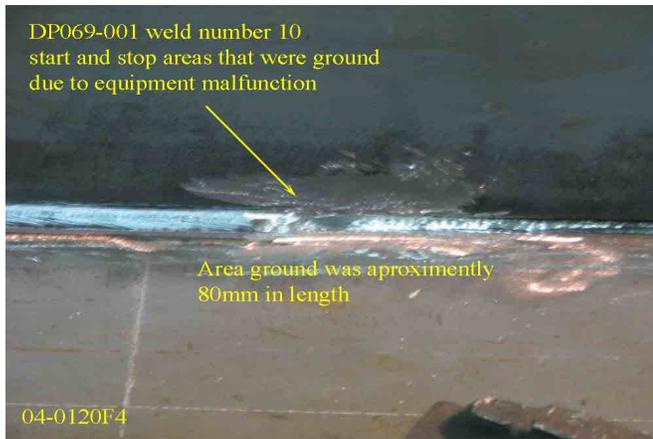
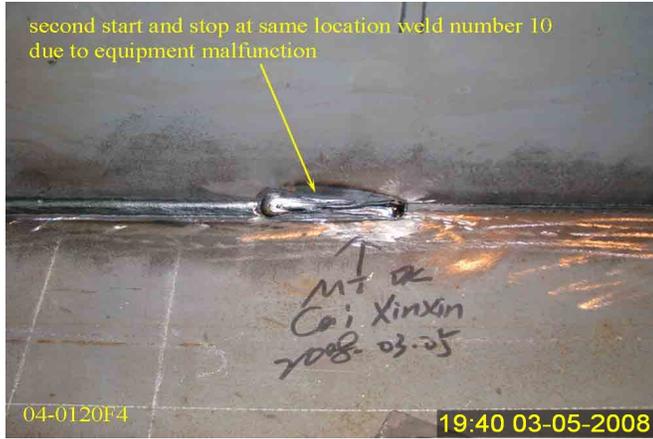
Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001683**Date Inspected:** 05-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China**CWI Name:** Wang Nan**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:** Deck Plates**Summary of Items Observed:**

This Quality Assurance (QA) Inspector arrived at ZPMC for visual inspection of the Orthotropic Bridge Girders (OBG) Deck Plates that were welded by ZPMC. Visual Inspection was determined to have Insufficient Fusion (IF) Over Lap (OL), Under Fill (UF), and Undercut (UC) within the weldments that were inspected. The locations and lengths of the discontinuities were recorded for tracking and distributed to the appropriate personnel for review. The deck plate inspected was number DP032-001. The above work was performed within the general requirements of the contract documents.

This Quality Assurance inspector upon arrival at ZPMC for observation of Orthotropic Bridge Deck witnessed ZPMC grinding the start and stops for the Submerged Arc Welding (SAW) process on DP069-001. ZPMC personnel informed this QA Inspector that gantry #2 was malfunctioning and causing the system to shut down. ZPMC ground the start and stop areas on welds 1&2 (rib U16), 5&6 (rib U1) and 9&10 (rib U17) See digital photo below for weld 10 grinding. After completion of the grinding Magnetic Particle (MT) was used to verify weld soundness by ZPMC's MT technician Cai Xin Xin (see digital photo below) and relayed to this QA inspector that no indications were present. ZPMC then continued with the SAW welding but immediately had the same malfunction and decided to pull of the production piece and call in their Lincoln welder representative to assist in the determination of the malfunction. ZPMC felt the issues were resolved and proceeded with finishing the welds stated above (which was observed after this QA inspector returned from his lunch break) the welds were completed. ZPMC then set up to weld the remaining 2 ribs for weld numbers 2&4 and 7&8. Again the equipment malfunctioned so ZPMC production personnel stopped the welding for this shift. The QC inspector Shen Xue Jun informed this QA Inspector that ZPMC would rectify the equipment issues in the morning but would first run a PMT test then finish welding deck plate DP069-001.

WELDING INSPECTION REPORT

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Summary of Conversations:

As noted in content above.

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Riley, Ken	Quality Assurance Inspector
Reviewed By:	Hager, Craig	QA Reviewer
