

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-002271**Date Inspected:** 10-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** See below**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:** Skin plates**Summary of Items Observed:**

CWI name: Wang Cheng Jun, Yang Yi Heng

Submerged Arc Welding (SAW) process on skin plate (Tower bay#1): Caltrans Quality Assurance Inspector (QAI) observed two Zhenhua Port Machinery Co (ZPMC) welding operators performed semi-automatic SAW on the splice weld of ASTM 709 345 skin plate numbered P146 to P144 with 45mm wall thickness, weld# SSD1-SA173B/K-7 and skin plate numbered P261 to SA17 with 45mm wall thickness, weld# SSD1-SA17A/G-15B. The weld designed is a double -V-groove with welding conducted in the in flat position (1G) with proper 4.8mm diameter wire feed electrode JW3 and flux/J1-B, made by China Company and completed with approximate five pass. The parameters used for SAW welding of splice weld was conducted in accordance with Caltrans approved WPS-B-T-2221-B-U3. The semi-automatic SAW was monitored and recorded by ABF Certified Welding Inspector (CWI) Miss. Xie Yan and Mr. Wei Jiam Bo. Based on Caltrans QAI observations, no discrepancies were noted.

"Push down" Heat straightening on skin plate (Tower bay#1 and bay#2) Caltrans QAI observed few ZPMC heat straightening operators performed heat straightening with ZPMC Heat Straightening Report (HSR) on plate numbered. P264, P1272, P351, P229 and P1408. The heating temperature is maximum 650 C (1200 F) and cool in still air. All the plates have been inspected and recorded by ZPMC QC within from 0.5mm to 1mm off set (Caltrans requirement Max 3mm) after heat straightening. Based on Caltrans QAI observation, no discrepancies were noted.

SAW process on skin plate (Tower bay#2): Caltrans QAI observed three ZPMC welding operators performed semi-automatic SAW on the splice weld of ASTM 709 345 skin plate numbered P1274 to SA233 to P1320 with 45mm wall thickness; weld# ESD1-SA233A/F-21A; skin plate numbered P456 to P325 with 90mm wall thickness; weld# WSD1-SA107B/J-16B skin plate numbered P456 to P325 with 90mm wall thickness; weld#

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

WSD1-SA107B/J-17B. The weld designed is a double -V-groove with welding conducted in the in flat position (1G) with proper 4.8mm diameter wire feed electrode JW3 and flux/J1-B, made by China Company and completed with approximate five pass. The parameters used for SAW welding of splice weld was conducted in accordance with Caltrans approved WPS-B-T-2221-B-U3. The semi-automatic SAW was monitored and recorded by ABF CWI Mr. Wang Cheng Jun and Mr. Yang Yi Heng Based on Caltrans QAI observations, no discrepancies were noted.

Summary of Conversations:

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

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer
