

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002270**Date Inspected:** 11-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island

CWI Name:	Wang Cheng Jun, Yang Yi Heng			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:

Submerged Arc Welding (SAW) process on skin plate (Tower bay#1): Caltrans Quality Assurance Inspector (QAI) observed a Zhenhua Port Machinery Co (ZPMC) welding operator performed semi-automatic SAW on the splice weld of ASTM 709 345 skin plate numbered P824 to P825 with 45mm wall thickness, weld# SSD1-SA18A/E-2A. 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) Mr. Wei Jiam Bo. Based on Caltrans QAI observations, no discrepancies were noted.

"Push down" Heat straightening on skin plate (Tower bay#1 and bay2) Caltrans QAI observed few ZPMC heat straightening operators performed heat straightening with ZPMC Heat Straightening Report (HSR) on plate numbered P663, P376, P182B, P503A and SA295. 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 P446 to SA375 to P1320 with 90mm wall thickness; weld# WSD1-SA107B/J-16A; skin plate numbered P375 to P228 with 90mm wall thickness; weld# WSD1-SA107B/J-17B, skin plate numbered P609 to P306, P290, P709 with 100mm wall thickness; weld# ESD1-SA216J/K-15B, ESD1-SA216J/K-7B, ESD1-SA216K/K-4, ESD1-SA216J/K-8B, ESD1-SA216-J/K-26. The weld designed is a double -V-groove with welding conducted in the in flat position

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(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. 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
