

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.9/14.3,0.0/1.6File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000828**Date Inspected:** 11-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1330**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**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:** 77 & 89 Mock-Up**Summary of Items Observed:**

On this date, Caltrans Office of Structural Materials (OSM), Quality Assurance (QA) Inspector, David A. Smith was present for the observations related the following;

Item-1 89 Meter Mock-Up Skin-A. Stiffener plates MP504-3 (weld 10) and MP504-22 (weld 12) to base plate MA21 were in the process of being preheated for welding of the root pass. Zhenhua Port Machinery Company (ZPMC) welders (A) Lei Lichno #053619 and (B) LI Shu Qaing #053609 certified for Flux Core Arc Welding (FCAW) in the 3G position were performing the welding of the root weld. Welding parameters recorded by this QA Inspector were, (A) Amps 315 Volts 32.4, Travel Speed (T/S) 311 mm/min. & Temperature 129c and welder (B) Amps 305, Volts 32, T/S 285 mm/min. & Temperature 127c. The welding procedure used was

WPS-B-T-2231-TC-U5-F. Welding was performed using Supercored 71H, .4mm/diameter welding wire. The CWI present was Sha Zhi.

Item-2 77 SA274 Flange Reinforcement Ring. The completed welding located at the edges of both sides of the flange plates (5 on each side) were monitored during ZPMC Level II technician Cai Xin Xin Magnetic Particle (MT) testing and were accepted. This Caltrans QA Inspector did Perform a random MT test on the weld edges and found them to be in compliance with the project specifications. The CWI present was Zhu Zhong Hai.

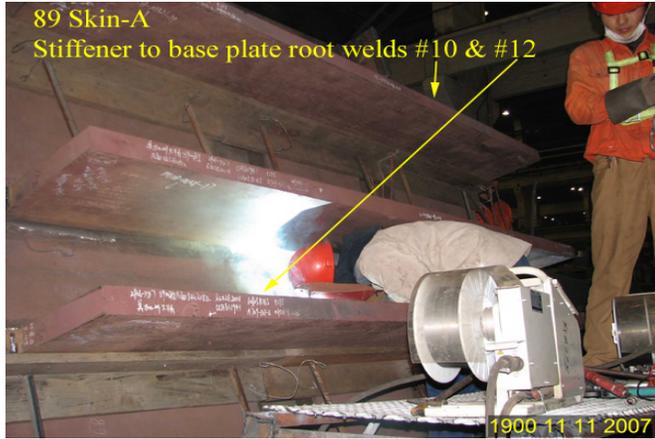
Item-3 77 Diaphragm SA274 The Flange Reinforcement Ring was in the process of being tack welded to the base plates MUSA-SA95 and MUSA-SA274. The ZPMC welder was Xu Yu Qin #062615. Welding parameters recorded by this QA Inspector were, Amps 218, Volts 24.5, T/S 130 mm/min. & Temperature 190c. The CWI present was Ye Yong Jun and the welding procedure used was WPS-B-T-4112-3 with welding rods TH506 FE.

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---



## Summary of Conversations:

There were no pertinent conversations pertaining to the project during this shift.

## 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:** Smith, David

Quality Assurance Inspector

---

**Reviewed By:** Cochran, Jim

QA Reviewer