

**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-004072**Date Inspected:** 03-Oct-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:** Shanghai, China**CWI Name:** Liu Yang and Li Bin**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:** SAS Tower**Summary of Items Observed:**

On this date, Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector Joselito Lizardo was present as requested to perform observations on the fabrication of Orthotropic Box Girder (OBG) and SAS Tower at Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China.

The QA Inspector has randomly observed the following activities on sub-assembly Bays mentioned below;

**HEAVY DUTY WORKSHOP #1:**

Observed heat straightening of various sub-assemblies, plate splice butted joints and plates due to welding distortion/mill induced distortion on the following; This QA also observed ZPMC/CWI/QC Liu Yang and Wang Tai and ABF/QA Liu Cheng monitoring the heat input on each sub-assembly/plate that were heated.

Sub-assembly/plate Lift Procedure Heat Input Gas Type

- a) SA97(S) 1ST HSR1(T)-4713 <650 deg. C Natural gas
- b) SA106(S) 1ST HSR1(T)-4551 <650 deg. C Natural gas
- c) SA105(S) 1ST HSR1(T)-4605 <650 deg. C Natural gas
- d) SA108(S) 1ST HSR1(T)-4606 <650 deg. C Natural gas
- e) P63(N) + P86(N) 1ST HSR1(T)-4710 <650 deg. C Natural gas
- f) P774(S) 1ST HSR1(T)-4645 <650 deg. C Natural gas
- g) P197(N) + P211(N) 1ST HSR1(T)-4712 <650 deg. C Natural gas
- h) P953(S) 1ST HSR1(T)-4715 <600 deg. C Natural gas

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i) SSD1-SA159/SSD1-SA15      1ST    HSR1(T)-4216 <650 deg. C Natural gas

**HEAVY DUTY WORKSHOP #2:**

Observed heat straightening of various sub-assemblies, plate splice butted joints and plates due to welding distortion/mill induced distortion on the following; This QA also observed ZPMC/CWI/QC Li Bin and Du Dao Feng and ABF/QA Chen Xiaoping monitoring the heat input on each sub-assembly/plate that were heated.

Sub-assembly/plate    Lift Procedure    Heat Input    Gas Type

- a) P135(W)    2nd HSR1(T)-4620 <650 deg. C Natural gas
- b) P135(E)    2nd HSR1(T)-4623 <650 deg. C Natural gas
- c) P1351(W)    2nd HSR1(T)-4621 <650 deg. C Natural gas
- d) P1351(E)    2nd HSR1(T)-4619 <650 deg. C Natural gas
- e) P1201(E)    2nd HSR1(T)-4627 <650 deg. C Natural gas
- f) P1201(W)    2nd HSR1(T)-4626 <650 deg. C Natural gas
- g) Skin 'C' Stiffener plates    HSR1(T)-4746 <650 deg. C Natural gas
- h) ESD1-SA296/ESD1-SA80      HSR1(T)-4188 <650 deg. C Natural gas  
    Skin 'D' and longitudinal  
    Stiffeners.

**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 Joshua Ishibashi, (858) 232-7081, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Lizardo,Josecito	Quality Assurance Inspector
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<b>Reviewed By:</b>	Cuellar,Robert	QA Reviewer
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