

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-000263**Date Inspected:** 05-Jul-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	N/A	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:	A709M 345 Plate for U-rib	

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Bruce Berger was present to observe quality control functions related to welding, testing and fabrication procedures at the Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Caltrans Quality Assurance (QA) Inspector Bruce J. Berger witnessed the re-magnetic particle testing for the U-Rib Bending Procedure. The rib being re-tested was U-01 by the visible dry magnetic particle testing procedure.

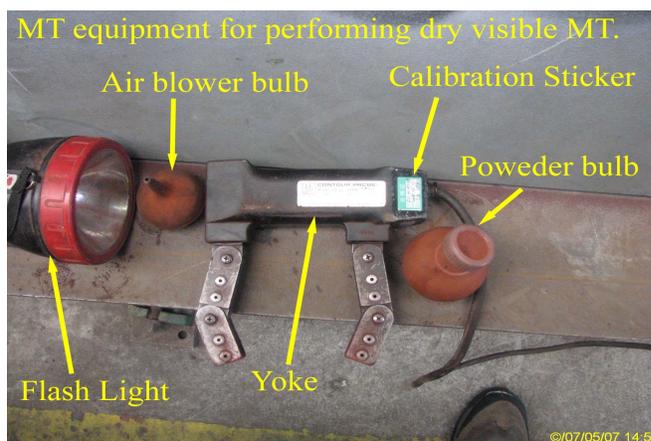
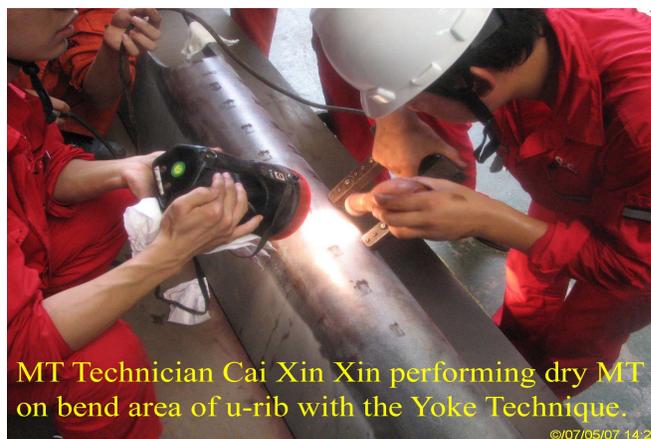
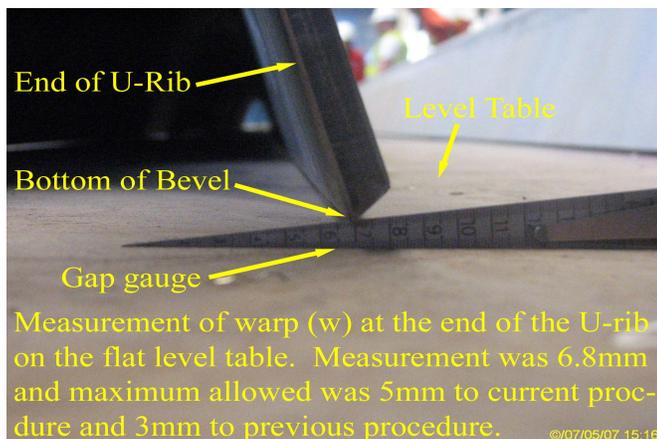
There were three approximately 1 meter long sites selected on U-01 in the radios area which had the paint removed by power wire brushing the previous day. A magnetic particle testing procedure was on hand today and a quick review was made of the procedure, however a more detailed review will need to be carried out a later time after the contractor ABF has had time to make a thorough review. During magnetic particle testing the following items were noted. The yoke being used had a current calibration sticker and along with the yoke there was a pie gauge, flash light, air blower bulb, powder bulb. Prior to conduction testing on the u-rib the system was checked by placing the pie gauge between the legs of the yoke and testing for holding of powder in various directions during magnetization. During the actual testing of the u-rib the NDT Technician Cai Xin Xin appeared to following the procedure and obtaining adequate coverage in two separate directions, one with the direction of rolling and the other 90 degrees to the direction of rolling.

Caltrans Quality Assurance (QA) Inspector Bruce J. Berger witnessed the bending of one u-rib in the shop as part of the U-Rib Bending Procedure. The U-rib, number U-04 was bent and then placed on the lazier level table and measurements were taken. It was found during the measuring of the warp using the gap gauge rule that at the very end of the u-rib the measurement was 6.8 millimeter which was 1.8 millimeters more than allowed by the most

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recently submitted U-rib Bending Procedure. The most recent procedure allow for the warp to be 5 millimeters while the previous one only allowed for 3 millimeters. ZPMC foreman Xiong Wenhui stated that he was going to discuss this issue with ABF and see what possible solutions there might be to deal with this issue.



Summary of Conversations:

No relevant conversations took place on this date.

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: Berger, Bruce

Quality Assurance Inspector

Reviewed By: McClary, David

QA Reviewer