

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 #: 04-0120F4
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9
 File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, P.R. China **Report No:** NCR-000554
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 21-Dec-2009
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0527

Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Segment 12AE Deck Panel
Procedural	Procedural	Description:	

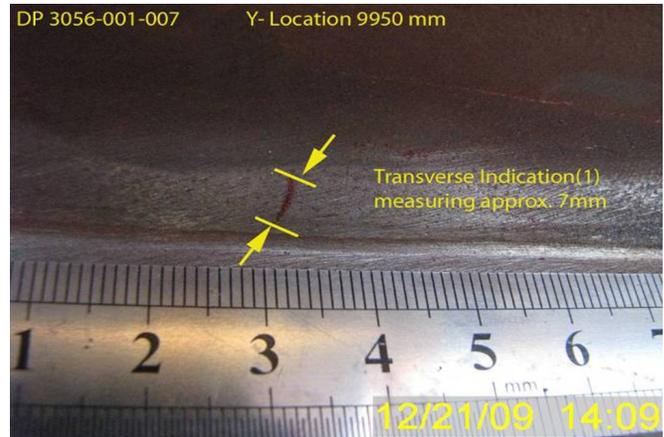
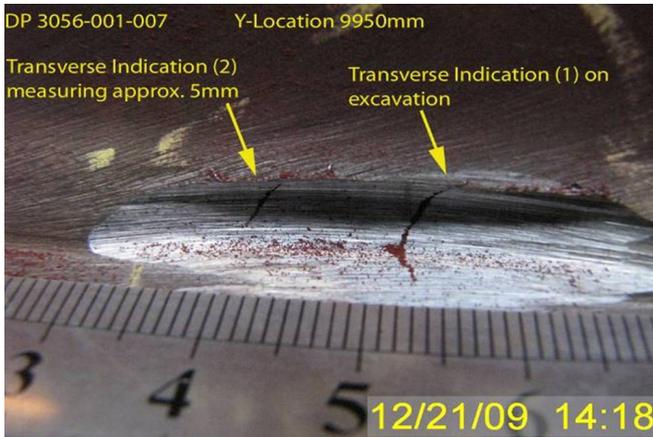
Reference Description: Segment 12AE, Two Transverse Indications discovered with the MT method after the contractor's acceptance

Description of Non-Conformance:

During the Quality Assurance Magnetic particle Testing (MT) review of welds located on Deck Panel (DP 3056-001), this Quality Assurance Inspector (QA) discovered the following issue:

- Two (2) transverse indications measuring approximately 7mm in length at Y location 9950mm.
- The weld is identified as: DP 3056-001-007.
- The Weld is a Partial Joint Penetration (PJP) tee weld joining the rib stiffener (RS3032C) to the deck plate (PL3119A).
- The member is located in the deck panel repair yard.

The Notice of Witness Inspection Number (NWIT) is 004908. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform twenty-five (25) percent MT inspection of this weld.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Christopher D'sousa

Name of individual from Contractor notified: Cao Hao Zhao

Time and method of notification: 12/21/2009, 1500 hours, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 12/22/2009, 1500 Hours, Verbal

QC Inspector's Name: Guo Yan Fei

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

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, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By: Carreon,Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh,Mazen

SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge

333 Burma Road
Oakland CA 94607
Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To:	AMERICAN BRIDGE/FLUOR, A JV 375 BURMA ROAD OAKLAND CA 95607	Date:	25-Dec-2009
Dear:	Mr. Charles Kanapicki	Contract No:	04-0120F4 04-SF-80-13.2 / 13.9
Attention:	Mr. Thomas Nilsson Project/Fabrication Manager	Job Name:	SAS Superstructure
Subject:	NCR No. ZPMC-0527	Document No:	05.03.06-000515

Reference Description: Segment 12AE, Two Transverse Indications discovered with the MT method after the contractor's acceptance

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

Material Location: OBG **Lift:** 12

Remarks:

During the Quality Assurance Magnetic particle Testing (MT) review of welds located on Deck Panel (DP 3056-001), this Quality Assurance Inspector (QA) discovered the following issue:

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Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval. Missed MT indications are a chronic problem. Provide training for the ZPMC MT technician that missed these two indications and provide documentation of such training to the engineer. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe

Attachments: ZPMC-0527

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao

File: 05.03.06

NCR PROPOSED RESOLUTION

To: CALTRANS - SAS Superstructure
333 Burma Road
Oakland CA 94607

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000515

Subject: NCR No. ZPMC-0527

Dated: 11-Jan-2010

Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No.: ABF-NPR-000457 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has acknowledged the missed MT indication, has generated an internal NCR, performed repairs and re-inspected the welds. ZPMC requests closure of this NCR.

ZPMC has acknowledged the missed MT indication, has generated an internal NCR, performed repairs and re-inspected the welds. ABF QCM has performed updated training to MT operators as a means to prevent re-currence. See attached documentation. ZPMC requests closure of this NCR.

Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000457R00;

Caltrans' comments:

Status: CLO

Date: 11-Jan-2010

Documentation received is sufficient to close this NCR.

Submitted by: Howe, Bill

Date: 11-Jan-2010

Attachment(s):



No. B-555

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-1-6

REGARDING: NCR-000554(ZPMC-0527)

With this letter of response, ZPMC requests closure of CT NCR-000554(ZPMC-0527), what mentioned that QA observed two missed MT indications in Weld ID: DP3056-001-007.

ZPMC acknowledged this problem and has issued internal NCR. Attached is documentation of the repair of the missed indications and subsequent NDT. Training was conducted by ABF's QCM with ZPMC's MT inspectors. Please be reminded, one indication was removed by slight grinding. So there is only one indication be addressed in above documentations.

Based on these actions and the attached documentation, ZPMC requests closure of this NCR.

ATTACHMENT:

NCR-B-341(ZPMC-0527)

NCR-000554(ZPMC-0527)

B-CWR1014

B787-MT-16988

VT FOR B-CWR1014

B787-MT-16988R1

MT TRAINING RECORD (MT-22-DEC-09)

A handwritten signature in black ink, appearing to be 'Jm' followed by a flourish.

1/6/10



Nonconformance Report

不符合项报告

Project Name: S.F.O.B.B
 项目名称: 美国加州海湾大桥
 NCR Number: NCR 编号: NCR-B-341(ZPMC-0527)

Item: Missed indication by MT
 名称描述: 磁粉遗漏缺陷
 Item Number: 件号: N/A
 Drawing: 图号: N/A

Location: outside yard
 位置: 外场
 Date: 日期: 2009-12-30

Description of Nonconformance:

不符合项状态描述:

During the Quality Assurance Magnetic Particle Testing(MT) review of welds located on Deck Panel(DP3056-001), this Quality Assurance Inspector(QA) discovered the following issues:

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加州检验员在对顶板 (DP3056-001) 进行 MT 检验时发现以下情况:

- Y 向 9950mm 位置发现两处长约 7mm 的横向缺陷
- 该焊缝为 PJP, 为 U 肋筋板 (RS3032C) 与顶板 (PL3119A) 的焊缝
- 该构件位于顶板返修外场

预约单号为 004908, 该缺陷在 ZPMC 之前做过的探伤检测范围内, 根据报告他们所作的探伤比例为 25%。

Work By: L.L. Lindy Prepared by: _____ Reviewed by QCE: David Shuang
 施工方: _____ 准备: _____ 质量工程师批准: _____
 Drawing Error 图纸错误 Material Defect 材料缺陷 Fabrication Error 制作错误 Other 其他原因

Disposition: Use as is 回用 Repair 返修 Reject 拒收
 处理措施:

Recommendation: 重新检测返修。(其中一处打磨处理掉)
 建议: Re-inspection and repair (removed one defect by grinding)

Prepared by: L.L. Lindy Approved by QCA: _____
 准备: _____ 质量经理批准

Reason for Nonconformance:

不符合原因:

线性缺陷(裂纹)没有检测出。
Discover linear defects.

Prevention of Re-occurrence:

预防措施:

降低检测速率, 检测过程中仔细观测。
Reduce inspection speed and test more carefully.

Approved by/批准:

CC Limly 9/16/06

Technical Justification for Use-As-Is/Repair:

回用或返修的技术依据:

Attachment

附件

Non-attachment

无附件

Reviewed /批准: _____

Verification:

确认:

Acceptable

可接受

Unacceptable

不可接受

Verified by QCI/质检确认: _____

Reviewed by QCA/质检主任审核: _____

#R787-QCP-1300



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 333 Burma Road
 Oakland CA 94607
 Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
 375 BURMA ROAD
 OAKLAND CA 95607

Date: 25-Dec-2009

Contract No: 04-0120F4
 04-SF-80-13.2 / 13.9

Dear: Mr. Charles Kanapicki
 Attention: Mr. Thomas Nilsson Project/Fabrication Manager

Job Name: SAS Superstructure
 Document No: 05.03.06-000515

Subject: NCR No. ZPMC-0527

Reference Description: Segment 12AE, Two Transverse Indications discovered with the MT method after the contractor's acceptance
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Transmitted by: Bill Howe

Attachments: ZPMC-0527

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao
 File: 05.03.06

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
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Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, P.R. China

Report No: NCR-000554

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 21-Dec-2009

Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

NCR #: ZPMC-0527

Type of problem:

- Welding Concrete Other
- Welding Curing Procedural
- Joint fit-up Coating Other
- Procedural Procedural Description:

Bridge No: 34-0006

Component: Segment 12AE Deck Panel

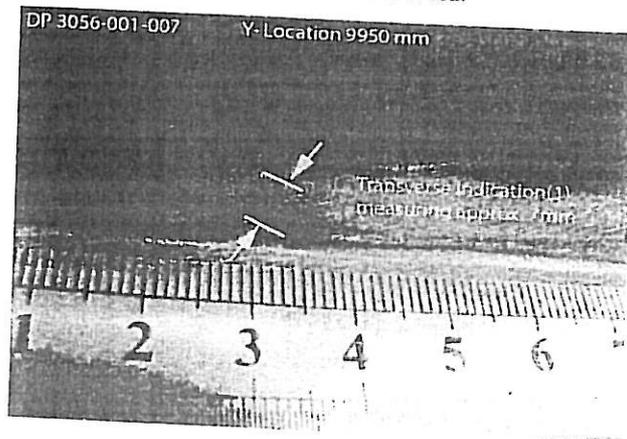
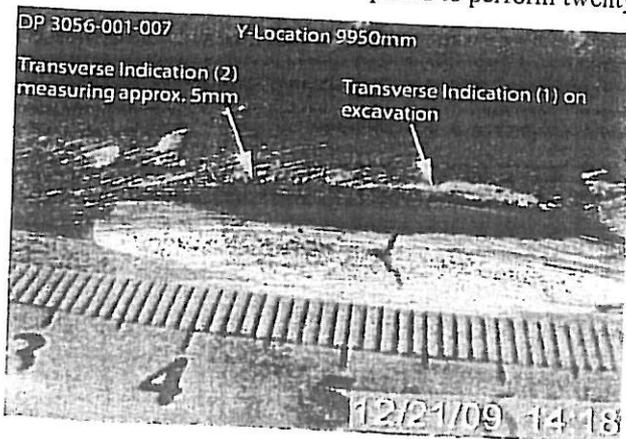
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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Name of individual from Contractor notified: Cao Hao Zhao

Time and method of notification: 12/21/2009, 1500 hours, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 12/22/2009, 1500 Hours, Verbal

QC Inspector's Name: Guo Yan Fei

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

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Inspected By: Carreon, Albert

Reviewed By: Wahbeh, Mazen

Lead Reviewer/Task Leader

SMR



关键焊缝返修报告
Critical Welding Repair Report (CWR)

版本
Rev. No.:

①

项目名称 Project Name:	美国海湾大桥 SFOBB	部件图号 Drawing No.:	DP3056	报告编号 Report No.:	B-CWR1014
合同号 Contract No.:	04-0120F4	部件名称 Item Name:	OBG U-RIB	NDT 报告编号 NDT Report No.:	B787-WT-16988
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述:

Description of Welding Discontinuity:

在对DP3056-001-007检测时,发现1处横向裂纹。L1=10mm

Welder ID No. (焊工编号): 059416

Position:(位置): 2G

One transverse crack was found by use of MT on DP3056-001-007.

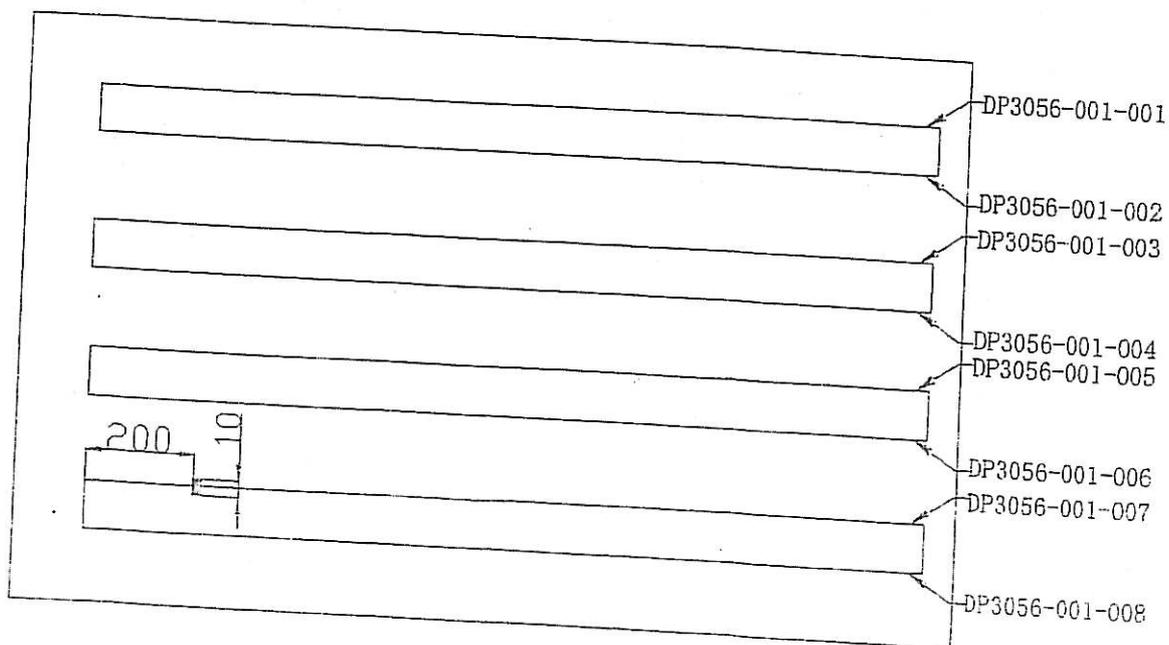
检验员 (Inspector): Zhao Chenggong

Zhao Chenggong

日期 (Date): 2009-12-21

焊缝返修位置示意图:

Draft of Welding Discontinuity:



This document is APPROVED
State of California
DEPARTMENT OF TRANSPORTATION
Compliant to Section 31.07 of the
Standard Specifications
DATE: 12/15/09
BY: [Signature]

产生原因:

Cause:

1. 火焰加热时, 水汽没有完全的去除或者这个区域预热不够;
1. Moisture wasn't completely removed during drying operation (preheating) or the area wasn't preheated sufficiently.

车间负责人 (Foreman):

Li Zhang

日期 (Date):

9.12.22

处理意见

Disposition:

1. 这次返修时, QC和Leader CWI到现场对打磨, 焊接进行指导和监控工作以保证返修按照处理意见进行;
 2. 整个返修的过程, QC和Leader CWI应该有批准CWR的复印件;
 3. 去除热影响区域上在各个方向上不小于25mm范围内的油漆;
 4. 将杂物以及MT检测遗留的残留物清理干净。然后采用打磨的方法去除裂纹, 打磨前预热至65° C。对于单个裂纹返修, 打磨返修范围为沿缺陷焊缝每一端加50mm;
 5. 如果打磨时母材损伤, 则在返修前将损伤区域打磨干净;
 6. 焊接前按照焊新的接返修工艺准备焊缝接头形式;
 7. 返修前, VT和MT检测确认返修区域没有裂纹及其他缺陷存在, 同时靠近裂纹的母材也要做MT, 保证没有裂纹延伸到母材。如果在母材上发现裂纹, 则另外需CWR, 且只有当这份另出的CWR批准后才能继续返修;
 8. 将杂物以及MT检测遗留的残留物清理干净。按照WPS进行预热和焊接, 预热温度为160° C—230° C;
 9. 焊接后WPS要求进行后热, 后热温度为230° C—315° C, 后热时间至少1个小时;
 10. 后热后将焊缝逐渐冷却到周围环境温度, 并控制冷却速率不超过50° C每小时;
 11. 后热后将修补区域打磨与母材或相邻焊缝平齐;
 12. 在焊缝冷却至环境温度至少经过48小时以后进行NDT检查;
 13. 返修后根据图纸进行MT检测, 并按照合同10-1.59“钢结构”中的“检测和试验”要求进行附加MT检测。
1. QC and a Lead CWI shall be present, direct and supervise all grinding and welding operations during this repair to ensure the repair is per the disposition requirements
 2. QC and a Lead CWI shall have an approved copy of the CWR in hand prior to the repair.
 3. Remove paint ≥ 25 mm in all direction of HAZ prior to MT.
 4. Clean the excavation area of all loose debris including MT powder. Preheat to 65° C before removing cracks by grinding, repair area shall extend a minimum of 50mm beyond each end of single crack repairs.
 5. If base metal is damaged by grinding, the damaged area shall be ground clean prior to performing weld repair. If gap > 5mm is found during or after grinding, comply with the notification on changing fillet weld to CJP which is submitted for Engineer's review and approval form.
 6. Prepare excavation in accordance with the New Repair Procedure prior to welding.
 7. Before this repair, Verify with VT and MT repair areas are defects free, and also MT shall be performed on the base metal laying abroad cracks to ensure that no cracks were propagated to the base metal. Separate CWR approval is needed if cracks are found in the base metal, and only after this new CWR's approval can continue the repair.
 8. Clean excavation area of all loose debris including MT powder after excavation. Preheat and weld according to repair WPS, the preheat shall between 160° C—230° C.
 9. Perform post weld heating according to repair WPS, the postheat shall between 230° C—315° C and for one hour minimum.
 10. Allow the weld to cool to ambient temperature gradually. Control cooling rate after PWHT to no more than 50° C per hour.
 11. Grind the repaired area flush with base metal or the adjacent weld after post weld heating.
 12. Wait 48 hours at least after the repair area has cooled to ambient temperature before performing NDT.
 13. Perform MT inspection to all repair area according to Contract Drawings along with all additional NDT required by the applicable notes Special Provision Section 10-1.59 'Steel Structure', subsection 'inspection testing'.

工艺:

Technical Engineer: *Xu Dongfeng*

审核:

Approved By: *Liyunhua*

日期:

Date: 9.12.22



关键焊缝返修报告

版本
Rev. No.:

Critical Welding Repair Report (CWR)

0

项目名称 Project Name:	美国海湾大桥 SFOBB	部件图号 Drawing No.:	DP3056	报告编号 Report No.:	B-CWR1014
合同号 Contract No.:	04-0120F4	部件名称 Item Name:	OBG U-RIB	NDT 报告编号 NDT Report No.:	B787-MT-16988
项目编号 Project No.:	ZP06-787				

纠正措施:

Corrective Action to Prevent Re-occurrence:

1. 返修前, QC确认有效的预热, 以将水汽全部去除。

1. QC shall verify sufficient preheat has been applied, to remove moisture, prior to welding.

车间负责人 (Foreman):

Li Zhigang

日期 (Date):

09.12.22

参照的 WPS 编号 Repair WPS No.:	WPS-345- FEAW AW-2G(2F)-Repair	工艺员 Technologist:	Xu Dongkai
返修 (碳刨) 前预热温度 Preheat Temperature Before Gouging:	124	返修的缺陷 Description of Discontinuity:	9.12.22 裂纹
焊前处理检查 Inspection Before Welding:	Ace	焊前预热温度 Preheat Temperature Before Welding:	175
最大碳刨深度 Max. Depth of Gouge:	9mm	碳刨总长 Total Length of Gouge:	120
焊工 Welder:	203805	焊接类型 Welding Type:	FEAW
焊接电流 Current:	302	焊接电压 Voltage:	29.7
		焊接位置 Position:	28
		焊接速度 Speed:	352
返修后检查 Inspection After Repair:			
外观检查 VT Result:	Ace	检验员 Inspector:	Sanwei
NDT 复检 NDT Result:	MT AU	探伤员 NDT Person:	zhao cheng gong
日期 Date:		日期 Date:	2009.12.27
日期 Date:		日期 Date:	2010.1.2
见证: Witness/Review:			
备注: Remark:			

#R787-QCP-900



REPORT OF MAGNETIC PARTICLE EXAMINATION
磁粉检测报告

REPORT NO. 报告编号 B787-MT-16988		DATE日期 2009.12.21		PAGE OF页码 1/1	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS			
DRAWING NO. 图号: DP3056		CALTRANS CONTRACT NO.:			
REFERENCING CODE 参考规范编码 AWS D1.5-2002		ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002		PROCEDURE NO. 程序编号 ZPQC-MT-01	
EQUIPMENT 设备 MT YOKE		MANUFACTURER 制造商 PARKER		CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 ST , 2009	
MAGNETIZING METHOD 磁化方法		Continuous magnetic yoke 磁轭式连续法		MODEL NO. 样式编号 B310S	
PARTICLE TYPE 磁粉类型		Dry magnet powder 干磁粉		CURRENT 电流 AC	
MATERIAL TO BE EXAMINED 检测材料		<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造		SERIAL NO. 连续编号 5395 5617 5620	
WELDING PROCESS 焊接方法		GMAW+SAW		YOKE SPACING 磁轭间距 70~150mm	
		TYPE OF JOINT 焊缝类型		T-JOINT	

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
DP3056-001-001						
DP3056-001-002				ACC.		10%MT
DP3056-001-003				ACC.		10%MT
DP3056-001-004				ACC.		10%MT
DP3056-001-005				ACC.		10%MT
DP3056-001-006				ACC.		10%MT
DP3056-001-007	1	transverse crack	10	ACC.		10%MT
DP3056-001-008					REJ.	Y=200
BLANK						
				ACC.		10%MT

EXAMINED BY 主探 Zhao Chengdong LEVEL-II SIGN 签名 / DATE日期 质检经理 / QCM	Zhao Chengdong 2009.12.21 Lu Yanhua 12/21/09	REVIEWED BY 审核 Su Wei LEVEL-II SIGN 签名 / DATE日期 用户CUSTOMER	Su Wei 2009.12.21
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教育培训纪录

培训编号: MT-22-Dec-09

培训内容:	MT Techniques
培训对象:	项目质检
授课人员:	Steve Lawton
培训类型:	内部培训
培训时间:	22-Dec-09 5:00 pm
计划培训地点:	ZPMC QC office

人员签到:

姓名	部门	姓名	部门
孙力杰 Sunlei	钢桥	狄坤能 Di kunlun	钢桥
孙刚 Sun Gongchang	钢桥	蔡新鑫 Cai Xinxin	钢桥
徐海 Xu Hai	钢桥	傅志强 Fu zhiqiang	钢桥
卞源源 Bian Yuan Yuan	钢桥	顾云武 Gu Yunwu	钢桥
许兵 Xu Bing	钢材	金建廷 Jin jianting	钢桥 MT
李振华 Li zhenhua	钢桥	常方杰 Chang fangjie	钢桥
李向阳 Li Xiyang	QA	袁俊 Yuan Jun	钢桥
王威 Wangwei	钢桥	刘章敏 Liu zhangmin	
施林 Si Lin	钢桥 MT	徐华祥 Xu Hua xiang	钢桥
丁阿成 Ding A cheng	钢桥 MT	周东运 Zhou Dongyun	钢桥
贺佳佳 He Jiajia	钢桥	赵成功 Zhao Cheng gong	钢桥
黄谱 Huang pu	钢桥	孙工 Sun Gongchang	钢桥
李黎明 Li Liming	钢桥	徐辉 Xu hui	钢桥
李昌涛 Li Chang tao		刘宏斌 Liu Hongbin	

会议纪要

Training memo

关于 NIT 检测的 NCR 问题

1. 首先工作中的安全问题要注意

- ① 工作中应戴如防护眼镜、手套、尽量戴护膝。
- ② 注意用电安全，防止漏电。
- ③ 工作中的焊光强度很重要，要保证光线充足。
- ④ 250℃ 以下要使用黄磁粉。

2. ~~机器~~ 检测过程中的注意事项。

- ① 机器提升力的清单。
- ② 机器在校正要经常校。
- ③ 机器的 ~~接头~~ 接头位置容易磨损，磨损大了会影响机器的提升力。
- ④ 指示器。
- ⑤ 照相要保证。
- ⑥ 与焊缝位置非常重要。 ~~位置~~

身体。

- ⑦ 磁粉的使用量很重要，要适量。

- ⑧ 检测的方向。

~~检测~~

- ⑨ 检测区域要保持干燥、干净。

3. 关于 NCR 的分析。

从 10 月份到 12 月份共 17 份 NCR。

有 9 份 NCR 关于焊缝端部位置。

ZPMC 抽检位置应做好明显标记，以便 CT 抽检。

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: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000453**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 20-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0527**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component:
Procedural	Procedural	Description:	

Date the Non-Conformance Report was written: 21-Dec-2009**Description of Non-Conformance:**

During the Quality Assurance Magnetic particle Testing (MT) review of welds located on Deck Panel (DP 3056-001), this Quality Assurance Inspector (QA) discovered the following issue:

- Two (2) transverse indications measuring approximately 7mm in length at Y location 9950mm.
- The weld is identified as: DP 3056-001-007.
- The Weld is a Partial Joint Penetration (PJP) tee weld joining the rib stiffener (RS3032C) to the deck plate (PL3119A).
- The member is located in the deck panel repair yard.

The Notice of Witness Inspection Number (NWIT) is 004908. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform twenty-five (25) percent MT inspection of this weld.

Contractor's proposal to correct the problem:

Repair indications, perform required NDT, and provide training to NDT Technicians.

Corrective action taken:

Contractor submitted CWR verifying the repairs were made along with NDT records verifying the weld is in conformance with Contract specifications. The NDT Technicians received training from the QCM in regards to the missed indications, and an internal NCR was issued by ZPMC.

Did corrective action require Engineer's approval? Yes No**If so, name of Engineer providing approval:****Date:****Is Engineer's approval attached?** Yes No**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 Jim Simonis, who represents the Office of Structural Materials for your project.

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer