

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



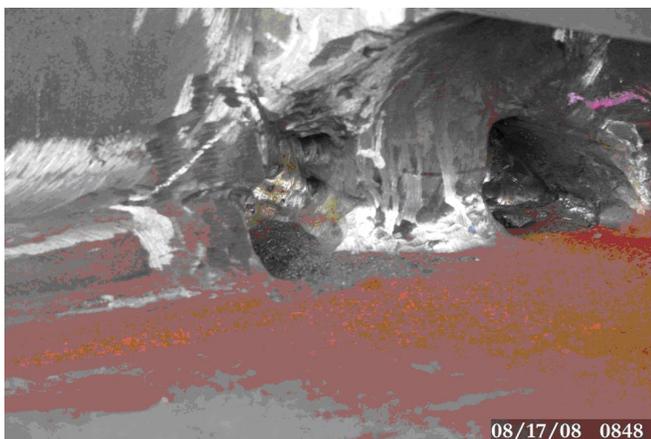
Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, PRC**Report No:** NCR-000176**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 17-Aug-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0159**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: SAS - Tower
Procedural	Procedural	Descriptor: Tower Double Diaphragms	

Reference Description: Shipping of Tower Diaphragms not completed**Description of Non-Conformance:**

ABF allowed to ZPMC to ship a total of five (5) Tower Double Diaphragms (ESD1-47.6m, ESD1-28m, SSD1-43m, ESD1-23m and ESD1-43m) for machining before fabrication and inspection/testing were completed; this was not in accordance with their approved fabrication plan. Furthermore, the noted double diaphragms assemblies were not accepted by ABF Quality Control (QC) prior to shipping due to weld discontinuities in need of repair, heat straightening not completed, required nondestructive testing not completed, and weld terminations not acceptable to project specifications. Any repairs made to these diaphragm assemblies after machining may negatively affect the final geometry of the Tower Shaft in localized areas.

**Applicable reference:**

ABF-SUB-093R02 77-m (Type 3B) Mock-Up Fabrication Plan and ABF/ZPMC Welding Quality Control Plan (WQCP)

Who discovered the problem: Quality Assurance (QA) Inspector, Jim Cochran

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Name of individual from Contractor notified: ABF representative, Huang Ji Hui (Jeff)

Time and method of notification: 08/17/2008 / verbal notification at 0900 hours (CST)

Name of Caltrans Engineer notified: Scott Kennedy, Structure Representative

Time and method of notification: 21-AUG-08, at approximately 1330 hours (CST)

QC Inspector's Name: ZPMC Quality Control, Fu Yuhong

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

ZPMC noted at the time of shipping they understood they were performing this work at risk.

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 Ryan Smith, who represents the Office of Structural Materials for your project.

Inspected By: Smith,Ryan

SMR

Reviewed By: Smith,Ryan

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: 22-Aug-2008

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Dave Williams Consultant

Document No: 05.03.06-000148

Subject: NCR No. ZPMC-0159

Reference Description: Failure to Follow Approved Procedures / Double Diaphragm Assemblies

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: Tower **Lift:** 01

Remarks:

ABF allowed to ZPMC to ship a total of five (5) Tower Double Diaphragms (ESD1-47.6m, ESD1-28m, SSD1-43m, ESD1-23m and ESD1-43m) for machining before fabrication and inspection/testing were completed; this was not in accordance with their approved fabrication plan. Furthermore, the noted double diaphragms assemblies were not accepted by ABF Quality Control (QC) prior to shipping due to weld discontinuities in need of repair, heat straightening not completed, required nondestructive testing not completed, and weld terminations not acceptable to project specifications. Any repairs made to these diaphragm assemblies after machining may negatively affect the final geometry of the Tower Shaft in localized areas.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with the approved procedures and the steps taken by the Quality Control Manager to prevent future failures to follow the submitted and approved procedures.

Transmitted by: Scott Kennedy Sr. Bridge Engineer

Attachments: ZPMC-0159

cc: Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000148

Subject: NCR No. ZPMC-0159

Dated: 11-Sep-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000147 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ABF has instructed ZPMC to follow the fabrication procedure. If the fabrication cannot be completed as written ZPMC shall revise the fabrication procedure prior to welding.

ZPMC violated the sequence of the fabrication procedure at their own risk. ABF has instructed ZPMC to follow the fabrication procedure. If the fabrication cannot be completed as written ZPMC shall revise the fabrication procedure prior to welding. Double Diaphragms, when returned will be completed. Contrary to the NCR, ABFJV does not have a hold point for acceptance of materials prior to shipping to the machine shop.

Submitted by:

Attachment(s): ABF-NPR-000147R00

Caltrans' comments:

Status: REJ

Date: 28-Sep-2008

The proposed resolution with the statement that "ABF has instructed ZPMC to follow the fabrication procedure. If the fabrication cannot be completed as written ZPMC shall revise the fabrication procedure prior to welding" would be an acceptable resolution. However it is unclear as to whether ABFJV is in agreement that ZPMC has violated the fabrication procedures due to ABFJV's assertion that there is not "a hold point for acceptance of the materials prior to shipping." It is the Department's position that Step 5 of the Diaphragm Fabrication Procedure FP-MUA-21, approved in Submittal 93R03, while not addressing acceptance of the materials does clearly indicate a hold point for inspection and correction prior to machining the diaphragms.

Therefore the proposed resolution as presented by ABFJV is not acceptable.

Submitted by: Wright, Doug

Date: 28-Sep-2008

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000148

Subject: NCR No. ZPMC-0159

Dated: 13-Feb-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000147 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ABF provides attached documents and requests this NPR be closed.

Please find attached NPR documentation and we kindly request that this NPR be closed.

Submitted by:

Attachment(s): ABF-NPR-000147R01;

Caltrans' comments:

Status: CLO

Date: 17-Feb-2009

The proposed resolution is acceptable. The Department concurs that Non-Conformance ZPMC-0159 is closed.

Submitted by: Wright, Doug

Date: 17-Feb-2009

Attachment(s):



PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 02/05/2009

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: NCR FOR CLOSURE

SUBMITTED FOR YOUR APPROVAL.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO.T-025 FOR CLOSURE.
- (2) COPY OF NCR WITH NUMBER NCR-176(ZPMC-159)
- ()
- (4) COPY OF NDT REPORTS

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

E. Quinn
 PLAN HOLDER

5-Feb-2009 (2:43)
 DATE

ABFJV
 COMPANY

 PHONE NO.

PLAN NUMBER: N/A
 #R787-QCP-102



No. T-025

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2009-2-5

REGARDING: NCR-176 ZPMC-159

ZPMC received NCR-176(ZPMC-159), it mentioned that ZPMC was shipping five tower double diaphragms identified as ESD1-47.6m, ESD1-28m, SSD1-43, ESD1-23m and ESD1-43m for machining, with fabrication and testing not completed.

ZPMC had verified and acknowledged this problem. Due to the tight schedule, ZPMC decided to send these five diaphragms to Nantong Base for machining. Before ZPMC sent out, most of the work was finished including welding, grinding, repairing and part of NDT. So ZPMC thought the diaphragm state at that time were already satisfied with machining condition. After all five diaphragms getting back, the technician finished all the required NDT and these five diaphragms had gotten Caltrans' green tag.

So ZPMC request to close this NCR basing on AB/F NCR Proposed Solution ABF-NPR-000179 and here provided all the NDT reports, hoped Caltrans can take a review and close NCR ZPMC-164.

ATTACHMENT:

NCR-000176 (ZPMC-0159)

ABF-NPR-000179

ESD1-47.6M NDT reports:

Upper diaphragm plate butt welding: T787-UT-052 & T787-MT-087

Lower diaphragm plate butt welding: T787-UT-010 & T787-MT-012

Welds between upper and lower diaphragm plates with web plates: T787-MT-463

Welds between upper diaphragm plate with flange ring: T787-MT-719

Welds between lower diaphragm plate with flange ring: T787-MT-378

Upper diaphragm flange ring butt welding: T787-UT-249

Lower diaphragm flange ring butt welding: T787-UT-218

ESD1-28M NDT reports:

Upper diaphragm plate butt welding: T787-UT-247 & T787-MT-349

Lower diaphragm plate butt welding: T787-UT-032 & T787-MT-030

Welds between upper and lower diaphragm plates with web plates: T787-MT-723

Welds between upper diaphragm plate with flange ring: T787-MT-725

Welds between lower diaphragm plate with flange ring: T787-MT-724

Upper diaphragm flange ring butt welding: T787-UT-279

Lower diaphragm, flange ring butt welding: T787-UT-207

SSD1-43M NDT reports:

Upper diaphragm plate butt welding: T787-UT-001,001R1 & T787-MT-004

Lower diaphragm plate butt welding: T787-UT-248, & T787-MT-345

Welds between upper and lower diaphragm plates with web plates:

T787-MT-532 & T787-MT-416

Welds between upper diaphragm plate with flange ring: T787-MT-417

Welds between lower diaphragm plate with flange ring: T787-MT-320

Upper diaphragm flange ring butt welding: T787-UT-153

Lower diaphragm flange ring butt welding: T787-UT-194

ESD1-23M NDT reports:

Upper diaphragm plate butt welding: T787-UT-061 & T787-MT-077

Lower diaphragm plate butt welding: T787-UT-419 & T787-MT-698

Welds between upper and lower diaphragm plates with web plates:

T787-MT-453 & T787-MT-454

Welds between upper diaphragm plate with flange ring: T787-MT-456

Welds between lower diaphragm plate with flange ring: T787-MT-282

Upper diaphragm flange ring butt welding: T787-UT-287

Lower diaphragm flange ring butt welding: T787-UT-177

ESD1-43M NDT reports:

Upper diaphragm plate butt welding: T787-UT-012,012R1 & T787-MT-013

Lower diaphragm plate butt welding: T787-UT-044 & T787-MT-047

Welds between upper and lower diaphragm plates with web plates:

T787-MT-460 & T787-MT-461

Welds between upper diaphragm plate with flange ring: T787-MT-369

Welds between lower diaphragm plate with flange ring: T787-MT-2471

Upper diaphragm flange ring butt welding: T787-UT-223

Lower diaphragm flange ring butt welding: T787-UT-256



2009-2-5

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, PRC

Report No: NCR-000176

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 17-Aug-2008

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

NCR #: ZPMC-0159

Type of problem:

Welding Concrete Other
 Welding Curing Procedural **Bridge No:** 34-0006
 Joint fit-up Coating Other **Component:** SAS - Tower
 Procedural Procedural **Description:** Tower Double Diaphragms

Reference Description: Shipping of Tower Diaphragms not completed

Description of Non-Conformance:

ABF allowed to ZPMC to ship a total of five (5) Tower Double Diaphragms (ESD1-47.6m, ESD1-28m, SSD1-43m, ESD1-23m and ESD1-43m) for machining before fabrication and inspection/testing were completed; this was not in accordance with their approved fabrication plan. Furthermore, the noted double diaphragms assemblies were not accepted by ABF Quality Control (QC) prior to shipping due to weld discontinuities in need of repair, heat straightening not completed, required nondestructive testing not completed, and weld terminations not acceptable to project specifications. Any repairs made to these diaphragm assemblies after machining may negatively affect the final geometry of the Tower Shaft in localized areas.



Applicable reference:

ABF-SUB-093R02 77-m (Type 3B) Mock-Up Fabrication Plan and ABF/ZPMC Welding Quality Control Plan (WQCP)

Who discovered the problem: Quality Assurance (QA) Inspector, Jim Cochran

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Name of individual from Contractor notified: ABF representative, Huang Ji Hui (Jeff)

Time and method of notification: 08/17/2008 / verbal notification at 0900 hours (CST)

Name of Caltrans Engineer notified: Scott Kennedy, Structure Representative

Time and method of notification: 21-AUG-08, at approximately 1330 hours (CST)

QC Inspector's Name: ZPMC Quality Control, Fu Yuhong

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

ZPMC noted at the time of shipping they understood they were performing this work at risk.

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 Ryan Smith, who represents the Office of Structural Materials for your project.

Inspected By: Smith,Ryan

SMR

Reviewed By: Smith,Ryan

SMR



American
Bridge

FLUOR

AMERICAN BRIDGE/FLUOR ENTERPRISES, a JV

P.O. BOX 23223 Oakland, CA 94623

Phone (510) 419-0120 / Fax (510) 839-0556

NCR PROPOSED RESOLUTION

To: CALTRANS - SAS Superstructure
333 Burma Road
Oakland CA 94607
Attention: Pursell, Gary
Resident Engineer
Ref: 05.03.06-000171
Subject: NCR No. ZPMC-0178

Dated: 07-Nov-2008
Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9
Job Name: SAS Superstructure
Document No.: ABF-NPR-000179 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution:

The fabrication procedure sequence documents that the inspection of welding will be completed prior to the machining process. Initial inspection of the Double Diaphragms was completed but repairs relative to Visual Inspection had not been completed. ZPMC then shipped the Double Diaphragms to Nantong for machining at their own risk noting that the repairs remaining would not adversely affect the final machined dimensions. ZPMC and ABF has since completed the weld repairs and will forward the inspection documents to CT for NCR closure.

Submitted by:

Attachment(s): ABF-NPR-000179R00

Caltrans' comments:

Status: AAP

Date: 10-Nov-2008

The response is acceptable, but the Non-Conformance is not closed.

The proposed resolution mentions that the repairs have been completed, and the inspection documents will be forwarded to Caltrans for NCR closure. Please provide this documentation. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0178 at that time.

Submitted by: Wright, Doug

Date: 10-Nov-2008

Attachment(s):



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-087

DATE日期 2008.05.09

PAGE OF页码 1/1

Revision No: 0

PROJECT NO.

ZP06-787

CONTRACTOR:

CALTRANS

工程编号:

用户:

DRAWING NO.

SA32(E)+P1424(E)
47.6M UPPER DIAPHRAGM

CALTRANS CONTRACT NO.:

04-0120F4

图号:

加州工程编号

REFERENCING CODE

ACCEPTANCE STANDARD
接受标准
AWS D1.5-2002

PROCEDURE NO.

CALIBRATION DUE DATE

参考规范编码
AWS D1.5-2002

程序编号
ZPQC-MT-01

仪器校正有效期
Dec. 28, 2008

EQUIPMENT 设备
MT YOKE

MANUFACTURER 制造商
PARKER

MODEL NO. 样式编号
B310S

SERIAL NO. 连续编号
5617 5395 5620

MAGNETIZING
METHOD磁化方法

Continuous magnetic yoke
磁轭式连续法

CURRENT

AC

PARTICLE TYPE
磁粉类型

Dry magnet powder
干磁粉

YOKE SPACING

70~150mm

MATERIAL TO BE
EXAMINED

WELDING 焊接件
 CASTING 铸件
 FORGING 锻造

Material & thickness
母材,厚度

A709M-HPS-485WT2-Z
75mm

WELDING PROCESS

SAW

TYPE OF JOINT

BUTT

焊接方法

焊缝类型

WELD I.D.
焊缝编号

DISCONTINUITY不连续性

INDICATION
指示

TYPE
类型

LENGTH IN
mm
长度

ACCEPT
接受

REJECT
拒收

REMARKS
备注

ESD1-SA32A/B-10A/10B

ACC.

BLANK

EXAMINED BY主操

REVIEWED BY 审核

LEVEL-II SIGN 签名

DATE日期

LEVEL-II

SIGN

DATE日期

质量经理 / QCM

用户 CUSTOMER

Hu Gang

2008.5.15

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-010

DATE 2008.04.06

PAGE 1 OF 1

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 47.6M LOWER

DRAWING NO.: SA226 (E) + P407 (E)

CALTRANS CONTRACT NO.: 04-0120F4

部件名称 DIAPHRAGM

图号

加州工程编号

REFERENCING CODE 参考规范

ACCEPTANCE STANDARD 接受标准

PROCEDURE NO. 程序编号

AWS D1.5-2002

AWS D1.5-2002(Table 6.3)

ZPQC-UT-01

WELDING PROCESS 焊接方法

JOINT TYPE 焊缝类型

CALIBRATION DUE DATE 仪器校正有效期

SAW

BUTT

Jan. 1ST, 2009

EQUIPMENT 设备

MANUFACTURER 制造商

MODEL NO. 样式编号

SERIAL NO. 序列编号

UT SCOPE

PANAMETRICS

EPOCH-4B

061488510, 061495811,

CALIBRATION BLOCK 试块

COUPLANT 耦合剂

MATERIAL/THICKNESS 材料厚度

AWS IIW BLOCK TYPE II

C.M.C

A709M-HPS-485WT2-Z/ 75 mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18x18 mm	Changchao	45 °	2.5 MHz	18x18 mm
Changchao	0 °	2.5 MHz	20 mm	Reference Level 参考灵敏度			20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)							
									a	b	c	d	Length 长度			Sound Path 声程
ESD1-SA226-10A (10B)		44.6				33									ACC.	
		68.2				32									ACC.	
BLANK																

EXAMINED BY 主探

REVIEWED BY 审核:

Xekharong 2008.04.06

Ma Ji Long 2008.04.06.

LEVEL - II SIGN / DATE

LEVEL - II SIGN / DATE

质量经理 / QCM

用户 CUSTOMER

Hu Guang 2008.04.08

主探 SIGN / 日期 DATE

审核 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-012

DATE 日期 2008.04.12

PAGE 页码 1/1

Revision No: 0

PROJECT NO.

ZP06-787

CONTRACTOR:

CALTRANS

工程编号:

用户:

DRAWING NO.

SA226(E)+P407(E)
47.6M LOWER DIAPHRAGM

CALTRANS CONTRACT NO.:

04-0120F4

图号:

加州工程编号

REFERENCING CODE

ACCEPTANCE STANDARD
接受标准
AWS D1.5-2002

PROCEDURE NO.

CALIBRATION DUE DATE

参考规范代码

程序编号

仪器校正有效期

AWS D1.5-2002

ZPQC-MT-01

Dec. 28, 2008

EQUIPMENT 设备
MT YOKEMANUFACTURER 制造商
PARKERMODEL NO. 样式编号
B310SSERIAL NO. 连续编号
5360 5362

MAGNETIZING

Continuous magnetic yoke
磁轭式连续法

CURRENT

AC

METHOD 磁化方法

YOKE SPACING

70~150mm

PARTICLE TYPE

Dry magnet powder
干磁粉

Material & thickness

A709M-HPS-485WT2-Z
75mm

MATERIAL TO BE

 WELDING 焊接件
 CASTING 铸件
 FORGING 锻造

Material & thickness

EXAMINED MATERIAL

母材, 厚度

WELDING PROCESS

SAW

TYPE OF JOINT

BUTT

焊接方法

焊缝类型

WELD I.D.
焊缝编号

DISCONTINUITY 不连续性

INDICATION
指示TYPE
类型LENGTH IN
mm
长度ACCEPT
接受REJECT
拒收REMARKS
备注

ESD1-SA226-10A/10B

ACC.

BLANK

EXAMINED BY 主操

REVIEWED BY 审核

Cai Xinxin

Zhou Donglin

LEVEL-II

SIGN 签名

DATE 日期

2008.04.12

LEVEL-II

SIGN

DATE 日期

2008-4-12

质量经理 / QCM

用户 CUSTOMER

Hu Gang

2008.4.16

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-463		DATE 日期 2008.08.15	PAGE OF 页码 1/2	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: ESD1-SA32B/B THE 1ST LIFTING TOWER(E) 47.6M DIAPHRAGM		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范代号 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 th , 2008	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5620 5395 5617	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
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 锻件	Material & thickness 母材, 厚度	A709M-HPS-485WT2-Z 75/60/40mm	
WELDING PROCESS 焊接方法	SMAW	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			
ESD1-SA32B/B-1				ACC.		
ESD1-SA32B/B-2				ACC.		
ESD1-SA32B/B-7				ACC.		
ESD1-SA32B/B-8				ACC.		
ESD1-SA32B/B-11				ACC.		
ESD1-SA32B/B-12				ACC.		
ESD1-SA32B/B-15				ACC.		
ESD1-SA32B/B-16				ACC.		
ESD1-SA226-11				ACC.		
ESD1-SA226-12				ACC.		
ESD1-SA226-13				ACC.		
ESD1-SA226-14				ACC.		
ESD1-SA226-15				ACC.		
ESD1-SA226-16				ACC.		

EXAMINED BY 主检 <u>BOTMIAI</u>	REVIEWED BY 审核 <u>Cai Xinglin</u>
LEVEL-II SIGN 签名 / DATE 日期 <u>2008.8.15</u>	LEVEL-II SIGN / DATE 日期 <u>08.28.15</u>
质量经理 / QCM <u>Huobang 2008.08.15</u>	用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-463		DATE日期 2008.08.15	PAGE OF页码 2/2	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: ESD1-SA32B/B THE 1ST LIFTING TOWER(E) 47.6M DIAPHRAGM		CALTRANS CONTRACT NO.: 苏州工程编号 04-0120F4		
REFERENCING CODE 参考规范编号 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 th , 2008	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5620 5395 5617	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
MATERIAL TO BE EXAMINED 被检材料	√ WELDING 焊接件 □ CASTING 铸件 □ FORGING 锻件	Material & thickness 母材, 厚度	A709M-HPS-485WT2-Z 75/60/40mm	
WELDING PROCESS 焊接方法	SMAW	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			
ESD1-SA32B/B-3				ACC.		
ESD1-SA32B/B-4				ACC.		
ESD1-SA32B/B-5				ACC.		
ESD1-SA32B/B-6				ACC.		
ESD1-SA32B/B-9				ACC.		
ESD1-SA32B/B-10				ACC.		
SD1-SA32B/B-13				ACC.		
ESD1-SA32B/B-14				ACC.		
BLANK						

EXAMINED BY 主检 <i>BUTINMI</i>	REVIEWED BY 审核 <i>Cai Xinjin</i>
LEVEL - II SIGN 签字 / DATE 日期 <i>2008.8.15</i>	LEVEL - II SIGN / DATE 日期 <i>08-08-15</i>
质量经理 / QCM <i>Wu</i>	客户 / CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATIO

磁粉检测报告

REPORT NO. 报告编号 T787-MT-378 DATE日期 2008.07.30 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: ESD1-SA226 TOWER(E) 47.6M DIAPHRAGM CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4

REFERENCING CODE 参考规范编号 AWS D1.5-2002 ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002 PROCEDURE NO. 程序编号 ZPQC-MT-01 CALIBRATION DUE DATE 仪器校正有效期 Dec. 28th, 2008

EQUIPMENT 设备 MT YOKE MANUFACTURER 制造商 PARKER MODEL NO. 样式编号 B310S SERIAL NO. 连续编号 5620 5395 5617

MAGNETIZING METHOD 磁化方法 Continuous magnetic yoke 磁轭式连续法 CURRENT 电流 AC

PARTICLE TYPE 磁粉类型 Dry magnet powder 干磁粉 YOKE SPACING 磁轭间距 70~150mm

MATERIAL TO BE EXAMINED 检测材料 WELDING 焊接件 CASTING 铸件 FORGING 锻造 Material & thickness 母材, 厚度 A709M-345T2 A709M-HPS485WT2 75/60mm

WELDING PROCESS 焊接方法 FCAW 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			
ESD1-SA226-1				ACC.		
ESD1-SA226-2				ACC.		

BLANK

EXAMINED BY 主操 Cai Yan bin

REVIEWED BY 审核 Zhao Dong

LEVEL-II SIGN 签名 / DATE日期 08.07.30

LEVEL-II SIGN / DATE日期 2008.07.30

质量经理 / QCM Hu Bing 2008.08.05

用户 CUSTOMER

主操 SIGN / 日期 DATE

主操 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-249

DATE 2008.07.23

PAGE 1 OF 2

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 47.6M UPPER DIAPHRAGM

DRAWING NO.: ESD1-SA292

CALTRANS CONTRACT NO.: 04-0120F4

部件名称 EDGE PLATE

图号

加州工程编号

REFERENCING CODE 参考规范

ACCEPTANCE STANDARD 接受标准

PROCEDURE NO. 程序编号

AWS D1.5-2002

AWS D1.5-2002(Table 6.3)

ZPQC-UT-01

WELDING PROCESS 焊接方法

JOINT TYPE 焊缝类型

CALIBRATION DUE DATE 仪器校正有效期

FCAW

BUTT

DEC. 28th, 2008

EQUIPMENT 设备

MANUFACTURER 制造商

MODEL NO. 样式编号

SERIAL NO. 序列编号

UT SCOPE

PANAMETRICS

EPOCH-4B

071565311, 061488510,

061495811, 070152011,

CALIBRATION BLOCK 试块

COUPLANT 耦合剂

MATERIAL/THICKNESS 材料厚度

AWS IIV BLOCK TYPE II

C.M.C

A709M-345T2 60mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70°	2.5 MHz	18*18 mm	Changchao	60°	2.5 MHz	18*18 mm
Changchao	0°	2.5 MHz	20 mm				

Reference Level 参考灵敏度

20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
									a	b	c	d	Length 长度		
ESD1-SA32A/B-3A(3B)															*
ESD1-SA32A/B-4A(4B)		68.5				32									ACC.
		58.5				32									ACC.
ESD1-SA32A/B-5A(5B)															*
ESD1-SA32A/B-6A(6B)															*
ESD1-SA32A/B-7A(7B)															*

EXAMINED BY 主探

REVIEWED BY 审核:

MaTi Long 2008.07.23
LEVEL - II SIGN DATE

Xue Kaiyong 2008.07.23
LEVEL - II SIGN DATE

新探理 / COM

用户 CUSTOMER

Huibo 2008.07.29

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-218

DATE 2008.07.13

PAGE 1 OF 2

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 47.6M LOWER DIAPHRAGM
部件名称 EDGE PLATE (S)

DRAWING NO.: ESD1-SA266
图号

CALTRANS CONTRACT NO.: 04-0120F4
加州工程编号

REFERENCING CODE 参考规范
AWS D1.5-2002

ACCEPTANCE STANDARD 接受标准
AWS D1.5-2002 (Table 6.3)

PROCEDURE NO. 程序编号
ZPQC-UT-01

WELDING PROCESS 焊接方法
FCAW

JOINT TYPE 焊缝类型
BUTT

CALIBRATION DUE DATE 仪器校正有效期
DEC. 28th, 2008

EQUIPMENT 设备
UT SCOPE

MANUFACTURER 制造商
PANAMETRICS

MODEL NO. 样式编号
EPOCH-4B

SERIAL NO. 序列编号
071565311, 061488510,
061495811, 070152011,

CALIBRATION BLOCK 试块
AWS IIV BLOCK TYPE II

COUPLANT 耦合剂
C.M.C

MATERIAL/THICKNESS 材料厚度
A709M-345T2 60mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18*18 mm ²	Changchao	60 °	2.5 MHz	18*18 mm ²
Changchao	0 °	2.5 MHz	20 mm				
Reference Level 参考灵敏度				20dB			

Base metal inspected per AWS D1.5-2002 Section 6.19.5 0 ° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
									a	b	c	d	Length 长度		
ESD1-SA226-3A/B															*
ESD1-SA226-4A/B															*
ESD1-SA226-5A/B															*
ESD1-SA226-6A/B															*
ESD1-SA226-7A/B															*
ESD1-SA226-17A/B															*

EXAMINED BY 主探

REVIEWED BY 审核:

Xu Ronggang 2008.07.13

Ma Jizhong 2008.07.13

LEVEL-II SIGN / DATE

LEVEL-II SIGN / DATE

质量经理 / QCM

用户 CUSTOMER

Yugang 2008.07.15

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-247

DATE 2008.07.22

PAGE 1 OF 1

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 28M UPPER DIAPHRAGM
部件名称 EDGE PLATE

DRAWING NO.: SA316(E)+P778(E)
图号

CALTRANS CONTRACT NO.: 04-0120F4
加州工程编号

REFERENCING CODE 参考规范
AWS D1.5-2002

ACCEPTANCE STANDARD 接受标准
AWS D1.5-2002(Table 6.3)

PROCEDURE NO. 程序编号
ZPQC-UT-01

WELDING PROCESS 焊接方法
SAW

JOINT TYPE 焊缝类型
BUTT

CALIBRATION DUE DATE 仪器校正有效期
DEC. 28th, 2008

EQUIPMENT 设备
UT SCOPE

MANUFACTURER 制造商
PANAMETRICS

MODEL NO. 样式编号
EPOCH-4B

SERIAL NO. 序列编号
071565311, 061488510,
061495811, 070152011,

CALIBRATION BLOCK 试块
AWS IIW BLOCK TYPE II

COUPLANT 耦合剂
C.M.C

MATERIAL/THICKNESS 材料厚度
A709M-HPS-485WT2-Z 75mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70°	2.5 MHz	18*18 mm	Changchao	45°	2.5 MHz	18*18 mm
Changchao	0°	2.5 MHz	20 mm	Reference Level 参考灵敏度		20dB	

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Reading	LOCATION OF DISCONTINUITY 不连续位置(mm)							
									a	b	c	d	Length 长度			Sound Path 声程
ESD1-SA316A/B-6A/B B		68.4				32									ACC.	
		44.8				32									ACC.	
ESD1-SA316A/B-12A/1 2B		68.4				32									ACC.	
		44.8				32									ACC.	

BLANK

EXAMINED BY 主探

REVIEWED BY 审核:

Xu Rongqiang 2008.07.22
LEVEL-II SIGN / DATE

Ma Jihong 2008.07.22
LEVEL-II SIGN / DATE

质量经理 / QCM

FOR CUSTOMER

Hukey 2008.07.22

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-032

DATE 2008.04.19

PAGE 1 OF 1

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: EASTERN TOWER 28M
部件名称 LOWER DIAPHRAGMDRAWING NO.: SA309(E)+P775(E)
图号CALTRANS CONTRACT NO.: 04-0120F4
加州工程编号REFERENCING CODE 参考规范
AWS D1.5-2002ACCEPTANCE STANDARD 接受标准
AWS D1.5-2002(Table 6.3)PROCEDURE NO. 程序编号
ZPQC-UT-01WELDING PROCESS 焊接方法
SAWJOINT TYPE 焊缝类型
BUTTCALIBRATION DUE DATE 仪器校正有效期
DEC. 26th, 2008EQUIPMENT 设备
UT SCOPEMANUFACTURER 制造商
PANAMETRICSMODEL NO. 样式编号
EPOCH-4BSERIAL NO. 序列编号
071565311, 061488510,
061495811, 070152011,CALIBRATION BLOCK 试块
AWS IIV BLOCK TYPE IICOUPLANT 耦合剂
C.M.CMATERIAL/THICKNESS 材料厚度
A709M-HPS-485WT2-Z / 75mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18x18 mm	Changchao	45 °	2.5 MHz	18x18 mm
Changchao	0 °	2.5 MHz	20 mm	Reference Level 参考灵敏度			20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Reading	LOCATION OF DISCONTINUITY 不连续位置(mm)							
									a	b	c	d	Length 长度			Sound Path 声程
ESD1-SA309-11A/11B		68.5				33									ACC.	
		44.5				34									ACC.	
ESD1-SA309-12A/12B		68.5				33									ACC.	
		44.5				34									ACC.	

BLANK

EXAMINED BY 主操

REVIEWED BY 审核:

Yue Hong Kong 2008.04.19
LEVEL-II SIGN 1 DATE

Yue Hong Kong 2008.04.19
LEVEL-II SIGN 1 DATE

质量经理 / QCM

用户 CUSTOMER

Hu Hong 2008.4.23

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T767-MT-030		DATE 日期 2008.04.22	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: SA309(E)+P775(E) EASTERN TOWER 28M LOWER DIAPHRAGM		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4				
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	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28, 2008			
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5360 5362 5395			
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC			
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm			
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	Material & thickness 母材, 厚度	A709M-HPS-485WT2-Z 75mm			
WELDING PROCESS 焊接方法	SAW	TYPE OF JOINT 焊缝类型	BUTT			
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			
ESD1-SA309-11A/11B				ACC.		
ESD1-SA309-12A/12B				ACC.		
BLANK						
EXAMINED BY 主操 <u>Zhen Duan</u> LEVEL-II SIGN 签名 / DATE 日期 2008.06.22			REVIEWED BY 审核 <u>Bo Pin</u> LEVEL-II SIGN 签名 / DATE 日期 2008.6.22			
质量经理 / QCIR <u>Huifang</u> 2008.5.1 签字 SIGN / 日期 DATE			用户 CUSTOMER _____ 签字 SIGN / 日期 DATE			

(FORM# ZPQC-MT01)



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-723		DATE 日期 2008.09.18	PAGE OF 页码 1/2	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: SA316 SA309 TOWER(E) 26M DIAPHRAGM PLATE		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范编号 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 th , 2008	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5620 5396 5617	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
MATERIAL TO BE EXAMINED 检测材料	√ WELDING 焊接件 = CASTING 铸件 = FORGING 锻件	Material & thickness 母材, 厚度	A709M-HPS-485WT2 40/60/75 mm	
WELDING PROCESS 焊接方法	SMAW	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			
ESD1-SA309-15				ACC.		
ESD1-SA309-16				ACC.		
ESD1-SA309-17				ACC.		
ESD1-SA309-18				ACC.		
ESD1-SA316 B/B-1				ACC.		
ESD1-SA316 B/B-2				ACC.		
ESD1-SA316 B/B-7				ACC.		
ESD1-SA316 B/B-8				ACC.		
ESD1-SA316 B/B-9				ACC.		
ESD1-SA316 B/B-10				ACC.		
ESD1-SA316 B/B-13				ACC.		
ESD1-SA316 B/B-14				ACC.		
ESD1-SA316 B/B-3				ACC.		
ESD1-SA316 B/B-4				ACC.		

EXAMINED BY 主操 <u>Bo Tin vnl</u>	REVIEWED BY 审核 <u>L.L. Luning</u>
LEVEL - II SIGN 签名 / DATE 日期 <u>2008.09.18</u>	LEVEL-II SIGN / DATE 日期 <u>2008.09.18</u>
质量经理 / QCM <u>Huang</u>	用户 CUSTOMER
签字 SIGN / 日期 DATE <u>2008.09.24</u>	签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-723		DATE 日期 2008.09.18	PAGE OF 页码 2/2	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: SA316 SA309 TOWER(E) 28M DIAPHRAGM PLATE		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范编号: AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 th , 2008	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5620 5395 5617	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
MATERIAL TO BE EXAMINED 检测材料	√ WELDING 焊接件 □ CASTING 铸件 □ FORGING 锻件	Material & thickness 母材, 厚度	A709M-HPS-485WT2 40/50/75 mm	
WELDING PROCESS 焊接方法	SMAW	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	REMARK 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
ESD1-SA316 B/B-5				ACC.		
ESD1-SA316 B/B-6				ACC.		
ESD1-SA316 B/B-11				ACC.		
ESD1-SA316 B/B-12				ACC.		
ESD1-SA316 B/B-15				ACC.		
ESD1-SA316 B/B-16				ACC.		
ESD1-SA309-13				ACC.		
ESD1-SA309-14				ACC.		
BLANK						

EXAMINED BY 主操 <i>B. Tinrai</i>	REVIEWED BY 审核 <i>L. Lowry</i>
LEVEL - II SIGN 签名 / DATE 日期 <i>08.09.18</i>	LEVEL - II SIGN 签名 / DATE 日期 <i>2008.09.18</i>
质量经理 / QCM <i>H. Lowry</i> 2008.09.24	用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

Attachment-1. CONTINUED



REPORT OF ULTRASONIC EXAMINATION

REPORT NO. 报告编号 T787-UT-279

DATE 2008.08.02

PAGE 2 OF 2

Revision No: 0

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置						
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Face 'A' 距表面深度	From 'X' 距X	From 'Y' 距Y		
ESD1-SA316A/B-9A(9B)														*	
ESD1-SA316A/B-10A(10B)		68.6				34							ACC..		
		59.6				34							ACC..		
ESD1-SA316A/B-11A(11B)														*	

*ESD1-SA316A/B-9A(9B), ESD1-SA316A/B-10A(10B) were 100% UT inspection and ACC, which is the result of required 25% UT.

*ESD1-SA316A/B-9A(9B), ESD1-SA316A/B-10A(10B) 焊缝经100%UT检测合格, 累积检测长度已经达到了此批要求的25%检测长度。

BLANK

EXAMINED BY 主操 <u>Xu Rongqiang</u> 2008.08.02 LEVEL-II SIGN / DATE	REVIEWED BY 审核: <u>Xu Rongqiang</u> 2008.08.02 LEVEL-II SIGN / DATE
质检经理 / QCM <u>Huang</u> 2008.08.02 签字 SIGN / 日期 DATE	用户 CUSTOMER _____ 签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-207

DATE 2008.07.07

PAGE 1 OF 2

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 28M LOWER DIAPHRAGM
EDGE PLATE

DRAWING NO.: ESD1-SA131
图号

CALTRANS CONTRACT NO.: 04-0120F4
加州工程编号

部件名称 (S)

REFERENCING CODE 参考规范
AWS D1.5-2002

ACCEPTANCE STANDARD 接受标准
AWS D1.5-2002(Table 6.3)

PROCEDURE NO. 程序编号
ZPQC-UT-01

WELDING PROCESS 焊接方法
FCAW

JOINT TYPE 焊缝类型
BUTT

CALIBRATION DUE DATE 仪器校正有效期
DEC. 28th, 2008

EQUIPMENT 设备
UT SCOPE

MANUFACTURER 制造商
PANAMETRICS

MODEL NO. 样式编号
EPOCH-4B

SERIAL NO. 序列编号
071565311, 061488510,
061495811, 070152011,

CALIBRATION BLOCK 试块
AWS IIV BLOCK TYPE II

COUPLANT 耦合剂
C.M.C

MATERIAL/THICKNESS 材料厚度
A709M-345T2 / 60mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18*18 mm				
Changchao	0 °	2.5 MHz	20 mm				

Reference Level 参考灵敏度

20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Alignment Factor	Indication Rating	LOCATION OF DISCONTINUITY						
									不连续位置(mm)						
a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y							
ESD1-SA309-3A(3B)															*
ESD1-SA309-4A(4B)															*
ESD1-SA309-5A(5B)															*
ESD1-SA309-6A(6B)															*
ESD1-SA309-7A(7B)															*
ESD1-SA309-8A(8B)															*

EXAMINED BY 主探

Xue Hai Yong 2008.07.07

LEVEL-II SIGN / DATE

REVIEWED BY 审核:

Xu Ronggang 2008.07.07

LEVEL-II SIGN / DATE

质量经理 / COM

Hu... 2008.07.15

签字 SIGN / 日期 DATE

客户 / CUSTOMER

签字 SIGN / 日期 DATE

Attachment-1. CONTINUED



REPORT OF ULTRASONIC EXAMINATION

REPORT NO. 报告编号 T787-UT-207

DATE 2008.07.07

PAGE 2 OF 2

Revision No: 0

WELD IDENTIFICATION 焊缝零件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置							
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Face 'A' 距表面深度	From 'X' 距X	From 'Y' 距Y			
ESD1-SA309-9A(9B)		68.4				35									ACC.	
		59.4				35									ACC.	
ESD1-SA309-10A(10B)		68.4				35									ACC.	
		59.4				35									ACC.	

*ESD1-SA309-9A(9B), ESD1-SA309-10A(10B) were 100% UT inspection and ACC, which is the result of required 25% UT.
 *ESD1-SA309-9A(9B), ESD1-SA309-10A(10B) 焊缝经100% UT检测合格, 实际检测长度已经达到了此批要求的25%检测长度。

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EXAMINED BY 主操
Xuella Wang 2008.07.07
 LEVEL-II SIGN / DATE

REVIEWED BY 审核:
Xu Donggang 2008.07.07
 LEVEL-II SIGN / DATE

质量经理 / QCM
Wu Kang 2008.07.07
 签字 SIGN / 日期 DATE

用户 CUSTOMER

 签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-001

DATE 2008.03.21

PAGE 1 OF 1

Revision No: 0

PROJECT NO.: 工程编号 ZP08-787

CONTRACTOR: CALTRANS

ITEMS NAME: 43X UPPER DIAPHRAGM
部件名称

DRAWING NO.: SA27, P546
图号

CALTRANS CONTRACT NO.: 04-0120F4
加州工程编号

REFERENCING CODE 参考规范
AWS D1.5-2002

ACCEPTANCE STANDARD 接受标准
AWS D1.5-2002(Table 6.3)

PROCEDURE NO. 程序编号
ZPQC-UT-01

WELDING PROCESS 焊接方法
FCAW

JOINT TYPE 焊缝类型
BUTT

CALIBRATION DUE DATE 仪器校正有效期
Jan. 1ST, 2009

EQUIPMENT 设备

MANUFACTURER 制造商

MODEL NO. 样式编号

SERIAL NO. 序列编号

UT SCOPE

PANAMETRICS

EPOCH-4B

071565311,051488510

CALIBRATION BLOCK 试块
AWS IIW BLOCK TYPE II

COUPLANT 耦合剂
C.M.C

MATERIAL/THICKNESS 材料厚度
A709M-HPS-485WT2-Z / 75 mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18x18 mm	Changchao	45 °	2.5 MHz	18x18 mm
Changchao	0 °	2.5 MHz	20 mm	Reference Level 参考灵敏度		20dB	

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝的作编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)							
									a	b	c	d	Length 长度			Sound Path 声程
SSD1-SA27A/B-1A/1B		68.4				32									ACC.	
	1	44.7	B	2	48	34	12	-2	20	170	40	0	990		REJ.	

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EXAMINED BY 主探

Xue Hairong 2008.03.21

LEVEL-II SIGN / DATE

REVIEWED BY 审核:

Li Liang 2008.03.21

LEVEL-II SIGN / DATE

质量经理 / QCM

Hu Gang 2008.3.26

签字 SIGN / 日期 DATE

用户 CUSTOMER

签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-001R1

DATE 2008.03.29

PAGE 1 OF 1

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS.

ITEMS NAME: 43X UPPER DIAPHRAGM
部件名称DRAWING NO.: SA27, P546
图号CALTRANS CONTRACT NO.: 04-0120F4
加州工程编号REFERENCING CODE 参考规范
AWS D1.5-2002ACCEPTANCE STANDARD 接受标准
AWS D1.5-2002(Table 6.3)PROCEDURE NO. 程序编号
ZPQC-UT-01WELDING PROCESS 焊接方法
SMAWJOINT TYPE 焊缝类型
BUTTCALIBRATION DUE DATE 仪器校正有效期
Jan. 1ST, 2009EQUIPMENT 设备
UT SCOPEMANUFACTURER 制造商
PANAMETRICSMODEL NO. 样式编号
EPOCH-4BSERIAL NO. 序列编号
071565311,061488510CALIBRATION BLOCK 试块
AWS IIV BLOCK TYPE IICOUPLANT 耦合剂
C.M.CMATERIAL/THICKNESS 材料厚度
A709M-HPS-485WT2-Z / 75 mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70°	2.5 MHz	18x18 mm	Changchao	45°	2.5 MHz	18x18 mm
Changchao	0°	2.5 MHz	20 mm	Reference Level	参考灵敏度		20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0° UT OK.

WELD IDENTIFICATION 焊缝识别编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
									a	b	c	d	Length 长度		Sound Path 声程
SSD1-SA27A/B-1A/1B		44.4				34									ACC.

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EXAMINED BY 主探

Xue Hairong 2008.03.29

LEVEL - II SIGN / DATE

REVIEWED BY 审核:

Li Cuming 2008.03.29

LEVEL - II SIGN / DATE

质量经理 / QCM

HUGANG 2008.4.1

签字 SIGN / 日期 DATE

用户 CUSTOMER

签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-004		DATE日期 2008.03.30	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: SA27, P546 43M UPPER DIAPHRAGM		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4				
REFERENCING CODE 参考规范编号 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		MODEL NO. 样式编号 B310S		
MAGNETIZING METHOD 磁化方法		Continuous magnetic yoke 磁轭式连续法		CURRENT 电流 AC		
PARTICLE TYPE 磁粉类型		Dry magnet powder 干磁粉		YOKE SPACING 磁轭间距 70~150mm		
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 锻件		Material & thickness 母材,厚度 A709M-HPS-485WT2-Z 75mm		
WELDING PROCESS 焊接方法		SAW		TYPE OF JOINT 焊接类型 BUTT		
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			
SSD1-SA27A/B-1A/ 1B				ACC.		
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EXAMINED BY 主探 <u>Cai Xin Xin</u> LEVEL - II SIGN 签名 / DATE日期 2008.3.30			REVIEWED BY 审核 <u>Bo Tian Ru</u> LEVEL-II SIGN / DATE日期 2008.3.30			
质量经理 / QCM <u>Huifang</u> 2008.3.30 签字 SIGN / 日期 DATE			用户 CUSTOMER _____ 签字 SIGN / 日期 DATE			



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-248

DATE 2008.07.23

PAGE 1 OF 1

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 43M LOWER DIAPHRAGM
部件名称DRAWING NO.: SA335(S), P459(S)
图号CALTRANS CONTRACT NO.: 04-0120F4
加州工程编号REFERENCING CODE 参考规范
AWS D1.5-2002ACCEPTANCE STANDARD 接受标准
AWS D1.5-2002(Table 6.3)PROCEDURE NO. 程序编号
ZPQC-UT-01WELDING PROCESS 焊接方法
SAWJOINT TYPE 焊缝类型
BUTTCALIBRATION DUE DATE 仪器校正有效期
DEC. 28th, 2008EQUIPMENT 设备
UT SCOPEMANUFACTURER 制造商
PANAMETRICSMODEL NO. 样式编号
EPOCH-4BSERIAL NO. 序列编号
071565311, 061488510,
061495811, 070152011,CALIBRATION BLOCK 试块
AWS IIV BLOCK TYPE IICOUPLANT 耦合剂
C.M.CMATERIAL/THICKNESS 材料厚度
A709M-HPS-485WT2-Z 75mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18*18 mm	Changchao	45 °	2.5 MHz	18*18 mm
Changchao	0 °	2.5 MHz	20 mm	Reference Level 参考灵敏度		20dB	

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY							
									不连续位置(mm)							
a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y								
SSD1-SA335-1A(1B)		69.0				34									ACC.	
		44.5				33									ACC.	

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EXAMINED BY 主探

Ma Jizhong 2008.07.23

LEVEL-II SIGN

DATE

REVIEWED BY 审核:

Xia Rongqiang 2008.07.23

LEVEL-II SIGN

DATE

质量经理 / QCM

Huban 2008.07.23

签字 SIGN / 日期 DATE

用户 CUSTOMER

签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-406 DATE日期 2008.08.06 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: SA27(S) TOWER(S) 43M DIAGRAGM CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4

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 CALIBRATION DUE DATE 仪器校正有效期 Dec. 28th, 2008

EQUIPMENT 设备 MT YOKE MANUFACTURER 制造商 PARKER MODEL NO. 样式编号 B310S SERIAL NO. 连续编号 5620 5395 5617

MAGNETIZING METHOD 磁化方法 Continuous magnetic yoke 磁轭式连续法 CURRENT 电流 AC

PARTICLE TYPE 磁粉类型 Dry magnet powder 干磁粉 YOKE SPACING 磁轭间距 70~150mm

MATERIAL TO BE EXAMINED 检测材料 WELDING 焊接件 CASTING 铸件 FORGING 锻造 Material & thickness 母材,厚度 A709M-HPS-485WT2-Z 75/50/40mm

WELDING PROCESS 焊接方法 SMAW 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			
SSD1-SA27B/B-1				ACC.		
SSD1-SA27B/B-2				ACC.		
SSD1-SA27B/B-13				ACC.		
SSD1-SA27B/B-14				ACC.		
SSD1-SA27B/B-5				ACC.		
SSD1-SA27B/B-6				ACC.		
SSD1-SA27B/B-9				ACC.		
SSD1-SA27B/B-10				ACC.		

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EXAMINED BY 主探 Wang Wei REVIEWED BY 审核 Xu Hai

LEVEL-I SIGN 签名 / DATE日期 08.08.06. LEVEL-II SIGN / DATE日期 08.8.06

质量经理 / QCM Hu Kang 2008.7.13 用户 CUSTOMER

签字 SIGN / 日期 DATE 签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-418		DATE日期 2008.08.08	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: SA27 TOWER(S) 43M DIAPHRAGM		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范编号 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 th , 2008	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5620 5395 5617	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
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	Material & thickness 母材, 厚度	A709M-HPS-485WT2-Z 75/60/40mm	
WELDING PROCESS 焊接方法	SMAW	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			
SSD1-SA27B/B-3				ACC.		
SSD1-SA27B/B-4				ACC.		
SSD1-SA27B/B-15				ACC.		
SSD1-SA27B/B-16				ACC.		
SSD1-SA27B/B-7				ACC.		
SSD1-SA27B/B-8				ACC.		
SSD1-SA27B/B-11				ACC.		
SSD1-SA27B/B-12				ACC.		
BLANK						

EXAMINED BY 主探 <u>Xu Hai</u>	REVIEWED BY 审核 <u>Cai Xin</u>
LEVEL-II SIGN 签名 / DATE日期 <u>08.8.8</u>	LEVEL-II SIGN / DATE日期 <u>08-08.08</u>
质量经理 / QCM <u>Hu Guang</u> <u>2008.08.13</u>	用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-417 DATE日期 2008.08.07 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: SA285+SA27 TOWER(S) 43M DIAGRAGM CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4

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 CALIBRATION DUE DATE 仪器校正有效期 Dec. 28th, 2008

EQUIPMENT 设备 MT YOKE MANUFACTURER 制造商 PARKER MODEL NO. 样式编号 B310S SERIAL NO. 连续编号 5620 5395 5617

MAGNETIZING METHOD 磁化方法 Continuous magnetic yoke 磁轭式连续法 CURRENT 电流 AC

PARTICLE TYPE 磁粉类型 Dry magnet powder 干磁粉 YOKE SPACING 磁轭间距 70~150mm

MATERIAL TO BE EXAMINED 检测材料 WELDING 焊接件 CASTING 铸件 FORGING 锻造 Material & thickness 母材, 厚度 A709M-345T2+A709M-HPS-485WT2 75/60/mm

WELDING PROCESS 焊接方法 FCAW 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			
SSD1-SA27A/B-7				ACC.		
SSD1-SA27A/B-8				ACC.		
BLANK						

EXAMINED BY 主探 Xu Hai REVIEWED BY 审核 Cai Xin

LEVEL - II SIGN 签名 / DATE 日期 08.07 LEVEL-II SIGN / DATE 日期 2008-08-07

质量经理 / QCM Hu Kang 用户 CUSTOMER

签字 SIGN / 日期 DATE 签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-194

DATE 2008.06.23

PAGE 1 OF 2

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 43M LOWER DIAPHRAGM
部件名称 (S)DRAWING NO.: SA285
图号CALTRANS CONTRACT NO.: 04-0120F4
加州工程编号REFERENCING CODE 参考规范
AWS D1.5-2002ACCEPTANCE STANDARD 接受标准
AWS D1.5-2002(Table 6.3)PROCEDURE NO. 程序编号
ZPQC-UT-01WELDING PROCESS 焊接方法
FCAWJOINT TYPE 焊缝类型
BUTTCALIBRATION DUE DATE 仪器校正有效期
DEC. 28th, 2008EQUIPMENT 设备
UT SCOPEMANUFACTURER 制造商
PANAMETRICSMODEL NO. 样式编号
EPOCH-4BSERIAL NO. 序列编号
071565311, 061488510,
061495811, 070152011.CALIBRATION BLOCK 试块
AWS IIV BLOCK TYPE IICOUPLANT 耦合剂
C.M.CMATERIAL/THICKNESS 材料厚度
A709M-345T2 / 60mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18*18 mm	Changchao	60 °	2.5 MHz	18*18 mm
Changchao	0 °	2.5 MHz	20 mm				

Reference Level 参考灵敏度

20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY						
									不连续位置(mm)						
a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y							
SSD1-SA335-2A/B															*
SSD1-SA335-3A/B															*
SSD1-SA335-4A/B		69.4				33								ACC.	
		59.4				34								ACC.	
SSD1-SA335-5A/B		69.4				33								ACC.	
		59.4				34								ACC.	

EXAMINED BY 主探

REVIEWED BY 审核:

LEVEL-II SIGN / DATE

LEVEL-II SIGN / DATE

质量经理 / QCM

用户 CUSTOMER

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-061 DATE 2008.05.06 PAGE 1 OF 1 Revision No: 0

PROJECT NO.: 工程编号 ZP06-787 CONTRACTOR: CALTRANS

ITEMS NAME: 23M UPPER DIAPHRAGM DRAWING NO.: SA238(E), P414(E) CALTRANS CONTRACT NO.: 04-0120F4
 部件名称 图号 加州工程编号

REFERENCING CODE 参考规范 ACCEPTANCE STANDARD 接受标准 PROCEDURE NO. 程序编号
 AWS D1.5-2002 AWS D1.5-2002(Table 6.3) ZPQC-UT-01

WELDING PROCESS 焊接方法 JOINT TYPE 焊缝类型 CALIBRATION DUE DATE 仪器校正有效期
 SAW BUTT DEC. 28th, 2008

EQUIPMENT 设备 MANUFACTURER 制造商 MODEL NO. 样式编号 SERIAL NO. 序列编号
 UT SCOPE PANAMETRICS EPOCH-4B 071565311, 061488510,
 061495811, 070152011,

CALIBRATION BLOCK 试块 COUPLANT 耦合剂 MATERIAL/THICKNESS 材料厚度
 AWS IIW BLOCK TYPE II C.M.C A709M-HPS-485WT2-Z/ 75mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70°	2.5 MHz	18x18 mm	Changchao	45°	2.5 MHz	18x18 mm
Changchao	0°	2.5 MHz	20 mm	Reference Level	参考灵敏度		20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5 0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)							
									a	b	c	d	Length 长度			Sound Path 声程
ESD1-SA238A/B-4A/4B		68.7				35										ACC.
		44.6				35										ACC.
ESD1-SA238A/B-3A/3B		68.7				35										ACC.
		44.6				35										ACC.

BLANK

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EXAMINED BY 主探 REVIEWED BY 审核:
Xu Huirong 2008.05.06 *Yu Ronggang* 2008.05.06
 LEVEL-II SIGN / DATE LEVEL-II SIGN / DATE

质量经理 / QCM 用户 CUSTOMER
Hui Chang 2008.5.15 _____
 签字 SIGN / 日期 DATE 签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-077

DATE日期 2008.05.07

PAGE 页码 1/1

Revision No: 0

PROJECT NO.

工程编号:

ZP06-787

CONTRACTOR:

用户:

CALTRANS

DRAWING NO.

图号:

SA238(E),P414(E)
23M UPPER DIAPHRAGM

CALTRANS CONTRACT NO.:

加州工程编号

04-0120F4

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

CALIBRATION DUE DATE

仪器校正有效期

Dec. 28, 2008

EQUIPMENT 设备

MT YOKE

MANUFACTURER 制造商

PARKER

MODEL NO. 样式编号

B310S

SERIAL NO. 连续编号

5617 5395 5360

MAGNETIZING

METHOD磁化方法

Continuous magnetic yoke

磁轭式连续法

CURRENT

电流

AC

PARTICLE TYPE

磁粉类型

Dry magnet powder

干磁粉

YOKE SPACING

磁轭间距

70~150mm

MATERIAL TO BE

EXAMINED

检测材料

WELDING 焊接件

CASTING 铸件

FORGING 锻造

Material & thickness

母材,厚度

A709M-HPS-485WT2-Z

75mm

WELDING PROCESS

焊接方法

SAW

TYPE OF JOINT

焊缝类型

BUTT

WELD I.D.

焊缝编号

DISCONTINUITY不连续性

INDICATION

指示

TYPE

类型

LENGTH IN

mm

长度

ACCEPT

接受

REJECT

拒收

REMARKS

备注

ESD1-SA238A/B-4A/4B

ACC.

ESD1-SA238A/B-3A/3B

ACC.

BLANK

EXAMINED BY主操

Edincai

LEVEL-II SIGN 签名 /

DATE日期

2008.5.7

REVIEWED BY 审核

wang wei

LEVEL-II SIGN /

DATE日期

2008.5.7

质量经理 / QCM

Huifang

2008.5.15

用户 CUSTOMER

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-419

DATE 2008.09.14

PAGE 1 OF 1

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 23M LOWER DIAPHRAGM

DRAWING NO.: SA287(E), 306(E)

CALTRANS CONTRACT NO.: 04-0120F4

部件名称

图号

加州工程编号

REFERENCING CODE 参考规范

ACCEPTANCE STANDARD 接受标准

PROCEDURE NO. 程序编号

AWS D1.5-2002

AWS D1.5-2002(Table 6.3)

ZPQC-UT-01

WELDING PROCESS 焊接方法

JOINT TYPE 焊缝类型

CALIBRATION DUE DATE 仪器校正有效期

SAW

BUTT

DEC. 28ST, 2008

EQUIPMENT 设备

MANUFACTURER 制造商

MODEL NO. 样式编号

SERIAL NO. 序列编号

UT SCOPE

PANAMETRICS

EPOCH-4B

071565311, 061488510,

051495811, 070152011,

CALIBRATION BLOCK 试块

COUPLANT 耦合剂

MATERIAL/THICKNESS 材料厚度

AWS IIW BLOCK TYPE II

C.M.C

A709M-HPS-485WT2-Z

75mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70°	2.5 MHz	18*18 mm	Changchao	45°	2.5 MHz	18*18 mm
Changchao	0°	2.5 MHz	20 mm				

Reference Level 参考灵敏度

20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探头角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY						
									不连续位置(mm)						
a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y							
ESD1-SA287-4A(4B)		70				34								ACC.	
		45				34								ACC.	

BLANK

EXAMINED BY 主

X. Donggang 2008.09.14
LEVEL-II SIGN / DATE

REVIEWED BY 审核:

[Signature]
LEVEL-II SIGN / DATE

顾客地址 / COM

签字 SIGN / 日期 DATE

客户 CUSTOMER

签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-453		DATE日期 2008.08.15	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: SA287(E), SA238(E) THE 1ST LIFTING TOWER(E) 23M DIAPHRAGM		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
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	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 ST , 2008	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5620 5395 5617	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
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	Material & thickness 母材, 厚度	A709M-HPS-485WT2-Z 75/60/40mm	
WELDING PROCESS 焊接方法	SMAW	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			
ESD1-SA238B/B-3				ACC.		
ESD1-SA238B/B-4				ACC.		
ESD1-SA238B/B-5				ACC.		
ESD1-SA238B/B-6				ACC.		
ESD1-SA238B/B-11				ACC.		
ESD1-SA238B/B-12				ACC.		
ESD1-SA238B/B-15				ACC.		
ESD1-SA238B/B-16				ACC.		
BLANK						

EXAMINED BY 主操 <i>[Signature]</i>	REVIEWED BY 审核 <i>Cai Xinlin</i>
LEVEL - II SIGN 签字 <i>[Signature]</i> / DATE 日期 2008.8.15	LEVEL-II SIGN / DATE 日期 2008.08.15
质量经理 / QCM <i>[Signature]</i> 2008-08-15	用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-454		DATE日期 2008.08.15	PAGE OF页码 1/1	Revision No: 0
PROJECT NO. 工程编号: ZP08-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: SA238(E) THE 1ST LIFTING TOWER(E) 23M DIAPHRAGM		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
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	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 th , 2008	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5620 5395 5617	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
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 锻件	Material & thickness 母材, 厚度	A709M-HPS-485WT2-Z 75/60/40mm	
WELDING PROCESS 焊接方法	SMAW	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			
ESD1-SA238B/B-1				ACC.		
ESD1-SA238B/B-2				ACC.		
ESD1-SA238B/B-7				ACC.		
ESD1-SA238B/B-8				ACC.		
ESD1-SA238B/B-9				ACC.		
ESD1-SA238B/B-10				ACC.		
ESD1-SA238B/B-13				ACC.		
ESD1-SA238B/B-14				ACC.		
BLANK						

EXAMINED BY 主检 <i>[Signature]</i>	REVIEWED BY 审核 <i>Cai Xinlin</i>
LEVEL-II SIGN 签名 / DATE日期 <i>[Signature]</i> 2008.8.15	LEVEL-II SIGN / DATE日期 <i>[Signature]</i> 2008-08-15
质量经理 / QCM <i>[Signature]</i> 2008-08-15	用户CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-287

DATE 2008.08.03

PAGE 1 OF 2

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 23M UPPER DIAPHRAGM

DRAWING NO.: ESD1-SA263

CALTRANS CONTRACT NO.: 04-0120F4

部件名称 EDGE PLATE

型号

加州工程编号

REFERENCING CODE 参考标准

ACCEPTANCE STANDARD 接受标准

PROCEDURE NO. 程序编号

AWS D1.5-2002

AWS D1.5-2002(Table 6.3)

ZPQC-UT-01

WELDING PROCESS 焊接方法

JOINT TYPE 焊缝类型

CALIBRATION DUE DATE 仪器校正有效期

FCAW

BUTT

DEC. 28th, 2008

EQUIPMENT 设备

MANUFACTURER 制造商

MODEL NO. 样式编号

SERIAL NO. 序列编号

UT SCOPE

PANAMETRICS

EPOCH-4B

071565311, 061488510,

CALIBRATION BLOCK 试块

COUPLANT 耦合剂

MATERIAL/THICKNESS 材料厚度

061495811, 070152011,

AWS IIV BLOCK TYPE II

C.M.C

A709M-345T2

60mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70°	2.5 MHz	18*18 mm	Changchao	60°	2.5 MHz	18*18 mm
Changchao	0°	2.5 MHz	20 mm				

Reference Level 参考灵敏度

20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO.: 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEGs (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Reading	LOCATION OF DISCONTINUITY						
									不连续位置(mm)						
a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y							
ESD1-SA238A/B-5A5B															*
ESD1-SA238A/B-6A6B															*
ESD1-SA238A/B-7A7B		69.5					33								ACC.
		59.6					33								ACC.
ESD1-SA238A/B-8A8B															*
ESD1-SA238A/B-9A9B		69.5					33								ACC.

EXAMINED BY 主操

REVIEWED BY 审核:

Xu Bangong 2008.08.03
LEVEL-II SIGN / DATE

Xu Min 2008.08.03
LEVEL-II / SIGN / DATE

质量经理 / QCM

用户/CUSTOMER

Huifan 2008.08.03
SIGN / DATE

SIGN / DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO.报告编号 T787-UT-177

DATE 2008.06.17

PAGE 1 OF 2

Revision No: 0

PROJECT NO.:工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 23M LOWER DIAPHRAGM
部件名称 EDGE PLATE

DRAWING NO.:SA269
图号

CALTRANS CONTRACT NO.: 04-0120F4
加州工程编号

REFERENCING CODE 参考规范
AWS D1.5-2002

ACCEPTANCE STANDARD 接受标准
AWS D1.5-2002(Table 6.3)

PROCEDURE NO. 程序编号
ZPQC-UT-01

WELDING PROCESS 焊接方法
FCAW

JOINT TYPE 焊缝类型
BUTT

CALIBRATION DUE DATE 仪器校正有效期
DEC. 28th, 2008

EQUIPMENT 设备
UT SCOPE

MANUFACTURER 制造商
PANAMETRICS

MODEL NO. 样式编号
EPOCH-4B

SERIAL NO. 序列编号
071565311,061488510,
061495811, 070152011,

CALIBRATION BLOCK 试块
AWS IIV BLOCK TYPE II

COUPLANT 耦合剂
C.M.C

MATERIAL/THICKNESS 材料厚度
A709M-345T2 / 60mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18*18 mm	Changchao	60 °	2.5 MHz	18*18 mm
Changchao	0 °	2.5 MHz	20 mm	Reference Level	参考灵敏度		20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
									a	b	c	d	Length 长度		
ESD1-SA287-5A/5B															*
ESD1-SA287-6A/6B															*
ESD1-SA287-7A/7B															*
ESD1-SA287-8A/8B															*
ESD1-SA287-9A/9B															*
ESD1-SA287-10A/10B															*
ESD1-SA287-11A/11B		69.1				32								ACC.	

EXAMINED BY 主操

REVIEWED BY 审核:

Xu Ronggang 2008.06.17

Ma Jilong 2008.06.17

LEVEL - II SIGN / DATE

LEVEL - II SIGN / DATE

质量经理 / QCM

用户 CUSTOMER

Hu Kang 2008.06.15

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-012

DATE 2008.04.06

PAGE 1 OF 1

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 43M UPPER DIAPHRAGM

DRAWING NO.: SA234 (E), P1297 (E)

CALTRANS CONTRACT NO.: 04-0120F4

部件名称

图号

加州工程编号

REFERENCING CODE 参考规程

ACCEPTANCE STANDARD 接受标准

PROCEDURE NO. 程序编号

AWS D1.5-2002

AWS D1.5-2002(Table 6.3)

ZPQC-UT-01

WELDING PROCESS 焊接方法

JOINT TYPE 焊缝类型

CALIBRATION DUE DATE 仪器校正有效期

SAW

BUTT

Jan. 1ST, 2009

EQUIPMENT 设备

MANUFACTURER 制造商

MODEL NO. 样式编号

SERIAL NO. 序列编号

UT SCOPE

PANAMETRICS

EPOCH-4B

071565311, 061488510,

061495811, 070152011,

CALIBRATION BLOCK 试块

COUPLANT 耦合剂

MATERIAL/THICKNESS 材料厚度

AWS IIW BLOCK TYPE II

C.M.C

A709M-HPS-485WT2-Z/ 75 mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18x18 mm	Changchao	45 °	2.5 MHz	18x18 mm
Changchao	0 °	2.5 MHz	20 mm	Reference Level 参考灵敏度			20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝识别编号	INDICATION NO. 指示号	PROBE ANGLE 探头角度	FROM FACE 检测面	LEG (位置)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷评定	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY							
									不连续位置(mm)							
a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y								
ESD1-SA234A/B-10A/10B		44.6				33									ACC.	
	1	68.2	A	1	38	32	6	0	30	107	40	-5	4300		REJ.	
	2	68.2	B	1	43	32	6	-5	35	107	40	0	4300		REJ.	
BLANK																

EXAMINED BY 主操

REVIEWED BY 审核:

Xue Haitong 2008.04.06

Ma Ji Long 2008.04.06

LEVEL - II SIGN / DATE

LEVEL - II SIGN / DATE

质量经理 / QCM

用户 CUSTOMER

Hu Gang 2008.4.8

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-013		DATE日期 2008.04.13	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:	SA234(E)+P1297(E) 43M UPPER DIAPHRAGM	CALTRANS CONTRACT NO.:		04-0120F4		
REFERENCING CODE 参考规范编号	ACCEPTANCE STANDARD 接受标准	PROCEDURE NO. 程序编号	CALIBRATION DUE DATE 仪器校正有效期			
AWS D1.5-2002	AWS D1.5-2002	ZPQC-MT-01	Dec. 28, 2008			
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395			
MAGNETIZING METHOD磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC			
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm			
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	Material & thickness 母材,厚度	A709M-HPS-485WT2-Z 75/75mm			
WELDING PROCESS 焊接方法	SAW	TYPE OF JOINT 焊缝类型	BUTT			
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			
ESD1-SA234A/B-10A				ACC.		
ESD1-SA234A/B-10B				ACC.		
BLANK						
EXAMINED BY 主检 <u>Bo Timmi</u> 2008.04.13			REVIEWED BY 审核 <u>Cai Xinxin</u>			
LEVEL-II SIGN 签名 / DATE日期			LEVEL-II SIGN / DATE日期 2008.04.13			
质量经理 / QCM <u>Hu Gang</u> 2008.4.16			用户CUSTOMER			
签字 SIGN / 日期 DATE			签字 SIGN / 日期 DATE			



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-044

DATE 2008.04.25

PAGE 1 OF 1

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: EASTERN TOWER 43M
部件名称 LOWER DIAPHRAGM

DRAWING NO.: SA268(E)+P590(E)
图号

CALTRANS CONTRACT NO.: 04-0120F4
加州工程编号

REFERENCING CODE 参考规范
AWS D1.5-2002

ACCEPTANCE STANDARD 接受标准
AWS D1.5-2002(Table 6.3)

PROCEDURE NO. 程序编号
ZPQC-UT-01

WELDING PROCESS 焊接方法
SAW

JOINT TYPE 焊缝类型
BUTT

CALIBRATION DUE DATE 仪器校正有效期
DEC. 28th, 2008

EQUIPMENT 设备
UT SCOPE

MANUFACTURER 制造商
PANAMETRICS

MODEL NO. 样式编号
EPOCH-4B

SERIAL NO. 序列编号
071565311, 061488510,
061495811, 070152011.

CALIBRATION BLOCK 试块
AWS IIV BLOCK TYPE II

COUPLANT 耦合剂
C.M.C.

MATERIAL/THICKNESS 材料厚度
A709M-HPS-485WT2-Z / 75mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18x18 mm	Changchao	45 °	2.5 MHz	18x18 mm
Changchao	0 °	2.5 MHz	20 mm	Reference Level 参考灵敏度			20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注		
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)								
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y				
ESD1-SA268-16A/16B		68.5				36											
		44.5				34											
BLANK																	

EXAMINED BY 主探

L. Chen 2008.04.25

LEVEL-II SIGN / DATE

REVIEWED BY 审核:

Xuehairong 2008.04.25

LEVEL-II SIGN / DATE

质量经理 / QCM

Hu Gang 2008.5.1

签字 SIGN / 日期 DATE

用户 CUSTOMER

签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-047		DATE日期 2008.04.27		PAGE 页码 1/1		Revision No: 0	
PROJECT NO. 工程编号: ZP08-787			CONTRACTOR: 用户: CALTRANS				
DRAWING NO. 图号: SA268(E),P590(E) 43M LOWER DIAPHRAGM			CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4				
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		CALIBRATION DUE DATE 仪器校正有效期 Dec. 28, 2008	
EQUIPMENT 设备 MT YOKE		MANUFACTURER 制造商 PARKER		MODEL NO. 样式编号 B310S		SERIAL NO. 连续编号 5360 5362 5395	
MAGNETIZING METHOD 磁化方法		Continuous magnetic yoke 磁轭式连续法		CURRENT 电流		AC	
PARTICLE TYPE 磁粉类型		Dry magnet powder 干磁粉		YOKE SPACING 磁轭间距		70~150mm	
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		Material & thickness 母材,厚度		A709M-HPS-485WT2-Z 75mm	
WELDING PROCESS 焊接方法		SAW		TYPE OF JOINT 焊缝类型		BUTT	
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				
ESD1-SA268-16A/16B				ACC.			
BLANK							
EXAMINED BY 主操 <u>Zhou Dongjun</u> LEVEL-II SIGN 签字 / DATE日期 2008.4.27				REVIEWED BY 审核 <u>Cai Xinxin</u> LEVEL-II SIGN / DATE日期 2008.04.27			
质量经理 / QCM <u>Hu Gang</u> 2008.5.1				用户 CUSTOMER			
签字 SIGN / 日期 DATE				签字 SIGN / 日期 DATE			



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T767-MT-460		DATE 日期 2008.08.15	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: SA234(E) THE 1ST LIFTING TOWER(E) 43M DIAPHRAGM		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范编号 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 th , 2008	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5620 5395 5617	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
MATERIAL TO BE EXAMINED 检测材料	√ WELDING 焊接件 □ CASTING 铸件 □ FORGING 锻件	Material & thickness 母材, 厚度	A709M-HP5-485WT2-Z 75/60/40mm	
WELDING PROCESS 焊接方法	SMAW	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			
ESD1-SA234B/B-1				ACC.		
ESD1-SA234B/B-2				ACC.		
ESD1-SA234B/B-7				ACC.		
ESD1-SA234B/B-8				ACC.		
ESD1-SA234B/B-9				ACC.		
ESD1-SA234B/B-10				ACC.		
ESD1-SA234B/B-13				ACC.		
ESD1-SA234B/B-14				ACC.		
BLANK						

EXAMINED BY 审核 <i>Brannyu</i>	REVIEWED BY 审核 <i>Cal Xiang</i>
LEVEL - II SIGN 签名 / DATE 日期 <i>2008.8.15</i>	LEVEL-II SIGN / DATE 日期 <i>08-01-15</i>
质量经理 / QCM <i>2008.8.15</i>	用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-461

DATE 日期 2008.08.15

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: SA234(E) THE 1ST LIFTING TOWER(E) 43M DIAPHRAGM		CALTRANS CONTRACT NO.: 杭州工程编号 04-0120F4	
REFERENCING CODE 参考规范编号 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 th , 2008
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5620 5395 5617
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
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 锻件	Material & thickness 母材, 厚度	A709M-HPS-485WT2-Z 75/60/40mm
WELDING PROCESS 焊接方法	SMAW	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			
ESD1-SA234B/B-3				ACC.		
ESD1-SA234B/B-4				ACC.		
ESD1-SA234B/B-5				ACC.		
ESD1-SA234B/B-6				ACC.		
ESD1-SA234B/B-11				ACC.		
ESD1-SA234B/B-12				ACC.		
ESD1-SA234B/B-14				ACC.		
ESD1-SA234B/B-15				ACC.		
BLANK						

EXAMINED BY 主检 <u>Bo Tin kui</u>	REVIEWED BY 审核 <u>Cal xin jin</u>
LEVEL - II SIGN 签名 / DATE 日期 <u>2008.08.15</u>	LEVEL-II SIGN / DATE 日期 <u>08.08.15</u>
质量经理 / QCM <u>Wubai</u> <u>2008.08.15</u>	用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-223

DATE 2008.07.15

PAGE 1 OF 2

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 43M UPPER DIAPHRAGM

DRAWING NO.: ESD1-SA346

CALTRANS CONTRACT NO.: 04-0120F4

部件名称 EDGE PLATE

图号

加州工程编号

REFERENCING CODE 参考规范

ACCEPTANCE STANDARD 接受标准

PROCEDURE NO. 程序编号

AWS D1.5-2002

AWS D1.5-2002(Table 6.3)

ZPQC-UT-01

WELDING PROCESS 焊接方法

JOINT TYPE 焊缝类型

CALIBRATION DUE DATE 仪器校正有效期

FCAW

BUTT

DEC. 28th, 2008

EQUIPMENT 设备

MANUFACTURER 制造商

MODEL NO. 样式编号

SERIAL NO. 序列编号

UT SCOPE

PANAMETRICS

EPOCH-4B

071565311, 061488510,

061495811, 070152011,

CALIBRATION BLOCK 试块

COUPLANT 耦合剂

MATERIAL/THICKNESS 材料厚度

AWS IIV BLOCK TYPE II

C.M.C

A709M-345T2 60mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18*18 mm	Changchao	60 °	2.5 MHz	18*18 mm
Changchao	0 °	2.5 MHz	20 mm				

Reference Level 参考灵敏度

20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					DISCONTINUITY EVALUATION 缺陷估计	REMARK 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY						
									不连续位置(mm)						
a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y							
ESD1-SA234A/B-3A/B															*
ESD1-SA234A/B-4A/B															*
ESD1-SA234A/B-5A/B															*
ESD1-SA234A/B-6A/B															*
ESD1-SA234A/B-7A/B															*
ESD1-SA234A/B-11A/B															*

EXAMINED BY 主操

REVIEWED BY 审核:

Xu Donggang 2008.07.15
LEVEL-II SIGN / DATE

Zshuigun
LEVEL-II SIGN / DATE 2008.07.15

质量经理 / QCM

用户 CUSTOMER

主操 SIGN / 日期 DATE

主操 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-256

DATE 2008.07.24

PAGE 1 OF 2

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: 43M LOWER DIAPHRAGM

DRAWING NO.: ESD1-SA268

CALTRANS CONTRACT NO.: 04-0120F4

部件名称 EDGE PLATE

图号

加州工程编号

REFERENCING CODE 参考规范

ACCEPTANCE STANDARD 接受标准

PROCEDURE NO. 程序编号

AWS D1.5-2002

AWS D1.5-2002(Table 6.3)

ZPQC-UT-01

WELDING PROCESS 焊接方法

JOINT TYPE 焊缝类型

CALIBRATION DUE DATE 仪器校正有效期

FCAW

BUTT

DEC. 28ST, 2008

EQUIPMENT 设备

MANUFACTURER 制造商

MODEL NO. 样式编号

SERIAL NO. 序列编号

UT SCOPE

PANAMETRICS

EPOCH-4B

071565311, 061488510,

061495811, 070152011,

CALIBRATION BLOCK 试块

COUPLANT 耦合剂

MATERIAL/THICKNESS 材料厚度

AWS IIV BLOCK TYPE II

C.M.C

A709M-345T2

60mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70 °	2.5 MHz	18*18 mm	Changchao	60 °	2.5 MHz	18*18 mm
Changchao	0 °	2.5 MHz	20 mm				

Reference Level 参考灵敏度

20dB

Base metal inspected per AWS D1.5-2002 Section 6.19.5

0 ° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY						
									不连续位置(mm)						
a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From'X 距X	From'Y 距Y							
ESD1-SA268-3A3B															*
ESD1-SA268-4A4B															*
ESD1-SA268-5A5B		68.4				33								ACC.	
		58.8				33								ACC.	
ESD1-SA268-6A6B		68.4				33								ACC.	

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EXAMINED BY 主探

REVIEWED BY 审核:

Yu Ronggang 2008.07.24
LEVEL-II SIGN / DATE

Xue Haitong 2008.07.24
LEVEL-II SIGN / DATE

质量经理 / QCM

用户 CUSTOMER

Huifang 2008-07-24

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE

Attachment-1. CONTINUED



REPORT OF ULTRASONIC EXAMINATION

REPORT NO. 报告编号 T787-UT-256

DATE 2008.07.24

PAGE 2 OF 2

Revision No: 0

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置							
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Face 'A' 距表面深度	From 'X' 距X	From 'Y' 距Y			
ESD1-SA268-5A6B		58.8				33									ACC.	
ESD1-SA268-7A7B																*
ESD1-SA268-8A8B																*
ESD1-SA268-9A9B																*
ESD1-SA268-17A17B																*

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EXAMINED BY 主探

Xie Rongqiang 2008.07.24
LEVEL-II SIGN / DATE

REVIEWED BY 审核:

Xue Hairong 2008.07.24
LEVEL-II SIGN / DATE

质量经理 / QCM

Huqiang 2008.07.24

用户 CUSTOMER

签字 SIGN / 日期 DATE

签字 SIGN / 日期 DATE

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, PRC**Report No:** NCS-000183**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 16-Feb-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0159**Type of problem:**

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

Date the Non-Conformance Report was written: 17-Aug-2008**Description of Non-Conformance:**

ABF allowed ZPMC to ship a total of five (5) Tower Double Diaphragms (ESD1-47.6m, ESD1-28m, SSD1-43m, ESD1-23m and ESD1-43m) for machining before fabrication and inspection/testing were completed; this was not in accordance with their approved fabrication plan. Furthermore, the noted double diaphragms assemblies were not accepted by ABF Quality Control (QC) prior to shipping due to weld discontinuities in need of repair, heat straightening not completed, required nondestructive testing not completed, and weld terminations not acceptable to project specifications. Any repairs made to these diaphragm assemblies after machining may negatively affect the final geometry of the Tower Shaft in localized areas.

Contractor's proposal to correct the problem:

ZPMC understands that they violated the sequence of the fabrication procedure at their own risk. ABF has instructed ZPMC to follow the fabrication procedure. If the fabrication cannot be completed as written, ZPMC shall submit a revised fabrication procedure for approval.

Corrective action taken:

ZPMC understands that the fabrication procedures must be followed. NDT records verifying sound welds for the affected diaphragms have been submitted. All diaphragms have since been jointly green tagged by ZPMC, ABF, and the Department.

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 Serge Sinevod, +86 134-8257-0045, who represents the Office of Structural Materials for your project.

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Sinevod,Serge

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer