



VG METAL TECHNOLOGY (M) SDN BHD

Inspection Release Certificate

CERTIFICATE NO.: VG/IRC/005

DRAWING NO. : VG/DWG/AFB/001, REV 0

MODEL NO. : N/A

MANUFACTURER SERIAL'S NO. : AS1002-10

QUANTITY: 1 UNIT

PROJECT NAME: A-FRAME

CLIENT: ALLIANCE SEAWORKS SDN BHD
(Formerly known as Bumi Magnitud S/B)

P.O/CONTRACT NO. : ABD0001

THAT HAS BEEN FABRICATED AT THE MANUFACTURER'S WORKSHOP
AND HAS BEEN FOUND TO BE IN CONFORMANCE WITH THE
REQUIREMENTS, SPECIFICATIONS, DRAWINGS AND ALL WORKS
ACCORDING TO GENERAL TERMS AND CONDITIONS ARE
COMPLETED.

Approved by, 	Approved by, 
Name: Ravichandran Date: 18/05/2010 Department: QA / QC Dept	Name: Venukanna Date: 18/05/2010 Department: Project Management Dept

 VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD									
APPENDIX 11		DOC NO: VG-SOP-14b-11		Revision 1 Date: 04/04/2009		REF NO. VG/ITP005			
INSPECTION AND TEST PLAN									
Client: ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud SDN BHD)		Manufacturer ID: AS1002-10		Prepared By: Chandran		Verified By: Venukanna		Approved By (if applicable)	
Project: A-FRAME		Model Name: N/A							
Drawing No: VG/DWG/AFB/001, REV 0									
D : Document Review Client or 3rd party shall review inspection record				W : Witness Client or 3rd party witness inspection (requires notification). H : Hold Point Client or 3rd party requires notification of the inspection or test timing and inspection shall be carried out with client or 3rd party attendance.					
SW : Spot Witness VGOCI not required to notify client or 3rd party the timing of inspection/ the client or 3rd party are not present.				Note : "H" in VG column is intended for VG QC Dept.					
test. Spot witness may be performed during witness inspection or when deemed necessary				M : Monitor					
Ref	PROCESS/ OPERATION DESCRIPTION	ACTIVITY REQUIRED	CONTROLLING SPEC./STANDARD PROC.	ACCEPTANCE CRITERIA	VERIFYING DOCUMENTS	VG	Client	3rd PARTY SURVEYOR	
INSPECTION INVOLVEMENT									
A.	DOCUMENTATION								
1	SPECIFICATION DOCUMENT OF CLIENT	Review client specifications, finalize deviations & amendments, clarified technical issues	• As per client drawing		• Sign Off Client spec (if required)	H			
2	WELDING PROCEDURE SPECIFICATIONS	Study and comply to the clients' requirements. Submit WPS and WPQR	• WPS/GMAW009	• AWS D1.1	• Sign Off ITP • Sign Off WPS	H			
3	WELDING QUALIFICATION REPORT	Comply to clients' requirement and submit list of welders with welders qualifications for approval.	• WPS/GMAW009	• AWS D1.1	• Sign Off ITP • Welders Certificates	H			
B.	MATERIALS								
1	RECEIPT OF MATERIAL AT YARD	Check all materials are received together with delivery note, size, quality, etc. visually inspect material to detect for any irregularities on the surface of material.	• VG-SOP-14a		• Sign Off Incoming Material Inspection Record	H			
2	VERIFICATION ON MATERIALS	Verify material received is conforming the spec. Check materials against the mill cert received, and perform Heat Number transferring.	• VG-SOP-14a		• Sign Off ITP • Sign Off Material Traceability Report (VG-SOP-14a-03)	H			
3	IDENTIFICATION OF MATERIALS	All received material should be marked according to the Material traceability record.	• VG-SOP-14a			H			
C.	FABRICATION								
1	MATERIAL SHEARING AND FORMING	Shear and Form Material as per shop drawing	• As per Fabrication Drawing		• Sign Off ITP	H			
2	MATERIAL JOINT FIT UP	Fit up inspection prior to welding	• As per Fabrication Drawing		• Sign Off ITP • Sign Off Fit Up Report	H			



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

WELDER LIST RECORD

REF NO : VG/WLST/001

Serial No.:

AS 1002-10

Model No.:

N/A

Client Name:

ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)

Project Name:

A-FRAME

No.	Welder Name	Welder Id No.		Passport No.	WPS No.		Position
		AWS D1.1			AWS D1.1		
1	ASHOK KUMAR	W35		B2897693	WPS/GMAW/009		3G
2	BABU	W36		Z0683082	WPS/GMAW/009		3G
3	MASUD ABU KALAM	W37		A0387757	WPS/GMAW/009		3G
4	MUKTER ALI	W38		X0057304	WPS/GMAW/009		3G
5	MOHAMMED MUNNA	W39		V0317216	WPS/GMAW/009		3G
6	SOHEL RANA	W40		Z0425687	WPS/GMAW/009		3G
7	UZZAL	W41		W0036925	WPS/GMAW/009		3G
8	KABIR HOSSAIN	W42		A0766019	WPS/GMAW/009		3G

CHECKED BY : _____



VERIFIED BY : _____



APPROVED BY : _____



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD (Co.No. 669923-T)
VG METAL TECHNOLOGY (M) SDN BHD (Co.No. 449738-D)

WELDING PROCEDURE SPECIFICATION (WPS)

AWS D1.1/D1.1M:2006 / DNV CN 2.7-1

Identification No : **WPS/ GMAW /009**

Company Name: **VG Offshore Containers International (M) S/B**
VG Metal Technology (M) S/B

Revision: **0** Date: **09/04/2009** By: **Chandran**

Authorised by: **Venu** Date: **09/04/2009**

Welding Process(es): **GMAW**

Type - Manual ☐ Semi-Automatic ☒

Supporting PQR No.(s): **PQR/GMAW/009 & PQR/GMAW/009S**

Machine ☐ Automatic ☐

JOINT DESIGN USED

All bevel geometries approved by AWS D1.1
 Type : for PQR qualified Single 'V' with backing

Single ☒ Double Weld ☒

Backing : Yes ☒ No ☐

Backing Material : **EN10025 S355 J2G3 or equivalent**

Root Opening : **6 ~ 7mm** Root Face Dimension: **2 ~ 3mm**

Groove Angle : **60° -/+10°** Radius (J-U): **-**

Back Gouging : Yes ☒ No ☐ Method: **Air Carbon Arc**

POSITION

Position of Groove : **ALL** Fillet: **ALL**

Vertical Progression : Up ☒ Down ☐

ELECTRICAL CHARACTERISTICS

Transfer Mode (GMAW) Short-Circuiting ☐

Globular ☒ Spray ☐

Current: AC ☐ DCEP ☒ DCEN ☐ Pulsed ☐

Other: **N/A**

BASE METALS

Material Spec: **EN10025 (or as approved by DNV 2.7-1)**
S355J2G3 (or base metal similar in chemical/
mechanical properties as approved by DNV

Type or Grade: **2.7-1**

Thickness: **6mm to unlimited** Fillet: **ALL**

Diameter (Pipe): **Diameter (OD) above 600mm**

Filler Metals: **GMAW (Dia 1.0 & 1.2 mm)**

AWS Specification: **A 5.18**

AWS Classification: **ER70S-6**

Note: Minimum thickness at 3mm when CVN is not requirement

Tungsten Electrode (GTAW)

Size: **-**

Type: **-**

TECHNIQUE

Stringer or Weave Bead: **STRING & WEAVE**

Multi-pass or Single Pass (per side) : **MULTI-PASS**

Number of Electrodes: **ONE(1)**

Electrode Spacing: Longitudinal: **-**

Lateral: **-**

Angle: **-**

Contact Tube to Work Distance: **15mm - 20mm**

Peening: **NONE**

Interpass Cleaning: **Chipping, Wire Brush**
& Grinding

SHIELDING

Flux: **-** Gas: **CO2**

Composition: **100%**

Electrod-Flux (Class) Flow Rate: **CO2 (20-25L/MIN)**

Gas Cup Size: **16mm**

PREHEAT

Preheat Temp., Min. : **25°C**

Interpass Temp., Min.: **25°C** Max.: **250°C**

POSTWELD HEAT TREATMENT

Temp.: **-**

Time : **-**

Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed (cm/min)	Heat Input (KJ/cm)	
		Class	Diam.	Type & Polarity	Amps. or Wire Feed speed				
1 ~ 3	GMAW	ER70S-6	1.0	DC+VE	130~150	22.0~24.0	10.0~30.0	6.0~18.0	
4 ~ 5	GMAW	ER70S-6	1.2	DC+VE	130~160	22.0~24.0	10.0~30.0	10.0~18.0	

NOTE : PQR QUALIFIED IN 3G POSITION WITH CVN AT - 29°C





VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD

Procedure Qualification Record (PQR) # PQR/GMAW/ 009 Test Results

TENSILE TEST

Specimen No.	Width (mm)	Thickness (mm)	Area (mm ²)	Ultimate tensile load, (KN)	Ultimate unit Stress, (Mpa)	Character of failure and location
T1	20.20	24.09	486.62	29059.02	585.64	Ductile / Base Metal
T2	20.13	25.10	505.26	29865.11	579.67	Ductile / Base Metal

GUIDED BEND TEST

Specimen No.	Type of bend	Result	Remarks
S1	SIDE BEND	SATISFACTORY	NO VISIBLE DEFECT
S2	SIDE BEND	SATISFACTORY	NO VISIBLE DEFECT
S3	SIDE BEND	SATISFACTORY	NO VISIBLE DEFECT
S4	SIDE BEND	SATISFACTORY	OPENING OF 1.4mm at FUSION LINE

VISUAL INSPECTION

Appearance SATISFACTORY
Undercut NONE
Piping porosity NONE
Convexity NONE
Test date 8/4/2009
Witnessed by ABS CONSULTING (M) SDN BHD

Radiographic-ultrasonic examination

RT report no.: NDT/RT/57602-01/09 Result SATISFACTORY

UT report no.: NIL Result NIL

FILLET WELD TEST RESULTS

Minimum size multiple pass Maximum size single pass
Macroetch Macroetch

1. - 3. - 1. - 3. -
2. - 2. -

Other Tests

CHARPY V-NOTCH IMPACT TEST RESULTS

Specimen Size (mm)	Location	Test Temp. Deg. (°C)	Individual Value (J)			Average Value (J)
			1	2	3	
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-

All-weld-metal tension test

Hardness Test Results

REFER REPORT NO :

MAT/0866-01/09

Welder's name ASHOK KUMAR Clock no. - Stamp no. W35

Test conducted by NUSANTARA TECHNOLOGIES SDN BHD Laboratory

Test number MAT/0866-01/09

Per MUHAMAD RIDZUAN AB.AZIZ

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of AWS D1.1/AWS D1.1M, (2006) Structural Welding Code- Steel.



☒ REVIEWED
☒ WITNESSED
☒ VERIFIED
NAME: V.RABINDRA
DATE 22/04/09

Signed _____

Manufacture QAIQC Contractor

By : CHANDRAN

Title : Q.A. ENGINEER

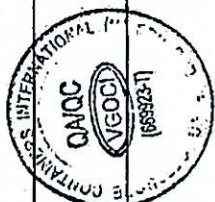
Date : 21/4/09



SHEET NO : 2/2
 DATE : 26/3/09
 REV. NO. : 0
 JOB NO. : -

WELDING DATA TEST RECORDS

WPS REF. NO : WPS/GMAW/009

CLIENT : FERGUSON SEACABS				WELDER'S NAME : ASHOK KUMAR				PASSPORT NO. :	B2897693							
PROJECT : MINI CONTAINER UK/AUSTRALIA				WELDER I.D. NO : W35				SERIAL NO. :	N/A							
PCS NO. STEP NO.	PASS NO.	LAYER NO.	WELDING MATERIAL			WELDING CONDITION						REMARKS				
			SFA NO.	TRADE NAME	MATERIAL CODED MARKING	SIZE	POSITION	AMPS	VOLTS	SPEED cm / min.	PREHEAT / RPM		INTERPASS	FLOW RATE	WIRE FEED SPEED	
9		7	AS-18		ER70S-6	1-0	3G	134	24	2'15"			142	25		TS (cm/min) HI (KJ/cm)
10		7	"		"	1-0	"	135	23	3'16"			117			13.3 14.5
11		7	"		"	1-0	"	134	23	3'50"			119			9.18 20.29
12		8	"		"	1-0	"	137	23	3'04"			170			7.83 23.63
13		8	"		"	1-0	"	135	22	3'15"			200			9.78 19.33
14		8	"		"	1-0	"	132	23	3'21"			235			9.23 19.3
																8.95 20.35
SKETCH			Refer page 1/2			MATERIAL			EN10025 S355J2G3 H1N BL47204							
ENTERED / CHECKED BY																
VERIFIED / CONFIRMED BY																

Title		Page 1 of 5
MECHANICAL TEST REPORT		
Your Ref.	Report No.	Date Received
Our Ref. NT/091196-01	MAT/0866-01/09	April 01, 2009
Client		Date Tested April 08, 2009
VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN. BHD. No. D17, Lot 10439 Jalan Sungai Jati 41000 Klang Selangor Darul Ehsan		
Project	MINI CONTAINER UK / AUSTRALIA	
Details		
Subject	: To conduct Mechanical Test on WPS Test Plate	
WPS No.	: WPS/GMAW/009	
Roll No.	: DL 47204	
Heat No.	: 13235	
Material Specification	: EN 10025 S355 J2G3	
Material Thickness	: 25.0 mm	
Welding Process	: GMAW	
Weld Configuration	: Single Vee	
Weld Position	: 3 G	
Welder's Particular	: ASHOK KUMAR - [P/P NO: B 2897963] - (W 35)	
Test Required	: i. Tensile Test 2 pcs. ii. Bend Test 4 pcs. iii. Hardness Test 1 pc. iv. Macro Etch Examination 1 pc.	
Test Specification	: AWS D1.1 / D1.1M - 2006 EDITION / DNV 2.7 - 1	
 REVIEWED WITHHELD - 08/04/09 VERIFIED - 08/04/09 NAME: V. RASNDRA DATE: 22/04/09 		
Tested by :	Prepared by :	Reviewed by :
Muhamad Ridzuan Ab. Aziz, Azhar Mohd. Nazir Lab. Technician (No Signature Required)	Aleefah Hosni Lab. Supervisor	Zaidi Ali Sr. Engineer

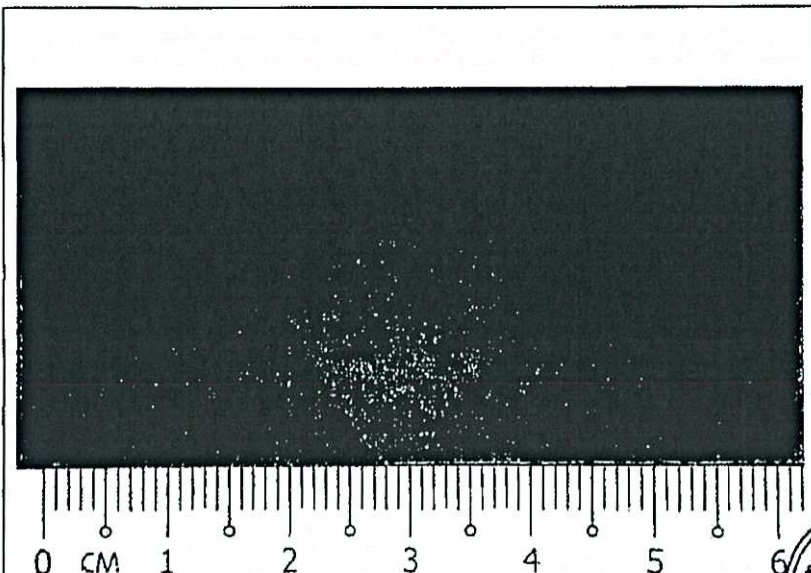
Report No. MAT/0866-01/09	Title BEND TEST		Page 3 of 5																																									
Test Result																																												
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NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

Head Office: No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia. Tel: 03-51229766/7/8 Fax: 03-51228766/7
Kemaman Branch: K-7206, Kawasan Perindustrian Jakar II, 24000 Kemaman, Terengganu Darul Iman. Tel: 09-8598529 Fax: 09-8593129
Ipoh Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lahat, Perak. Tel: 019-6620324 Fax: 03-51228766

NUSATEK

Report No. MAT/0866-01/09	Title MACRO ETCH EXAMINATION	Page 5 of 5
Test Result		
 0 CM 1 2 3 4 5 6 Interpretation : WPS/GMAW/009 Visual examination of the cross section of the weld indicated complete fusion, free from crack and found to be satisfactory.		
The above mentioned test were witnessed by		
 Name: <u>Chandra</u>	 Name: <u>V. RABINDRA</u> DATE: <u>22/04/09</u>	☒ REVIEWED ☒ WITNESSED - <u>08/04/09</u> ☒ VERIFIED - <u>[Signature]</u> Name: _____ DATE: _____

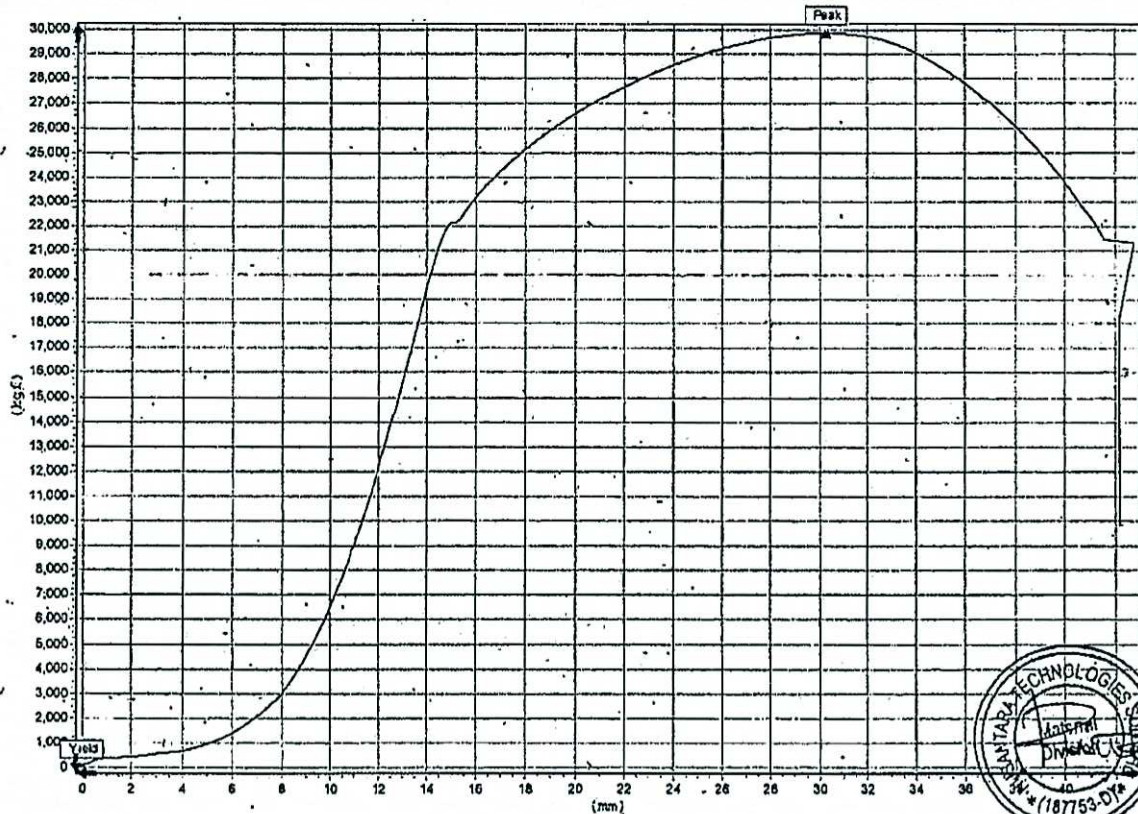
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 Ipoh Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lahat, Perak Darul Ridzuan Tel: 05-3229571 Fax: 05-3220524

NO.	JOB NO.	AREA mm ²	MAX FORCE kgf	TENSILE STRENGTH kgf/mm ²	REMARKS
2	091196	505.26	29865.11	59.11	

WRS/GMAW/009-2



WITNESSED BY:-

1)



2)



3)

REVIEWED
WITNESSED
VERIFIED

NAME: ZULKFLI MOHAMAD

DATE: 8/4/09

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Ipoh Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lafiai, Perak. Tel: 019-6620324 Fax: 03-51228766

CERTIFIED TRUE COPY

Shang 17/10/08

ANN JOO METAL SDN BHD
(LOG Dept) (Co. No. 260316-F)

JFE スチール 株式会社 東日本製鉄所(東海)
JFE Steel Corporation East Japan Works(Osaka)

検査証明書 INSPECTION CERTIFICATE

顧客名 : ANN JOO METAL SDN. BHD.

顧客管理番号 : JFE SHOJI TRADE CORPORATION

送り先 : JFE SHOJI TRADE CORPORATION

参考番号 : FF5 -C80135724

品名 : HOT ROLLED STEEL PLATE

規格 : JIS EN10025 S355J2G3 1993

検査項目 : 化学成分, 機械的性質, 寸法, 重量, 試験方法

検査結果 : 合格

検査場所 : JFE Steel Corporation East Japan Works(Osaka)

検査日 : 2008-07-14

検査員 : 田中 浩二

検査設備 : 万能試験機, 引張試験機, 圧入試験機, 衝撃試験機, 硬度試験機, 金相顕微鏡, 光学顕微鏡, 超音波探傷機, X線探傷機, 放射線探傷機, 磁粉探傷機, 渦電流探傷機, 漏電磁場探傷機, 熱画像探傷機, 赤外線探傷機, 超音波探傷機, X線探傷機, 放射線探傷機, 磁粉探傷機, 渦電流探傷機, 漏電磁場探傷機, 熱画像探傷機, 赤外線探傷機

検査費用 : 50000円

検査報告書 : JFE-IR-001

検査証明書 : JFE-IR-002

検査記録 : JFE-IR-003

検査結果 : 合格

検査場所 : JFE Steel Corporation East Japan Works(Osaka)

検査日 : 2008-07-14

検査員 : 田中 浩二

検査設備 : 万能試験機, 引張試験機, 圧入試験機, 衝撃試験機, 硬度試験機, 金相顕微鏡, 光学顕微鏡, 超音波探傷機, X線探傷機, 放射線探傷機, 磁粉探傷機, 渦電流探傷機, 漏電磁場探傷機, 熱画像探傷機, 赤外線探傷機

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検査日 : 2008-07-14

検査員 : 田中 浩二

検査設備 : 万能試験機, 引張試験機, 圧入試験機, 衝撃試験機, 硬度試験機, 金相顕微鏡, 光学顕微鏡, 超音波探傷機, X線探傷機, 放射線探傷機, 磁粉探傷機, 渦電流探傷機, 漏電磁場探傷機, 熱画像探傷機, 赤外線探傷機

検査費用 : 50000円

検査報告書 : JFE-IR-001

検査証明書 : JFE-IR-002

検査記録 : JFE-IR-003

検査結果 : 合格

検査場所 : JFE Steel Corporation East Japan Works(Osaka)

検査日 : 2008-07-14

検査員 : 田中 浩二

検査設備 : 万能試験機, 引張試験機, 圧入試験機, 衝撃試験機, 硬度試験機, 金相顕微鏡, 光学顕微鏡, 超音波探傷機, X線探傷機, 放射線探傷機, 磁粉探傷機, 渦電流探傷機, 漏電磁場探傷機, 熱画像探傷機, 赤外線探傷機

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検査結果 : 合格

検査場所 : JFE Steel Corporation East Japan Works(Osaka)

検査日 : 2008-07-14

検査員 : 田中 浩二

品番 Item No.	Roil No.	顧客管理番号 Customer's Control No.				月数 Quantity	質量 Mass (CAL)	化学成分 Chemical Composition										引張試験 Tensile Test				IMPACT TEST					
		寸法 SIZING	寸法 DIM	寸法 DIM	寸法 DIM			C	SI	MO	P	S	CUNI	MO	CRS	AL	CEQ3	Y.P.	T.S.	伸長率 % EL	断面収縮率 % RA	1	2	3	NOTCH TEMP.		
鋼種 Heat No.	001	25.0	X	2438	X	9144	1	4573	16	3514	13	5	3	2	1	3	31	41	TC	421	561	27	GTLDU	207	201	2MM V	
13235	001	25.0	X	2438	X	9144	1	4573															231	213	-20°C		
13235		TOTAL						10	43730KG																		
VISUAL &		DIMENSIONS : GOOD																									
		TEST : ASTM A439																									
																				Y.S. ... 0.5% UNDER LOAD							

(注) 1. 検査項目の記載は、検査項目の範囲に合致していることを証明いたします。
(Notes) 1. The inspection items are within the range of inspection items.
2. 検査結果は、検査項目の範囲に合致していることを証明いたします。
(2) The inspection results are within the range of inspection items.
3. 検査費用は、検査項目の範囲に合致していることを証明いたします。
(3) The inspection fee is within the range of inspection items.

検査証明書 : JFE-IR-002
検査記録 : JFE-IR-003
検査結果 : 合格
検査場所 : JFE Steel Corporation East Japan Works(Osaka)
検査日 : 2008-07-14
検査員 : 田中 浩二
検査設備 : 万能試験機, 引張試験機, 圧入試験機, 衝撃試験機, 硬度試験機, 金相顕微鏡, 光学顕微鏡, 超音波探傷機, X線探傷機, 放射線探傷機, 磁粉探傷機, 渦電流探傷機, 漏電磁場探傷機, 熱画像探傷機, 赤外線探傷機

東日本製鉄所 (京浜) : 〒210-0868 神奈川県川崎市磯子区磯島1番地1 East Japan Works (Keihin) : 1-1, OHSISHIMA, KAWASAKI 210-0868 JAPAN
東日本製鉄所 品質保証
Quality Assurance Section
East Japan Works



贏力工業有限公司

IMPRESS STEEL WIRE INDUSTRIES SDN. BHD. (436101-V)

PT 517, Jalan PBR 23, Kawasan Perindustrian Bukit Rambai, 75250 Melaka, Malaysia.

Tel. : 606-3510789

Email : impresssteel@gmail.com

Fax : 606-3510987

Website : http://www.impress-steel.com.my



Title : **MILL CERTIFICATE**
 Product : **MIG COPPER COATED WIRE**
 Customer Name : **[REDACTED]**

1.0 Manufacturer : **IMPRESS STEEL WIRE INDUSTRIES SDN BHD**
 1.1 Country of Origin : **MALAYSIA**

2.0 Material & Packing

2.1	2.2	2.3	2.4	2.5
Material Type	Size	Tolerance Size	Tensile Strength	Weight
ER70S-6	1.20 mm dia	+0, -0.025 mm	120-150 kg/mm ²	15 Kgs

3.0 Chemical Composition

C	Mn	Si	S	P	Cu	Ni	Cr	Mo	V	Al
0.07	1.47	0.82	0.014	0.01	0.11	0.06	0.02	0.02	0.007	0.003
Sn	B	Ti	As	Pb	Nb	Sb	02ppmm	N2ppmm		
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	40	

4.0 Physical Test

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Reduction Area (%)
383	520	28	79



Approved by

26/3/09



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

Procedure Qualification Record (PQR) # PQR/GMAW/ 009S
Test Results

TENSILE TEST

Specimen No.	Width (mm)	Thickness (mm)	Area (mm ²)	Ultimate tensile load, (KN)	Ultimate unit Stress, (Mpa)	Character of failure and location
T1	-	-	-	-	-	-
T2	-	-	-	-	-	-

GUIDED BEND TEST

Specimen No.	Type of bend	Result	Remarks
S1	-	-	-
S2	-	-	-
S3	-	-	-
S4	-	-	-

VISUAL INSPECTION

Appearance SATISFACTORY
Undercut NONE
Piping porosity NONE
Convexity NONE
Test date 8/4/2009
Witnessed by ABS CONSULTING (M) SDN BHD

Radiographic-ultrasonic examination

RT report no.: NDT/RT/57668-01/09 Result SATISFACTORY
UT report no.: NIL Result NIL

FILLET WELD TEST RESULTS

Minimum size multiple pass Maximum size single pass
Macroetch Macroetch

1. - 3. - 1. - 3. -
2. - 2. -

Other Tests

CHARPY V-NOTCH IMPACT TEST RESULTS

Specimen Size (mm)	Location	Test Temp. Deg. (°C)	Individual Value (J)			Average Value (J)
			1	2	3	
3.3x10x55	Weld metal	-29	20	16	24	20.0
3.3x10x55	Fusion Line + 1.0mm	-29	28	28	20	25.3
3.3x10x55	Fusion Line + 5.0mm	-29	44	46	48	46

Hardness Test Results

-
-
-
-
-

Welder's name ASHOK KUMAR Clock no. - Stamp no. W35

Test conducted by NUSANTARA TECHNOLOGIES SDN BHD Laboratory

Test number MAT/0867-01/09

Per MUHAMAT RIDZUAN AB. AZIZ

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of AWS D1.1/AWS D1.1M, (2006) Structural Welding Code- Steel.



☒ REVIEWED
☒ WITNESSED
☒ VERIFIED
NAME: V. RABINDRA
DATE: 22/04/09

Signed [Signature] Manufacture or

By : CHANDRAN

Title : Q.A. ENGINEER

Date : 8/4/09



Report No: NDT/RT/57668-01/09		RADIOGRAPHIC EXAMINATION REPORT										Page No: 1 of 1					
Client : VG OFFSHORE CONTAINERS Project : MINI CONTAINER UK/AUSTRALIA Material : EN10025 S355J5G3 Welding Process : GMAW Inspection Code : AWS D1-1/D1.1M: 2006 Acceptance Code : AWS D1-1/D1.1M: 2006				IQI Type : ASTM 1B Film Type : CLASS II Density : 2.0 To 4.0 Sensitivity : 0.33 MM (5 WIRE VISIBLE) Source to Object Distance : 18 INCH Source Side of Object to the Film Distance : 6 MM + 3 MM No. of Film Each Cassette : 1 FILM Radiographic Technique : SWSI													
Inspection Date : 01 ST APRIL 2009 Source Type / Size : IR192 (1.7MM X 2.7 MM)																	
Weld Reference		Film Position	Material Thickness (mm)	Pipe Diameter (mm)	Type of Defect										Result		Remarks
Weld Thickness Reinforcement Thickness					Excess Penetration	Burn Through	Slag Inclusion	Porosity	Concavity	Undercut	Incomplete Pen.	Root Fusion	Crack	Surface	No Significant Discontinuity	Acceptable	
ASHOK KUMAR																	
W35		0-1	6											X	X		
3G																	
6 MM																	
RT: 3 MM																	
Radiographer : AMANSHAH										Approved By :							
Interpreted By : AMAT HAMIDI -ASNT LEV II										Client's Approval :							



☒ REVIEWED
☐ WITHIN
☐ VERIFIED

NAME: VRABINDRA
DATE: 22/04/09



Kemaman Branch: K-7206, Kawasan Perindustrian Jakar II, 24000 Kemaman, Terengganu Darul Iman. Tel: 09-8598529 Fax: 09-8593129
Johor Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lahat, Perak. Tel: 019-6620324 Fax: 03-51228767



23/25

Report No. MAT/0867-01/09	Title CHARPY IMPACT TEST	Page 2 of 2																																												
Test Result																																														
<table border="1"><thead><tr><th colspan="4">CHARPY V-NOTCH IMPACT TEST</th></tr></thead><tbody><tr><td colspan="4">Sample Size : 3.3 x 10 x 55 mm</td></tr><tr><td colspan="4">Test Temperature : Minus 29°C</td></tr><tr><td colspan="2">WPS No. WPS/GMAW/009S</td><td colspan="2">Absorbed Energy (Joules)</td></tr><tr><td colspan="2"></td><td>Individual</td><td>Average</td></tr><tr><td rowspan="3">Weld Metal</td><td>1</td><td>20.0</td><td rowspan="3">20.0</td></tr><tr><td>2</td><td>16.0</td></tr><tr><td>3</td><td>24.0</td></tr><tr><td rowspan="3">Fusion + 1.0 mm</td><td>1</td><td>28.0</td><td rowspan="3">25.3</td></tr><tr><td>2</td><td>28.0</td></tr><tr><td>3</td><td>20.0</td></tr><tr><td rowspan="3">Fusion Line + 5.0 mm</td><td>1</td><td>44.0</td><td rowspan="3">46.0</td></tr><tr><td>2</td><td>46.0</td></tr><tr><td>3</td><td>48.0</td></tr></tbody></table>			CHARPY V-NOTCH IMPACT TEST				Sample Size : 3.3 x 10 x 55 mm				Test Temperature : Minus 29°C				WPS No. WPS/GMAW/009S		Absorbed Energy (Joules)				Individual	Average	Weld Metal	1	20.0	20.0	2	16.0	3	24.0	Fusion + 1.0 mm	1	28.0	25.3	2	28.0	3	20.0	Fusion Line + 5.0 mm	1	44.0	46.0	2	46.0	3	48.0
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Fusion Line + 5.0 mm	1	44.0	46.0																																											
	2	46.0																																												
	3	48.0																																												
																																														
The above mentioned test were witnessed by																																														
 Name: <u>Chong Joon</u> 874609	 Name: <u>*</u>	☒ REVIEWED ☒ WITNESSED ☒ VERIFIED 02/04/09 NAME: <u>V. RAJENDRA</u> DATE: <u>02/04/09</u> Name: _____																																												

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NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

Head Office: No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia. Tel: 03-51229766/7/8 Fax: 03-51228766/7
Kemaman Branch: K-7206, Kawasan Perindustrian Jakar II, 24000 Kemaman, Terengganu Darul Iman. Tel: 09-8598529 Fax: 09-8593129
Ipoh Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lahat, Perak. Tel: 019-6620324 Fax: 03-51228766



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD
AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTO

Name : BABU

Welding Procedure Specification No.: WPS/GMAW/009

Identification No. W36

Rev. 0 Date 09/04/2009

Variables

Process/Type [Table 4.12, Item (1)]
Electrode (single or multiple) [Table 4.12, Item (7)]
Current / Polarity

Position [Table 4.12, Item (4)]
Weld Progression [Table 4.12, Item (6)]

Backing (YES or NO) [Table 4.12, Item (8)]

Material/Spec

Base Metal
Thickness : (Plate)

Groove

Fillet

Thickness : (Pipe/tube)
Groove

Fillet

Diameter : (Pipe)
Groove

Fillet

Filler Metal [Table 4.12]
Spec. No.

Class

F.No. [Table 4.12, Item (2)]

Gas/Flux Type [Table 4.12]

Other

Record Actual Values
Used in Qualification

GMAW-Globular Transfer

SINGLE

DC+VE

3G

UPHILL

YES

EN10025 S355J2G3

25mm

-

-

A 5.18

ER70S-6

6

CO2

Qualification Range

GMAW-Globular/Spray Transfer

SINGLE

DC+VE

F.H.V

UPHILL

WITH BACKING/DOUBLE WELD

EN 10025 S355 materials & materials
of similar chemical / mechanical
properties

3mm to Unlimited

ALL THICKNESS

3mm to Unlimited

ALL THICKNESS

> 600mm OD

3mm to Unlimited

ALL THICKNESS

A 5.18 & A 5.28

6

WITH SHIELDING GAS



☒ REVIEWED

☒ WITNESSED

☒ VERIFIED

NAME: V.RABINDRA

DATE: 22/04/09

VISUAL INSPECTION (4.8.1)

Acceptable YES or NO YES

Guided Bend Test Results (4.30.5)

Type

Result

Type

Result

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance : -

Fracture Test Root Penetration : -

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Fillet Size

Macroetch

Inspected by -

Test Number -

Organization -

Date -

RADIOGRAPHIC TEST RESULTS (4.30.3.2)

Film Identification
Number

Results

Remarks

Film Identification
Number

Results

Remarks

0-1

ACCEPT

-

-

-

-



Interpreted by AMAT HAMIDI - ASNT LEVEL II

Organization NUSANTARA TECHNOLOGIES SDN.BHD

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor VGOCI / VGMT

Test Number NDT/RT/57602-02/09

Date 08TH APRIL 2009

Authorized By ABS CONSULTING (M) SDN BHD

Date 22/04/09



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTOName: MUKTER ALIWelding Procedure Specification No.: WPS/GMAW/009Rev. 0Identification No. W38Date 09/04/2009**Variables**

Process/Type [Table 4.12, Item (1)]
Electrode (single or multiple) [Table 4.12, Item (7)]
Current / Polarity

Position [Table 4.12, Item (4)]
Weld Progression [Table 4.12, Item (5)]

Backing (YES or NO) [Table 4.12, Item (6)]

Material/Spec

Base Metal

Thickness: (Plate)

Groove

Fillet

Thickness: (Pipe/tube)

Groove

Fillet

Diameter: (Pipe)

Groove

Fillet

Filler Metal [Table 4.12]

Spec. No.

Class

F-No. [Table 4.12, Item (2)]

Gas/Flux Type [Table 4.12]

Other

**Record Actual Values
Used in Qualification****Qualification Range**

GMAW-Globular Transfer

GMAW-Globular/Spray Transfer

SINGLE

SINGLE

DC+VE

DC+VE

3G

F,H,V

UPHILL

UPHILL

YES

WITH BACKING/DOUBLE WELD

EN10025 S355J2G3

EN 10025 S355 materials & materials
of similar chemical / mechanical
properties

25mm

3mm to Unlimited

-

ALL THICKNESS

-

3mm to Unlimited

-

ALL THICKNESS

-

> 600mm OD

-

3mm to Unlimited

-

ALL THICKNESS

A 5.18

A 5.18 & A 5.28

ER 70S-6

6

6

CO2

WITH SHIELDING GAS

NAME: V.RABINDRADATE: 22/04/09**VISUAL INSPECTION (4.8.1)**Acceptable YES or NO YES**Guided Bend Test Results (4.30.5)**

Type	Result	Type	Result
-	-	-	-
-	-	-	-

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance - Fillet Size -
Fracture Test Root Penetration - Macroetch -
(Describe the location, nature, and size of any crack or tearing of the specimen.)

Inspected by - Test Number -Organization - Date -**RADIOGRAPHIC TEST RESULTS (4.30.3.2)**

Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks
0-1	ACCEPT	PROSITY	-	-	-

Interpreted by AMAT HAMIDI - ASNT LEVEL IIOrganization NUSANTARA TECHNOLOGIES SDN.BHD

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor VG OFFSHORETest Number NDT/RT/57602-02/09Date 08TH APRIL 2009Authorized By ABS CONSULTING (M) SDN BHDDate 22/04/09



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTOName : SOHEL RANAWelding Procedure Specification No. WPS/GMAW/009Identification No. W40Rev. 0Date 09/04/2009**Variables**

Process/Type [Table 4.12, Item (1)]

Electrode (single or multiple) [Table 4.12, Item (7)]

Current / Polarity

Position [Table 4.12, Item (4)]

Weld Progression [Table 4.12, Item (5)]

Backing (YES or NO) [Table 4.12, Item (6)]

Material/Spec

Base Metal

Thickness : (Plate)

Groove

Fillet

Thickness : (Pipe/tube)

Groove

Fillet

Diameter : (Pipe)

Groove

Fillet

Filler Metal [Table 4.12]

Spec. No.

Class

F-No. [Table 4.12, Item (2)]

Gas/Flux Type [Table 4.12]

Other

**Record Actual Values
Used In Qualification****Qualification Range**

GMAW-Globular Transfer

GMAW-Globular/Spray Transfer

SINGLE

SINGLE

DC+VE

DC+VE

3G

F,H,V

UPHILL

UPHILL

YES

WITH BACKING/DOUBLE WELD

EN10025 S355J2G3

EN 10025 S355 materials & materials
of similar chemical / mechanical
properties

25mm

3mm to Unlimited

-

ALL THICKNESS

-

3mm to Unlimited

-

ALL THICKNESS

-

> 600mm OD

-

3mm to Unlimited

-

ALL THICKNESS

A 5.18

A 5.18 & A 5.28

ER70S-6

6

6

CO2

WITH SHIELDING GAS



REVIEWED

WITNESSED

VERIFIED

NAME: V. RABINDRADATE: 22/04/09**VISUAL INSPECTION (4.8.1)**Acceptable YES or NO YES

Type

Result

Guided Bend Test Results (4.30.5)

Type

Result

Appearance : -Fracture Test Root Penetration -

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Fillet Test Results (4.30.2.3 and 4.30.4.1)Fillet Size -Macroetch -Inspected by -Test Number -Organization -Date -**RADIOGRAPHIC TEST RESULTS (4.30.3.2)**

Film Identification

Number

Results

Remarks

Film Identification

Number

Results

Remarks

0-1

ACCEPT

PROSITY

-

-

-

Interpreted by AMAT HAMIDI - ASNT LEVEL IIOrganization NUSANTARA TECHNOLOGIES SDN.BHDTest Number NDT/RT/57602-01/09Date 08TH APRIL 2009

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of Section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHDAuthorized By ABS CONSULTING (M) SDN BHDDate 22/04/09



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTO

Name : KABIR HOSSAIN

Welding Procedure Specification No. : WPS/GMAW/009

Identification No. W42

Rev. 0

Date 09/04/2009

Variables

Process/Type [Table 4.12, Item (1)]
Electrode (single or multiple) [Table 4.12, Item (7)]
Current / Polarity

Position [Table 4.12, Item (4)]
Weld Progression [Table 4.12, Item (5)]

Backing (YES or NO) [Table 4.12, Item (6)]

Material/Spec

Base Metal

Thickness : (Plate)

Groove

Fillet

Thickness : (Pipe/tube)

Groove

Fillet

Diameter : (Pipe)

Groove

Fillet

Filler Metal [Table 4.12]

Spec. No.

Class

F-No. [Table 4.12, Item (2)]

Gas/Flux Type [Table 4.12]

Other

Record Actual Values Used in Qualification

GMAW-Globular Transfer

SINGLE

DC+VE

3G

UPHILL

YES

EN10025 S355J2G3

25mm

-

-

-

-

A 5.18

ER 70S-6

6

CO2

Qualification Range

GMAW-Globular/Spray Transfer

SINGLE

DC+VE

F,H,V

UPHILL

WITH BACKING/DOUBLE WELD

EN 10025 S355 materials & materials
of similar chemical / mechanical
properties

3mm to Unlimited

ALL THICKNESS

3mm to Unlimited

ALL THICKNESS

> 600mm OD

3mm to Unlimited

ALL THICKNESS

A 5.18 & A 5.28

6

WITH SHIELDING GAS



☒ REVIEWED

☒ WITNESSED

☒ VERIFIED

NAME: V.RABINDRA

DATE: 22/04/09

VISUAL INSPECTION (4.8.1)

Acceptable YES or NO YES

Type	Result	Type	Result
-	-	-	-
-	-	-	-

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance: -

Fracture Test Root Penetration: -

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Fillet Size

Macroetch

Inspected by -

Test Number -

Organization -

Date -



RADIOGRAPHIC TEST RESULTS (4.30.3.2)

Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks
0-1	ACCEPT	-	-	-	-

Interpreted by AMAT HAMIDI - ASNT LEVEL II

Organization NUSANTARA TECHNOLOGIES SDN.BHD

Test Number NDT/RT/57602-01/09

Date 08TH APRIL 2009

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor VGOCI / VGMT

Authorized By ABS CONSULTING (M) SDN BHD

Date 22/04/09



ALPINE PIPE MANUFACTURING SDN. BHD. (Company No. 267844-A)
(A Wholly-owned subsidiary of Himp Teck Venture Berhad. 421340-11)

MILL TEST CERTIFICATE

Customer : SOON HOE HARDWARE SDN BHD
D/O No : JV09080966

Certificate No : 29-08-MAN-507
Date of Issue : 11/08/2009

Certificate No : 29-08-MAN-807 Date of Issue : 11/08/2009		Mechanical Properties													Date of Issue	
No	Commodity, Size, Specification	Qty	Tensile Test					V-Notch Charpy Impact Test					Average	% Elong	Coil No	Heat No
			Area, Type	Yield, MPa	Tensile, MPa	Elong, %	Area, Type	Temp, °C	Sample 1 (J)	Sample 2 (J)	Sample 3 (J)					
1	38MMX38MMX3 203MMX6.003M SQUARE HOLLOW SECTIONS - CR ALPINE MANUFACTURER STANDARD	192	-	238.00	331.00	37.00	-	-	-	-	-	-	-	-	0901395045	CQS3741
2	50MMX6.003M WELDED STEEL PIPES - HR BS 1387	185	-	305.00	385.00	30.00	-	-	-	-	-	-	-	-	0908004110 0908005420	20919370 30921200
Chemical Composition																
Coil No	Heat No	Max %														
		C	Si	Mn	P	S	Fe	Al	Ca	Mg	N					
0901395045	CQS3741	0.190	0.020	0.180	0.012	0.008	-	-	-	-	-	-	-	-	-	-
0908004110 0908005420	20919370 30921200	0.150	0.020	0.150	0.005	0.006	-	-	-	-	-	-	-	-	-	-
Remarks																

Remarks

Authorised Signature
Date

Note: The Results of Chemical Composition are based on the Results of the Mill Test Certificate (Subject to change due to annual verification). Any alteration to this document or its use for other products shall be deemed as acceptance of the results and be subjected to criminal prosecution. Leg 6/05, Jalan Haji Abdul Kadir, Bani S., Jalan Man. 41050 Klang, Selangor Darul Ehsan, Malaysia. Tel: 03-3927678 Fax: 03-3927651



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

APPENDIX 1

VG-SOP-14b-01

Revision 1 14/04/2010

DIMENSION REPORT (STRUCTURE)

MODEL NO. : N/A			REPORT NO. : VG / DR /001			
PROJECT NAME : A-FRAME						
MANUFACTURER'S SERIAL NO. : AS 1002-10						
OWNER NAME : ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)						
No.	Drawing No.	Symbol	Drawing Dimension (mm)	Actual Dimension (mm)	Differences (mm)	Allowed Tolerance
1	VG/DWG/AFB/001, REV 0	A	2560	2556	-4	±6
		B	4050	4042	-4	±8
		C	1214	1213	-1	±4
		D	1075	1074	-1	±4
		E	541	539	-2	±3
		F	864	865	+1	±3
		G	541	539	-2	±3
		H	710	713	+3	±3
		I	850	850	0	±3
		J	850	848	-2	±3
		K	850	847	-3	±3
		L	120	120	0	±2
		M	70	70	0	±2
		N	1032	1032	0	±4

INSPECTED BY :



Name: Shaharudin
Date: 27/4/2010

REVIEWED / VERIFIED BY :

[Signature]

Name: Veru
Date: 27/4/10

WITNESSED / REVIEWED BY :

Name: _____
Date: _____



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

APPENDIX 1

VG-SOP-14b-01

Revision 1 14/04/2010

DIMENSION REPORT (STRUCTURE)

MODEL NO. : N/A

REPORT NO. : VG / DR /002

PROJECT NAME : A--FRAME (Hydraulic unit structure)

MANUFACTURER'S SERIAL NO. : AS 1002-10

OWNER NAME : ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)

No.	Drawing No.	Symbol	Drawing Dimension (mm)	Actual Dimension (mm)	Differences (mm)	Allowed Tolerance
1	VG/DWG/HUB/001, REV 0	A	620	620	0	±3
		B	2000	2000	0	±4
		C	100	98	-2	±2
		D	460	457	-3	±3
		E	440	443	+3	±3
		F	155	155	0	±2
		G	295	297	+2	±2
		H	800	802	+2	±3
		I	620	620	0	±3
		J	560	560	0	±3
		K	470	469	-1	±3
		L	800	802	+2	±3
		M	2000	2000	0	±4

INSPECTED BY :

REVIEWED / VERIFIED BY :

WITNESSED / REVIEWED BY :



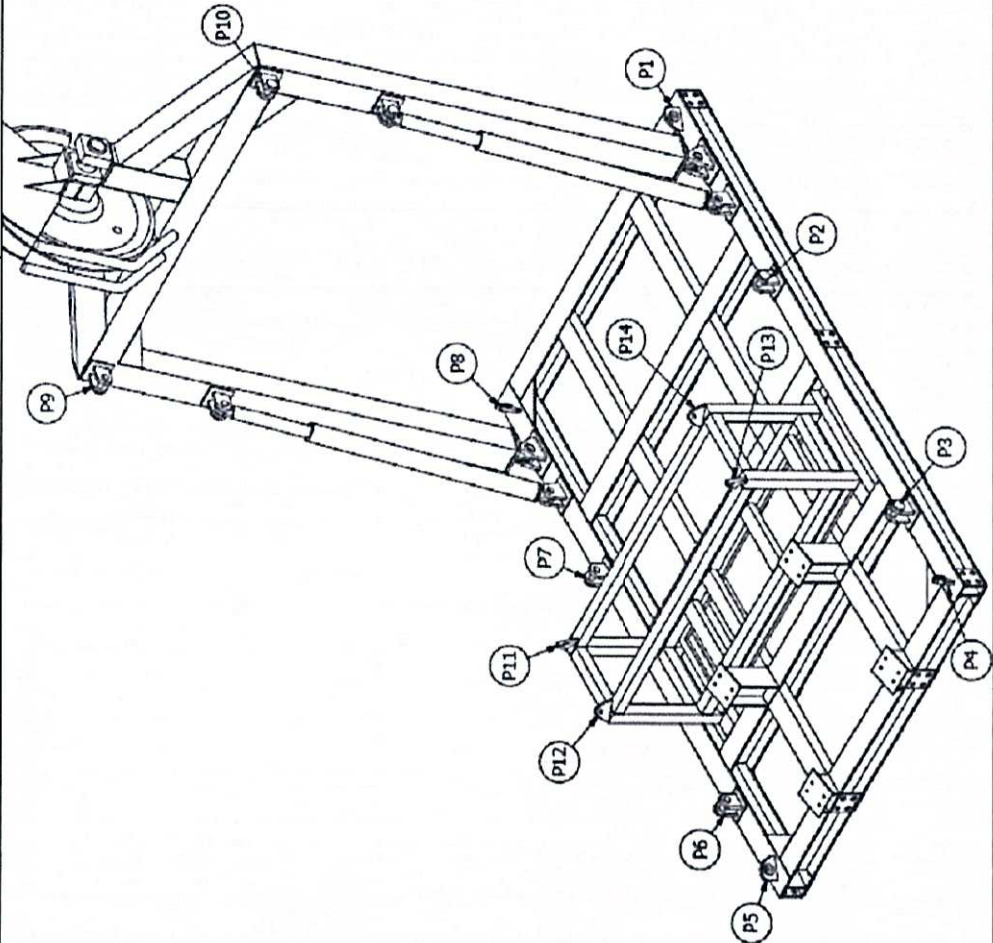
Name: Chandra
Date: 27/4/10



Name: Chandra
Date: 27/4/10

Name: _____
Date: _____

VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD		APPENDIX 2	DOC NO: VG-SOP-14b-02	Revision 0 Date: 21/11/2008
MFG SERIAL NO	AS 1002-10	WELD MAP NO: WMR-AF-004		
CLIENT	ALLIANCE SEAWORKS SDN BHD (known as Bumi Magnitud Sdn Bhd)	VERIFIED BY: 		
PROJECT	A- FRAME			
ASSEMBLY SECTION	BASE ASSEMBLY			
REMARKS	PADEYE MPI TEST			



NO	WELD LOCATION	WELDER ID	PASS	FAIL	RE WORK	RE INSPECT	ACCEPTED
PADEYE							
1	P1	WJH2	✓				
2	P2	WJH2	✓				
3	P3	WJH2	✓				
4	P4	WJH2	✓				
5	P5	WJH2	✓				
6	P6	WJH2	✓				
7	P7	WJH2	✓				
8	P8	WJH2	✓				
9	P9	WJH2	✓				
10	P10	WJH2	✓				
11	P11	WJH2	✓				
12	P12	WJH2	✓				
13	P13	WJH2	✓				
14	P14	WJH2	✓				



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

APPENDIX 8

VG-SOP-14b-08

Revision 1 14/04/2010

PRODUCT TEST REPORT

MODEL NO. :	N/A	REPORT NO. :	VG / LT / AF
PROJECT NAME :	A-FRAME	TEST DATE :	05/04/2010
MANUFACTURER'S SERIAL NO. :	AS 1002-10	TOTAL NO. OF PRODUCTION :	1 UNIT
OWNER NAME :	ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)	NO. (s) OF UNIT TESTED :	1 UNIT
DRAWING NO. :	VG/DWG/AFB/001 ,REV0	PROTOTYPE TESTING :	☒
PRODUCTION SERIES :	N/A	PRODUCTION TESTING :	☐
		LOAD TEST :	2.5R ☐ 2.0R ☐

Weight Details :

Tare Weight (T) : N/A

ayload (P) : N/A

Maximum Gross Weight (R) : N/A

This is to certify that the following container manufacturer number mentioned above had been selected randomly from the above mentioned production series and tested according to the type of test(s) listed below :

Type of Test(s) :

Pass (✓)

Fail (X)

Load Test Weight (4 points lift) : N/A
Load Test Weight (2 points lift) : N/A
Drop Test Weight (4 points lift) : N/A
ther test (Please Specify) : 6000 Kg

✓	

Product ready for production / next process : ☐

Modification Required : ☐

Sign - Off	Name	Signature & Stamp	Date	Comments
Project Management	Venky		5/5/10	
QA / QC	chandra		5/5/10	
Client (if applicable)				
Third party (if applicable)	Nazrin		5/5/10	Result satisfactory.



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

APPENDIX 9

VG-SOP-14b-09

Revision 2 14/04/2010

SURFACE PREPARATION & COATING APPLICATION REPORT

MODEL NO :	N/A	REPORT NO. :	VG / PR / 02 / 10
PROJECT NAME :	A-FRAME (BOOM)	COATING APPLICATOR :	VGOCI
MANUFACTURER'S SERIAL NO. :	AS 1002-10	INHOUSE PAINT INSPECTOR :	CHANDRAN
OWNER NAME :	ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)	PAINTER :	NANDU/FIRUJ
DRAWING NO. :	VG/DWG/AFB/001 , REV0	APPLICATION AREA :	EXTERNAL

CLIMATIC CONDITION

No. of Coats	Blasting			1st Coat		2nd Coat		3rd Coat	4th Coat
Time (Hour)	10.00am			2.00pm		10.00am		1.00pm	
Weather Condition	SUNNY			SUNNY		SUNNY		SUNNY	
Dry/ Wet/ Dew Point °C	30/25/23			34/29/27		31/25/23		35/29/28	
Relative Humidity %	67%			69%		52%		65%	
Steel temperature °C	32°C			36°C		33°C		37°C	
Date of Application	Location	Surface Preparation	No. of Coats	Paint Type	Type of Paint Generic	Colour	Film Thickness (microns)		
							WFT	DFT	TDFT
28/04/2010	At Shop	SA2.5	1	Barrier ZEP	Zinc Epoxy	Grey	138-150	75-100	75 micron
29/04/2010			1	Duramastic	High Solid Primer	Mist Grey	160-180	125-175	125 micron
02/05/2010			1	Hardtop HB	Polyurethane	Red 926	100-110	50-80	50 micron

PAINT TYPE & BATCH NUMBER

Item No.	Product Name	Paint / Thinner Manufacturer	Batch No. (Part A)	Batch No. (Part B)	Manufacturing Date
1	Barrier ZEP	JOTUN	190265-1-0310	KF358942A-129	
2	Duramastic	JOTUN	183753-1-0110	189076-1-0310	
3	Hardtop XP	JOTUN	195353-1-0410	193380-1-0410	

INSPECTION

Coat	Date	Average Dry Film Thickness - DFT (microns µ)					Average	# of readings taken
		1st	2nd	3rd	4th	5th		
1st Coat	29/04/2010	82	87	93	76	99	87	5
2nd Coat	30/04/2010	213	221	215	234	231	223	5
3rd Coat	03/05/2010	263	277	284	294	275	279	5
4th Coat								

SURFACE PREPARATION

Blasting Standard	Type of Abrasive	Surface Profile
SA 2.5	GARNET	50 micron

INSPECTED BY :

REVIEWED BY :

VERIFIED BY
3rd PARTY PAINT INSPECTOR :

VERIFIED BY CLIENT :

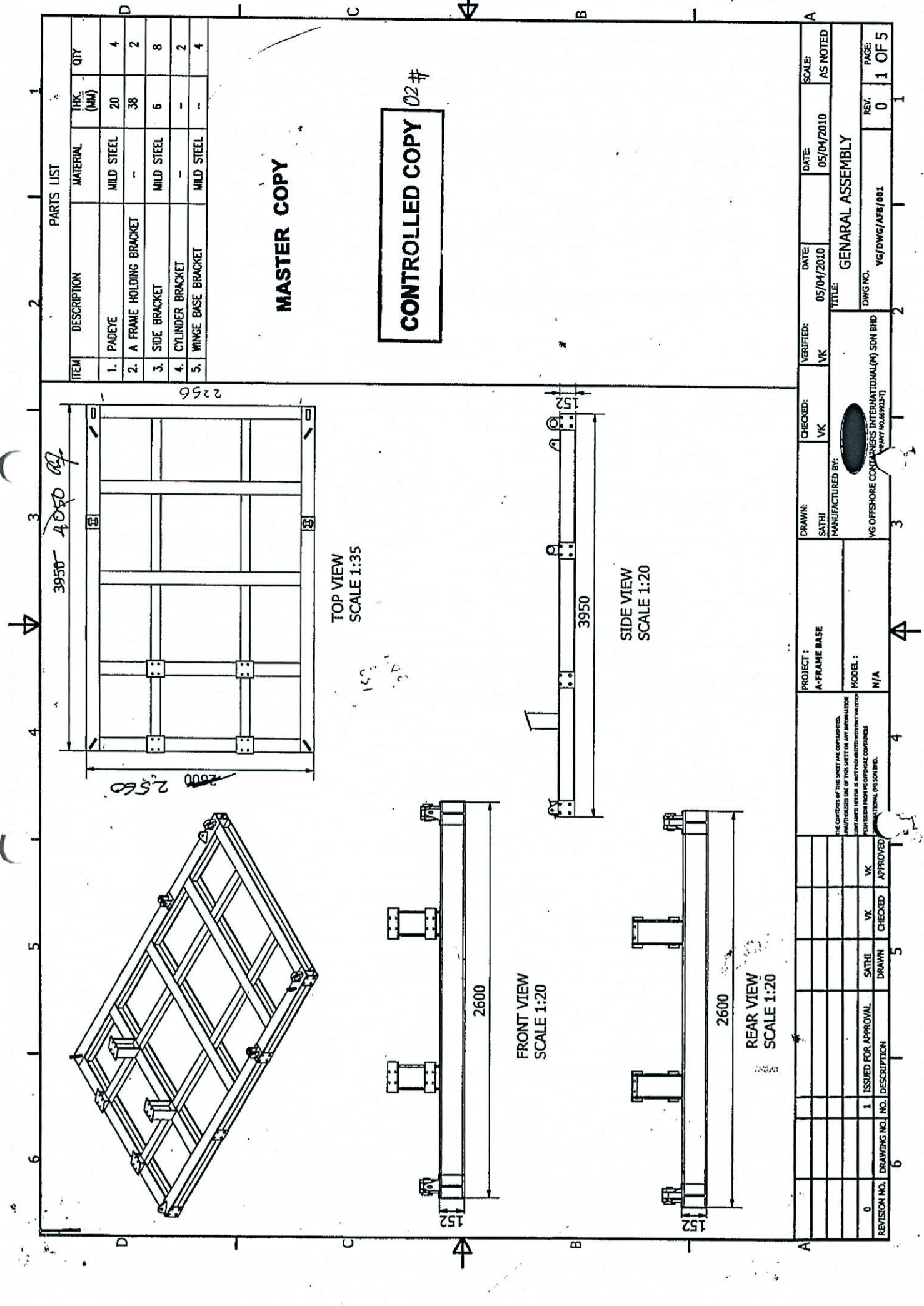


Name: CHANDRAN
Date: 03/05/2010

Name: VENU
Date: 03/05/2010

Name:
Date:

Name:
Date:



REVISION NO.	0	DRAWING NO.	1	DESCRIPTION	ISSUED FOR APPROVAL	DRAWN	SATHI	CHECKED	VK	APPROVED	VK
THE CONTENTS OF THIS SHEET ARE CONFIDENTIAL. UNAUTHORIZED USE OF THIS SHEET OR ANY INFORMATION CONTAINED HEREIN IS NOT PERMITTED WITHOUT THE WRITTEN PERMISSION FROM VG OFFSHORE CONTAINERS INTERNATIONAL (P) LTD. SON BHD.											
PROJECT :			A-FRAME BASE			DRAWN:			SATHI		
MANUFACTURED BY:			VG OFFSHORE CONTAINERS INTERNATIONAL (P) LTD. SON BHD			CHECKED:			VK		
VERIFIED:			VK			DATE:			05/04/2010		
DATE:			05/04/2010			SCALE:			AS NOTED		
TITLE: GENERAL ASSEMBLY											
DWG NO. VG/DWG/ATB/001											
REV. 0											
PAGE: 1 OF 5											

INDEX

SECTION 1	INSPECTION RELEASE CERTIFICATES
SECTION 2	INSPECTION AND TEST PLAN
SECTION 3	PRODUCT DESIGN DEVELOPMENT SCHEDULE
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SECTION 5	WELDING PROCEDURES
SECTION 6	WELDER QUALIFICATION CERTIFICATES
SECTION 7	MATERIAL CERTIFICATES
SECTION 8	DIMENSIONAL CONTROL REPORT
SECTION 9	NDT REPORTS
SECTION 10	PRODUCTION / PROTOTYPE TESTING
SECTION 11	PAINTING REPORTS
SECTION 12	OTHERS (IF APPLICABLE)

SECTION 1

INSPECTION RELEASE CERTIFICATES



VG METAL TECHNOLOGY (M) SDN BHD

Inspection Release Certificate

CERTIFICATE NO.: VG/IRC/005

DRAWING NO. : VG/DWG/AFB/001, REV 0

MODEL NO. : N/A

MANUFACTURER SERIAL'S NO. : AS1002-10

QUANTITY: 1 UNIT

PROJECT NAME: A-FRAME

CLIENT: ALLIANCE SEAWORKS SDN BHD
(Formerly known as Bumi Magnitud S/B)

P.O/CONTRACT NO. : ABD0001

THAT HAS BEEN FABRICATED AT THE MANUFACTURER'S WORKSHOP
AND HAS BEEN FOUND TO BE IN CONFORMANCE WITH THE
REQUIREMENTS, SPECIFICATIONS, DRAWINGS AND ALL WORKS
ACCORDING TO GENERAL TERMS AND CONDITIONS ARE
COMPLETED.

Approved by, 	Approved by, 
Name: Ravichandran Date: 18/05/2010 Department: QA / QC Dept	Name: Venukanna Date: 18/05/2010 Department: Project Management Dept



REPORT NO: MLS 10 0347-IR-02

DATE: 05 May 2010

PAGE: 1 OF 1

INSPECTION REPORT OF LOAD TEST

Issued within the Scope of the Bureau Veritas General Conditions

THIS IS TO CERTIFY that the undersigned surveyor to **BUREAU VERITAS (M) Sdn. Bhd** at the request of Messrs. **VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN. BHD.** had visited the factory at **No. D17, Lot 10439, Jalan Sg Jati, 41000 Klang, Selangor** to witness the load test. The details are as follows:

- Project : A-FRAME
- Client : ALLIANCE SEAWORKS SDN BHD
- Drawing No. : VG/DWG/AFB/001, REV 0
- Model no : N/A
- Date of Manufacture : May 2010
- Manufacturer S/N : AS 1002-10
- Load Test : 6000 kg

The load test on the Lifting A-Frame was carried out and held for 5 minutes.
The condition of the item was found satisfactory after load test.

Naazrin Zakaria



Hamdan Bin Alham

NAZRIN ZAKARIA
Surveyor to BUREAU VERITAS

HAMDAN BIN ALHAM
Project Manager

SECTION 2

INSPECTION AND TEST PLAN

SECTION 3

PRODUCT DESIGN DEVELOPMENT SCHEDULE

SECTION 4

GENERAL ARRANGEMENT DRAWINGS

SECTION 5

WELDING PROCEDURES

 VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD									
APPENDIX 11		DOC NO: VG-SOP-14b-11		Revision 1 Date: 04/04/2009		REF NO. VG/ITP/005			
INSPECTION AND TEST PLAN									
Client: ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud SDN BHD)		Manufacturer ID: AS1002-10		Prepared By Chandran		Verified By Venukanna		Approved By (if applicable)	
Project: A-FRAME		Model Name: N/A							
Drawing No: VG/DWG/AFB/001, REV 0									
D : Document Review Client or 3rd party shall review inspection record		W : Witness Client or 3rd party witness inspection (requires notification). However, inspection and test is performed as scheduled, and even if the client or 3rds party are not present.		H : Hold Point Client or 3rd party requires notification of the inspection or test timing and inspection shall be carried out with client or 3rd party attendance.		Note : "H" In VG column is intended for VG QC Dept.			
SW : Spot Witness VGOC1 not required to notify client or 3rd party the timing of inspection/ test. Spot witness may be performed during witness inspection or when deemed necessary		M : Monitor							
Ref	PROCESS/ OPERATION DESCRIPTION	ACTIVITY REQUIRED	CONTROLLING SPEC./STANDARD PROC.	ACCEPTANCE CRITERIA	VERIFYING DOCUMENTS	VG	Client	3rd PARTY SURVEYOR	
A.	DOCUMENTATION								
1	SPECIFICATION DOCUMENT OF CLIENT	Review client specifications, finalize deviations & amendments, clarified technical issues	•As per client drawing		• Sign Off Client spec (if required)	H			
2	WELDING PROCEDURE SPECIFICATIONS	Study and comply to the clients' requirements. Submit WPS and WPQR	• WPS/GMAW/D09	• AWS D1.1	• Sign Off ITP • Sign Off WPS	H			
3	WELDING QUALIFICATION REPORT	Comply to clients' requirement and submit list of welders with welders qualifications for approval.	• WPS/GMAW/D09	• AWS D1.1	• Sign Off ITP • Welders Certificates	H			
B.	MATERIALS								
1	RECEIPT OF MATERIAL AT YARD	Check all material are received together with delivery note, size, quality, etc. visually inspect material to detect for any irregularities on the surface of material.	• VG-SOP-14a		• Sign Off Incoming Material Inspection Record	H			
2	VERIFICATION ON MATERIALS	Verify material received is conforming the spec. Check materials against the mill cert received, and perform Heat Number transferring.	• VG-SOP-14a		• Sign Off ITP • Sign Off Material Traceability Report (VG-SOP-14a-03)	H			
3	IDENTIFICATION OF MATERIALS	All received material should be marked according to the Material traceability record.	• VG-SOP-14a			H			
C.	FABRICATION								
1	MATERIAL SHEARING AND FORMING	Shear and Form Material as per shop drawing	• As per Fabrication Drawing		• Sign Off ITP	H			
2	MATERIAL JOINT FIT UP	Fit up Inspection prior to welding	• As per Fabrication Drawing		• Sign Off ITP • Sign Off Fit Up Report	H			



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

APPENDIX 11		DOC NO: VG-SOP-14b-11	Revision 1 Date: 04/04/2009	REF NO.	VG/ITP/005				
INSPECTION AND TEST PLAN									
Client: ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud SDN BHD)		Manufacturer ID: AS1002-10		Prepared By	Approved By (if applicable)				
Project: A-FRAME		Model Name: N/A		Chandran	Venukanna				
Drawing No: VG/DWG/AFB/001, REV 0									
D : Document Review Client or 3rd party shall review inspection record									
W : Witness Client or 3rd party witness inspection (requires notification). H : Hold Point Client or 3rd party requires notification of the inspection or test timing. However, inspection and test is performed as scheduled, and even if the client or 3rd party are not present.									
SW : Spot Witness VGOCI not required to notify client or 3rd party the timing of inspection/ test. Spot witness may be performed during witness inspection or when deemed necessary									
M : Monitor									
Note : "H" In VG column is intended for VG QC Dept.									
Ref		PROCESS/ OPERATION DESCRIPTION	ACTIVITY REQUIRED	CONTROLLING SPEC./STANDARD PROC.	ACCEPTANCE CRITERIA	VERIFYING DOCUMENTS	VG	Client	3rd PARTY SURVEYOR
D.		WELDING PROCESS							
1		CONSUMABLE CONTROL	Welding consumables to be identified by their batch number and be stored appropriately	• VG-SOP-22					
2		WELDING	Verify approved WPS being applied during fabrication.	• WPS/GMAW/009					
3		WELD DEFECTS	Conduct repairs on any weld defects identified. Document defects and request for NDE. Client to be notify on major repairs.	• VG-SOP-18					
4		DIMENSIONAL CHECK	Final inspection before product test	• VG-SOP-16 • VG-SOP-14b					
5		RELEASE FOR PRODUCT TEST	Final verification of the entire control module project against client specification and drawing.	• VG-SOP-17 • VG-SOP-14b					
E.		BLASTING AND PAINTING							
1		BLASTING AND PRIMER	Check blast profile. Check product surfaces. Paint inspector to check the temp. & humidity. Readings are recorded.	• VG-SOP-20 • VG-SOP-14b	• Paint manufacturers' Technical Data sheet	• Sign Off Surface Preparation & Coating Application Report • Sign Off ITP	H		
2		INSPECTION PRIOR TO APPLICATION OF EACH COATS	Check paint properties, paint surface finish, record humidity, steel temp for each application.				H		
F.		FINAL INSPECTION AND ACCEPTANCE							
1		FINAL INSPECTION	Final verification of the entire control module project against client specification and drawing.	• VG-SOP-14b • As per Drawing	• Drawing	• Sign Off ITP	H		



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

WELDER LIST RECORD

REF NO : VG/WLST/001

Serial No.:	AS 1002-10
Model No.:	N/A
Client Name:	ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)
Project Name:	A-FRAME

No.	Welder Name	Welder Id No.		Passport No.	WPS No.		Position
		AWS D1.1			AWS D1.1		
1	ASHOK KUMAR	W35		B2897693	WPS/GMAW/009		3G
2	BABU	W36		Z0683082	WPS/GMAW/009		3G
3	MASUD ABU KALAM	W37		A0387757	WPS/GMAW/009		3G
4	MUKTER ALI	W38		X0057304	WPS/GMAW/009		3G
5	MOHAMMED MUNNA	W39		V0317216	WPS/GMAW/009		3G
6	SOHEL RANA	W40		Z0425687	WPS/GMAW/009		3G
7	UZZAL	W41		W0036925	WPS/GMAW/009		3G
8	KABIR HOSSAIN	W42		A0766019	WPS/GMAW/009		3G



CHECKED BY : _____



VERIFIED BY : _____

APPROVED BY : _____



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD (Co.No. 669923-T)
VG METAL TECHNOLOGY (M) SDN BHD (Co.No. 449738-D)

WELDING PROCEDURE SPECIFICATION (WPS)
AWS D1.1/D1.1M:2006 / DNV CN 2.7-1

Identification No : **WPS/ GMAW /009**

Company Name: **VG Offshore Containers International (M) S/B**
VG Metal Technology (M) S/B

Revision: **0** Date: **09/04/2009** By: **Chandran**
 Authorised by: **Venu** Date: **09/04/2009**

Welding Process(es): **GMAW**

Type - Manual ☐ Semi-Automatic ☒

Supporting PQR No.(s): **PQR/GMAW/009 & PQR/GMAW/009S**

Machine ☐ Automatic ☐

JOINT DESIGN USED

POSITION

All bevel geometries approved by AWS D1.1
 Type : for PQR qualified Single 'V' with backing

Single ☒ Double Weld ☒

Backing : Yes ☒ No ☒

Backing Material : **EN10025 S355 J2G3 or equivalent**

Root Opening : **6 ~ 7mm** Root Face Dimension: **2 ~ 3mm**

Groove Angle : **60° +/-10°** Radius (J-U): **-**

Back Gouging : Yes ☒ No ☒ Method: **Air Carbon Arc**

Position of Groove : **ALL** Fillet: **ALL**

Vertical Progression : Up ☒ Down ☐

ELECTRICAL CHARACTERISTICS

Transfer Mode (GMAW) Short-Circuiting ☐

Globular ☒ Spray ☐

Current: AC ☐ DCEP ☒ DCEN ☐ Pulsed ☐

Other: **N/A**

Tungsten Electrode (GTAW)

Size: **-**

Type: **-**

REVIEWED
 WITNESSED
 VERIFIED
 NAME: **V.RABINDRA**
 DATE: **22/04/09**

BASE METALS

Material Spec: **EN10025 (or as approved by DNV 2.7-1)**
S355J2G3 (or base metal similar in chemical/
mechanical properties as approved by DNV

Type or Grade: **2.7-1**

Thickness: **6mm to unlimited** Fillet: **ALL**

Diameter (Pipe): **Diameter (OD) above 600mm**

Filler Metals: **GMAW (Dia 1.0 & 1.2 mm)**

AWS Specification: **A 5.18**

AWS Classification: **ER70S-6**

Note: Minimum thickness at 3mm when CVN is not requirement

TECHNIQUE

Stringer or Weave Bead: **STRING & WEAVE**

Multi-pass or Single Pass (per side) : **MULTI-PASS**

Number of Electrodes: **ONE(1)**

Electrode Spacing: Longitudinal: **-**

Lateral: **-**

Angle: **-**

Contact Tube to Work Distance: **15mm - 20mm**

Peening: **NONE**

Interpass Cleaning: **Chipping, Wire Brush**
& Grinding

SHIELDING

Flux: **-** Gas: **CO2**

Composition: **100%**

Electrod-Flux (Class) Flow Rate: **CO2 (20-25L/MIN)**

Gas Cup Size: **16mm**

PREHEAT

POSTWELD HEAT TREATMENT

Preheat Temp., Min. : **25°C**

Interpass Temp., Min.: **25°C** Max.: **250°C**

Temp.: **-**

Time : **-**

Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed (cm/min)	Heat Input (KJ/cm)	
		Class	Diam.	Type & Polarity	Amps. or Wire Feed speed				
1 ~ 3	GMAW	ER70S-6	1.0	DC+VE	130~150	22.0~24.0	10.0~30.0	6.0~18.0	65°~75° 3.0 mm T 3.0 mm Single sided with backing and/or double weld
4 ~ 5	GMAW	ER70S-6	1.2	DC+VE	130~160	22.0~24.0	10.0~30.0	10.0~18.0	

NOTE : PQR QUALIFIED IN 3G POSITION WITH CVN AT - 29°C





VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD (Co.No. 669923-T)
VG METAL TECHNOLOGY (M) SDN BHD (Co.No. 449738-D)

PROCEDURE QUALIFICATION RECORDS (PQR)

AWS D1.1/D1.1M:2006 / DNV CN 2.7-1

Company Name: <u>VG Offshore Containers International (M) S/B</u> <u>VG Metal Technology (M) S/B</u> Welding Process(es): <u>GMAW</u> Supporting PQR No.(s): <u>PQR/GMAW/009</u>				Identification No : WPS/ GMAW /009 Revision: <u>0</u> Date: <u>09/04/2009</u> By: <u>Chandran</u> Authorised by: <u>Venu</u> Date: <u>09/04/2009</u> Type - Manual ☐ Semi-Automatic ☒ Machine ☐ Automatic ☐				
JOINT DESIGN USED				POSITION				
Type : <u>BUTT</u> Single ☒ Double Weld ☐ Backing : Yes ☒ No ☐ Backing Material : <u>EN10025 S355 J2G3</u> Root Opening : <u>6 mm</u> Root Face Dimension : <u>2 ~ 3mm</u> Groove Angle : <u>60° +/-10°</u> Radius (J-U): <u>-</u> Back Gouging : Yes ☐ No ☒ Method: <u>-</u>				Position of Groove : <u>ALL</u> Fillet: <u>N/A</u> Vertical Progression : Up ☒ Down ☐				
BASE METALS				ELECTRICAL CHARACTERISTICS				
Material Spec: <u>EN10025</u> Type or Grade: <u>S355J2G3</u> Thickness: <u>25mm</u> Fillet: <u>ALL</u> Diameter (Pipe): <u>N/A</u> Filler Metals: <u>GMAW(Dia 1.0 & 1.2mm)</u> AWS Specification: <u>A 5.18</u> AWS Classification: <u>ER70S-6</u>				Transfer Mode (GMAW) Short-Circuiting ☐ Globular ☒ Spray ☐ Current: AC ☐ DCEP ☒ DCEN ☐ Pulsed ☐ Other: <u>N/A</u> Tungsten Electrode <u>(GMAW)</u> Size: <u>N/A</u> Type: <u>N/A</u> NAME: <u>V.RABINDR</u> DATE: <u>22/04/09</u>				
SHIELDING				TECHNIQUE				
Flux: <u>-</u> Gas: <u>CO2</u> Composition: <u>100%</u> Electrode-Flux (Class) Flow Rate: <u>CO2 (20-25L/MIN)</u> Gas Cup Size: <u>16MM</u>				Stringer or Weave Bead: <u>STRING and WEAVE</u> Multi-pass or Single Pass (per side) : <u>MULTI-PASS</u> Number of Electrodes: <u>ONE(1)</u> Electrode Spacing: Longitudinal: <u>-</u> Lateral: <u>-</u> Angle: <u>-</u> Contact Tube to Work Distance: <u>15mm - 20mm</u> Peening: <u>NONE</u> Interpass Cleaning: <u>Chipping, Wire Brush & Grinding</u>				
PREHEAT				POSTWELD HEAT TREATMENT				
Preheat Temp., Min. : <u>35°C</u> Interpass Temp., Min.: <u>35°C</u> Max.: <u>235°C</u>				Temp.: <u>N/A</u> Time : <u>N/A</u>				
Weld Layer(s)		Process	Filler Metals		Current			
		Class	Diam.	Type & Polarity	Amps. or Wire Feed speed	Volts		
					Travel Speed (cm/min)	Heat Input (KJ/cm)		
1~ 6	GMAW	ER70S-6	1.2	DC+VE	131~148	21.9 ~ 22.0	8.82~14.15	12.22~21.55
7 ~ 8	GMAW	ER70S-6	1.2	DC + VE	145~ 145	22.0	8.33~11.46	16.7~22.34
9~ 11	GMAW	ER70S-6	1.0	DC+VE	134 ~ 135	23.0~24.0	7.83~13.3	14.5~23.63
12 ~ 14	GMAW	ER70S-6	1.0	DC+VE	132 ~ 137	22.0~23.0	8.95~9.78	19.30~20.35

NOTE : PQR QUALIFIED IN 3G POSITION WITH CVN AT - 29°C



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD

VG METAL TECHNOLOGY (M) SDN BHD

Procedure Qualification Record (PQR) # PQR/GMAW/ 009

Test Results

TENSILE TEST

Specimen No.	Width (mm)	Thickness (mm)	Area (mm ²)	Ultimate tensile load, (KN)	Ultimate unit Stress, (Mpa)	Character of failure and location
T1	20.20	24.09	486.62	29059.02	585.64	Ductile / Base Metal
T2	20.13	25.10	505.26	29865.11	579.67	Ductile / Base Metal

GUIDED BEND TEST

Specimen No.	Type of bend	Result	Remarks
S1	SIDE BEND	SATISFACTORY	NO VISIBLE DEFECT
S2	SIDE BEND	SATISFACTORY	NO VISIBLE DEFECT
S3	SIDE BEND	SATISFACTORY	NO VISIBLE DEFECT
S4	SIDE BEND	SATISFACTORY	OPENING OF 1.4mm at FUSION LINE

VISUAL INSPECTION

Appearance SATISFACTORY
 Undercut NONE
 Piping porosity NONE
 Convexity NONE
 Test date 8/4/2009
 Witnessed by ABS CONSULTING (M) SDN BHD

Radiographic-ultrasonic examination

RT report no.: NDT/RT/57602-01/09 Result SATISFACTORY
 UT report no.: NIL Result NIL

FILLET WELD TEST RESULTS

Minimum size multiple pass Maximum size single pass
 Macroetch Macroetch

1. - 3. - 1. - 3. -
 2. - 2. -

Other Tests

CHARPY V-NOTCH IMPACT TEST RESULTS

Specimen Size (mm)	Location	Test Temp. Deg. (°C)	Individual Value (J)			Average Value (J)
			1	2	3	
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-

Hardness Test Results

REFER REPORT NO :

MAT/0866-01/09

Welder's name ASHOK KUMAR Clock no. - Stamp no. W35

Test conducted by NUSANTARA TECHNOLOGIES SDN BHD Laboratory

Test number MAT/0866-01/09

Per MUHAMAD RIDZUAN AB.AZIZ

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of AWS D1.1/AWS D1.1M, (2006) Structural Welding Code- Steel.



☒ REVIEWED
☒ WITNESSED
☒ VERIFIED

NAME: V.RABINDRA
 DATE: 22/04/09

Signed _____

Manufacture QAIQC Contractor VS6

By : CHANDRAN

Title : Q.A. ENGINEER

Date : 21/4/09



SHEET NO : 1/2
DATE : 26/3/09
REV. NO. : 0
JOB NO : -

WELDING DATA TEST RECORDS

WPS REF. NO : WPS/GMAW/009

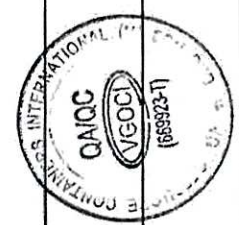
CLIENT : FERGUSON SEACABS				WELDER'S NAME : ASHOK KUMAR				PASSPORT NO.:	B2897693							
PROJECT : MINI CONTAINER UK/AUSTRALIA				WELDER I.D. NO : W35				SERIAL NO.:	N/A							
PCS NO. STEP NO.	PASS NO.	LAYER NO.	WELDING MATERIAL			WELDING CONDITION						REMARKS				
			SFA NO.	TRADE NAME	MATERIAL CODED MARKING	SIZE	POSITION	AMPS	VOLTS	SPEED CM / MIN.	PREHEAT / RPM		INTERPASS	FLOW RATE	WIRE FEED SPEED	
1	1		AS-18	60°	GR70S-6	1-2	3G	131	22	2'07"	33	33	25	14-15	12-22	TS (cm/min) H.T (KJ/cm)
2	2		"	"	"	1-2	"	134	22	2'13"		60		13-07		
3	3		"	"	"	1-2	"	148	21-9	2'38"		96		17-07		
4	4		"	"	"	1-2	"	142	22	3'12"		128		19-98		
5	5		"	"	"	1-2	"	141	22	2'48"		135		17-39		
6	5		"	"	"	1-2	"	144	22	3'24"		130		21-55		
7	6		"	"	"	1-2	"	145	22	2'37"		153		16-7		
8	6		"	60°	"	1-2	"	141	22	3'36"		140		22-34		
SKETCH							MATERIAL ENTERED / CHECKED BY VERIFIED / CONFIRMED BY				EM10015 S355J2G3 H/W DL 47204 26/3/09 REVIEWED WITNESSED VERIFIED		QA/QC VGOCL (589324-1) OFFSHORE CONTAINERS INTERNATIONAL			

NAME : V. RAJENDRA
DATE : 26/03/09

SHEET NO: 2/2
 DATE: 26/3/09
 REV. NO.: 0
 JOB NO.: -

WELDING DATA TEST RECORDS

WPS REF. NO: WPS/GMAW/009

CLIENT: FERGUSON SEACABS				WELDER'S NAME: ASHOK KUMAR				PASSPORT NO.:	B2897693							
PROJECT: MINI CONTAINER UK/AUSTRALIA				WELDER I.D. NO: W35				SERIAL NO.:	N/A							
PCS NO. STEP NO.	PASS NO.	LAYER NO.	WELDING MATERIAL			WELDING CONDITION					REMARKS					
			SFA NO.	TRADE NAME	MATERIAL CODED MARKING	SIZE	POSITION	AMPS	VOLTS	SPEED cm/min.		PREHEAT / RPM	INTERPASS	FLOW RATE	WIRE FEED SPEED	
9		7	AS-18		ER70S-6	1-0	3G	134	24	2'15"			142	25		TS (cm/min) HI (kJ/cm)
10		7	"		"	1-0	"	135	23	3'16"			117			13.3 14.5
11		7	"		"	1-0	"	134	23	3'50"			119			9.18 20.29
12		8	"		"	1-0	"	137	23	3'04"			170			7.83 23.63
13		8	"		"	1-0	"	135	22	3'15"			200			9.78 19.33
14		8	"		"	1-0	"	132	23	3'21"			235			9.23 19.3
																8.95 20.35
SKETCH			Refer page 1/2			MATERIAL			EN10025 S355J2G3							
						ENTERED / CHECKED BY										
						VERIFIED / CONFIRMED BY								REVIEWED ☒ WITNESSED ☒ NAME: YRABINDRA DATE: 26/03/09		



NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

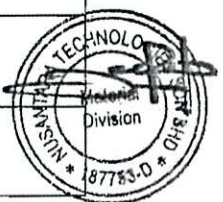
No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel : 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: nusatek@tm.net.my

6/25

Report No: NDT/RT/57602-01/09		RADIOGRAPHIC EXAMINATION REPORT												Page No: 1 of 1				
Client	:	VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN. BHD										IQI Type		:	ASTM 1B			
Project	:	WPS/GMAW/009 MINI CONTAINER UK/AUSTRALIA										Film Type		:	CLASS II			
Material	:	EN 10025 S355J2G3										Density		:	2.0 TO 3.0			
Welding Process	:	GMAW										Sensitivity		:	0.33MM (5 WIRE VISIBLE)			
Inspection Code	:	AWS D1-1 : 2006										Source to Object Distance		:	18 INCH			
Acceptance Code	:	AWS D1-1 : 2006										Source Side of Object to the Film Distance		:	25 MM + 3 MM			
Inspection Date	:	01 ST APRIL 2009										No. Of Film Each Cassette		:	1 FILM			
Source Type / Size	:	IR192 (1.7MM X 2.7 MM)										Radiographic Technique		:	SWSI			
Weld Reference Weld Thickness Reinforcement Thickness	Film Position	Material Thickness (mm)	Pipe Diameter (inch)	Type of Defect												Result		Remarks
				Excess Penetration	Burn Through	Slag Inclusion	Porosity	Concavity	Undercut	Incomplete Pen.	Lack of fusion	Crack	Surface	No Significant Discontinuity	Acceptable	Rejectable		
ASHOK KUMAR																		
B 2897693	0-1	25													X	X		
WN: W35																		
WN: 25 MM																		
WT: 3 MM																		
Radiographer: AMANSAH								Approved By:								REVIEWED		
Interpreted By: AMAT HAMIDI - LEV II								Client's Approval:								WITNESSED		
														NAME: ZULKIFLI MOHAMAD				
														DATE: 8/4/09				

Title		Page 1 of 5
MECHANICAL TEST REPORT		
Your Ref.	Report No.	Date Received
Our Ref. NT/091196-01	MAT/0866-01/09	April 01, 2009
		Date Tested April 08, 2009
Client		
VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN. BHD. No. D17, Lot 10439 Jalan Sungai Jati 41000 Klang Selangor Darul Ehsan		
Project		
MINI CONTAINER UK / AUSTRALIA		
Details		
Subject	: To conduct Mechanical Test on WPS Test Plate	
WPS No.	: WPS/GMAW/009	
Roll No.	: DL 47204	
Heat No.	: 13235	
Material Specification	: EN 10025 S355 J2G3	
Material Thickness	: 25.0 mm	
Welding Process	: GMAW	
Weld Configuration	: Single Vee	
Weld Position	: 3 G	
Welder's Particular	: ASHOK KUMAR - [P/P NO: B 2897963] - (W 35)	
Test Required	: i. Tensile Test 2 pcs. ii. Bend Test 4 pcs. iii. Hardness Test 1 pc. iv. Macro Etch Examination 1 pc.	
Test Specification	: AWS D1.1 / D1.1M - 2006 EDITION / DNV 2.7 - 1	
 ☒ REVIEWED ☒ WITNESSED ☒ VERIFIED NAME: V. RABINDRA DATE: 22/04/09 		
Tested by :	Prepared by :	Reviewed by :
Muhamad Ridzuan Ab. Aziz, Azhar Mohd. Nazir Lab. Technician (No Signature Required)	Aleefah Hosni Lab. Supervisor	Zaidi Ali Sr. Engineer

Report No. MAT/0866-01/09	Title TENSILE TEST		Page 2 of 5																																										
Test Result																																													
<table border="1"> <thead> <tr> <th colspan="4">TRANSVERSE TENSILE TEST</th> </tr> <tr> <th colspan="2" rowspan="2">WPS No.</th> <th colspan="2">WPS/GMAW/009</th> </tr> <tr> <th>T 1</th> <th>T 2</th> </tr> </thead> <tbody> <tr> <td>Width</td> <td>mm</td> <td>20.20</td> <td>20.13</td> </tr> <tr> <td>Thickness</td> <td>mm</td> <td>24.09</td> <td>25.10</td> </tr> <tr> <td>Cross Sectional Area</td> <td>mm²</td> <td>486.62</td> <td>505.26</td> </tr> <tr> <td>Maximum Load</td> <td>kgf</td> <td>29059.02</td> <td>29865.11</td> </tr> <tr> <td>Tensile Strength</td> <td>N/mm²</td> <td>585.64</td> <td>579.67</td> </tr> <tr> <td></td> <td>psi</td> <td>84917.45</td> <td>84052.54</td> </tr> <tr> <td colspan="2">Position of Fracture</td> <td colspan="2">Broke at Base Metal</td> </tr> <tr> <td colspan="2">Mode of Failure</td> <td colspan="2">Ductile</td> </tr> </tbody> </table>				TRANSVERSE TENSILE TEST				WPS No.		WPS/GMAW/009		T 1	T 2	Width	mm	20.20	20.13	Thickness	mm	24.09	25.10	Cross Sectional Area	mm ²	486.62	505.26	Maximum Load	kgf	29059.02	29865.11	Tensile Strength	N/mm ²	585.64	579.67		psi	84917.45	84052.54	Position of Fracture		Broke at Base Metal		Mode of Failure		Ductile	
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		☒ REVIEWED ☒ WITNESSED - 08/04/09 ☐ VERIFIED NAME: V.RABINDRA DATE: 22/04/09																																											
																																													

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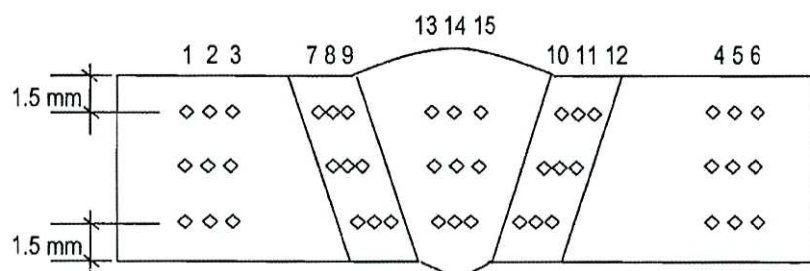
Head Office: No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia. Tel: 03-51229766/7/8 Fax: 03-51228766/7
 Kemaman Branch: K-7206, Kawasan Perindustrian Jakar II, 24000 Kemaman, Terengganu Darul Iman. Tel: 09-8598529 Fax: 09-8593129
 Ipoh Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lahat, Perak. Tel: 019-6620324 Fax: 03-51228766

Report No. MAT/0866-01/09	Title BEND TEST	Page 3 of 5																																													
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="5">TRANSVERSE BEND TEST</th> </tr> <tr> <td colspan="5">Diameter of Former : 38.1 mm</td> </tr> <tr> <td colspan="5">Angle of Bend : 180°</td> </tr> <tr> <th style="width: 20%;">WPS No. WPS/GMAW/009</th> <th style="width: 15%;">Nominal Width (mm)</th> <th style="width: 15%;">Nominal Thickness (mm)</th> <th style="width: 15%;">Result</th> <th style="width: 35%;">Remarks</th> </tr> <tr> <td style="text-align: center;">Side Bend</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">S 1</td> <td style="text-align: center;">10.0</td> <td style="text-align: center;">25.0</td> <td style="text-align: center;">Satisfactory</td> <td style="text-align: center;">No Visible Defect</td> </tr> <tr> <td style="text-align: center;">S 2</td> <td style="text-align: center;">10.0</td> <td style="text-align: center;">25.0</td> <td style="text-align: center;">Satisfactory</td> <td style="text-align: center;">No Visible Defect</td> </tr> <tr> <td style="text-align: center;">S 3</td> <td style="text-align: center;">10.0</td> <td style="text-align: center;">25.0</td> <td style="text-align: center;">Satisfactory</td> <td style="text-align: center;">No Visible Defect</td> </tr> <tr> <td style="text-align: center;">S 4</td> <td style="text-align: center;">10.0</td> <td style="text-align: center;">25.0</td> <td style="text-align: center;">Satisfactory</td> <td style="text-align: center;">An opening of 1.4 mm was detected at fusion line</td> </tr> </table>			TRANSVERSE BEND TEST					Diameter of Former : 38.1 mm					Angle of Bend : 180°					WPS No. WPS/GMAW/009	Nominal Width (mm)	Nominal Thickness (mm)	Result	Remarks	Side Bend					S 1	10.0	25.0	Satisfactory	No Visible Defect	S 2	10.0	25.0	Satisfactory	No Visible Defect	S 3	10.0	25.0	Satisfactory	No Visible Defect	S 4	10.0	25.0	Satisfactory	An opening of 1.4 mm was detected at fusion line
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 ☒ REVIEWED ☒ WITNESSED - 08/04/09 ☐ VERIFIED NAME: V.RABINDRA DATE: 22/04/09																																															
																																															

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Ipoh Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lahat, Perak. Tel: 019-6620324 Fax: 03-51228766

Report No. MAT/0866-01/09	Title HARDNESS TEST	Page 4 of 5
Test Result		
VICKERS HARDNESS TEST (HV 10)		
Sketch  Line 1 Line 2 Line 3		
Indentor : Diamond Pyramid Angle 136° Load : 10 kgf		
 REVIEWED ☒ WITNESSED ☒ - 08/04/09 VERIFIED ☒ - 08/04/09 NAME: V. RABINDRA DATE: 08/04/09		
Point	Location	WPS/GMAW/009
		Line 1 Line 2 Line 3
1	Base Metal	173.0
2		178.0
3		171.0
4		175.0
5		170.0
6		176.0
7	HAZ	223.0
8		219.0
9		222.0
10		224.0
11		221.0
12		225.0
13	Weld Metal	196.0
14		190.0
15		194.0

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NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

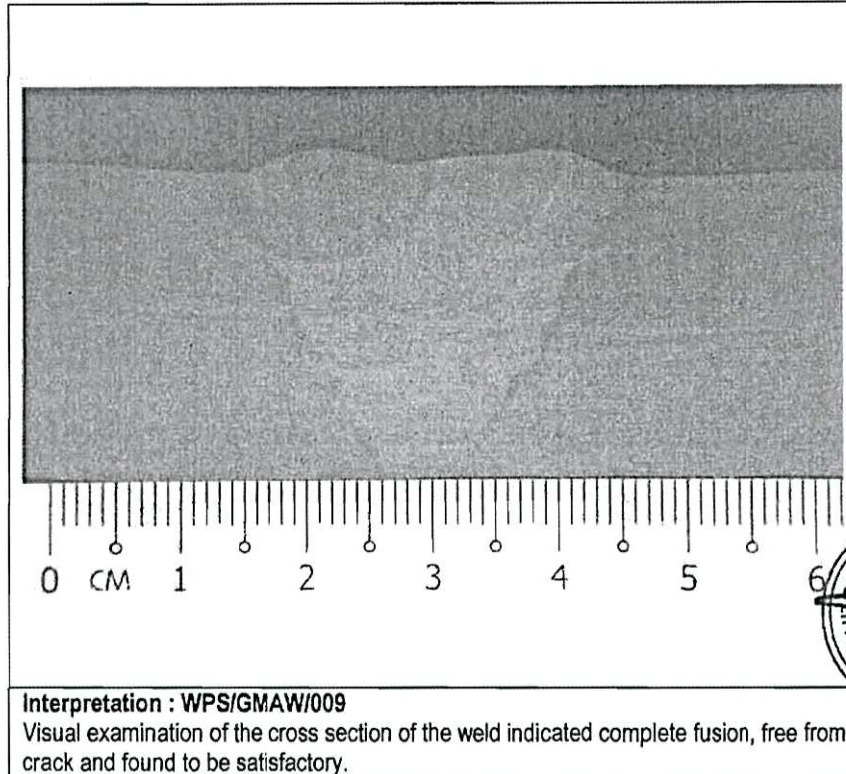
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Report No. MAT/0866-01/09	Title MACRO ETCH EXAMINATION	Page 5 of 5
------------------------------	--	-------------

Test Result



The above mentioned test were witnessed by

Name : *Chandran 8/4/09*



Name :

☒ REVIEWED
☒ WITNESSED - 08/04/09
☒ VERIFIED V. Rabindra
NAME: V.RABINDRA
DATE: 22/04/09

Name :

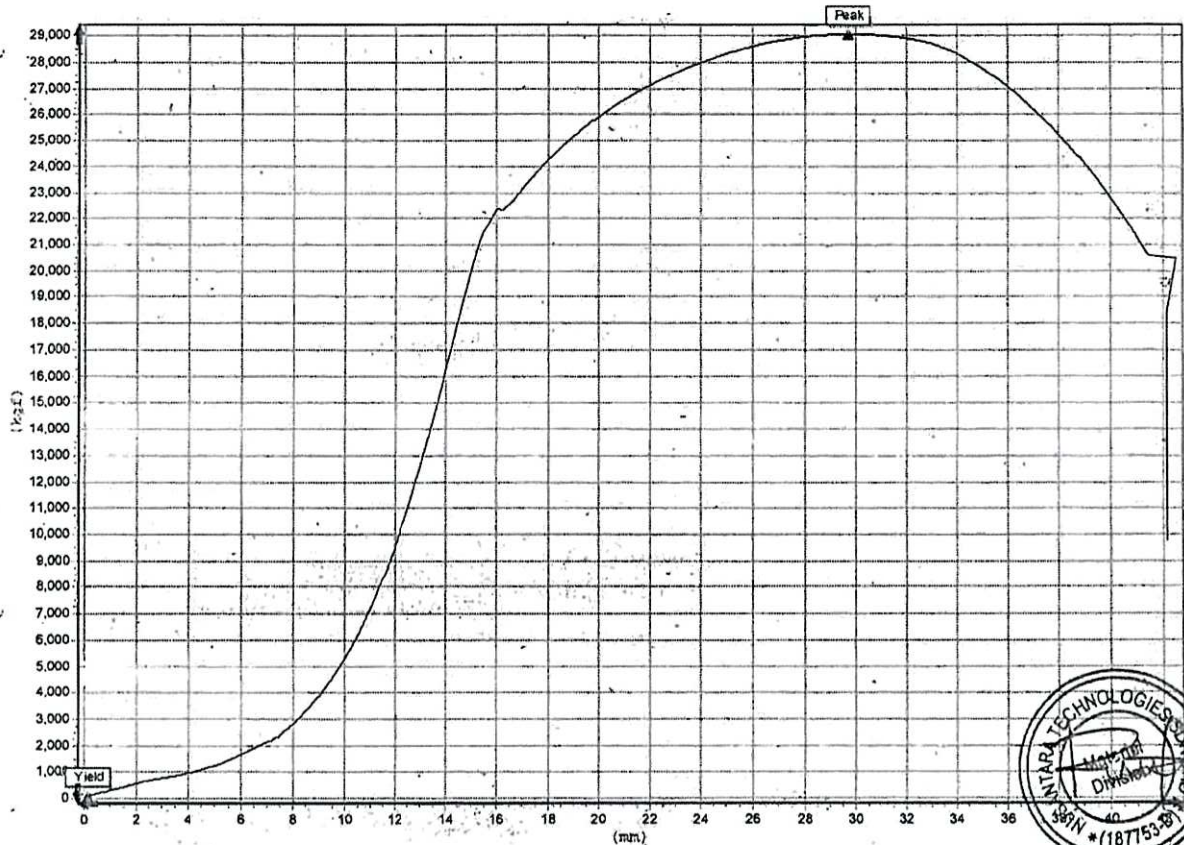
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NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

Head Office: No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia. Tel: 03-51229766/7/8 Fax: 03-51228766/7
Kemaman Branch: K-7206, Kawasan Perindustrian Jakar II, 24000 Kemaman, Terengganu Darul Iman. Tel: 09-8598529 Fax: 09-8593129
Ipoh Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lahat, Perak Darul Ridzuan Tel: 05-3229571 Fax: 05-3220524

NO.	JOB NO.	AREA mm ²	MAX FORCE kgf	TENSILE STRENGTH kgf/mm ²	REMARKS
1	091196	486.62	29059.02	59.72	

WPS/GMAW/009-1



WITNESSED BY:-



☐ REVIEWED
☐ WITNESSED
☐ VERIFIED

NAME: ZULKIFLI MOHAMAD

DATE: 8/4/09

3) _____

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NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

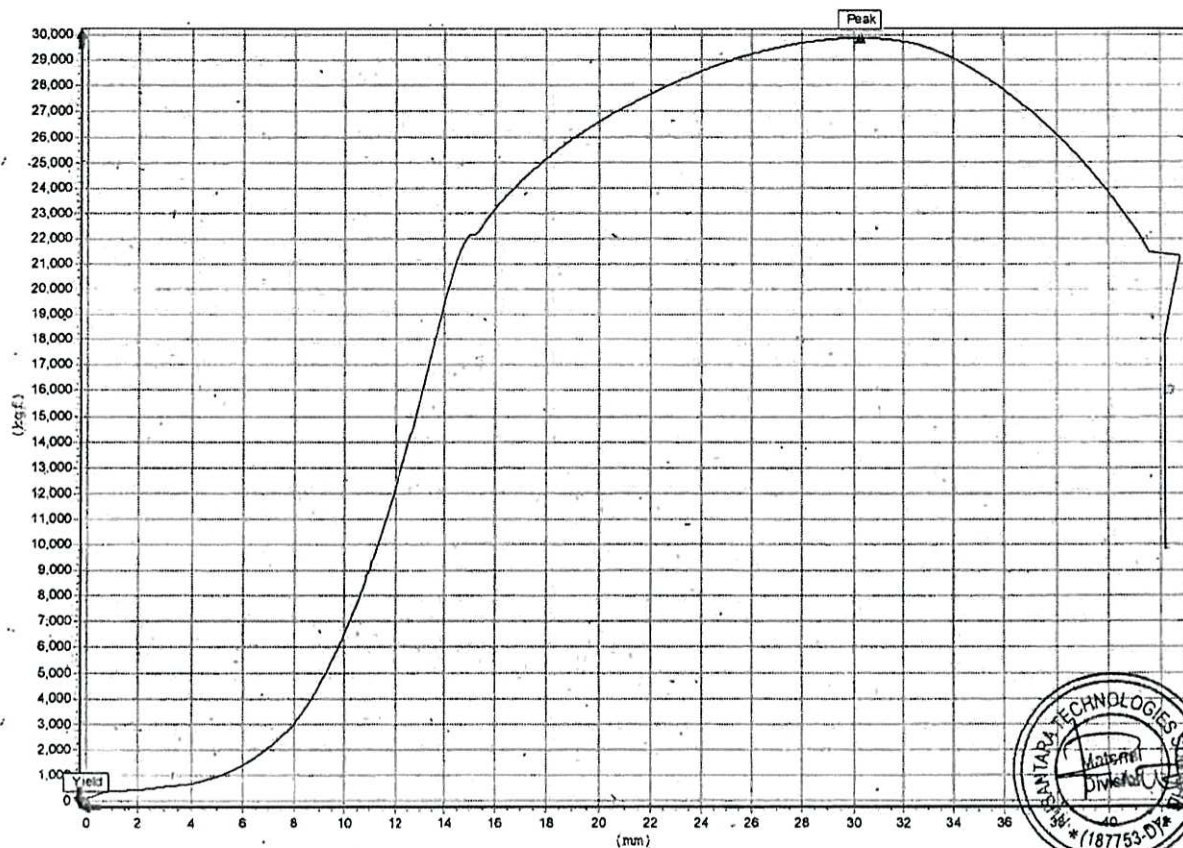
Head Office: No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia. Tel: 03-51229766/7/8 Fax: 03-51228766/7

Kemaman Branch: K-7206, Kawasan Perindustrian Jakar II, 24000 Kemaman, Terengganu Darul Imafi. Tel: 09-8598529 Fax: 09-8593129

Ipoh Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lahat, Perak. Tel: 019-6620324 Fax: 03-51228766

NO.	JOB NO.	AREA mm ²	MAX FORCE kgf	TENSILE STRENGTH kgf/mm ²	REMARKS
2	091196	505.26	29865.11	59.11	

WPS/GMAW/009-2



WITNESSED BY:-



☐ REVIEWED
☒ WITNESSED
☐ VERIFIED

NAME: ZULKIFLI MOHAMAD

DATE: 8/4/09

3) _____

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NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

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Ipoh Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lahat, Perak. Tel: 019-6620324 Fax: 03-51228766

ANN JOO METAL SDN. BHD.

Customer: *Yg Metal Technology (M) Sdn Bhd.*

Dimension: *25mm x 1019mm x 2433mm*

D/O No.: *09103790* P/O No.: *00001100*

Quantity: *3pc* Date: *13/10/03*

CERTIFIED TRUE

Chong Mphob

ANN JOO METAL SDN BHD
(LOG Dept) (Co. No. 260316-F)

JFE

JFE スチール株式会社 東日本製鉄所 (京浜)
JFE Steel Corporation East Japan Works (Yokohama)

検査証明書 INSPECTION CERTIFICATE

顧客名: **ANN JOO METAL SDN. BHD.**

顧客管理番号: **Customer's Control No. 108/00038**

仕入元: **JFE SHOJI TRADE CORPORATION**

注文番号: **FF5 -C80135724**

品名: **HOT ROLLED STEEL PLATE**

規格: **BS EN10025 S355J203 1993**

証明番号: **AUREX-0960-001**

日付: **2008-07-14**

注文番号: **3A30305**

検査項目	検査結果	化学組成 (%)			引張試験	衝撃試験		
		C	Si	Mn	Yield Strength	1	2	3
化学成分		0.20	0.01	0.55	355	19	27	27
引張試験					561	252	208	215
衝撃試験					561	252	208	215

TEST RESULTS

Size of Impact Test Specimen: 10x10mm x 2.75x10mm x 3.2x10mm x 4.5x10mm

Direction: Longitudinal

Transverse

Through-thickness

Fracture: S: Shear B: Brittle

Expansion: M: mm I: mil

UT: Ultrasonic Examination

G: Good

INSPECTOR TO

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION.

東日本製鉄所 (京浜) : 〒210-0868 千葉県京浜市川崎区磯島1番地1 東日本製鉄所 (京浜) 1-1-1, OHGISHIMA, KAWASAKI 210-0868

Quality Assurance Section
East Japan Works

CERTIFIED TRUE COPY

Chung 17/10/08.

ANN JOO METAL SDN BHD
(LOG Dept) (Co. No. 260316-F)

検査証明書 INSPECTION CERTIFICATE

JFE スチール株式会社 東日本製鉄所 (京浜)
JFE Steel Corporation East Japan Works (Kaihin)

JFE

底明書番号 : AUREX-0960-002
Certificate No.

日付 : 2008-07-14
Date

船名 :
Ship No.

工事番号 :
Construction No.

注文番号 : 8A30305
Order No.

顧客 : ANN JOO METAL SDN. BHD.

顧客管理番号 : I08/00038

注文者 : JFE SHOJI TRADE CORPORATION

注文番号 : FF5 -C80135724

品名 : HOT ROLLED STEEL PLATE

規格 : BS EN10025 S355J2G3 1993

項目 Item	鋼種 Steel No.	寸法 Size	数量 Quantity	重量 Mass (CAL)	化学成分 Chemical Composition (%)			引張試験 Tensile Test			衝撃試験 IMPACT TEST		
					C	SI	P	S	CUNIMO	CRS.AL	CEQ3	Y.P.	T.S.
		T X W X L			X100	X100	X100	X100	X100	X100	X100	N/MM2	%
	001	25.0 X 2438 X 9144	1	437316	35141	13	5	3	2	1	3	31	41
	001	25.0 X 2438 X 9144	1	4373									
		TOTAL	10	43730KG									
VISUAL & DIMENSIONS : GOOD													
UST : ASTM A435													
Y.S. ... 0.5% UNDER LOAD													

(注) 1. 検査結果の表示方法
(Notes) 1. Inspection Results Display Method
2. 検査結果の表示方法
(Notes) 2. Inspection Results Display Method
3. 検査結果の表示方法
(Notes) 3. Inspection Results Display Method

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION.

東日本製鉄所 (京浜) : 〒210-0868 神奈川県横浜市磯子区磯子1番地1 East Japan Works (Kaihin) : 1-1, OHGISHIMA, KAWASAKI 210-0868 JAPAN
Quality Assurance Section
東日本製鉄所 品質保証部
East Japan Works



威力工業有限公司

IMPRESS STEEL WIRE INDUSTRIES SDN. BHD.

PT 517, Jalan PBR 23, Kawasan Perindustrian Bukit Rambai, 75250 Melaka, Malaysia.

Tel : 606-3510989

Fax : 606-3510987

Email : impresssteel@gmail.com

Website : http://www.impress-steel.com.my



Title : MILL CERTIFICATE
Product : MIG COPPER COATED WIRE
Customer Name :

1.0 Manufacturer : IMPRESS STEEL WIRE INDUSTRIES SDN BHD
1.1 Country of Origin: MALAYSIA

2.0 Material & Packing

2.1	2.2	2.3	2.4	2.5
Material Type	Size	Tolerance Size	Tensile Strength	Weight
ER70S-6	1.00 mm dia	+0, -0.025 mm	130 - 160 kg/mm ²	15 Kgs

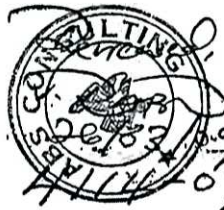
3.0 Chemical Composition

C	Mn	Si	S	P	Cu	Ni	Cr	Mo	V	Al
0.07	1.47	0.82	0.014	0.01	0.11	0.06	0.02	0.02	0.007	0.003

Sn	B	Ti	As	Pb	Nb	Sb	Q2ppm	N2ppm
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	40

4.0 Physical Test

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Reduction Area (%)
388	520	28	79



Approved by



贏力工業有限公司

IMPRESS STEEL WIRE INDUSTRIES SDN. BHD. (436101-V)

PT 517, Jalan PBR 23, Kawasan Perindustrian Bukit Rambai, 75250 Melaka, Malaysia.

Tel. : 606-3510989

Email : impresssteel@gmail.com

Fax : 606-3310987

Website : <http://www.impress-steel.com.my>



2/3

Title : **MILL CERTIFICATE**
Product : **MIG COPPER COATED WIRE**
Customer Name :

1.0 Manufacturer : **IMPRESS STEEL WIRE INDUSTRIES SDN BHD**

1.1 Country of Origin: **MALAYSIA**

2.0 Material & Packing

2.1	2.2	2.3	2.4	2.5
Material Type	Size	Tolerance Size	Tensile Strength	Weight
ER70S-6	1.20 mm dia	+0, -0.025 mm	120 - 150 kg/mm ²	15 Kgs

3.0 Chemical Composition

C	Mn	Si	S	P	Cu	Ni	Cr	Mo	V	Al
0.07	1.47	0.82	0.014	0.01	0.11	0.06	0.02	0.02	0.007	0.003

Sn	B	Ti	As	Pb	Nb	Sb	02ppmm	N2ppmm
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	40

4.0 Physical Test

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Reduction Area (%)
388	520	28	79



26/3/09



Approved by



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD (Co.No. 669923-T)
VG METAL TECHNOLOGY (M) SDN BHD (Co.No. 449738-D)

PROCEDURE QUALIFICATION RECORDS (PQR)

AWS D1.1/D1.1M:2006 / DNV CN 2.7-1



Company Name: VG Offshore Containers International (M) S/B
VG Metal Technology (M) S/B

Identification No : WPS/ GMAW /009S

Revision: 0 Date: 09/04/2009 By: Chandran

Authorised by: Venu Date: 09/04/2009

Welding Process(es): GMAW

Type - Manual ☐ Semi-Automatic ☒

Supporting PQR No.(s): PQR/GMAW/009S

Machine ☐ Automatic ☐

JOINT DESIGN USED

Type : BUTT

Single ☒ Double Weld ☐

Backing : Yes ☒ No ☐

Backing Material : EN10025 S355 J2G3

Root Opening : 6 ~ 7mm Root Face Dimension: 2~3mm

Groove Angle : 60° +/-10° Radius (J-U): -

Back Gouging : Yes ☐ No ☒ Method: -

BASE METALS

Material Spec: EN10025

Type or Grade: S355J2G3

Thickness: 6mm Fillet: N/A

Diameter (Pipe): N/A

Filler Metals: GMAW (Dia 1.0 & 1.2 mm)

AWS Specification: A 5.18

AWS Classification: ER70S-6

SHIELDING

Flux: - Gas: CO2

Composition: 100%

Electrod-Flux (Class) Flow Rate: CO2 (20-25L/MIN)

Gas Cup Size: 16mm

PREHEAT

Preheat Temp., Min. : 27.5°C

Interpass Temp., Min.: 27.5°C Max.: 205°C

POSITION

Position of Groove : 3G Fillet: N/A

Vertical Progression : Up ☒ Down ☐

ELECTRICAL CHARACTERISTICS

Transfer Mode (GMAW) Short-Circuiting ☐

Globular ☒ Spray ☐

Current: AC ☐ DCEP ☒ DCEN ☐ Pulsed ☐

Other: N/A

Tungsten Electrode (GTAW)

Size: N/A

Type: N/A

☒ REVIEWED

☒ WITHROSE

☒ VERIFIED

NAME: V.RABINDRA

TECHNIQUE

DATE 02/04/09

Stringer or Weave Bead: STRING and WEAVE

Multi-pass or Single Pass (per side) : MULTI-PASS

Number of Electrodes: ONE(1)

Electrode Spacing: Longitudinal: -

Lateral: -

Angle: -

Contact Tube to Work Distance: 15mm - 20mm

Peening: NONE

Interpass Cleaning: Chipping, Wire Brush & Grinding

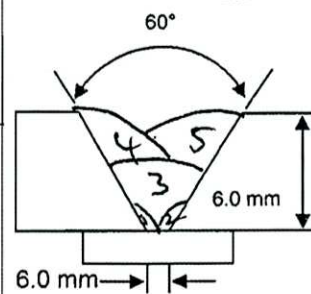
POSTWELD HEAT TREATMENT

Temp.: N/A

Time : N/A



Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed (cm/min)	Heat Input (KJ/cm)
		Class	Diam.	Type & Polarity	Amps. or Wire Feed speed			
1	GMAW	ER70S-6	1.0	DC+VE	135	22.0	25.71	6.93
2	GMAW	ER70S-6	1.0	DC+VE	136	22.0	17.82	10.07
3	GMAW	ER70S-6	1.0	DC+VE	149	23.0	10.97	18.73
4	GMAW	ER70S-6	1.2	DC+VE	149	23.0	16.22	12.68
5	GMAW	ER70S-6	1.2	DC+VE	151	23.5	12.41	17.16



NOTE : PQR QUALIFIED IN 3G POSITION WITH CVN AT - 29°C



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

Procedure Qualification Record (PQR) # PQR/GMAW/009S
Test Results

TENSILE TEST

Specimen No.	Width (mm)	Thickness (mm)	Area (mm ²)	Ultimate tensile load, (KN)	Ultimate unit Stress, (Mpa)	Character of failure and location
T1	-	-	-	-	-	-
T2	-	-	-	-	-	-

GUIDED BEND TEST

Specimen No.	Type of bend	Result	Remarks
S1	-	-	-
S2	-	-	-
S3	-	-	-
S4	-	-	-

VISUAL INSPECTION

Appearance SATISFACTORY
Undercut NONE
Piping porosity NONE
Convexity NONE
Test date 8/4/2009
Witnessed by ABS CONSULTING (M) SDN BHD

Radiographic-ultrasonic examination

RT report no.: NDT/RT/57668-01/09 Result SATISFACTORY

UT report no.: NIL Result NIL

FILLET WELD TEST RESULTS

Minimum size multiple pass Maximum size single pass
Macroetch Macroetch

1. - 3. - 1. - 3. -
2. - 2. -

Other Tests

CHARPY V-NOTCH IMPACT TEST RESULTS

Specimen Size (mm)	Location	Test Temp. Deg. (°C)	Individual Value (J)			Average Value (J)
			1	2	3	
3.3x10x55	Weld metal	-29	20	16	24	20.0
3.3x10x55	Fusion Line + 1.0mm	-29	28	28	20	25.3
3.3x10x55	Fusion Line + 5.0mm	-29	44	46	48	46

All-weld-metal tension test

Hardness Test Results

-
-
-
-
-

Welder's name ASHOK KUMAR Clock no. - Stamp no. W35

Test conducted by NUSANTARA TECHNOLOGIES SDN BHD Laboratory

Test number MAT/0867-01/09

Per MUHAMAT RIDZUAN AB.AZIZ

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of section 4 of AWS D1.1/AWS D1.1M, (2006) Structural Welding Code- Steel.



☒ REVIEWED
☒ WITNESSED
☒ VERIFIED
NAME: V.RABINDRA
DATE: 22/04/09

Signed [Signature]

Manufacturer or Contractor

By : CHANDRAN

Title : Q.A. ENGINEER

Date : 8/4/09

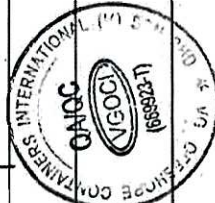


SHEET NO : 11
 DATE : 26/3/09
 REV. NO. : 0
 JOB NO : -

WELDING DATA TEST RECORDS

WPS REF. NO : WPS/GMAW/009

CLIENT : FERGUSON SEACABS				WELDER'S NAME : ASHOK KUMAR										PASSPORT NO.:	B2897693	
PROJECT : MINI CONTAINER UK/AUSTRALIA				WELDER I.D. NO : W35										SERIAL NO. :	N/A	
PCS NO. STEP NO.	PASS NO.	LAYER NO.	WELDING MATERIAL			WELDING CONDITION							REMARKS			
			SFA NO.	TRADE NAME	MATERIAL CODED MARKING	SIZE	POSITION	AMPS	VOLTS	SPEED cm / min.	PREHEAT / RPM	INTERPASS		FLOW RATE	WIRE FEED SPEED	
1	1	1	AS.18	power	ER70S-6	1-0	3G	135	22	1' 10"	275	275	275	25		T.S (cm/min) H-J (KJ/cm)
2	1	1	"	Impress	"	1-0	"	136	22	1' 41"		107				25.71 6-93
3	2	2	"	"	"	1-0	"	149	23	2' 44"		145				17-82 10-07
4	3	3	"	"	"	1-2	"	149	23	1' 51"		196				10-97 18-73
5	3	3	"	"	"	1-2	"	151	23.5	2' 25"		205				16-22 12-68
																12-41 17-16
SKETCH																
MATERIAL			EN 10025 S355J2G3													
ENTERED / CHECKED BY			H1W 970690124													
VERIFIED / CONFIRMED BY																



NAME : V.RABINDRA
 DATE : 26/03/09

52/02

21/25

Report No: NDT/RT/57668-01/09		RADIOGRAPHIC EXAMINATION REPORT										Page No: 1 of 1							
Client : VG OFFSHORE CONTAINERS Project : MINI CONTAINER UK/AUSTRALIA Material : EN10025 S355J5G3 Welding Process : GMAW Inspection Code : AWS D1-1/D1.1M: 2006 Acceptance Code : AWS D1-1/D1.1M: 2006 Inspection Date : 01 ST APRIL 2009 Source Type / Size : IR192 (1.7MM X 2.7 MM)				IQI Type : ASTM 1B Film Type : CLASS II Density : 2.0 To 4.0 Sensitivity : 0.33 MM (5 WIRE VISIBLE) Source to Object Distance : 18 INCH Source Side of Object to the Film Distance : 6 MM + 3 MM No. of Film Each Cassette : 1 FILM Radiographic Technique : SWSI															
Weld Reference		Film Position	Material Thickness (mm)	Pipe Diameter (mm)	Type of Defect												Result		Remarks
Weld Thickness Reinforcement Thickness					Excess Penetration	Burn Through	Slag Inclusion	Porosity	Concavity	Undercut	Incomplete Pen.	Root Fusion	Crack	Surface	No Significant Discontinuity	Acceptable	Rejectable		
ASHOK KUMAR																			
W35		0-1	6												X	X			
3G																			
: 6 MM																			
RT: 3 MM																			
Radiographer : AMANSHAH Interpreted By : AMAT HAMIDI -ASNT LEV II										Approved By : Client's Approval :									



☒ REVIEWED
☐ WITHHELD
☐ VERIFIED

NAME: V.RABINDRA
DATE: 22/04/09



**NUSANTARA TECHNOLOGIES SDN. BHD.**

(187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel : 03-5122 9766/7/8 Fax : 03-5122 8766/7 E-mail : nusatek@tm.net.my

22/25

Title		Page 1 of 2
MECHANICAL TEST REPORT		
Your Ref.	Report No.	Date Received
		April 01, 2009
Our Ref. NT/091197-01	MAT/0867-01/09	Date Tested April 08, 2009
Client		
VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN. BHD. No. D17, Lot 10439 Jalan Sungai Jati 41000 Klang Selangor Darul Ehsan		
Project		
MINI CONTAINER UK / AUSTRALIA		
Details		
Subject : To conduct Mechanical Test on WPS Test Plate		
WPS No. : WPS/GMAW/009S		
Plate No. : 970690124		
Material Specification : EN 10025 S355 J2G3		
Material Thickness : 6.0 mm		
Welding Process : GMAW		
Weld Configuration : Single Vee		
Weld Position : 3 G		
Welder's Particular : ASHOK KUMAR - [P/P NO: B 2897963] - (W 35)		
Test Required : i. Charpy Impact Test 9 pcs.		
Test Specification : AWS D1.1 / D1.1M - 2006 EDITION / DNV 2.7 - 1		
 ☒ REVIEWED ☒ WITHHELD - 08/04/09 ☒ VERIFIED NAME: V.RABINDRA DATE: 22/04/09 		
Tested by :	Prepared by :	Reviewed by :
Muhamad Ridzuan Ab. Aziz Lab. Technician (No Signature Required)	Aleefah Hosni Lab. Supervisor	Zaidi Ali Sr. Engineer

Report No. MAT/0867-01/09	Title CHARPY IMPACT TEST	Page 2 of 2																																											
Test Result																																													
<table border="1"> <tr> <th colspan="4">CHARPY V-NOTCH IMPACT TEST</th> </tr> <tr> <td colspan="4">Sample Size : 3.3 x 10 x 55 mm</td> </tr> <tr> <td colspan="4">Test Temperature : Minus 29°C</td> </tr> <tr> <th rowspan="2">WPS No. WPS/GMAW/009S</th> <th colspan="3">Absorbed Energy (Joules)</th> </tr> <tr> <th>Individual</th> <th colspan="2">Average</th> </tr> <tr> <td rowspan="3">Weld Metal</td> <td>1</td> <td>20.0</td> <td rowspan="3">20.0</td> </tr> <tr> <td>2</td> <td>16.0</td> </tr> <tr> <td>3</td> <td>24.0</td> </tr> <tr> <td rowspan="3">Fusion + 1.0 mm</td> <td>1</td> <td>28.0</td> <td rowspan="3">25.3</td> </tr> <tr> <td>2</td> <td>28.0</td> </tr> <tr> <td>3</td> <td>20.0</td> </tr> <tr> <td rowspan="3">Fusion Line + 5.0 mm</td> <td>1</td> <td>44.0</td> <td rowspan="3">46.0</td> </tr> <tr> <td>2</td> <td>46.0</td> </tr> <tr> <td>3</td> <td>48.0</td> </tr> </table>			CHARPY V-NOTCH IMPACT TEST				Sample Size : 3.3 x 10 x 55 mm				Test Temperature : Minus 29°C				WPS No. WPS/GMAW/009S	Absorbed Energy (Joules)			Individual	Average		Weld Metal	1	20.0	20.0	2	16.0	3	24.0	Fusion + 1.0 mm	1	28.0	25.3	2	28.0	3	20.0	Fusion Line + 5.0 mm	1	44.0	46.0	2	46.0	3	48.0
CHARPY V-NOTCH IMPACT TEST																																													
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	3	48.0																																											
																																													
The above mentioned test were witnessed by																																													
 Name: <u>Chandran</u> <u>874609</u>	 Name: <u>*</u>	☒ REVIEWED ☒ WITNESSED - 08/04/09 ☒ VERIFIED - <u>[Signature]</u> NAME: <u>V. RABINDRA</u> DATE: <u>07/04/09</u> Name: _____																																											

This report shall not be reproduced without written approval from Nusantara Technologies Sdn. Bhd.

NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)

Head Office: No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia. Tel: 03-51229766/7/8 Fax: 03-51228766/7
Kemaman Branch: K-7206, Kawasan Perindustrian Jakar II, 24000 Kemaman, Terengganu Darul Iman. Tel: 09-8598529 Fax: 09-8593129
Ipoh Branch: 9, Persiaran Industri Lahat 3, Kawasan Perindustrian Rima, 31500 Lahat, Perak. Tel: 019-6620324 Fax: 03-51228766

Customer : V6 Metal Technology Co., Ltd.
 Dimension : 6mm x 2439mm x 4144mm
 D/O No. : 08109652 P/O No. : 0001581
 Quantity : 2pc Date : 12/10/08

注 文 者 : METAL ONE CORPORATION
 注文者照会番号 : ISF-68P761M0/
 契約番号 : 5-831-H1-5-Y-LX05
 商品名 : HIGH TENSILE STEEL PLATE
 規格 : EN10025 (1993) S355J2G3
 文書番号 :
 DOCUMENT No. :

新日本製鐵株式會社
 Nippon Steel Corporation

鋼材検査証明書 INSPECTION CERTIFICATE

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.2)

顧客 : ANN JOO METAL SDN. BHD.
 CUSTOMER : ANN JOO METAL SDN. BHD.

品質管理番号 : IPO NO: 106/00050
 CUSTOMERS CONTROL No. : IPO NO: 106/00050

証明書番号 : A-27071 PAGE : 1
 発行年月日 : 2006-12-04
 DATE OF ISSUE : 2006-12-04
 A731 2***E***
 *****J****

寸法 DIMENSION MM	数量 QTY	重量 MASS KG	製鋼番号 CAST No. 試験番号 TEST No.	製品番号 PLATE No.	引張試験 TENSILE TEST					衝撃試験 IMPACT TEST			化学成分 CHEMICAL COMPOSITION %										
					YS	TS	Y.P.	TS	EL	伸び %	平均値 AVG	個々値 EACH	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	Nb	V
6X2438X9144	01	4200	G8002FROM 11998 970690109TCJ TO 970690112	970690112	449	575	28	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	
6X2438X9144	01	8400	G8002FROM 11998 970690117TCJ TO 970690124	970690124	449	575	28	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	
6X2438X9144	01	8400	G8002FROM 11998 970690133TCJ TO 970690140	970690140	449	575	28	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	
6X2438X9144	01	4200	G8002FROM 11998 970690113TCJ TO 970690116	970690116	456	571	28	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	

注 記 (NOTES) 1. 位置: 縦長方向 Longitudinal, C: 垂直方向 Transverse, Z: 板厚方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis
 2. G.L. 板面間隙 Gauge Length, A: 50mm 半形試験片 Rectangular, B: 50mm 半形試験片 Rectangular, F: 80mm 半形試験片 Round, 20mm 半形試験片 Round
 3. R.A. : 板の破断位置 Yield Point, 4. A: 合格 Acceptable, 5. F: 不合格 Fail, 6. 試験結果 Plate Thickness, 7. 試験結果 Plate Thickness, 8. 試験結果 Plate Thickness, 9. 試験結果 Plate Thickness
 4. 試験結果 Plate Thickness, 5. 試験結果 Plate Thickness, 6. 試験結果 Plate Thickness, 7. 試験結果 Plate Thickness, 8. 試験結果 Plate Thickness, 9. 試験結果 Plate Thickness
 5. 試験結果 Plate Thickness, 6. 試験結果 Plate Thickness, 7. 試験結果 Plate Thickness, 8. 試験結果 Plate Thickness, 9. 試験結果 Plate Thickness
 6. 試験結果 Plate Thickness, 7. 試験結果 Plate Thickness, 8. 試験結果 Plate Thickness, 9. 試験結果 Plate Thickness
 7. 試験結果 Plate Thickness, 8. 試験結果 Plate Thickness, 9. 試験結果 Plate Thickness
 8. 試験結果 Plate Thickness, 9. 試験結果 Plate Thickness
 9. 試験結果 Plate Thickness

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

Reviewed by
 SURVEYOR TO
 AMERICAN BUREAU OF SHIPPING
 YOKOHAMA

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE TO THE APPLICABLE SPECIFICATION BY THE BASIC ORIGINATOR AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EUROPEAN STANDARDS WITH SATISFACTORY RESULTS.

GROUP MANAGER
 PLATE QUALITY CONTROL DEPT.
 KIMITSU WORKS

SECTION 6

WELDERS QUALIFICATION CERTIFICATES



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTOName: ASHOK KUMARIdentification No. W35Welding Procedure Specification No.: WPS/GMAW/009Rev. 0Date 09/04/2009**Variables**

Process/Type [Table 4.12, Item (1)]
Electrode (single or multiple) [Table 4.12, Item (7)]
Current / Polarity

Position [Table 4.12, Item (4)]
Weld Progression [Table 4.12, Item (5)]

Backing (YES or NO) [Table 4.12, Item (6)]

Material/Spec

Base Metal

Thickness : (Plate)

Groove

Fillet

Thickness : (Pipe/tube)

Groove

Fillet

Diameter : (Pipe)

Groove

Fillet

Filler Metal [Table 4.12]

Spec. No.

Class

F-No. [Table 4.12, Item (2)]

Gas/Flux Type [Table 4.12]

Other

**Record Actual Values
Used in Qualification****Qualification Range****GMAW-Globular Transfer****GMAW-Globular/Spray Transfer****SINGLE****SINGLE****DC+VE****DC+VE****3G****F,H,V****UPHILL****UPHILL****YES****WITH BACKING/DOUBLE WELD****EN10025 S355J2G3****EN 10025 S355 materials & materials
of similar chemical / mechanical
properties****25mm****3mm to Unlimited****-****ALL THICKNESS****-****3mm to Unlimited****-****ALL THICKNESS****-****> 600mm OD****-****3mm to Unlimited****-****ALL THICKNESS****A 5.18****A 5.18 & A 5.28****ER 70S-6****6****6****CO2****WITH SHIELDING GAS****VISUAL INSPECTION (4.8.1)**Acceptable YES or NO YES**Guided Bend Test Results (4.30.5)**

Type	Result	Type	Result
SIDE BEND	SATISFACTORY	-	-

Fillet Test Results (4.30.2.3 and 4.30.4.1)Appearance : -Fillet Size -Fracture Test Root Penetration: -Macroetch -

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Inspected by MUHAMAD RIDZUAN AB.AZIZ

Test Number

MAT/0866-01/09Organization NUSANTARA TECHNOLOGIES SDN BHD

Date

8th APRIL 2009**RADIOGRAPHIC TEST RESULTS (4.30.3.2)**

Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks
0-1	ACCEPT	-	-	-	-

Interpreted by

AMAT HAMIDI - ASNT LEVEL II

Organization

NUSANTARA TECHNOLOGIES SDN BHD

Test Number

NDT/RT/57602-01/09

Date

01st APRIL 2009

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor

VGOCI / VGMT

Authorized By

ABS CONSULTING (M) SDN BHD

Date

22/04/09

☒ REVIEWED
☒ WITNESSED
☒ VERIFIED
NAME: V.RABINDRA
DATE: 22/04/09





VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD
AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTO

Name : BABU

Welding Procedure Specification No.: WPS/GMAW/009

Identification No. W36

Rev. 0

Date 09/04/2009

Variables

Process/Type [Table 4.12, Item (1)]
Electrode (single or multiple) [Table 4.12, Item (7)]
Current / Polarity

Position [Table 4.12, Item (4)]
Weld Progression [Table 4.12, Item (5)]

Backing (YES or NO) [Table 4.12, Item (6)]

Material/Spec

Base Metal
Thickness : (Plate)
Groove
Fillet
Thickness : (Pipe/tube)
Groove

Fillet
Diameter : (Pipe)
Groove
Fillet

Filler Metal [Table 4.12]
Spec. No.
Class
F-No. [Table 4.12, Item (2)]
Gas/Flux Type [Table 4.12]
Other

Record Actual Values
Used in Qualification

GMAW-Globular Transfer

SINGLE

DC+VE

3G

UPHILL

YES

EN10025 S355J2G3

25mm

-

-

-

-

-

-

-

A 5.18

ER 70S-6

6

CO2

Qualification Range

GMAW-Globular/Spray Transfer

SINGLE

DC+VE

F,H,V

UPHILL

WITH BACKING/DOUBLE WELD

EN 10025 S355 materials & materials
of similar chemical / mechanical
properties

3mm to Unlimited

ALL THICKNESS

3mm to Unlimited

ALL THICKNESS

> 600mm OD

3mm to Unlimited

ALL THICKNESS

A 5.18 & A 5.28

6

WITH SHIELDING GAS

VISUAL INSPECTION (4.8.1)

Acceptable YES or NO YES

Guided Bend Test Results (4.30.5)

Type

Result

Type

Result

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance : -

Fracture Test Root Penetration : -

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Fillet Size

Macroetch

Inspected by -

Test Number -

Organization -

Date -

RADIOGRAPHIC TEST RESULTS (4.30.3.2)

Film Identification
Number

Results

Remarks

Film Identification
Number

Results

Remarks

0-1

ACCEPT

-

-

-

-

Interpreted by AMAT HAMIDI - ASNT LEVEL II
Organization NUSANTARA TECHNOLOGIES SDN.BHD

Test Number NDT/RT/57602-02/09
Date 08TH APRIL 2009

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor VGOCI / VGMT

Authorized By ABS CONSULTING (M) SDN BHD

Date 22/04/09



☒ REVIEWED
☒ WITNESSED
☒ VERIFIED
NAME: V.RABINDRA
DATE: 22/04/09





VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTOName : MASUD ABU KALAMWelding Procedure Specification No. : WPS/GMAW/009Rev. 0Identification No. W37Date 09/04/2009**Variables**

Process/Type [Table 4.12, Item (1)]

Electrode (single or multiple) [Table 4.12, Item (7)]

Current / Polarity

Position [Table 4.12, Item (4)]

Weld Progression [Table 4.12, Item (5)]

Backing (YES or NO) [Table 4.12, Item (6)]

Material/Spec

Base Metal

Thickness : (Plate)

Groove

Fillet

Thickness : (Pipe/tube)

Groove

Fillet

Diameter : (Pipe)

Groove

Fillet

Filler Metal [Table 4.12]

Spec. No.

Class

F-No. [Table 4.12, Item (2)]

Gas/Flux Type [Table 4.12]

Other

**Record Actual Values
Used in Qualification****Qualification Range**

GMAW-Globular Transfer

GMAW-Globular/Spray Transfer

SINGLE

SINGLE

DC+VE

DC+VE

3G

F.H.V

UPHILL

UPHILL

YES

WITH BACKING/DOUBLE WELD

EN10025 S355J2G3

EN 10025 S355 materials & materials
of similar chemical / mechanical
properties

25mm

3mm to Unlimited

ALL THICKNESS

☒ REVIEWED☒ WITNESSED☒ VERIFIEDNAME: V.RABINDRADATE: 22/04/09

A 5.18

A 5.18 & A 5.28

ER 70S-6

6

6

CO2

WITH SHIELDING GAS

VISUAL INSPECTION (4.8.1)Acceptable YES or NO YES**Guided Bend Test Results (4.30.5)**

Type	Result	Type	Result
-	-	-	-
-	-	-	-

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance: - Fillet Size -
 Fracture Test Root Penetration: - Macroetch -
 (Describe the location, nature, and size of any crack or tearing of the specimen.)

Inspected by - Test Number -
 Organization - Date -

RADIOGRAPHIC TEST RESULTS (4.30.3.2)

Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks
0-1	ACCEPT	-	-	-	-

Interpreted by : AMAT HAMIDI - ASNT LEVEL II
 Organization NUSANTARA TECHNOLOGIES SDN.BHD

Test Number NDT/RT/57602-02/09
 Date 08TH APRIL 2009

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor

VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHDAuthorized By ABS CONSULTING (M) SDN BHDDate 22/04/09



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTOName: MUKTER ALIWelding Procedure Specification No.: WPS/GMAW/009Rev. 0Identification No. W38Date 09/04/2009**Variables**

Process/Type [Table 4.12, Item (1)]

Electrode (single or multiple) [Table 4.12, Item (7)]

Current / Polarity

Position [Table 4.12, Item (4)]

Weld Progression [Table 4.12, Item (5)]

Backing (YES or NO) [Table 4.12, Item (6)]

Material/Spec

Base Metal

Thickness: (Plate)

Groove

Fillet

Thickness: (Pipe/tube)

Groove

Fillet

Diameter: (Pipe)

Groove

Fillet

Filler Metal [Table 4.12]

Spec. No.

Class

F-No. [Table 4.12, Item (2)]

Gas/Flux Type [Table 4.12]

Other

**Record Actual Values
Used In Qualification**

GMAW-Globular Transfer

SINGLE

DC+VE

3G

UPHILL

YES

EN10025 S355J2G3

25mm

-

-

-

-

-

-

-

-

A 5.18

ER 70S-6

6

CO2

Qualification Range

GMAW-Globular/Spray Transfer

SINGLE

DC+VE

F,H,V

UPHILL

WITH BACKING/DOUBLE WELD

EN 10025 S355 materials & materials

of similar chemical / mechanical

properties

3mm to Unlimited

ALL THICKNESS

3mm to Unlimited

ALL THICKNESS

> 600mm OD

3mm to Unlimited

ALL THICKNESS

A 5.18 & A 5.28

6

WITH SHIELDING GAS

VISUAL INSPECTION (4.8.1)Acceptable YES or NO YES**Guided Bend Test Results (4.30.5)**

Type

Result

Type

Result

Fillet Test Results (4.30.2.3 and 4.30.4.1)Appearance -Fracture Test Root Penetration -

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Fillet Size -Macroetch -Inspected by -Test Number -Organization -Date -**RADIOGRAPHIC TEST RESULTS (4.30.3.2)**Film Identification
Number

Results

Remarks

Film Identification
Number

Results

Remarks

0-1

ACCEPT

PROSITY

-

-

-

Interpreted by

AMAT HAMIDI - ASNT LEVEL II

Organization

NUSANTARA TECHNOLOGIES SDN.BHD

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

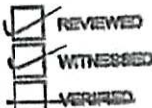
Manufacturer or Contractor

VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHDTest Number NDT/RT/57602-02/09Date 08TH APRIL 2009

Authorized By

ABS CONSULTING (M) SDN BHD

Date

02/04/09NAME: V.RABINDRADATE: 22/04/09



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD
AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTO

Name: MOHAMMED MUNNA

Welding Procedure Specification No. WPS/GMAW/009

Rev. 0

Identification No. W39

Date 09/04/2009

Variables

Process/Type [Table 4.12, Item (1)]
Electrode (single or multiple) [Table 4.12, Item (7)]
Current / Polarity

Position [Table 4.12, Item (4)]
Weld Progression [Table 4.12, Item (5)]

Backing (YES or NO) [Table 4.12, Item (6)]

Material/Spec

Base Metal

Thickness : (Plate)

Groove

Fillet

Thickness : (Pipe/tube)

Groove

Fillet

Diameter : (Pipe)

Groove

Fillet

Filler Metal [Table 4.12]

Spec. No.

Class

F.No. [Table 4.12, Item (2)]

Gas/Flux Type [Table 4.12]

Other

**Record Actual Values
Used in Qualification**

GMAW-Globular Transfer

SINGLE

DC+VE

3G

UPHILL

YES

EN10025 S355J2G3

25mm

-

-

-

-

-

-

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Qualification Range

GMAW-Globular/Spray Transfer

SINGLE

DC+VE

F,H,V

UPHILL

WITH BACKING/DOUBLE WELD

EN 10025 S355 materials & materials
of similar chemical / mechanical
properties

3mm to Unlimited

ALL THICKNESS

3mm to Unlimited

ALL THICKNESS

> 600mm OD

3mm to Unlimited

ALL THICKNESS

A 5.18 & A 5.28

6

WITH SHIELDING GAS

VISUAL INSPECTION (4.8.1)

Acceptable YES or NO YES

Guided Bend Test Results (4.30.5)

Type

Result

Type

Result

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance : -

Fracture Test Root Penetration : -

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Fillet Size

Macroetch

Inspected by -

Test Number -

Organization -

Date -

RADIOGRAPHIC TEST RESULTS (4.30.3.2)

Film Identification
Number

Results

Remarks

Film Identification
Number

Results

Remarks

0-1

ACCEPT

PROSITY

-

-

-

Interpreted by

AMAT HAMIDI - ASNT LEVEL II

Organization

NUSANTARA TECHNOLOGIES SDN.BHD

Test Number NDT/RT/57602-01/09

Date 08TH APRIL 2009

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor

VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD

Authorized By ABS CONSULTING (M) SDN BHD

Date 22/04/09





VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD
AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTO

Name : SOHEL RANA

Welding Procedure Specification No. WPS/GMAW/009

Identification No. W40

Rev. 0

Date 09/04/2009

Variables	Record Actual Values Used In Qualification	Qualification Range
Process/Type [Table 4.12, Item (1)]	GMAW-Globular Transfer	GMAW-Globular/Spray Transfer
Electrode (single or multiple) [Table 4.12, Item (7)]	SINGLE	SINGLE
Current / Polarity	DC+VE	DC+VE
Position [Table 4.12, Item (4)]	3G	F,H,V
Weld Progression [Table 4.12, Item (5)]	UPHILL	UPHILL
Backing (YES or NO) [Table 4.12, Item (6)]	YES	WITH BACKING/DOUBLE WELD
Material/Spec	EN10025 S355J2G3	EN 10025 S355 materials & materials of similar chemical / mechanical properties
Base Metal		
Thickness : (Plate)	25mm	3mm to Unlimited
Groove	-	ALL THICKNESS
Fillet	-	
Thickness : (Pipe/tube)	-	3mm to Unlimited
Groove	-	ALL THICKNESS
Fillet	-	> 600mm OD
Diameter : (Pipe)	-	3mm to Unlimited
Groove	-	ALL THICKNESS
Fillet	-	
Filler Metal [Table 4.12]	A 5.18	A 5.18 & A 5.28
Spec. No.	ER 70S-6	
Class	6	6
F-No. [Table 4.12, Item (2)]	CO2	WITH SHIELDING GAS
Gas/Flux Type [Table 4.12]		
Other		



☒ REVIEWED
☒ WITNESSED
☒ VERIFIED
NAME: V.RABINDRA
DATE: 22/04/09

VISUAL INSPECTION (4.8.1)

Acceptable YES or NO YES

Guided Bend Test Results (4.30.5)

Type	Result	Type	Result
-	-	-	-

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance : - Fillet Size -
Fracture Test Root Penetration - Macroetch -
(Describe the location, nature, and size of any crack or tearing of the specimen.)

Inspected by - Test Number -
Organization - Date -

RADIOGRAPHIC TEST RESULTS (4.30.3.2)

Film Identification Number	Results	Remarks	Film Identification Number	Results	Remarks
0-1	ACCEPT	PROSITY	-	-	-

Interpreted by AMAT HAMIDI - ASNT LEVEL II
Organization NUSANTARA TECHNOLOGIES SDN.BHD

Test Number NDT/RT/57602-01/09
Date 08TH APRIL 2009

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor



Authorized By ABS CONSULTING (M) SDN BHD

Date 22/04/09



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTO

Name : UZZAL

Welding Procedure Specification No. WPS/GMAW/009

Identification No. W41

Rev. 0

Date 09/04/2009

Variables

Process/Type [Table 4.12, Item (1)]
Electrode (single or multiple) [Table 4.12, Item (7)]
Current / Polarity

Position [Table 4.12, Item (4)]
Weld Progression [Table 4.12, Item (5)]

Backing (YES or NO) [Table 4.12, Item (6)]

Material/Spec

Base Metal

Thickness : (Plate)

Groove

Fillet

Thickness : (Pipe/tube)

Groove

Fillet

Diameter : (Pipe)

Groove

Fillet

Filler Metal [Table 4.12]

Spec. No.

Class

F-No. [Table 4.12, Item (2)]

Gas/Flux Type [Table 4.12]

Other

Record Actual Values Used in Qualification

GMAW-Globular Transfer

SINGLE

DC+VE

3G

UPHILL

YES

EN10025 S355J2G3

25mm

A 5.18

ER 70S-6

6

CO2

Qualification Range

GMAW-Globular/Spray Transfer

SINGLE

DC+VE

F,H,V

UPHILL

WITH BACKING/DOUBLE WELD

EN 10025 S355 materials & materials
of similar chemical / mechanical
properties

3mm to Unlimited

ALL THICKNESS

3mm to Unlimited

ALL THICKNESS

> 600mm OD

3mm to Unlimited

ALL THICKNESS

A 5.18 & A 5.28

6

WITH SHIELDING GAS

VISUAL INSPECTION (4.8.1)

Acceptable YES or NO YES

Guided Bend Test Results (4.30.5)

Type

Result

Type

Result

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance -

Fracture Test Root Penetration -

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Fillet Size -

Macroetch -

Inspected by -

Test Number -

Organization -

Date -

RADIOGRAPHIC TEST RESULTS (4.30.3.2)

Film Identification
Number

Results

Remarks

Film Identification
Number

Results

Remarks

0-1

ACCEPT

PROSITY

-

-

-

Interpreted by
Organization

AMAT HAMIDI - ASNT LEVEL II

NUSANTARA TECHNOLOGIES SDN.BHD

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of Section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor



Test Number NDT/RT/57602-01/09

Date 08TH APRIL 2009

Authorized By

ABS CONSULTING (M) SDN BHD

Date

22/04/09



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD

WELDER QUALIFICATION TEST RECORD AWS D1.1/D1.1M:2006

Type of Welder SEMI-AUTO

Name : KABIR HOSSAIN

Welding Procedure Specification No. : WPS/GMAW/009

Identification No. W42

Rev. 0

Date 09/04/2009

Variables

Process/Type [Table 4.12, Item (1)]
Electrode (single or multiple) [Table 4.12, Item (7)]
Current / Polarity

Position [Table 4.12, Item (4)]
Weld Progression [Table 4.12, Item (5)]

Backing (YES or NO) [Table 4.12, Item (6)]

Material/Spec

Base Metal
Thickness : (Plate)
Groove
Fillet
Thickness : (Pipe/tube)
Groove
Fillet
Diameter : (Pipe)
Groove
Fillet

Filler Metal [Table 4.12]
Spec. No.
Class
F-No. [Table 4.12, Item (2)]
Gas/Flux Type [Table 4.12]
Other



☒ REVIEWED
☒ WITNESSED
☐ VERIFIED
NAME: V.RABINDRA
DATE: 22/04/09

Record Actual Values Used in Qualification

GMAW-Globular Transfer

SINGLE

DC+VE

3G

UPHILL

YES

EN10025 S355J2G3

25mm

-

-

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Qualification Range

GMAW-Globular/Spray Transfer

SINGLE

DC+VE

F,H,V

UPHILL

WITH BACKING/DOUBLE WELD

EN 10025 S355 materials & materials
of similar chemical / mechanical
properties

3mm to Unlimited

ALL THICKNESS

3mm to Unlimited

ALL THICKNESS

> 600mm OD

3mm to Unlimited

ALL THICKNESS

A 5.18 & A 5.28

6

WITH SHIELDING GAS

VISUAL INSPECTION (4.8.1)

Acceptable YES or NO YES

Guided Bend Test Results (4.30.5)

Type

Result

Type

Result

-

-

-

-

Fillet Test Results (4.30.2.3 and 4.30.4.1)

Appearance: -

Fillet Size -

Fracture Test Root Penetration: -

Macroetch -

(Describe the location, nature, and size of any crack or tearing of the specimen.)

Inspected by -

Test Number -

Organization -

Date -

RADIOGRAPHIC TEST RESULTS (4.30.3.2)

Film Identification
Number

Results

Remarks

Film Identification
Number

Results

Remarks

0-1

ACCEPT

-

-

-

-

Interpreted by AMAT HAMIDI - ASNT LEVEL II
Organization NUSANTARA TECHNOLOGIES SDN.BHD

Test Number NDT/RT/57602-01/09
Date 08TH APRIL 2009

We, the undersigned, certify that the statements in this record are correct and that the test welds prepared, welded, and tested in accordance with requirements of section 4 of AWS D1.1/AWS D1.1M (2006) Structural Welding Code-Steel.

Manufacturer or Contractor VGOCI / VGMT

Authorized By ABS CONSULTING (M) SDN BHD

Date 22/04/09



SECTION 7

MATERIAL CERTIFICATES



SIAM YAMATO STEEL CO., LTD.
MILL INSPECTION CERTIFICATE
(In accordance with DIN5049 / EN10204 3.1)



Head office : 1 Siam Cement Road, Bangsue, Bangkok Thailand 10800
Tel : (662) 586-2783-4, 586-5329-30 Fax : (662) 586-2687, 910-3123

Certificate No. : 42107080152
Reference No. : OCE070025712
D/P No. : 120887152, 120887153, 120887154, 120887155, 120887156, 120887167, 120887168, 120887211

Customer : 3005262 ANN JOO METAL SDN BHD
Description of Goods : H-BEAM
Remark 1 : CONFORMED TO ASTM GRADE A36
Remark 2 :
Remark 3 : ANN JOO 26/2

Shipper : SIAM YAMATO STEEL CO., LTD.

Grade : A36

Steelmaking and Manufacturing Process Semi-Killed Steel, As-Rolled

Revision 00
Date of Issue : 19/09/2007
Page 1 / 1

Dimension x Length	Qty (Pcs.)	Heat No.	Mechanical Property			Chemical Composition (%)											
			Yield Str. (N/mm ²)	Tensile Str. (N/mm ²)	Elongation (%)	Impact (J)	Bend Test	C x100	Si x100	Mn x100	CE x100	SW x100	P x1000	S x1000	Nb x1000	V x1000	N x1000
W A36 6"x6"x15L/BF 30F	46	74305	393.1	482.7	20.38	-	-	14	19	83	30	21	12	19	1	5	9
W A36 6"x6"x15L/BF 30F	59	74306	382.5	486.0	29.15	-	-	15	20	85	31	21	11	22	1	4	9
W A36 6"x6"x15L/BF 30F	11	74307	359.2	470.3	22.54	-	-	13	19	91	30	20	10	26	1	4	9
W A36 6"x6"x15L/BF 30F	8	74400	334.6	437.2	21.79	-	-	11	19	70	25	17	9	27	1	3	9
W A36 6"x6"x15L/BF 40F	37	74305	393.1	482.7	20.38	-	-	14	19	83	30	21	12	19	1	5	9
W A36 6"x6"x15L/BF 40F	44	74306	382.5	486.0	29.15	-	-	15	20	85	31	21	11	22	1	4	9
W A36 6"x6"x15L/BF 40F	12	74307	359.2	470.3	22.54	-	-	13	19	91	30	20	10	26	1	4	9
W A36 6"x6"x20L/BF 40F	83	74371	323.9	417.7	29.79	-	-	10	14	77	25	18	10	24	1	4	9
W A36 6"x6"x25L/BF 40FT	4	74143	305.7	426.8	26.96	-	-	11	16	65	24	16	8	15	1	4	9
W A36 6"x6"x25L/BF 40FT	38	74307	322.1	452.1	25.73	-	-	13	19	91	30	20	10	26	1	4	9
W A36 6"x6"x25L/BF 40FT	23	74308	308.2	442.0	27.71	-	-	12	15	85	29	19	12	26	1	3	9

ANN JOO METAL SDN. BHD.	
Customer : Vg Metal Techno	QW
Dimension : 152mm x 152mm x 321mm	152mm x 152mm x 321mm
D/O No. : 10763803	P/O No. : 00553503
Quantity : 3 pcs	Date : 5/4/18

CERTIFIED TRUE COPY

ANN JOO METAL SDN BHD
LOG Dept/Cd/No. 260316-P)

ANN JOO METAL SDN. BHD.
Customer : Vg Metal Technology CW
Dimension : 152mm x 152mm x 37.1mm
D/O No. : 10/09/05 P/O No. : 0055350
Quantity : 2 pcs Date : 5/11/10

CERTIFIED TRUE COPY

ANN JOO METAL SDN BHD
LOG Dept/Cd No. 260316-P)

Checked By : Finished Good Checking Operator

Remark : CE = Carbon equivalent
SW = Chemical composition on sensitivity

We hereby certify that the material described herein has been tested and inspected satisfactorily in accordance with the requirements of the above specification.

Manufactured by Siam Yamato Steel Co., Ltd.

Quality Promotion & Engineering Department Manager

Ann Jo

CERTIFIED TRUE COPY

31/1/2010

JIKANG DIMENSI SDN.BHD.(CO.NO.249230K)

Certificate No: 8666

济钢(马)钢板有限公司

Lot 69-71, Kawasan Perindustrian Gebeng, 26100 Kuantan, Pahang D.M., Malaysia

Tel: 09-5839881 Fax: 09-5839882

PRODUCT QUALITY CERTIFICATE

Date: 26-Aug-09

Purchaser/客户: JK JI SENG MARKETING SDN.BHD.

Spec./标准: BS4360:86 43A

Spec./标准: BS4360:86 43A													Purchaser/客户: JK JI SENG MARKETING SDN.BHD.												
Grade 钢种	Heat No. 炉号	Plate No. 钢板批号	Dimension 规格			Quantity 数量 (Pieces)	Weight 重量 (Mt)	Remarks 备注	Mechanical Test 力学试验				Remarks 备注												
			Thickness 厚度 (Inch/mm)	Width 宽度 (Inch/mm)	Length 长度 (Inch/mm)				Yield Point 屈服点 (Mpa)	Tensile Strength 抗拉强度 (Mpa)	Elongation 伸长率 in 200mm(%)	Notch Toughness Charpy-V													
												℃		J											
43A	09W4-57331	1700	20	1524	6096	6	8.754		386	523	23														
43A	09W4-57331	1699	20	1524	6096	12	17.508		368	521	24														
43A	09W6-41927	1702	20	1524	6096	6	8.754		383	514	22														
43A	09W4-57331	1701	20	1524	6096	7	10.213		389	525	22														
43A	09W5-55740	1694	8	1524	6096	17	9.911		340	530	21														
43A	09W5-55739	1692	8	1524	6096	2	1.166		354	536	21														
43A	09W6-41924	1606	12	1829	6096	18	18.900		345	513	22														
43A	09W4-57333	1670	32	1829	6096	8	22.408		370	516	24														
43A	09W4-57333	1669	32	1829	6096	7	19.607		333	509	26														
43A	09W4-57332	1673	32	1829	6096	1	2.801		318	486	29														
43A	09W4-57331	1714	25	1524	6096	2	3.646		316	503	24														
Grade 钢种	Heat No. 炉号	Ladle Analysis 熔炼分析(%)											Ceq												
		C	Si	Mn	P	S																			
43A	09W4-57331	0.18	0.27	1.06	0.023	0.007								0.36											
43A	09W4-57331	0.18	0.27	1.06	0.023	0.007								0.36											
43A	09W6-41927	0.17	0.26	1.04	0.027	0.006								0.34											
43A	09W4-57331	0.18	0.27	1.06	0.023	0.007								0.36											
43A	09W5-55740	0.18	0.28	1.05	0.024	0.005								0.36											
43A	09W5-55739	0.17	0.27	1.05	0.026	0.003								0.35											
43A	09W6-41924	0.17	0.30	1.05	0.023	0.007								0.35											
43A	09W4-57333	0.18	0.28	1.07	0.021	0.007								0.36											
43A	09W4-57333	0.18	0.28	1.07	0.021	0.007								0.36											
43A	09W4-57332	0.17	0.28	1.06	0.016	0.006								0.35											
43A	09W4-57331	0.18	0.27	1.06	0.023	0.007								0.36											

Comply to EN 10204:2004 Type 3.1

This is to certify that the product has been approved with the requirements of the above specification for the above purchaser

兹证明认可本产品符合客户上述的技术条件要求

制表人/Issuer: W. T. TAN

质量经理/Quality Control Manager:

领

Dimension: 25mm x 1524mm x 6096mm

D/O No. : 1605054 P/O No. : 0550311

Quantity : 1 pc Date : 8/1/2010



ALPINE PIPE MANUFACTURING SDN. BHD. (Company No. 267844-V)
(A Wholly-owned subsidiary of Himp Teck Venture Berhad. 421340-U)

MILL TEST CERTIFICATE

Customer : SOON HOE HARDWARE SDN BHD
D/O No : JV09080966

Certificate No : 29-08-MAN-407
Date of Issue : 11/08/2009

No	Commodity, Size, Specification	Qty	Mechanical Properties												Other(s)	Coil No	Heat No.				
			Tensile Test					V - Notch Charpy Impact Test													
			Area Type	Yield MPa	Tensile MPa	El %	Area Type	Size (mm)	Temp °C	Sample 1			Sample 2					Sample 3		Average (J)	% Shear Area
										(J)	(J)	(J)	(J)	(J)				(J)	(J)		
1	38MMX38MMX1.20MMX6.000M SQUARE HOLLOW SECTIONS - CR ALPINE MANUFACTURER STANDARD)	192	-	238.00	311.00	37.00	-	-	-	-	-	-	-	-	-	-	0901395045	CQS3741			
2	50MMX50X6.000M WELDED STEEL PIPES - HR BS 1387	185	-	305.00	383.00	30.00	-	-	-	-	-	-	-	-	-	-	0908004110 0908005420	20919370 30921200			
Coil No	Heat No	Chemical Composition											Remarks								
		Max %																			
0901395045	CQS3741	C	Si	Mn	P	S															
		0.190	0.170	0.180	0.012	0.008															
0908004110 0908005420	20919370 30921200	0.030 0.040	0.030 0.020	0.150 0.170	0.005 0.006	0.006 0.004															

Note: The Results of Chemical Composition Are Based On: Raw Material Mill Test (Certificate Subject to change due to internal verification)
Any alteration to this document or its use for other products shall be deemed as falsification of certificate and be subjected to criminal prosecution
Let 6085, Jalan Haji Abdul Kader, Bani S, Jalan Merau, 11050 Kajang, Selangor Darul Ehsan, Malaysia. Tel: 03-8927678 Fax: 03-8926851

[Signature]
Authorized Signature



ALPINE PIPE MANUFACTURING SDN. BHD. (Company No. 267844-V)
(A Wholly-owned subsidiary of Hap Teck Venture Berhad. 421340-U)

MILL TEST CERTIFICATE

Customer : SOON HOE HARDWARE SDN BHD
D/O No : JV09081852

Certificate No. : 29-08-MAN-1783		Date of Issue : 2008/2009																		
No.	Commodity, Size, Specification	Qty	Mechanical Properties												Other(s)	Coil No.	Heat No.			
			Tensile Test				V - Notch Charpy Impact Test													
			Area, Type	Yield MPa	Tensile MPa	El %	Area, Type	Size (mm)	Temp °C	Sample 1 (J)	Sample 2 (J)	Sample 3 (J)	Average (J)	% Shear Area						
1	75MMX75MMX4.50MMX6.00MM SQUARE HOLLOW SECTIONS - HR ASTM A 500 GRADE B	25	-	366.00	439.00	26.00	-	-	-	-	-	-	-	-	-	0907037790	10917950			
2	50MMX150MMX6.00MMX6.00MM RECTANGULAR HOLLOW SECTIONS - HR ASTM A 500 GRADE B	15	-	349.00	435.00	26.00	-	-	-	-	-	-	-	-	-	0901025240	20902000			
Coil No.		Heat No.		Chemical Composition																
				Max %																
				C	Si	Mn	P	S												
0907037790		10917950		0.040	0.150	0.400	0.008	0.003												
0901025240		20902000		0.050	0.150	0.300	0.009	0.003												

Remarks :
 L = Longitudinal T = Transverse PB = Pipe Body W = Welding Area E = Eddy Current Test H = Hydrostatic Test U7 = Ultrasonic Test F = Flattening FI = Flame CM = Cooling

Chemical Composition

Max %

Coil No.

Heat No.

0907037790

10917950

0901025240

20902000

0.040

0.150

0.400

0.008

0.003

0.050

0.150

0.390

0.009

0.003

Remarks :

L = Longitudinal T = Transverse PB = Pipe Body W = Welding Area E = Eddy Current Test H = Hydrostatic Test UT = Ultrasonic Test F = Flattening R = Flaring CM = Coiling Max

Note: The Results of Chemical Composition Are Based On Raw Material Mill Test Certificate (Subject to change due to internal verification)
Any alteration to this document or its use for other products shall be detected as documents forgery and be subjected to criminal jurisdiction.
Lot 6085, Jalan Hui Ahui Maman, Batu 5 1/2, Jalan Meru, 41050 Ekar, Selangor Darul Ehsan, Malaysia. Tel: 03-3921612 Fax: 03-3928821

[Signature]
Authorized Signature

SECTION 8

DIMENSION CONTROL REPORT



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

Revision 1 14/04/2010

VG-SOP-14b-01

APPENDIX 1

DIMENSION REPORT (STRUCTURE)

MODEL NO. : N/A			REPORT NO. : VG / DR /001			
PROJECT NAME : A-FRAME						
MANUFACTURER'S SERIAL NO. : AS 1002-10						
OWNER NAME : ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)						
No.	Drawing No.	Symbol	Drawing Dimension (mm)	Actual Dimension (mm)	Differences (mm)	Allowed Tolerance
1	VG/DWG/AFB/001, REV 0	A	2560	2556	-4	±6
		B	4050	4042	-4	±8
		C	1214	1213	-1	±4
		D	1075	1074	-1	±4
		E	541	539	-2	±3
		F	864	865	+1	±3
		G	541	539	-2	±3
		H	710	713	+3	±3
		I	850	850	0	±3
		J	850	848	-2	±3
		K	850	847	-3	±3
		L	120	120	0	±2
		M	70	70	0	±2
		N	1032	1032	0	±4

INSPECTED BY :



Name: Shaharman
Date: 27/4/2010

REVIEWED / VERIFIED BY :

[Signature]

Name: Veri V.
Date: 27/4/10

WITNESSED / REVIEWED BY :



DIMENSION REPORT (STRUCTURE)

MODEL NO. : N/A		REPORT NO. : VG / DR /002				
PROJECT NAME : A--FRAME (Hydraulic unit structure)						
MANUFACTURER'S SERIAL NO. : AS 1002-10						
OWNER NAME : ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)						
No.	Drawing No.	Symbol	Drawing Dimension (mm)	Actual Dimension (mm)	Differences (mm)	Allowed Tolerance
1	VG/DWVG/HUB/001, REV 0	A	620	620	0	±3
		B	2000	2000	0	±4
		C	100	98	-2	±2
		D	460	457	-3	±3
		E	440	443	+3	±3
		F	155	155	0	±2
		G	295	297	+2	±2
		H	800	802	+2	±3
		I	620	620	0	±3
		J	560	560	0	±3
		K	470	469	-1	±3
		L	800	802	+2	±3
		M	2000	2000	0	±4

INSPECTED BY :

REVIEWED / VERIFIED BY :

WITNESSED / REVIEWED BY :



Name: Shaharudin
Date: 27/4/10



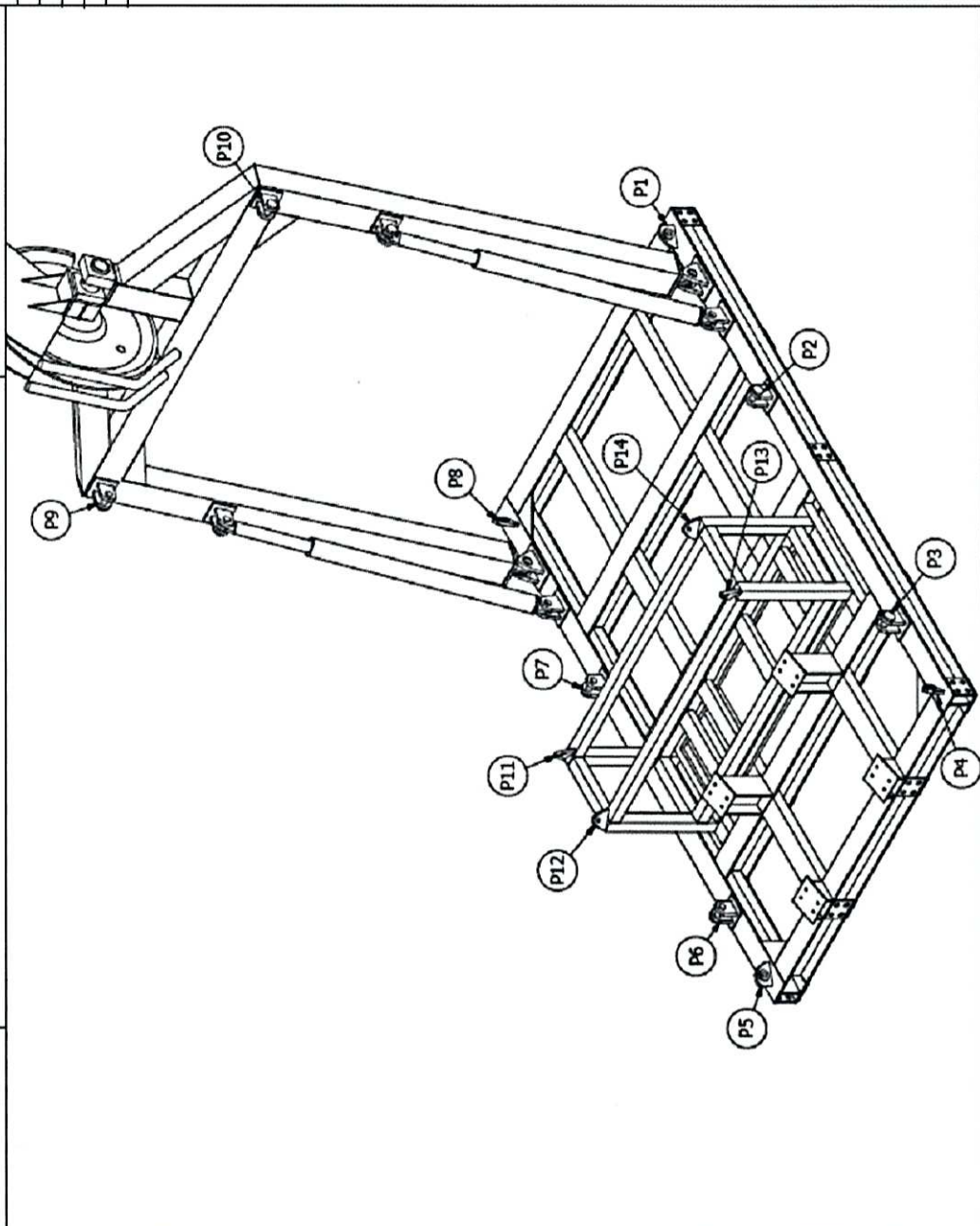
Name: MDALI
Date: 27/4/10

REVISION NO.	DRAWING NO.	NO.	DESCRIPTION	ISSUED FOR APPROVAL	SATHI DRAWN	VK CHECKED	VK APPROVED	THE CONTENTS OF THIS SHEET ARE COPYRIGHTED. UNAUTHORISED USE OF THIS SHEET OR ANY INFORMATION CONTAINED HEREIN IS NOT PERMITTED WITHOUT WRITTEN PERMISSION FROM VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD.				PROJECT :	A-FRAME BASE		DRAWN:	SATHI	CHECKED:	VK	VERIFIED:	VK	DATE:	27/04/2010	DATE:	27/04/2010	SCALE:	AS NOTED				
0		1																												
MANUFACTURED BY: 												TITLE: GENERAL ASSEMBLY																		
MODEL : N/A												VG OFFSHORE CONTAINERS INTERNATIONAL(M) SDN BHD [COMPANY NO.669923-T]												DWG NO.	VG/DWG/AFB/001		REV.	0	PAGE:	1 OF 1
6				5				4				3				2				1										

SECTION 9

NDT REPORTS

MFG SERIAL NO	AS 1002-10	WELD MAP NO: WMR-AF-001
CLIENT	ALLIANCE SEAWORKS SDN BHD (known as Bumi Magnitud Sdn Bhd)	VERIFIED BY:
PROJECT	A- FRAME	
ASSEMBLY SECTION	BASE ASSEMBLY	
REMARKS	PADYEY MPI TEST	



	NO	WELD	LOCATION	WELDER ID	PASS	FAIL	RE WORK	RE INSPECT	ACCEPTED
	PADEYE								
	1	P1		WA2	✓				
	2	P2		WA2	✓				
	3	P3		WA2	✓				
	4	P4		WA2	✓				
	5	P5		WA2	✓				
	6	P6		WA2	✓				
	7	P7		WA2	✓				
	8	P8		WA2	✓				
	9	P9		WA2					
	10	P10		WA2	✓				
	11	P11		WA2	✓				
	12	P12		WA2	✓				
	13	P13		WA2	✓				
	14	P14		WA2	✓				

**NUSANTARA TECHNOLOGIES SDN. BHD.**

(187753-D)

No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel : 03-5122 9766/7/8 Fax : 03-5122 8766/7 E-mail : nusatek@tm.net.my

Our ref. : 63246	MAGNETIC PARTICLE EXAMINATION REPORT	Page No. : 1 of 1 Report No. : NDT/MT/63246-01/10
------------------	---	--

Client : <u>ALLIANCE SEAWORKS SDN. BHD.</u> (Formerly Known as Bumi Magnitud Sdn Bhd)	Procedure No. : <u>NT/G/MT/AWS Rev. 1</u>
Project : <u>A-FRAME</u>	Acceptance Standard : <u>AWS D1.1 (Table 6.1)</u>
	Inspection Date : <u>05th May 2010</u>
Material : <u>BS 4360 43A</u>	Welding Process : <u>GMAW</u>
Surface Preparation : <u>Cleaned</u>	Stage of Examination : <u>Complete weld</u>

MAGNETIC PARTICLE INSPECTION :

☐ Dry ☒ Wet ☐ Fluorescent

Magnetic Particle : Magnaflux-7HF Surface Contrast : Magnaflux-WCP2

Method of removing excess particle : ☒ Normal blow ☐

Magnetizing Technique : ☒ Yoke Technique ☐ Prod Technique

Magnetizing Current : ☒ AC electromagnetic ☐ DC electromagnetic ☐ Permanent Magnet

Lighting : ☒ Daylight ☐ Artificial light ☐ Black light

View Illumination : >1300 lux $\mu W/cm^2$

No.	Joint Reference	Interpretation	Result	Remark
	Magnetic particle inspection was carried out on the following item : Item No. : PADEYE Serial No. : AS1002-10 Joint No. : P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14	No relevant indication was detected during the inspection time 	Accepted	

NDT Operator : Signature :  Name : M. Fadzil Date : <u> </u>	Reviewed By : Signature :  Name : Mohd Zahir Arohad Date : <u> </u>	Approved By : Signature : <u> </u> Name of Client's Rep. : <u> </u> Date : <u> </u>
--	---	--

SECTION 10

PRODUCTION / PROTOTYPE TESTING



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

APPENDIX 8

VG-SOP-14b-08

Revision 1 14/04/2010

PRODUCT TEST REPORT

MODEL NO. :	N/A	REPORT NO. :	VG / LT / AF
PROJECT NAME :	A-FRAME	TEST DATE :	05/04/2010
MANUFACTURER'S SERIAL NO. :	AS 1002-10	TOTAL NO. OF PRODUCTION :	1 UNIT
OWNER NAME :	ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)	NO. (s) OF UNIT TESTED :	1 UNIT
DRAWING NO. :	VG/DWG/AFB/001 ,REV0	PROTOTYPE TESTING :	☒
PRODUCTION SERIES :	N/A	PRODUCTION TESTING :	☐
		LOAD TEST :	2.5R ☐ 2.0R ☐

Weight Details :

Tare Weight (T) : N/A

ayload (P) : N/A

Maximum Gross Weight (R) : N/A

This is to certify that the following container manufacturer number mentioned above had been selected randomly from the above mentioned production series and tested according to the type of test(s) listed below :

Type of Test(s) :

Pass (✓)

Fail (X)

Load Test Weight (4 points lift) : N/A
Load Test Weight (2 points lift) : N/A
Drop Test Weight (4 points lift) : N/A
ther test (Please Specify) : 6000 Kg

✓	

Product ready for production / next process : ☐

Modification Required : ☐

Sign - Off	Name	Signature & Stamp	Date	Comments
Project Management	Vlny.		5/5/10	
QA / QC	chandra		5/5/10	
Client (if applicable)				
Third party (if applicable)	Nharin		5/5/10	Result satisfactory.

SECTION 11

PAINTING REPORTS

 VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD									
APPENDIX 9	VG-SOP-14b-09	Revision 2 14/04/2010							
SURFACE PREPARATION & COATING APPLICATION REPORT									
MODEL NO : N/A		REPORT NO. : VG / PR / 01 / 10							
PROJECT NAME : A-FRAME		COATING APPLICATOR : VGOCI							
MANUFACTURER'S SERIAL NO. : AS 1002-10		INHOUSE PAINT INSPECTOR : CHANDRAN							
OWNER NAME : ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)		PAINTER : NANDU/FIRUJ							
DRAWING NO. : VG/DWG/AFB/001 , REV0		APPLICATION AREA : EXTERNAL							
CLIMATIC CONDITION									
No. of Coats	Blasting	1st Coat	2nd Coat	3rd Coat	4th Coat				
Time (Hour)	10.00am	2.00pm	10.00am	1.00pm					
Weather Condition	SUNNY	SUNNY	SUNNY	SUNNY					
Dry/ Wet/ Dew Point °C	30/25/23	34/29/27	31/25/23	35/29/28					
Relative Humidity %	67%	69%	62%	65%					
Steel temperature °C	32°C	36°C	33°C	37°C					
Date of Application	Location	Surface Preparation	No. of Coats	Paint Type	Type of Paint Generic	Colour	Film Thickness (microns)		
							WFT	DFT	TDFT
28/04/2010	At Shop	SA2.5	1	Barrier ZEP	Zinc Epoxy	Grey	138-150	75-100	75 micron
29/04/2010			1	Duramastic	High Solid Primer	Mist Grey	160-180	125-175	125 micron
02/05/2010			1	Hardtop HB	Polyurethane	Red 926	100-110	50-80	50 micron
PAINT TYPE & BATCH NUMBER									
Item No.	Product Name	Paint / Thinner Manufacturer	Batch No. (Part A)	Batch No. (Part B)	Manufacturing Date				
1	Barrier ZEP	JOTUN	190265-1-0310	KF358942A-129					
2	Duramastic	JOTUN	183753-1-0110	189076-1-0310					
3	Hardtop XP	JOTUN	195353-1-0410	193380-1-0410					
INSPECTION									
Coat	Date	Average Dry Film Thickness - DFT (microns μ)					Average	# of readings taken	
		1st	2nd	3rd	4th	5th			
1st Coat	29/04/2010	93	87	102	113	84	96	5	
2nd Coat	30/04/2010	221	243	207	232	215	224	5	
3rd Coat	03/05/2010	263	284	261	277	293	276	5	
4th Coat									
SURFACE PREPARATION									
Blasting Standard		Type of Abrasive				Surface Profile			
SA 2.5		GARNET				50 micron			
INSPECTED BY :		REVIEWED BY :		VERIFIED BY 3rd PARTY PAINT INSPECTOR :		VERIFIED BY CLIENT :			
									
Name: CHANDRAN Date: 03/05/2010		Name: VENU Date: 03/05/2010		Name: Date:		Name: Date:			



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD

APPENDIX 9

VG-SOP-14b-09

Revision 2 14/04/2010

SURFACE PREPARATION & COATING APPLICATION REPORT

MODEL NO :	N/A	REPORT NO. :	VG / PR / 02 / 10
PROJECT NAME :	A-FRAME (BOOM)	COATING APPLICATOR :	VGOCI
MANUFACTURER'S SERIAL NO. :	AS 1002-10	INHOUSE PAINT INSPECTOR :	CHANDRAN
OWNER NAME :	ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)	PAINTER :	NANDU/FIRUJ
DRAWING NO. :	VG/DWG/AFB/001 , REV0	APPLICATION AREA :	EXTERNAL

CLIMATIC CONDITION

No. of Coats	Blasting	1st Coat	2nd Coat	3rd Coat	4th Coat
Time (Hour)	10.00am	2.00pm	10.00am	1.00pm	
Weather Condition	SUNNY	SUNNY	SUNNY	SUNNY	
Dry/ Wet/ Dew Point °C	30/25/23	34/29/27	31/25/23	35/29/28	
Relative Humidity %	67%	69%	62%	65%	
Steel temperature °C	32°C	36°C	33°C	37°C	

Date of Application	Location	Surface Preparation	No. of Coats	Paint Type	Type of Paint Generic	Colour	Film Thickness (microns)		
							WFT	DFT	TDFT
28/04/2010	At Shop	SA2.5	1	Barrier ZEP	Zinc Epoxy	Grey	138-150	75-100	75 micron
29/04/2010			1	Duramastic	High Solid Primer	Mist Grey	160-180	125-175	125 micron
02/05/2010			1	Hardtop HB	Polyurethane	Red 926	100-110	50-80	50 micron

PAINT TYPE & BATCH NUMBER

Item No.	Product Name	Paint / Thinner Manufacturer	Batch No. (Part A)	Batch No. (Part B)	Manufacturing Date
1	Barrier ZEP	JOTUN	190265-1-0310	KF358942A-129	
2	Duramastic	JOTUN	183753-1-0110	189076-1-0310	
3	Hardtop XP	JOTUN	195353-1-0410	193380-1-0410	

INSPECTION

Coat	Date	Average Dry Film Thickness - DFT (microns μ)					Average	# of readings taken
		1st	2nd	3rd	4th	5th		
1st Coat	29/04/2010	82	87	93	76	99	87	5
2nd Coat	30/04/2010	213	221	215	234	231	223	5
3rd Coat	03/05/2010	263	277	284	294	275	279	5
4th Coat								

SURFACE PREPARATION

Blasting Standard	Type of Abrasive	Surface Profile
SA 2.5	GARNET	50 micron

INSPECTED BY :	REVIEWED BY :	VERIFIED BY 3rd PARTY PAINT INSPECTOR :	VERIFIED BY CLIENT :
 Name: CHANDRAN Date: 03/05/2010	 Name: VENU Date: 03/05/2010		

SECTION 12

OTHERS (IF APPLICABLE)



VG-SOP-14b-04

Revision 1 14/04/2010

VISUAL INSPECTION REPORT

MODEL NO :	N/A
------------	-----

REPORT NO.: VG / VIR / AF

PROJECT NAME :	A-FRAME
----------------	---------

MANUFACTURER'S SERIAL NO.:	AS 1002-10
----------------------------	------------

OWNER NAME : ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)

DRAWING NO.: VG/DWG/AFB/001, REV 0

ASSEMBLY SECTION : N/A

[illegible]

INSPECTED BY:

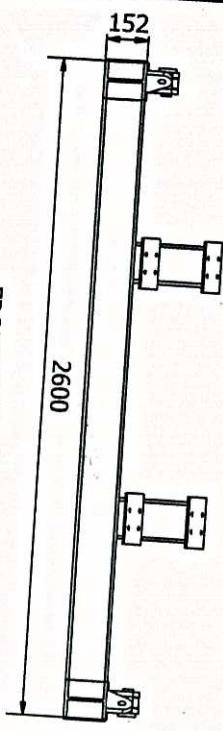
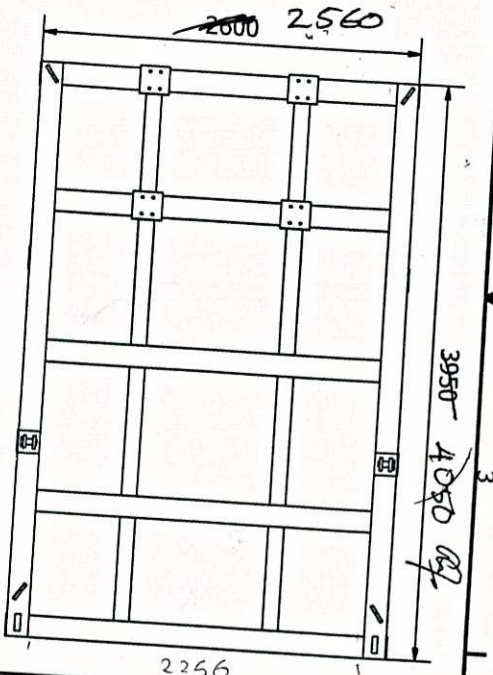
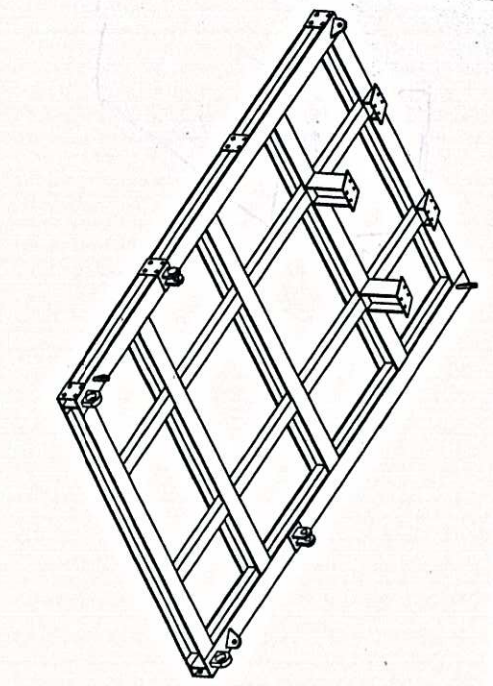
REVIEWED / VERIFIED BY:

WITNESSED / REVIEWED BY:

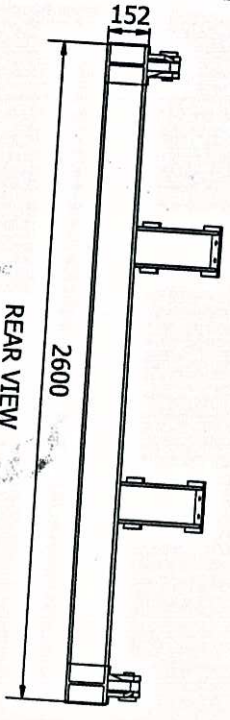


Name: Ammon
Date: 2/7/10

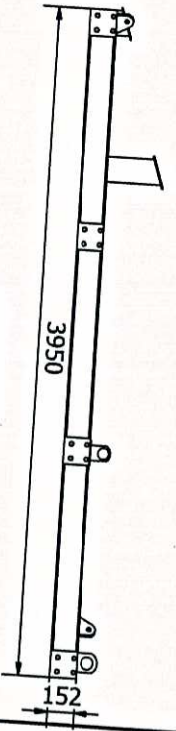
Name: _____
Date: 27/4/10



FRONT VIEW
SCALE 1:20



REAR VIEW
SCALE 1:20



SIDE VIEW
SCALE 1:20

PARTS LIST				
ITEM	DESCRIPTION	MATERIAL	THK. (MM)	QTY
1.	PADEYE	MILD STEEL	20	4
2.	A FRAME HOLDING BRACKET	-	38	2
3.	SIDE BRACKET	MILD STEEL	6	8
4.	CYLINDER BRACKET	-	-	2
5.	WINGE BASE BRACKET	MILD STEEL	-	4

MASTER COPY

CONTROLLED COPY 02 #

REVISION NO.	DRAWING NO.	NO.	DESCRIPTION	SATHI	CHKD	APPROVED
0		1	ISSUED FOR APPROVAL		VK	VK
6						

THE CONTENTS OF THIS SHEET ARE CONFIDENTIAL AND NOT TO BE DISCLOSED TO ANY OTHER PERSON OR ORGANIZATION WITHOUT THE WRITTEN PERMISSION FROM THE OFFICE OF THE DIRECTOR, (M) SON BHD.

PROJECT: A-FRAME BASE
MODEL: N/A

DRAWN: SATHI
CHECKED: VK
VERIFIED: VK
MANUFACTURED BY: VG OFFSHORE CONTRACTORS INTERNATIONAL (M) SON BHD
DATE: 05/04/2010

TITLE: GENERAL ASSEMBLY
DATE: 05/04/2010
SCALE: AS NOTED
DWG NO.: VG/DWG/AFB/001
REV. 0
PAGE: 1 OF 5

GFC TESTING CENTRE SDN. BHD.

Company No. 334310-X
No.2, Jalan Sungai Beting 2, Off Jalan Sungai Putus,
42100 Klang, Selangor Darul Ehsan, Malaysia.
Tel: (03) 3290 1188 (Hunting Line) Fax: (03) 3290 2929

Certificate No.
G14083-01

Customer Order No.
AJ004/12(REV)

CERTIFICATE OF TEST AND EXAMINATION OF LIFTING APPLIANCES AND LIFTING GEAR

Testing apparatus utilises load cells **CALIBRATED** in accordance with international guidelines and **SPECIFICATION** reviewed and certified by approved third parties.

(1) Particulars

Distinguishing Mark or No. (i)	Description of item. This should include size, material and particulars of any heat treatment (ii)	Number tested and examined (iii)	Dates of test and examination (iv)	Proof Load Applied (Specify units) (v)	Safe Working Load (Specify units) (vi)
G14083-01	DESTRUCTION TEST ON CLIENT'S 26MM DIA ARMOUSED CABLE ORIGIN: UNKNOWN SAMPLE WAS SOCKETED AT BOTH ENDS AND WAS LOADED IN TENSION UNTIL DESTRUCTION CABLE PARTED AT 17.7MT ACTUAL DIAMETER: 25.99MM	1 LGTH	13/03/2012	-	-

(2) Name & Address of maker, supplier or repairer
ALLIANCE SEAWORKS SDN BHD
NO. 37, JALAN PENDIDIK U1/31
HICOM GLENMARIE INDUSTRIAL PARK
40150 SHAH ALAM, SELANGOR DARUL EHSAN

(3) Name of firm, company, association or person undertaking the test and examination,
GFC Testing Centre Sdn. Bhd.

(4) Name of person who carried out test and examination

Position: **KEN CHEE(TESTER)**

Date: **13/03/2012**

(5) I certify on behalf of the firm, company, association or person named in (3) & (4) before, that the items or appliances described herein were tested and thereafter thoroughly examined by a competent person; found to have withstood the proof load without deformation; found to be free from cracks, flaws or other defects; and that the above particulars are correct.

Signature:

(6) Name & Address of owner
ALLIANCE SEAWORKS SDN BHD
NO. 37, JALAN PENDIDIK U1/31
HICOM GLENMARIE INDUSTRIAL PARK
40150 SHAH ALAM, SELANGOR DARUL EHSAN

SEE NOTES OVERLEAF

The above equipment has been tested and examined and is for normal use by a person who has been instructed, trained and where necessary is supervised in its proper use.

1. Save as expressly stated in writing, GFC Testing Centre Sdn. Bhd. its servants or agents does not let or supply the vessels, equipment or goods ('The Equipment') with any representation concerning the condition performance or qualities of the Equipment or with or subject to any condition or warranty express or to be implied by statute description at common law or otherwise and all such representations conditions warranties whether relating to the capacity age quality description condition or use of the Equipment or the merchantability or suitability or fitness of the Equipment for a particular or any purpose are excluded.

2. GFC Testing Centre Sdn. Bhd. shall not be liable in contract or in tort for loss injury or damage arising by reason of any defects in the Equipment whether such defect be latent or apparent on examination (other than liability for death or personal injury arising from the negligence of GFC Testing Centre Sdn. Bhd.

GFC TESTING CENTRE SDN. BHD.

Company No. 334310-X
No.2, Jalan Sungai Beting 2, Off Jalan Sungai Putus,
42100 Klang, Selangor Darul Ehsan, Malaysia.
Tel: (03) 3290 1188 (Hunting Line) Fax: (03) 3290 2929

Certificate No.
G0745-01

Customer Order No.

CERTIFICATE OF TEST AND EXAMINATION OF LIFTING APPLIANCES AND LIFTING GEAR

Testing apparatus utilises load cells **CALIBRATED** in accordance with international guidelines and **SPECIFICATION** reviewed and certified by approved third parties.

(1) Particulars

Distinguishing Mark or No. (i)	Description of item. This should include size, material and particulars of any heat treatment (ii)	Number tested and examined (iii)	Dates of test and examination (iv)	Proof Load Applied (Specify units) (v)	Safe Working Load (Specify units) (vi)
G0745-01	4-LEGGED WIRE ROPE SLING TO SUIT GROSS WEIGHT OF 7MT FOR DNV 2.7.1 AT 90 DEGREES COMPLIANCE COMPRISING OF:- A) MASTERLINK ASSEMBLY-MT-16-10-1PC B) 22MM DIA UNGALV'D STEEL WIRE ROPE SLING. BOTH ENDS MECHANICAL SPLICED WITH THIMBLE. LENGTH MEASURED FROM OUTER EYE TO OUTER EYE. QTY: 2 LGTHS X 4.7MTRS 2 LGTHS X 6MTRS C) 6.5 TON BOW BOLT & NUT SHACKLE-4PC D) METAL SAFETY TAG - 1PC **REMARKS: FOR CONCENTRIC LOAD ONLY.	1 SET	15/07/10	14 TON	7 TON

(2) Name & Address of maker, supplier or repairer
GOFORTH CORPORATION SDN BHD
NO. 1, JALAN WAWASAN 3/KU7
KAWASAN PERINDUSTRIAN SG KAPAR INDAH
42200 KAPAR, KLANG, SELANGOR DARUL EHSAN.

(3) Name of firm, company, association or person undertaking the test and examination,
GFC Testing Centre Sdn. Bhd.

(4) Name of person who carried out test and examination

Position: ADRIAN NG (TESTER)

Date: 15/07/10

(5) I certify on behalf of the firm, company, association or person named in (3) & (4) before, that the items or appliances described herein were tested and thereafter thoroughly examined by a competent person; found to have withstood the proof load without deformation; found to be free from cracks, flaws or other defects; and that the above particulars are correct.

Signature:

(6) Name & Address of owner
ALLIANCE SEAWORK
37, JALAN PENDIDIK U1/31,
JICOM GLENMARIE,
SHAH ALAM.

SEE NOTES OVERLEAF

The above equipment has been tested and examined and is for normal use by a person who has been instructed, trained and where necessary is supervised in its proper use.

1. Save as expressly stated in writing, GFC Testing Centre Sdn. Bhd. its servants or agents does not let or supply the vessels, equipment or goods ('The Equipment') with any representation concerning the condition performance or qualities of the Equipment or with or subject to any condition or warranty express or to be implied by statute description at common law or otherwise and all such representations conditions warranties whether relating to the capacity age quality description condition or use of the Equipment or the merchantability or suitability or fitness of the Equipment for a particular or any purpose are excluded.

2. GFC Testing Centre Sdn. Bhd. shall not be liable in contract or in tort for loss injury or damage arising by reason of any defects in the Equipment whether such defect be latent or apparent on examination (other than liability for death or personal injury arising from the negligence of GFC Testing Centre Sdn. Bhd.

GFC TESTING CENTRE SDN. BHD.

Company No. 334310-X
No.2, Jalan Sungai Beting 2, Off Jalan Sungai Putus,
42100 Klang, Selangor Darul Ehsan, Malaysia.
Tel: (03) 3290 1188 (Hunting Line) Fax: (03) 3290 2929

Certificate No.

Customer Order No.

CERTIFICATE OF TEST AND EXAMINATION OF LIFTING APPLIANCES AND LIFTING GEAR

Testing apparatus utilises load cells **CALIBRATED** in accordance with international guidelines and **SPECIFICATI**
reviewed and certified by approved third parties.

(1) Particulars

Distinguishing Mark or No. (i)	Description of item. This should include size, material and particulars of any heat treatment (ii)	Number tested and examined (iii)	Dates of test and examination (iv)	Proof Load Applied (Specify units) (v)	Safe Work Load (Specify u (vi)
30745-01	4-LEGGED WIRE ROPE SLING TO SUIT GROSS WEIGHT OF 7MT FOR DNV 2.7.1 AT 90 DEGREES COMPLIANCE COMPRISING OF:- A) MASTERLINK ASSEMBLY-MT-16-10-1PC B) 22MM DIA UNGALV'D STEEL WIRE ROPE SLING. BOTH ENDS MECHANICAL SPLICED WITH THIMBLE. LENGTH MEASURED FROM OUTER EYE TO OUTER EYE. QTY: 2 LGTHS X 4.7MTRS 2 LGTHS X 6MTRS C) 6.5 TON BOW BOLT & NUT SHACKLE-4PC D) METAL SAFETY TAG - 1PC **REMARKS: FOR CONCENTRIC LOAD ONLY.	1 SET	15/07/10	14 TON	7 TON

CERTIFIED TRUE COPY
P/O NO. :
D/O NO. :
DATE : 15-7-10

Name & Address of maker, supplier or repairer
GFC TESTING CENTRE SDN BHD
NO 6, JALAN WAWASAN 3/KU7
WASAN PERINDUSTRIAN SG KAPAR INDAH
42200 KAPAR, KLANG, SELANGOR DARUL EHSAN.

(5) I certify on behalf of the firm, company, association or person named in (3) & (4) before, that the items or appliances described here were tested and thereafter thoroughly examined by competent person, found to have withstood the proof load with deformation; found to be free from cracks, flaws or other defects and that the above particulars are correct.

Signature



(3) Name of firm, company, association or person undertaking the test and examination,
GFC Testing Centre Sdn. Bhd.

(4) Name of person who carried out test and examination

Position: **ADRIAN NG (TESTER)**
Date: **15/07/10**

(6) Name & Address of owner
ALLIANCE SEAWORK
37, JALAN PENDIDIK U1/31,
JICOM GLENMARIE,
SHAH ALAM.

SEE NOTES OVERLEAF

The above equipment has been tested and examined and is for normal use by a person who has been instructed, trained and where necessary supervised in its proper use.

1. Save as expressly stated in writing, GFC Testing Centre Sdn. Bhd. its servants or agents does not let or supply the vessels, equipment or goods ('The Equipment') with representation concerning the condition performance or qualities of the Equipment or with or subject to any condition or warranty express or to be implied by statute descriptive common law or otherwise and all such representations conditions warranties whether relating to the capacity age quality description condition or use of the Equipment or merchantability or suitability or fitness of the Equipment for a particular or any purpose are excluded.

2. GFC Testing Centre Sdn. Bhd. shall not be liable in contract or in tort for loss injury or damage arising by reason of any defects in the Equipment whether such defect be latent or apparent on examination (other than liability for death or personal injury arising from the negligence of GFC Testing Centre Sdn. Bhd.



PROVNINGSSINTYG

No H-1010

Manufacturer/tillverkare: GUNNEBO LIFTING AB

Customer/kund: _____

Order no. _____

Department/avdelning _____

Order. no. _____

Identification No	Specification of item size and type	Material property	Quantity	Eff. length m	Working Load Limit at °A between the legs t°)	Proof Force kN*)	Min Ultimate Force kN*)
Identifikations nr	Specifikation av produkt storlek och typ	Material spec.	Kvantitet	Eff. längd m	Max last vid °A mellan parterna t°)	Prov-kraft Ton	Min. Brott-kraft Ton
MT-16-10	50 MM DIA MASTERLINK	GRADE 10	300		28.0	56.0	
	ASSEMBLY						
	TYPE "MT"						
CERTIFIED TRUE COPY P/O NO. - D/O NO. : 1007415 DATE : 15-7-10							

*) 1 t (metric ton) = 1000 Kg (= 10 kN)

Heat treatment Alloy steel hardened and tempered to grade 10 / Seghårdning
Värmebehandling _____

Notes Safety Factor / Säkerhetsfaktor 4 : 1
Anmärkningar 5 : 1 at 0° angle

I certify that the above mentioned details have been tested in an officially approved testing machine and have been found free from defects:

Härmed intygas att ovan nämnda detaljer befunnits fria från defekter och har blivit provade i av Statens Provsningsanstalt godkänd dragprovsmaskin.

Place and date : RAMNÄS 20/ 10 2008
Plats och datum _____

Signature: *Ann Palm*

Postadress Postal address
GUNNEBO LIFTING AB
S-730 60 RAMNÄS
Sweden

Telefon Telephone
Nat 0220-221 00
Int +46 220 221 00

Telex
40610 GUNNEBO S

Telefax
Nat 0220-350 21
Int +46 220 350 21

P.O. Box 57, 3360 AB Sliedrecht
 Industrieweg 6, 3361 HJ Sliedrecht
 The Netherlands
 Tel. +31 184 41 33 00
 Fax. +31 184 41 49 59
 email: sales@vanbeest.nl
 www.vanbeest.nl



Franklin Offshore International
 11 Pandan Road
 002260 Singapore
 Singapore

MANUFACTURER TEST CERTIFICATE

Number 80018945 Date 24.08.2009
 Customer no. 30344 Page 2 / 6

Our order no.	Your ref. no.
28859	33785

Traceability Bow	Traceability Pin	Description	Qty.	Date of test and examination	Min. proofload (T)	Working load limit (T)
K BS 6 CE	BS6Z CE	GPGHMB22 G-4163, Green Pin® Standard Shackles, bow shackles with safety bolt, to EN13889, hot dipped galvanized, 22 mm x 25 mm, WLL 6.5 ton	1,00 0	11.05.2009	13	6.5

CERTIFIED TRUE COPY

P/O NO. -

D/O NO. : 100745

DATE : 15-7-10

EC Declaration of conformity in accordance with the machinery directive 2006/42/EC
 (according to Annex IIA of the machinery directive)
 We declare under our sole responsibility that the above mentioned product(s), with CE marking, comply with the machinery directive 2006/42/EC.
 This certificate is only valid for Van Beest BV products, used for fittings for lifting equipment, marked as such.

I certify that the items described herein were tested and thereafter examined and were found to be free from cracks, flaws or other defects.

J.J. Vermeulen (QA-Manager)



VAN BEEST B.V., manufacturer and supplier of wire rope and chain fittings.

Registered trade marks "Green Pin" and "Excel". Member of Van Beest International.

Rabobank account nr. 35 93 43 155, IBAN code: NL86RABO0359343155, SWIFT/BIC code: RABONL2U

VAT number NL 0091.33.836.B01, Chamber of Commerce Dordrecht - nr. 23009317. All our offers and contracts are subject to our General Conditions of Sale as registered with the District Court of Dordrecht on November 16, 2007 under number AL 31/2007.

STEEL WIRE ROPE TEST CERTIFICATE



SOUTHERN WIRE INDUSTRIES (M) SDN BHD (53945-H)

Lot 4808, Jalan Utas 15/7,
40000 Shah Alam, Selangor Darul Ehsan, Malaysia.

http://www.s-wire.com

Tel : 603-55191501 Fax : 603-55193369

Certificate No : 1000002727
Date Of Issued : 05.10.2009

Customer :	GOFORTH COPPORATION SDN BHD NO. 2 JALAN SUNGAI BETING 2 OFF JALAN SUNGAI PUTUS 42100 SELANGOR DARUL EHSAN	P.O. No. :	14244
		S.O. No. :	4090800518
		D.O. No. :	8091001214
		L/C No. :	-
Product :	6 X 36 UNGL 22MM RHOL IWRC BS1770 1000M (3 REELS X 1000 M)	Quantity :	3,000.000 MT / 3
Rope Diameter :	22 MM	Lay / Forming :	RIGHT HAND ORDINARY LAY
Specification :	BS 302 : PART 2 : 1987		

Mechanical Properties

Batch No.	Reel No.	Diameter (mm)			Breaking Load (KN)	
		Specification		Actual	Specification	Actual
		Min	Max		Min	
B182990140	3 REELS	21.78	22.88	22.44	305	314
				CERTIFIED TRUE COPY P/O NO. : -		

Remarks :

D/O NO. : 100745
DATE : 15-7-10

This is to certify that the above results are correct

For and on behalf of
Southern Wire Industries (M) Sdn Bhd



CERTIFIED TO OHSAS 1800 : 2007
Registration No : SR 0442



CERTIFIED TO ISO 14001 : 2004
Registration No : ER 0637



CERTIFIED TO MS ISO 9001:2000
Registration No : AR 0097



Chap Harimau Merah
(Red Tiger Brand)