



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
(Company No. 669923-T)

Factory Add 1: D17, Lot 10439, Jalan Sg. Jati, 41000 Klang, Selangor D.E (Malaysia)

Factory Add 2: Lot 66, Section 12, Phase 1B, Jalan Perigi Nenas 8/10, Sek.8,
Taman Perindustrian Pulau Indah, 42920 Port Klang, Selangor D.E (Malaysia)

Postal Add: No.2A, Jalan Damar Laut 3, Glenmarie Cove,
42000 Port Kang, Selangor D.E (Malaysia)

Tel: +603-5161 1610 **Fax:** +603-5161 1625
E-Mail : enquiry@vgoci.com **Website:** www.vgoci.com



Project:	20ft Control Van
Proposal Reference No.:	VGOCI/ABD/1018/Q/10
Revision:	1
Date:	4 March 2010
Attn:	En. Abdullah



INDEX

Section 1 Introduction

- 1.0 Overview**
- 2.0 Outline**
- 3.0 General Specifications**

Section 2 Technical Description

Item A 20ft Control Van

Section 3 Commercial

- 1.0 Price**
- 2.0 Acceptance of Purchase Order**
- 3.0 Delivery Terms**
- 4.0 Delivery Schedule**
- 5.0 Terms & Conditions**



SECTION 1 Introduction

1.0 Overview

VG Offshore Containers International (M) Sdn Bhd (VGOCI) was established to focus on the ever growing offshore market demands.

Strategically located minutes away from Port Klang, the busiest port in Malaysia, we have progressively expanded our operations over the years, reaching beyond the shores of Malaysia to markets stretching from Asia Pacific Region to Europe. Our offshore containers, lab cabins, accommodation cabins and control modules used globally are designed to international standards and recognized by Certifying Authorities such as Det Norske Veritas (DNV), Bureau Veritas and ABS.

VG has two large fabrication facilities to cater the demand of Clients from all over the world. Our combined factories built up area of over **100,000 square feet** are equipped with the state of art technology and facilities in producing top quality offshore containers. All our containers are designed, built and fitted out in-house at our factories.

VGOCI Quality Management System is certified to **ISO 9001:2008**.

2.0 Outline

This proposal covers the design, supply, manufacture & fit out of one (1) number of module for En. Abdullah. The scope of work only covers the structural, architectural and electrical systems. The module is as follows:

20ft Control Van

Dimension (mm)	: 6096 (L) x 2438 (W) x 2590 (H)
SWL	: 15 Ton
Qty	: 1 unit

Note : All units complete with ISO Corner Blocks and Padeyes to enable stacking and lifting.

3.0 General Specifications

3.1 Size

Please refer to Section 1, Part 2.0.

3.2 Classification

Please refer to Section 2.0.

3.3 Standards

The container will be designed and manufactured in accordance to Offshore Containers Standard - DNV 2.7-1 / EN12079.



3.4 Testing and Inspections

- All testing and inspections (load test and non-destructive testing) are according to DNV 2.7-1 / EN 12079 requirements.
- MPI – 100% on primary structure and 20% on secondary parts. 100% MPI on padeyes (lifting points).
- UT – 100% on Padeyes

3.5 Certification & Conformity Code

One (1) set of original dossier will be provided in hard copy and soft copy. The documentation will cover the following:

- a) Certified by Bureau Veritas (BV) to
 - **Det Norske Veritas Classification, Offshore Containers, Certification Notes No 2.7-1, April 2006**
 - **British Standard Offshore Containers – Design, Construction, Testing, Inspection and Marking (BS EN 12079), 2006**
- b) Design Temperature (Minus 20 Degree Celsius)
- c) General Arrangement Drawing
- d) Certificate of Conformity
- e) Material Traceability Report
- f) NDT Reports
- g) Manufacture Test Reports
- h) Painting Report
- i) Markings – ID No. & Logo (as per Client requirement)
- j) Offshore Container Approval Plate & Data Plate
- k) Third Party Emblem
- l) Wire Rope Slings Proof Load Test Certificate

3.6 Lifting Gears

One (1) set of certified 4-legged Wire Rope Slings complete with shackles is included for each unit.

3.7 Surface Preparation and Protective Coating

The surface preparation and coating of the modules shall be as follows:

External & Underside

- Blast clean to SA 2.5
- 1st coat Zinc Rich Epoxy Primer : DFT 75 micron
- 2nd coat Epoxy High Build : DFT 125 micron
- 3rd coat Polyurethane : DFT 50 micron (RAL 3000)

Internal

- Blast clean to SA 2.5
- 1st coat Zinc Rich Epoxy Primer : DFT 75 micron
- 2nd coat Epoxy High Build : DFT 75 micron

Total dry-film thickness will be **250 microns** for exterior and **150 micron** for interior. Proposed paint manufacturer is **Jotun**.



Section 2 Technical Description

20ft Control Van

1.0 Overview

Dimension (mm) : 6096 (L) x 2438 (W) x 2590 (H)
SWL : 15 Ton
Qty : 1 unit

The scope of work only covers the structural, architectural and electrical systems.

2.0 Architectural

2.1 Internal Paneling

We have included for the supply & installation of Polyurethane panels.

Description	Material	Thickness / Size
Wall Insulation Panel c/w Plywood Insert	PU	50mm
Ceiling Insulation Panel without Plywood Insert	PU	50mm
Door Panels	PU	25mm

2.2 Doors

We have included for the supply & installation of the following:

Description	Qty	Material
External Single Door c/w Locking Device on Side Wall (2100mm x 900mm)	2 units	Steel
Escape Hatch c/w Panic Bar System on Side Wall (Approx Size: 900mm x 900mm)	1 unit	Steel
External Grill c/w Ladder for Air-Con Recess Area on Rear End	1 unit	Steel

2.3 Flooring

We have included for the supply and installation of chequered plate / anti-slip coated flooring.

**3.0 Electrical**

- All electrical wiring / cabling (armored)
- 1 unit of 3-phase Distribution Box
- 2 units of 1.5HP Air-Con c/w brackets and metal trunking (50/60 Hz)
- 3 units of 2 x 36W Fluorescent Light (industrial type with protection)
- 2 units of Light Switch
- 2 units of Air-Con Switch
- 1 unit of Emergency Lamp c/w Backup Battery
- 1 unit of Smoke Detector (battery operated)
- 1 unit of 8" Ventilation Fan
- 4 units double switched European style 3 pin power sockets
- 1 unit of MCT

Note:

- a) Brand and Technical specifications of equipments and materials supplied will be given upon confirmation of final Bill of Material.
- b) All electrical items are **Non-Rated**.

4.0 Equipments & Furniture

Description	Qty	Material
Workbench c/w 3 Drawers (2 compartments) (Approx. Size mm: 2100 W x 600 D x 725 H)	1 unit	Steel
Overhead Cabinet c/w Shelf and Sliding Door (Approx. Size mm: 2000 W x 450 D x 411 H)	1 unit	Steel
Cabinet c/w Shelves and Overhead Cabinet (Approx. Size mm: 1060 W x 450 D x 2350 H)	1 unit	Steel

5.0 Optional (excluded from Scope)

- VGOCI labour & equipments to assist client in installation of equipments (which are not part of VGOCI's scope of work) and all other fixtures/fittings at VGOCI factory will be charged accordingly. These charges will be captured under Variation Order.
- VGOCI labour to assist installation of the module at client's site will be charged accordingly. The charges to be discussed prior to installation and will be captured under Variation Order.
- Testing and commissioning of client supplied equipments.
- Third party certification of client's equipments.
- Mounting brackets and all other brackets for client supplied equipments.
- Penetrations are as per the drawing. All additional penetrations will be charged accordingly.
- Fire and Gas equipments (other than the above), ancillary equipments, HVAC and pressurization system are excluded.
- Transformer and External Power Plug is excluded.

**SECTION 3 Commercial****1.0 Price**

20ft Control Van

Unit Price : MYR 112,000.00**2.0 Acceptance of Purchase Order**

The contract and delivery schedule will not start until VG Offshore Containers International formally provides written acceptance of the purchase order after receipt of purchase order and all applicable documentation.

In the event the order is cancelled, 10% of the total contract sum and all costs that has incurred will be charged accordingly with the proof of purchase from vendor (VGOCI). The client must meet obligations on the reimbursement of payments within 30 days of request for payment.

3.0 Delivery Terms

Ex-works VGOCI, Malaysia

4.0 Delivery Schedule

Delivery from acceptance date of Purchase Order by VG Offshore Containers International: **6 working weeks**

Any disputes over drawings / documentation provided to be resolved prior to fabrication starting. Prior to fabrication starting, delivery schedule to be reconfirmed and agreed upon between VG Offshore Containers International and the client.

5.0 Terms & Conditions**5.1 Terms of Payment**

Purchase Order complete with the following progress payment schedule:

1 st Payment	50% of total order by upon acceptance of Purchase Order
Final Payment	50% of total order prior to delivery

Purchase Order in the name of **VG Offshore Containers International (M) Sdn Bhd**. Terms and conditions to be agreed upon prior to award of contract. After receipt of order, pricing to remain valid for the duration of the order based on the delivery schedule indicated above. Any delay in the delivery of the equipment by the client may require delayed delivery charges / storage charges to be imposed by VG Offshore Containers International.

Quotation is valid for 30 days

Origin of Equipment: Klang, Selangor Darul Ehsan, Malaysia.



5.2 Standard Warranty

VG Offshore Containers International standard warranty will apply for this project.

VG Offshore Containers International shall warrant all material / workmanship for a period of eighteen (18) months from the date of shipping / invoicing or twelve (12) months from the date of commissioning / startup, whichever occurs first. VG Offshore Containers International Warranty provides for the labour / material to repair the containers by VG Offshore Containers International at either a VG Offshore Containers International designated shop or, if possible, onsite.

Warranty **does not** include cranes / labour to dismantle / reassemble, load / unload onto trucks/barges or freight to remove / return to location. VG Offshore Containers International warranty provides replacement of defective parts on a F.O.B. Kuala Lumpur, Malaysia **only**. Incidental and consequential damages are not included or covered. The foregoing warranty is in lieu of all other warranties expressed or implied.

INDEX

SECTION 1	DESIGN ASSESSMENT REPORT
SECTION 2	OFFSHORE CONTAINER CERTIFICATE
SECTION 3	GENERAL ARRANGEMENT DRAWINGS
SECTION 4	MATERIAL TRACEABILITY REPORT
SECTION 5	WELDING PROCEDURES
SECTION 6	WELDERS QUALIFICATION CERTIFICATES
SECTION 7	MANUFACTURER INSPECTION REPORTS ▪ FIT-UP INSPECTION REPORT ▪ VISUAL INSPECTION REPORT ▪ FINAL INSPECTION REPORT
SECTION 8	DIMENSION REPORT
SECTION 9	NDT REPORTS C/W WELD MAPS
SECTION 10	PRODUCTION / PROTOTYPE TESTING
SECTION 11	WIRE ROPE SLINGS PROOF LOAD CERTIFICATE AND MATERIAL CERTIFICATES
SECTION 12	SURFACE PREPARATION & COATING APPLICATION REPORTS
SECTION 13	OFFSHORE CONTAINER APPROVAL PLATE & DATA PLATE
SECTION 14	MARKING
SECTION 15	INSPECTION RELEASE CERTIFICATE
SECTION 16	OTHERS (IF APPLICABLE)

SECTION 1

DESIGN ASSESSMENT REPORT



**BUREAU
VERITAS**

Independent Review Certificate

IRC No.: 197/MLS/08-006-01

BV Job No.: BVKL – 08 197

Issued within the scope of Bureau Veritas General Conditions of Service, by the Technical Center Kuala Lumpur

Equipment: 20FT OFFSHORE CONTAINER

Manufacturer: VG Offshore Containers International (M) Sdn Bhd

The design of the above assembly, as detailed in the drawings and specifications listed below, has been reviewed on the basis of following references

Operations Limitations:

Maximum Gross Mass, R (kg):	15,000
Tare Mass, T (kg):	4,182
Sling angle from vertical (deg):	30
Dimensions (mm):	L: 6096, W: 2438, H: 2750

Material:

S355J2G3 (Primary Structure)	– Min Yield Strength 355 N/mm ²
S355J2G3 (For Pad eye)	– Min Yield Strength 355 N/mm ²
SS400 (For Plate)	– Min Yield Strength 245 N/mm ²

Design Reference:

- International Maritime Organization, MSC/Circ.860, Guidelines for the Approval of Offshore Containers Handled in Open Seas, 22 May 1998
- Det norske Veritas Classification, Offshore Containers, Certification Notes No 2.7-1, April 2006
- British Standard Offshore Containers – Design, Construction, Testing, Inspection and Marking (BS EN 12079)

Documentation:

<u>Document/Drawing Title</u>	<u>Ref No.</u>	<u>Rev.</u>
Design Calculation Report	VG-DH-B-20-8-9	1
General Arrangement (Page 1 of 8)	VG-DWG-DH-B-20-8-9	0
Base Assembly (Page 2 of 8)	VG-DWG-DH-B-20-8-9	0
Top Assembly (Page 3 of 8)	VG-DWG-DH-B-20-8-9	0
Side Wall Assembly (Page 4 of 8)	VG-DWG-DH-B-20-8-9	0
Front End Assembly (Page 5 of 8)	VG-DWG-DH-B-20-8-9	0
Rear End Assembly (Page 6 of 8)	VG-DWG-DH-B-20-8-9	0
Roof Assembly (Page 7 of 8)	VG-DWG-DH-B-20-8-9	0
Padeye (Page 8 of 8)	VG-DWG-DH-B-20-8-9	0



**BUREAU
VERITAS**

Independent Review Certificate

IRC No.: 197/MLS/08-006-01

BV Job No.: BVKL – 08 197

Scope of Review:

The scope of this design review is to check the stress levels for the conditions listed in above operational limitations, to the criteria set forth in the design reference documents.

The above design has been reviewed against the specified design references. As a result, BUREAU VERITAS considers that equipment manufactured to this design will satisfy the specified performance criteria. Consequently, this certificate is considered to contribute towards a duty holder's obligation for the verification of the equipment's design under the requirements of the following regulations and / or associated guidance:

- New Zealand Maritime Rules, Part 24E Carriage of Cargoes – Offshore Containers, 30 June 2005
- SI-913 (1996) Offshore Installations and Wells, Design and Construction Regulations
- SI-2306 (1998) Provision and Use of Work Equipment Regulations (PUWER)
- SI-289 (1974) D. En. Guidance on Design, Construction & Certification
- Norwegian Petroleum Directorate, the Facilities Regulations, Sept 2001

Restriction:

This Independent Review Certificate shall be the issuance of a Certificate of Conformity to any product manufactured in accordance with the reviewed design is subject to the execution and independent certification of the Prototype Testing, Production Testing and Production Inspection requirements of the Design References listed above.



Issued at Kuala Lumpur
On 9th July 2009


Suresh Kumar
Senior Structural Engineer


Raul Vieira
Technical Center
Manager

SECTION 2

OFFSHORE CONTAINER CERTIFICATE



CERTIFICATE OF PRODUCT CONFORMITY
N° 08 197/VGO/078/00

BASED ON MANUFACTURING AGREEMENT N° BVKL 08 197



BUREAU
VERITAS

This Certificate is valid only when endorsed by a BUREAU VERITAS Surveyor, proving that surveys of the product and audits of the Company Quality System have been carried out in accordance with the conditions prescribed by the Manufacturing Agreement N° BVKL 08 197

Part II – Fabrication

The following services were performed by Bureau Veritas

- Visual Inspection of structure – See Report **VG/VIR/1129**
- Welding Inspection – See Report **WMR-VG-RT-1129-001, WMR-VG-RT-1129-002, WMR-VG-RT-1129-003, WMR-VG-RT-1129-004 & WMR-VG-MPI-1129-005**
- Dimensional Inspection – See Report **VGOCI/DR/1129**
- Review Material Inspection Report - See Report **VG/MTR/1129**
- Review of Fit-up Inspection Report - See Report **VG/FUI/1129**
- Review NDT Reports - See Report **NDT/RT/62589-01/10, NDT/RT/62589-02/10, NDT/RT/61352-01/10, NDT/RT/62589-03/10, NDT/RT/62589-04/10, NDT/RT/62589-05/10, NDT/UT/62642-01/10, NDT/MT/62692-05/10, NDT/MT/62692-06/10 & NDT/MT/62692-07/10**
- Review Proof Load Test for one set of 4-Legged Wire Rope Sling – See GFC Testing Centre Certificate No. **G00782-02**

Proof testing – This offshore container or another offshore container from the same fabrication series, has been subjected to the following proof test:

- Manufacturer's Serial No. from the same fabrication series: **VG DNV 1129**
- Manufacturer's Serial No. of the offshore container(s) tested: **VG DNV 1129**
- Witness All Point Lifting Test – See report **VG/LT/1129/10 (Total test load, 2.5R : 37,500 kg)**
- Witness Prototype 2-Point Lifting (Diagonal Lifting) Test – N/A
- Witness Prototype Vertical Impact Test (Drop Test) – N/A
- Witness Intermediate Deck (Shelf) Test – N/A

PROTOTYPE

☐ Yes ☒ No

Marking and stamping :

CPC No: 08 197/VGO/078/00

IRC No: 197/MLS/08-006-01

SIGNED ON BEHALF OF VG OFFSHORE CONTAINERS INTERNATIONAL
(M) SDN BHD

Name: **VENUKANNA GANAPATHY**

Position: **SENIOR PROJECT MANAGER**

Place / date : **KUALA LUMPUR, 07/05/2010**

SIGNED ON BEHALF OF BUREAU VERITAS (M) SDN BHD

Name: **BRYAN EUNSON**

Position: **TECHNICAL DIRECTOR**

Place / date : **KUALA LUMPUR, 11 MAY 2010**



Any person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgment, fault or negligence committed by personnel of the Society or its Agents in the establishment or issuance of this document, and in connection with any activities for which it may provide.

The latest published BUREAU VERITAS General Conditions of Services are applicable.

BUREAU VERITAS Head Office: 17 bis, Place des Reflets - La Defense 2 - 92400 COURBEVOIE - Tel: 33 (0)1 42 91 52 91 - telex: 615376 BVDCN - Fax: 33 (0)1 42 91 28 94
Ad E 6950



CERTIFICATE OF PRODUCT CONFORMITY
N° 08 197/VGO/078/00

BASED ON MANUFACTURING AGREEMENT N° BVKL 08 197



BUREAU
VERITAS

This Certificate is valid only when endorsed by a BUREAU VERITAS Surveyor, proving that surveys of the product and audits of the Company Quality System have been carried out in accordance with the conditions prescribed by the Manufacturing Agreement N° BVKL 08 197

Owner : **ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)**
Vendor : **ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)**
Manufacturer : **VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD**
Design Code : **DNV 2.7-1, APRIL 2006 / EN 12079, 2006**

Identification:

Equipment : **20FT OFFSHORE CONTAINER**
Project Name : **20FT TIGER CONTROL VAN**
Model No. : **VG-DH-B-20-8-9**
Container ID : **AS1001-10**
Manufacturer's Serial No. : **VG DNV 1129**
Manufacturing Date : **APRIL 2010**

Part I – Design

Structural design review was carried out on the container based on the Structural Calculations Report number: VG-DH-B-20-8-9 R0 submitted by VG Offshore Containers International (M) Sdn. Bhd.

The operating conditions for the container are as follows:

- (i) Design Temperature : -20° C
- (ii) Maximum Gross Mass : 15,000 kg
- (iii) Maximum Pay Load : 10,818 kg
- (iv) Maximum Tare Mass : 4,182 kg
- (v) Minimum Shackle Working Load : 9.5 MT
- (vi) Shackle Bolt Diameter : 32 mm
- (vii) Minimum Safety Factor For Shackle : 6.0
- (viii) Max Angle of Sling Legs (from vertical) : 30°

The Independent Design Review Certificate number **197/MLS/08-006-01** dated **9th July 2009** was issued by BUREAU VERITAS.

SECTION 3

GENERAL ARRANGMENT DRAWINGS

SECTION 4

MATERIAL TRACEABILITY REPORT

		MATERIAL TRACEABILITY RECORD				
VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD		REPORT NO :VG/MTR/1129				
Serial No.:	VG DNV 1129					
Model No.:	VG-DH-B-20-8-9					
Client Name:	ALLIANCE SEAWORKS SDN BHD (FORMERLY KNOWN AS BUMI MAGNITUD SDN BHD)					
Project Name:	TIGER CONTROL VAN					
Marking / Colour ID:	N/A					
Item No.	Description	Material type	Structure Type	Thk	Heat No.	Mill Cert. No.
1	Bottom Side Rail	ABS EH 36	Primary	6.0mm	05469	981229A0002
2	Bottom End Rail	ABS EH 36	Primary	6.0mm	05475	981229A0005
3	Coner post	ABS EH 36	Primary	6.0mm	05471	981229A0003
4	Padeye	EN10025 S355J2G3	Primary	25.0mm	PC45120802	081015-PPHE-002-002
5	Top Side Rail	ABS EH 36	Primary	6.0mm	05475	981229A0005
6	Top End Rail	ABS EH 36	Primary	6.0mm	05471	981229A0003
7	Cross Members	ABS EH 36	Non-Essential Primary	6.0mm	05471	981229A0003



CHECKED BY : _____

13/10



VERIFIED BY : _____

13/10

APPROVED BY : _____



品質證明書 TEST CERTIFICATE

CHINA STEEL CORPORATION
1 Chung Kang Road, Hsiao Kang, Kaohsiung 81233
Taiwan
Tel: 886 (7) 802 1111 Fax: 886 (7) 802 2511

客戶名稱 SOLD TO		ANN JOO METAL SDN BHD		WISMA ANN JOO, LOT 19391, BT 8 1/2, JALAN KLANG LAMA, 46000 PETALING JAYA, SELANGOR, MALAYSIA		產品名稱 PRODUCT		PLATE-H.S.L.A STEEL		A0002-08 COMPANY REGISTRATION NUMBER: 30414175 0002	
規格名稱 SPEC.		ABS-09 PART 2 SEC. 1 GR. EH36, NORMALIZED.				發票號碼 INVOICE NO.		983796/EA3648		證明書編號 CERTIFICATE NO.	
						客戶編號 CUSTOMER NO.		22535598		中鋼訂單編號 CSC ORDER NO.	
						交運日期 SHIPPING DATE		ON/ABOUT DEC. 29, 2009		證明書日期 T C ISSUE DATE	
檢驗 INSPECTION		ABS INSPECTION		T/C 01 - 02		客戶訂單編號 TEST ORDER NO.		109/00090		AB-2782-01	
項目 ITEM		產品序號 SERIAL NO.		厚度 THICK		寬度 WIDTH		長度 LENGTH		重量 WEIGHT	
001 05469		6.00		2438		9144		3		3, 1502CX60 401105469	
05470		"		"		"		"		3, 1502CX60 302305470	
		TOTAL		6		6,300					
材料說明 MATERIAL DESCRIPTION		爐號 HEAT NO.		試片編號 SAMPLE ID.		拉伸試驗 TENSILE TEST		化學成份 CHEMICAL ANALYSIS %		REMARK	
		408		55022.5		Y.S. 200 MPa		C 0.22, P 0.005, S 0.03, Mn 0.50, Si 0.03, Ni 0.005, Cr 0.005, Mo 0.005, Al 0.005, Ti 0.005, V 0.005, Nb 0.005, N 0.005			
		405		55823.2		Y.S. 200 MPa		X10 10X10X10			
		408		55022.5		Y.S. 200 MPa		X10 10X10X10			
		405		55823.2		Y.S. 200 MPa		X10 10X10X10			
		TOTAL		6		6,300					
試驗結果 TEST RESULTS		TENSILE TEST		IMPACT TEST		TRAN AVG					
*01 拉伸試驗		TENSILE TEST		IMPACT TEST		TRAN AVG					
*06 衝擊試驗		IMPACT TEST		TRAN AVG							
*07 衝擊試驗		IMPACT TEST		TRAN AVG							
*10 正常化溫度		NORMALIZED TEMP.									
*11 正常化時間		NORMALIZED TIME									
NOTES		# IMPACT TEST SPECIMEN SIZE (mm) #5: 10X5. 0X55; #6: 10X6. 7X55; #7: 10X7. 5X55; #F: 10X10X55.									
Tr: TRACE ELEMENT WITH ITS CONTENT CONFORMING TO THE SPECIFICATION											
In accordance to EN10204 3.1B											
CREDIT NUMBER 002LC09121052385 DATED 091210											
1MPa = 1N/mm2											
ANN JOO METAL SDN. BHD.											
Customer: LG Metal Technology (M) S/B											
Dimension: 6mm x 2438 mm x 9144 mm											
P/O No.: 10100969											
Quantity: 26 Pcs											
P/O No.: 06603198											
Date: 27/11/2010											
GENERAL MANAGER											
Lix Wei											
METALLURGICAL DEPARTMENT											



CHINA STEEL CORPORATION
1 Chung Kang Road, Hsiao Kang, Kaohsiung 81233
Taiwan
Tel: 886 (7) 802 1111 Fax: 886 (7) 802 2511

MILL CERTIFICATE

WILL CERTIFICATE		A0003-0B		COMPANY REGISTRATION NUMBER: 30414175		0005	
ANN JOO METAL SDN BHD		WISMA ANN JOO, LOT 19391, BT 8 1/2, JALAN KLANG LAMA, 46000 PETALING JAYA, SELANGOR, MALAYSIA		PRODUCT		PLATE-H S. L. A STEEL	
ABS-09 PART 2 SEC. 1 GR. EH36, NORMALIZED.		ABS-09 PART 2 SEC. 1 GR. EH36, NORMALIZED.		發票號碼 INVOICE NO.		983796/EA3648	
規格名稱		規格名稱		客戶編號 CUSTOMER NO.		981229A0003	
SPEC		SPEC		中鋼訂單編號 USE ORDER NO.		QT3035D	
ABS INSPECTION		ABS INSPECTION		交運日期 SHIPPING DATE		ON/ABOUT DEC. 29, 2009	
T/C 01 - 02		T/C 01 - 02		證明書日期 T C ISSUE DATE		DEC. 29, 2009	
客戶訂單編號 CUST ORDER NO.		客戶訂單編號 CUST ORDER NO.		客戶訂單編號 CUST ORDER NO.		109/00090	
AB-2782-02		AB-2782-02		AB-2782-02		AB-2782-02	

[illegible]
$$1 \text{ MPa} = 1 \text{ N/mm}^2$$

IN ACCORDANCE TO EN10204 3.1B
CREDIT NUMBER 002LC09121052385 DATED
091210

: #6: 10X6. 7X55; #7: 10X7. 5X55; #F: 10X10X55.

Tr:TRACE ELEMENT WITH ITS CONTENT CONFORMING TO THE SPECIFICATION

茲證明本表所列產品，均係材料規格製造及試驗，並符合規格之要求。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE TO THE APPLICABLE SPECIFICATION BY BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMERICAN BUREAU OF SHIPPING RULES WITH SATISFACTORY

冶金技術處處長
GENERAL MANAGER, METALLURGICAL DEPARTMENT

品質證明書
TEST CERTIFICATE

CHINA STEEL CORPORATION
1 Chung Kang Road, Hsiao Kang, Kaohsiung 81233
Taiwan
Tel: 886 (7) 802 1111 Fax: 886 (7) 802 2511

客戶名稱 SOLD TO	ANN JOO METAL SDN BHD	產品名稱 PRODUCT	PLATE-H. S. L. A. STEEL	公司註冊號碼 COMPANY REGISTRATION NUMBER: 30414175	0011
規格名稱 SPEC	ABS-09 PART 2 SEC. 1 GR. EH36, NORMALIZED.	發票號碼 INVOICE NO.	983796/EA3648	證明書編號 CERTIFICATE NO.	981229A0005
		客戶編號 CUSTOMER NO.	225355598	中鋼訂單編號 CSC ORDER NO.	QT3035D
		交運日期 SHIPPING DATE	ON/ABOUT DEC. 29, 2009	證明書日期 T.C. ISSUE DATE	DEC. 29, 2009
檢驗 INSP.	ABS INSPECTION	客戶訂單編號 CUST. ORDER NO.	109/00090		AB-2782-04

項目	產品序號	MATERIAL DESCRIPTION			爐號	試片編號	拉伸試驗 *1 G.L. = 200 mm 降伏 抗拉 伸長 Y.S. T.S. EL MPa, N/mm ² %	#06 IMP. T. AVT. -400-40C	#07 IMP. T. TIME	#10 NORM. TIME	#11 NORM. TIME	化學成份 CHEMICAL ANALYSIS %												REMARK					
		厚度 THICK	寬度 WIDTH	長度 LENGTH								重量 WEIGHT	QTY	NO.	NO.	NO.	C	Mn	P	S	Si	Ni	Cr		Mo	Al	Nb	Ti	V
001	05475	6.00	2438	9144	3	3	3	1502CX60	402205475	#5	33	33	905	15	34	34	15	14	21	9	37	1	2	2	45	29	7	Tr	
	05476							05476			408	55022.5	15		34	34	15												
								05478			408	55023.2	15				15												
								05476			408	55022.5	15		34	34	15												
								05478			405	55023.2	15				15												
								TOTAL			6	6.300																	

IN ACCORDANCE TO EN10204 3.1B
CREDIT NUMBER 002LC09121052385 DATED 091210

1MPa - 1N/mm²

茲證明本表所列產品，均依材料規格製造及試驗，並符合規格之要求。
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE TO THE APPLICABLE SPECIFICATION BY BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMERICAN BUREAU OF SHIPPING RULES WITH SATISFACTORY RESULTS.

Tr: TRACE ELEMENT WITH ITS CONTENT CONFORMING TO THE SPECIFICATION

POSCO Mill Test Certificate/검사증명서

Certificate No./증명서번호:081015-PPHE-002-002
Date of Issue/발행일자:Oct., 15, 2008

Order No./계약번호:0003410137

P.O No./주문번호:3410137

Supplier/주문자:POSTEEL

Commodity/품명:PLATE

Customer/고객사:ANN JOO

Spec & Type/규격:EN10025 S355J2G3

Size/치수	Product No. 제품번호	Quantity 수량	Weight 중량 (kg)	Heat No. 제강번호	Position	Tensile/인장시험 YP TS EL (%) (MPa)	Impact/충격시험 V Notch -20°C Energy SF (%) (Joule)	DIVISION	Chemical Composition/화학성분(%) C Si Mn P S CEQ -4 -3 -3 -4 -4 -3
25x2438x9144	PC45096401-8402	2	8,746	SB17698	T	372 529 31	3:242 A:238 1:264 2:208 3:242 A:238 1:264 2:208 3:242 A:238	L	1630 332 1369 183 31 397
25x2438x9144	PC45120801-0802	2	8,746	SB17698	T	372 529 31	3:242 A:238 1:264 2:208 3:242 A:238	L	1630 332 1369 183 31 397
25x2438x9144	PC45169101	1	4,373	SB17698	T	372 529 31	3:242 A:238 1:264 2:208 3:242 A:238	L	1630 332 1369 183 31 397

** Specimen No : Tension => PP06288507

25x2438x9144 Impact => PP06288507

PC45096401-8402

PC45120801-0802

PC45169101

Position - T: Top, M: Middle, B: Bottom

Tensile Test. Direction : Transversal, Gauge Length : 5.65 √ A. (Rectangular),

U.S.T(Ultrasonic Test)

Impact Test. Direction : Longitudinal,

T.L.R(Trans Longitude Ratio)

Division - L:Ladle Analysis

Chemical Composition Unit: -2x1/100, -3x1/1000, -5x1/100000

Tr: It is within the standard range(<0.008%) and include trace element.

Supply Condition : As-Rolled unless otherwise Heat Treated

We hereby certify that the material herein has been made in accordance with the order and specification.
This material has been fully killed and made by basic oxygen process.



Surveyor To: ABS

W.G. Jo

POSCO Pohang Works, 5 Dongchon-dong, Nam-gu, Pohang-si, Gyeongsangbuk-do, 790-785, Korea

< PAGE:9 >

Chief of material testing section

Jo, Won Gook

SECTION 5

WELDING PROCEDURES



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

Company Name: VG Offshore Containers International (M) S/B
VG Metal Technology (M) S/B
Welding Process(es): GMAW
Supporting PQR No.(s): PQR/GMAW/009 & PQR/GMAW/009S

Identification No : WPS/ GMAW /009

Revision: 0 Date: 09/04/2009 By: Chandran
Authorised by: Venu Date: 09/04/2009
Type - Manual ☐ Semi-Automatic ☒
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

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

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

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

Tungsten Electrode (GTAW)

Size: -

Type: -



☒ REVIEWED

☒ WITNESSED

☒ VERIFIED

NAME: V.RABINDRA

DATE: 22/04/09

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

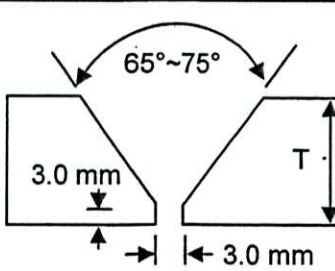
Peening: NONE

Interpass Cleaning: Chipping, Wire Brush
& Grinding

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 (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
Welding Process(es): GMAW
Supporting PQR No(s): PQR/GMAW/0098

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

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

Type - Manual ☐ Semi-Automatic ☒
Machine ☐ Automatic ☐

JOINT DESIGN USED

Type : BUTT

Single ☒ Double Weld ☐

Backing : Yes ☒ No ☐

Backing Material : EN10025 S355 J2G3

Root Opening : 6 mm 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: 25mm Fillet: ALL

Diameter (Pipe): N/A

Filler Metals: GMAW(Dia 1.0 & 1.2mm)

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. : 35°C

Interpass Temp., Min.: 35°C Max.: 235°C

POSITION

Position of Groove : ALL 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

Size: N/A

Type: N/A

TECHNIQUE

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

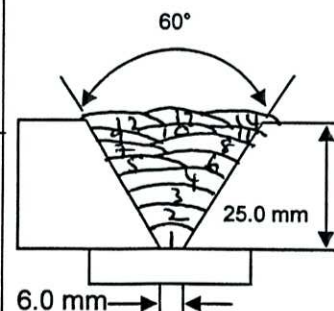
Interpass Cleaning: Chipping, Wire Brush & Grinding

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 ~ 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 _____

Manufactured by VG OFFSHORE CONTAINERS INTERNATIONAL

By : CHANDRAN

Title : Q.A. ENGINEER

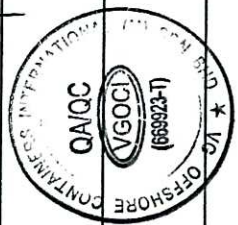
Date : 8/4/09

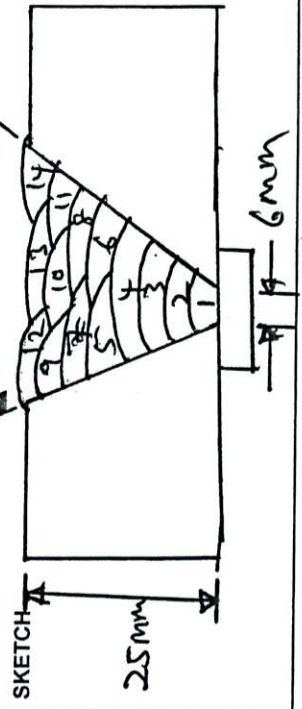


SHEET NO : 1/2
 DATE : 26/3/09
 REV. NO. : 0
 JOB NO : -

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	Butter	ER70S-6	1-2	3G	131	22	2'07"	33	35	25		TS (cm/min) HI (KJ/cm)
2	2		"	IMPRESS	"	1-2	"	134	22	2'13"		60			14-15
3	3		"	"	"	1-2	"	148	21-9	2'38"		96			13-53
4	4		"	"	"	1-2	"	142	22	3'12"		128			11-39
5	5		"	"	"	1-2	"	141	22	2'48"		135			9-38
6	5		"	"	"	1-2	"	144	22	3'24"		130			10-7
7	6		"	"	"	1-2	"	145	22	2'37"		153			8-82
8	6		"	60°	"	1-2	"	141	22	3'36"		140			11-46
MATERIAL							EN10025 S355J2G3								
ENTERED / CHECKED BY							H/W DL 47204								
VERIFIED / CONFIRMED BY															



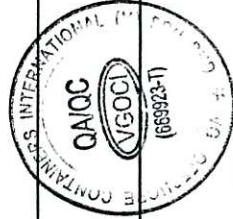
NAME: VRABINDRA
 DATE: 26/03/09

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"					TS (cm/min) HI (KJ/cm)
10	7	"			"	1-0	1	135	23	3'16"					13.3 14.5
11	7	"			"	1-0	"	134	23	3'50"					9.18 20.29
12	8	"			"	1-0	"	137	23	3'04"					7.83 23.63
13	8	"			"	1-0	"	135	22	3'15"					9.78 19.33
14	8	"			"	1-0	"	132	23	3'21"					9.23 19.3
															8.95 20.35
SKETCH			Refer page 1/2			MATERIAL			EN10025 S355J2G3 H/N BL47204						
						ENTERED / CHECKED BY			 						
						VERIFIED / CONFIRMED BY									



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

Report No: NDT/RT/57602-01/09

RADIOGRAPHIC EXAMINATION REPORT

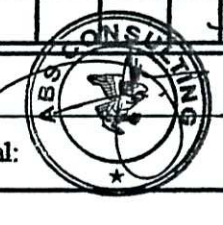
Page No: 1 of 1

Client : VG OFFSHORE CONTAINERS
INTERNATIONAL (M) SDN. BHD
Project : WPS/GMAW/009
MINI CONTAINER
UK/AUSTRALIA
Material : EN 10025 S355J2G3
Welding Process : GMAW
Inspection Code : AWS D1-1 : 2006
Acceptance Code : AWS D1-1 : 2006

IQI Type : ASTM 1B
Film Type : CLASS II
Density : 2.0 TO 3.0
Sensitivity : 0.33MM (5 WIRE VISIBLE)
Source to Object Distance : 18 INCH
Source Side of Object to the
Film Distance : 25 MM + 3 MM
No. Of Film Each Cassette : 1 FILM

Inspection Date : 01ST APRIL 2009
Source Type / Size : IR192 (1.7MM X 2.7 MM)

Radiographic Technique : SWSI

Weld Reference	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																☒ REVIEWED ☐ WITNESSED ☐ VERIFIED		
Interpreted By: AMAT HAMIDI - LEV II																Approved By: _____ Client's Approval: _____		



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

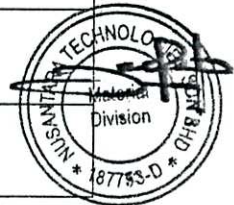
7/25

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 - 22/04/09 ☒ VERIFIED - 22/04/09 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

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	



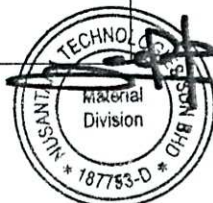
☒ REVIEWED
☒ WITNESSED - 08/04/09
☐ VERIFIED
 NAME: V.RABINDRA
 DATE: 22/04/09



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

Report No. MAT/0866-01/09	Title BEND TEST		Page 3 of 5																																									
Test Result																																												
<table border="1"> <tr> <th colspan="5">TRANSVERSE BEND TEST</th> </tr> <tr> <td colspan="5">Diameter of Former : 38.1 mm Angle of Bend : 180°</td> </tr> <tr> <th>WPS No. WPS/GMAW/009</th> <th>Nominal Width (mm)</th> <th>Nominal Thickness (mm)</th> <th>Result</th> <th>Remarks</th> </tr> <tr> <td>Side Bend</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>S 1</td> <td>10.0</td> <td>25.0</td> <td>Satisfactory</td> <td>No Visible Defect</td> </tr> <tr> <td>S 2</td> <td>10.0</td> <td>25.0</td> <td>Satisfactory</td> <td>No Visible Defect</td> </tr> <tr> <td>S 3</td> <td>10.0</td> <td>25.0</td> <td>Satisfactory</td> <td>No Visible Defect</td> </tr> <tr> <td>S 4</td> <td>10.0</td> <td>25.0</td> <td>Satisfactory</td> <td>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
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																																								
																																												
																																												
☒ REVIEWED ☒ WITNESSED - 08/04/09 ☐ VERIFIED NAME: V.RABINDRA DATE: 22/04/09																																												
																																												

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

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 ☒ 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

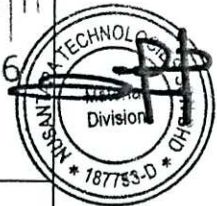
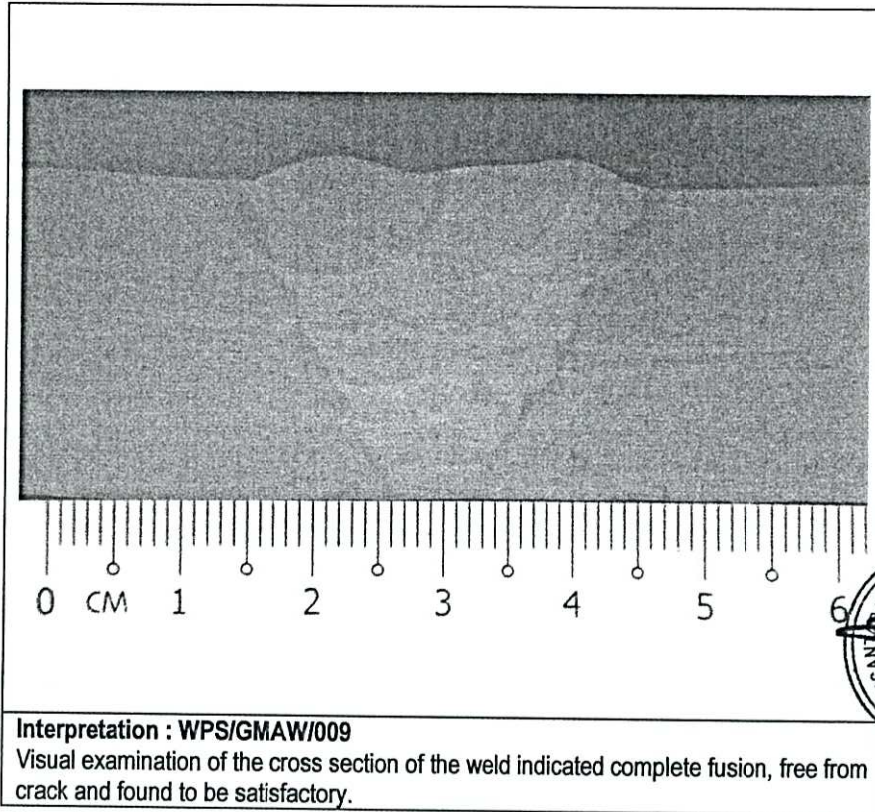
This report shall not be reproduced without written approval from **Nusantara Technologies Sdn. Bhd.**

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

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

Test Result



The above mentioned test were witnessed by		
Name: <i>Chandran 81469</i>	Name: <i>V.RABINDRA</i>	☒ REVIEWED ☒ WITNESSED - <i>08/04/09</i> ☒ VERIFIED - <i>V.R.</i> NAME: <i>V.RABINDRA</i> DATE: <i>22/04/09</i>

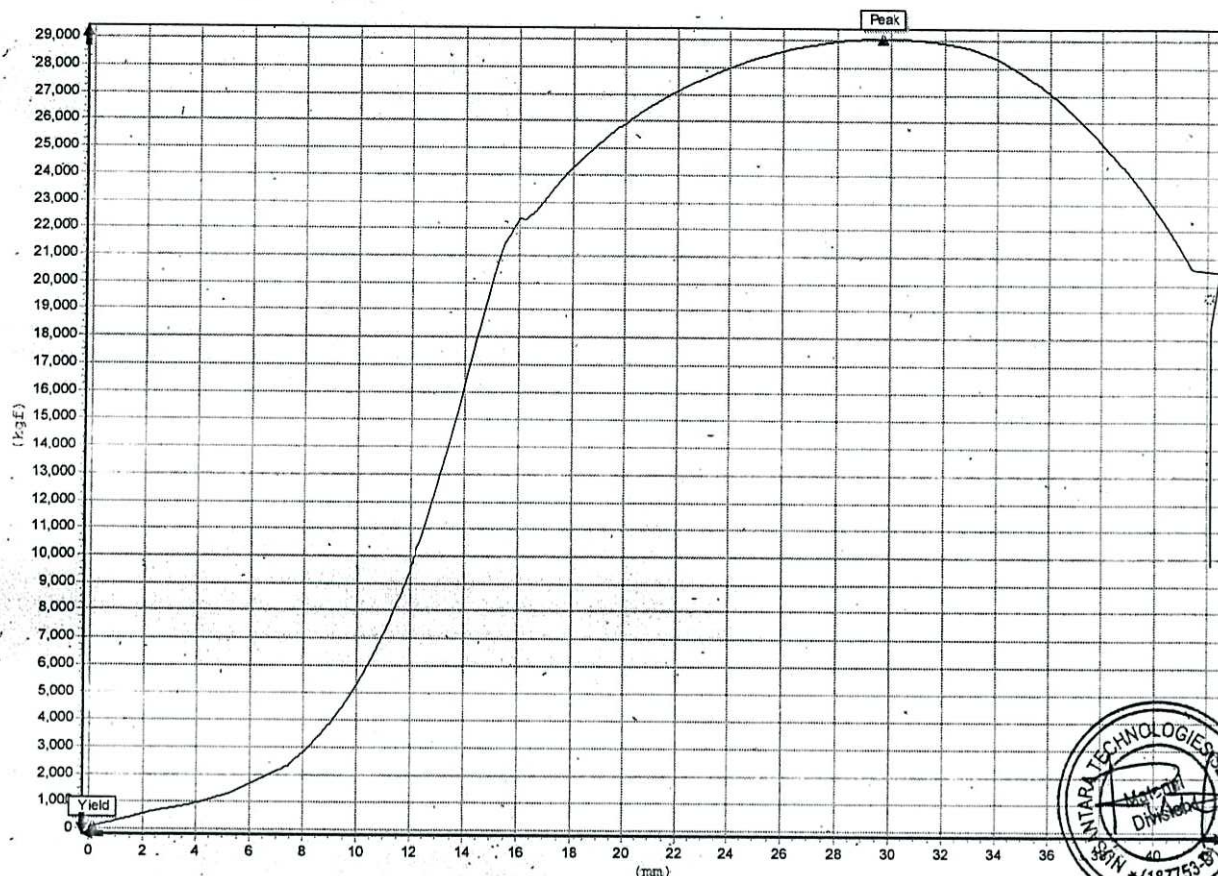
This report shall not be reproduced without written approval from Nusantara Technologies Sdn. Bhd.

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/
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) _____

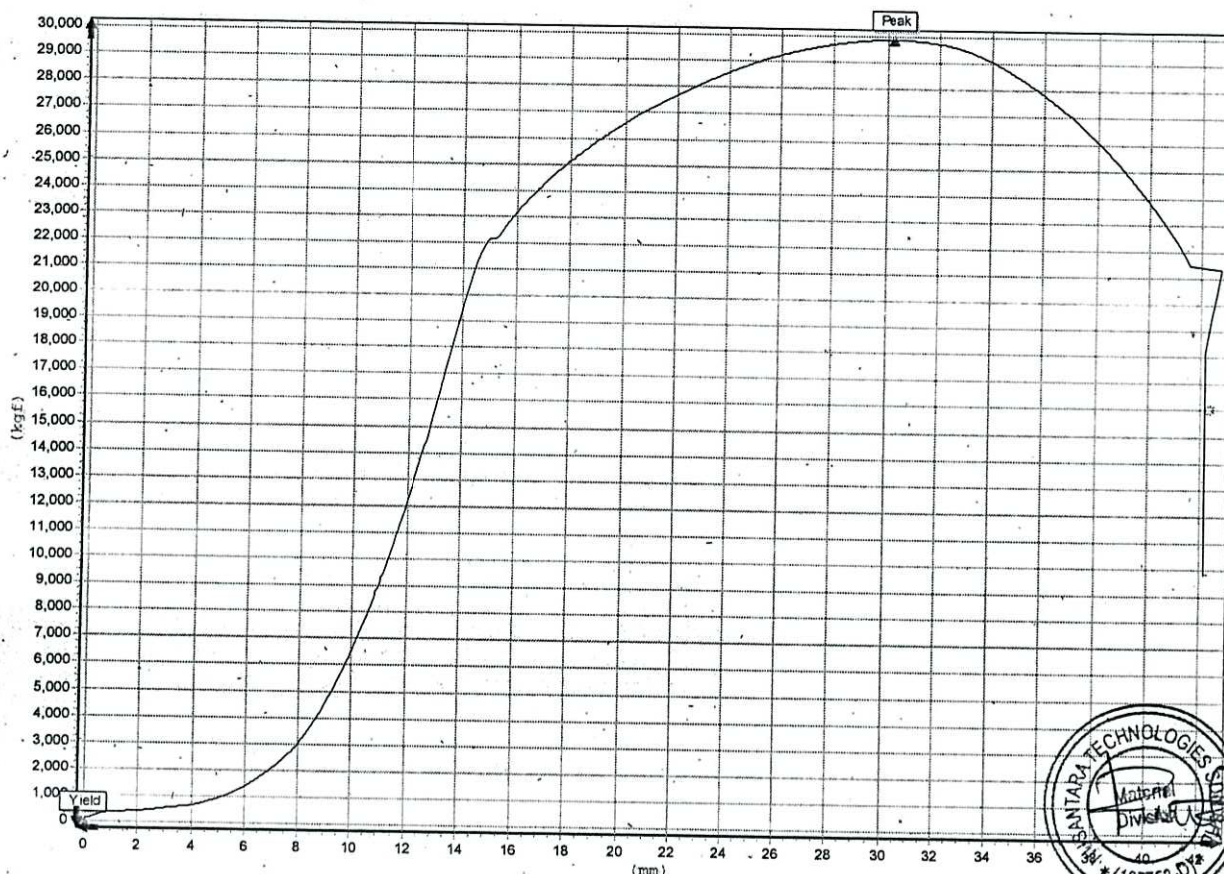
This report shall not be reproduced without the approval of Nusantara Technologies Sdn. Bhd.

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

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

1)

2)

3)

This report shall not be reproduced without the approval of 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

ANN JOO METAL SDN. BHD.
Customer: Y& Metal Technology (M) Sdn Bhd.
Dimension: 28mm x 119mm x 2433mm
D/O No.: 03/03790 P/O No.: 00001000
Quantity: 3pc Date: 13/10/02

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

検査証明書
INSPECTION CERTIFICATE

顧客名: ANN JOO METAL SDN. BHD.
顧客管理番号: 108/00038
注文者: JFE SHOJI TRADING CORPORATION
注文番号: FF5 -C80135724
品名: HOT ROLLED STEEL PLATE
規格: BS EN10025 S355J203 1993

JFE
証明書番号: AUREX-0960-001
CONTINUED
日付: 2008-07-14
船名: :
工番: :
注文番号: :
注文番号: : SA30305

鋼 番 Heat No.	行番 Item No.	規 格 Size T X W X L (MM)	注 法 (STANDARD)	LADLE	員 数 QUAN- tity	質 量 MASS (KG)	化 学 成 分 Chemical Composition (%)						引 張 試 験 Tensile Test				IMPACT TEST							
							C	SI	Mn	P	S	CEQ3	Y	P	Y	TS	1	2	3	AVE	TEMP. -20°C	IPS		
SPECIFIED VALUE (STANDARD)																								
DL46901	001	25.0 X 2438 X 9144	1	1	4373	16	35	14	13	5	3	2	1	3	31	41	TC	426	561	29	252	208	2MM V	-20°C
DL46902	001	25.0 X 2438 X 9144	1	1	4373																186	215		
DL46903	001	25.0 X 2438 X 9144	1	1	4373																			
DL46904	001	25.0 X 2438 X 9144	1	1	4373																			
DL47201	001	25.0 X 2438 X 9144	1	1	4373																			
DL47202	001	25.0 X 2438 X 9144	1	1	4373																			
DL47203	001	25.0 X 2438 X 9144	1	1	4373																			
DL47204	001	25.0 X 2438 X 9144	1	1	4373																			
DL47205	001	25.0 X 2438 X 9144	1	1	4373																			
DL47206	001	25.0 X 2438 X 9144	1	1	4373																			
DL47207	001	25.0 X 2438 X 9144	1	1	4373																			
DL47208	001	25.0 X 2438 X 9144	1	1	4373																			
DL47209	001	25.0 X 2438 X 9144	1	1	4373																			
DL47210	001	25.0 X 2438 X 9144	1	1	4373																			
DL47211	001	25.0 X 2438 X 9144	1	1	4373																			
DL47212	001	25.0 X 2438 X 9144	1	1	4373																			
DL47213	001	25.0 X 2438 X 9144	1	1	4373																			
DL47214	001	25.0 X 2438 X 9144	1	1	4373																			
DL47215	001	25.0 X 2438 X 9144	1	1	4373																			
DL47216	001	25.0 X 2438 X 9144	1	1	4373																			
DL47217	001	25.0 X 2438 X 9144	1	1	4373																			
DL47218	001	25.0 X 2438 X 9144	1	1	4373																			
DL47219	001	25.0 X 2438 X 9144	1	1	4373																			
DL47220	001	25.0 X 2438 X 9144	1	1	4373																			
DL47221	001	25.0 X 2438 X 9144	1	1	4373																			
DL47222	001	25.0 X 2438 X 9144	1	1	4373																			
DL47223	001	25.0 X 2438 X 9144	1	1	4373																			
DL47224	001	25.0 X 2438 X 9144	1	1	4373																			
DL47225	001	25.0 X 2438 X 9144	1	1	4373																			
DL47226	001	25.0 X 2438 X 9144	1	1	4373																			
DL47227	001	25.0 X 2438 X 9144	1	1	4373																			
DL47228	001	25.0 X 2438 X 9144	1	1	4373																			
DL47229	001	25.0 X 2438 X 9144	1	1	4373																			
DL47230	001	25.0 X 2438 X 9144	1	1	4373																			
DL47231	001	25.0 X 2438 X 9144	1	1	4373																			
DL47232	001	25.0 X 2438 X 9144	1	1	4373																			
DL47233	001	25.0 X 2438 X 9144	1	1	4373																			
DL47234	001	25.0 X 2438 X 9144	1	1	4373																			
DL47235	001	25.0 X 2438 X 9144	1	1	4373																			
DL47236	001	25.0 X 2438 X 9144	1	1	4373																			
DL47237	001	25.0 X 2438 X 9144	1	1	4373																			
DL47238	001	25.0 X 2438 X 9144	1	1	4373																			
DL47239	001	25.0 X 2438 X 9144	1	1	4373																			
DL47240	001	25.0 X 2438 X 9144	1	1	4373																			
DL47241	001	25.0 X 2438 X 9144	1	1	4373																			
DL47242	001	25.0 X 2438 X 9144	1	1	4373																			
DL47243	001	25.0 X 2438 X 9144	1	1	4373																			
DL47244	001	25.0 X 2438 X 9144	1	1	4373																			
DL47245	001	25.0 X 2438 X 9144	1	1	4373																			
DL47246	001	25.0 X 2438 X 9144	1	1	4373																			
DL47247	001	25.0 X 2438 X 9144	1	1	4373																			
DL47248	001	25.0 X 2438 X 9144	1	1	4373																			
DL47249	001	25.0 X 2438 X 9144	1	1	4373																			
DL47250	001	25.0 X 2438 X 9144	1	1	4373																			
DL47251	001	25.0 X 2438 X 9144	1	1	4373																			
DL47252	001	25.0 X 2438 X 9144	1	1	4373																			
DL47253	001	25.0 X 2438 X 9144	1	1	4373																			
DL47254	001	25.0 X 2438 X 9144	1	1	4373																			
DL47255	001	25.0 X 2438 X 9144	1	1	4373																			
DL47256	001	25.0 X 2438 X 9144	1	1	4373																			
DL47257	001	25.0 X 2438 X 9144	1	1	4373																			
DL47258	001	25.0 X 2438 X 9144	1	1	4373																			
DL47259	001	25.0 X 2438 X 9144	1	1	4373																			
DL47260	001	25.0 X 2438 X 9144	1	1	4373																			
DL47261	001	25.0 X 2438 X 9144	1	1	4373																			
DL47262	001	25.0 X 2438 X 9144	1	1	4373																			
DL47263	001	25.0 X 2438 X 9144	1	1	4373																			
DL47264	001	25.0 X 2438 X 9144	1	1	4373																			
DL47265	001	25.0 X 2438 X 9144	1	1	4373																			
DL47266	001	25.0 X 2438 X 9144	1	1	4373																			
DL47267	001	25.0 X 2438 X 9144	1	1	4373																			
DL47268	001	25.0 X 2438 X 9144	1	1	4373																			
DL47269	001	25.0 X 2438 X 9144	1	1	4373																			
DL47270	001	25.0 X 2438 X 9144	1	1	4373																			
DL47271	001	25.0 X 2438 X 9144	1	1	4373																			
DL47272	001	25.0 X 2438 X 9144	1	1	4373																			
DL47273	001	25.0 X 2438 X 9144	1	1	4373																			
DL47274	001	25.0 X 2438 X 9144	1	1	4373																			
DL47275	001	25.0 X 2438 X 9144	1	1	4373																			
DL47276	001	25.0 X 2438 X 9144	1	1	4373																			
DL47277	001	25.0 X 2438 X 9144	1	1	4373																			
DL47278	001	25.0 X 2438 X 9144	1	1	4373																			

12/10/08.

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



検査証明書
INSPECTION CERTIFICATE

992

I08/00038

KJFE SHOJI TRADE CORPORATION

FF5 -C80135724

HOT ROLLED STEEL PLATE

BS EN10025 S355J203 1993

聖賢之學

[illegible]

(Notes) : 15桁: 現貨番号, 2 letters & the 1st 3 figures: mother plate numbers
: 72桁: 分組番号, the last 2 figures: divided plate numbers
#2 BG: 数次, Degassed

Item	Unit	Value	Unit	Value
1. Part Name		1. 部品名		
2. Part No.		2. 部品番号		
3. Drawing No.		3. 図面番号		
4. Revision		4. 改訂		
5. Material		5. 材質		
6. Quantity		6. 数量		
7. Unit of Measure		7. 単位		
8. Description		8. 説明		
9. Specification		9. 仕様		
10. Drawing Scale		10. 図面縮尺		
11. Drawing Date		11. 図面作成日		
12. Drawing By		12. 図面作成者		
13. Drawing Check		13. 図面確認者		
14. Drawing Approval		14. 図面承認者		
15. Drawing Status		15. 図面状態		
16. Drawing Version		16. 図面バージョン		
17. Drawing Location		17. 図面保存場所		
18. Drawing Access		18. 図面アクセス権限		
19. Drawing History		19. 図面履歴		
20. Drawing Comments		20. 図面コメント		
21. Drawing Attachments		21. 図面添付ファイル		
22. Drawing Links		22. 図面リンク		
23. Drawing Tags		23. 図面タグ		
24. Drawing Keywords		24. 図面キーワード		
25. Drawing Metadata		25. 図面メタデータ		
26. Drawing Security		26. 図面セキュリティ		
27. Drawing Audit		27. 図面監査		
28. Drawing Backup		28. 図面バックアップ		
29. Drawing Restore		29. 図面復元		
30. Drawing Delete		30. 図面削除		
31. Drawing Archive		31. 図面アーカイブ		
32. Drawing Unarchive		32. 図面アーカイブ解除		
33. Drawing Export		33. 図面エクスポート		
34. Drawing Import		34. 図面インポート		
35. Drawing Print		35. 図面印刷		
36. Drawing Share		36. 図面共有		
37. Drawing Unshare		37. 図面共有解除		
38. Drawing Move		38. 図面移動		
39. Drawing Copy		39. 図面コピー		
40. Drawing Paste		40. 図面貼り付け		
41. Drawing Cut		41. 図面切り取り		
42. Drawing Undo		42. 図面元に戻す		
43. Drawing Redo		43. 図面やり直し		
44. Drawing Zoom In		44. 図面ズームイン		
45. Drawing Zoom Out		45. 図面ズームアウト		
46. Drawing Zoom Reset		46. 図面ズームリセット		
47. Drawing Pan		47. 図面パanning		
48. Drawing Rotate		48. 図面回転		
49. Drawing Scale		49. 図面スケール		
50. Drawing Lock		50. 図面ロック		
51. Drawing Unlock		51. 図面ロック解除		
52. Drawing Hide		52. 図面隠す		
53. Drawing Show		53. 図面表示		
54. Drawing Freeze		54. 図面凍結		
55. Drawing Unfreeze		55. 図面凍結解除		
56. Drawing Lock All		56. 図面すべてをロック		
57. Drawing Lock Selected		57. 図面選択したものをロック		
58. Drawing Lock None		58. 図面ロックを解除		
59. Drawing Hide All		59. 図面すべてを隠す		
60. Drawing Hide Selected		60. 図面選択したものを隠す		
61. Drawing Hide None		61. 図面表示		
62. Drawing Freeze All		62. 図面すべてを凍結		
63. Drawing Freeze Selected		63. 図面選択したものを凍結		
64. Drawing Freeze None		64. 図面凍結解除		
65. Drawing Unfreeze All		65. 図面凍結解除		
66. Drawing Unfreeze Selected		66. 図面選択したものを凍結解除		
67. Drawing Unfreeze None		67. 図面凍結解除		
68. Drawing Lock and Hide		68. 図面ロックと隠す		
69. Drawing Lock and Show		69. 図面ロックと表示		
70. Drawing Lock and Freeze		70. 図面ロックと凍結		
71. Drawing Lock and Unfreeze		71. 図面ロックと凍結解除		
72. Drawing Lock and Hide and Freeze		72. 図面ロック、隠す、凍結		
73. Drawing Lock and Hide and Unfreeze		73. 図面ロック、隠す、凍結解除		
74. Drawing Lock and Hide and Lock All		74. 図面ロック、隠す、すべてをロック		
75. Drawing Lock and Hide and Lock Selected		75. 図面ロック、隠す、選択したものをロック		
76. Drawing Lock and Hide and Lock None		76. 図面ロック、隠す、ロックを解除		
77. Drawing Lock and Hide and Hide All		77. 図面ロック、隠す、すべてを隠す		
78. Drawing Lock and Hide and Hide Selected		78. 図面ロック、隠す、選択したものを隠す		
79. Drawing Lock and Hide and Hide None		79. 図面ロック、隠す、表示		
80. Drawing Lock and Hide and Freeze All		80. 図面ロック、隠す、すべてを凍結		
81. Drawing Lock and Hide and Freeze Selected		81. 図面ロック、隠す、選択したものを凍結		
82. Drawing Lock and Hide and Freeze None		82. 図面ロック、隠す、凍結解除		
83. Drawing Lock and Hide and Unfreeze All		83. 図面ロック、隠す、凍結解除		
84. Drawing Lock and Hide and Unfreeze Selected		84. 図面ロック、隠す、選択したものを凍結解除		
85. Drawing Lock and Hide and Unfreeze None		85. 図面ロック、隠す、凍結解除		
86. Drawing Lock and Hide and Lock and Hide		86. 図面ロック、隠す、ロックと隠す		
87. Drawing Lock and Hide and Lock and Show		87. 図面ロック、隠す、ロックと表示		
88. Drawing Lock and Hide and Lock and Freeze		88. 図面ロック、隠す、ロックと凍結		
89. Drawing Lock and Hide and Lock and Unfreeze		89. 図面ロック、隠す、ロックと凍結解除		
90. Drawing Lock and Hide and Lock and Hide and Freeze		90. 図面ロック、隠す、ロック、隠す、凍結		
91. Drawing Lock and Hide and Lock and Hide and Unfreeze		91. 図面ロック、隠す、ロック、隠す、凍結解除		
92. Drawing Lock and Hide and Lock and Hide and Lock All		92. 図面ロック、隠す、ロック、隠す、すべてをロック		
93. Drawing Lock and Hide and Lock and Hide and Lock Selected		93. 図面ロック、隠す、ロック、隠す、選択したものをロック		
94. Drawing Lock and Hide and				

第3 CEQ3=C+MN/6+(CG+NSU)/5+(CR+MD+V)/5

上記商品は検査の結果指定の規格に合格していることを証明いたします。

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.

INSPECTOR TO

東日本製鉄所 (京浜) : 〒210-0868 神奈川県川崎市川崎区西島1番地1 East Japan works (Keihin) : 1-1, OHGISHIMA, KAWASAKI 210-0868

東日本製鐵所 品質保證

Quality Assurance Section



贏力工業有限公司
IMPRESS STEEL WIRE INDUSTRIES SDN. BHD.

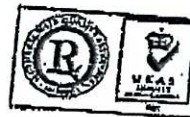
PT 517, Jalan PBR 23, Kawasan Perindustrian Bukit Rambai, 75250 Melaka, Malaysia.

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	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



贏力工業有限公司

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

PT 517, Jalan FBR 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>



3/3

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 - 130 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.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	40	

4.0 Physical Test

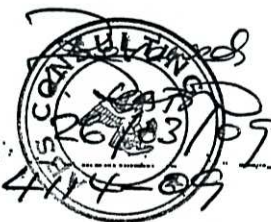
Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Reduction Area (%)
388	520	28	79



Approved by



26/3/09





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

Identification No : WPS/ GMAW /009S
 Revision: 0 Date: 09/04/2009 By: Chandran
 Authorised by: Venu Date: 09/04/2009
 Type - Manual ☐ Semi-Automatic ☒
 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%
 Electrode-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 (GMAW) ☒
 Size: N/A
 Type: N/A
 REVIEWED ☒
 WITNESSED ☒
 VERIFIED ☒
 NAME: V.RABINDRA
 DATE: 02/04/09

TECHNIQUE

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

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]
Manufactured by [Signature]

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	27.5	25		25.71	6-93	T.S (cm/min) H-J (KJ/cm)
2	1	1	"	Interpass	"	1-0	"	136	22	1' 41"		107			17-82	10-07	
3	2	2	"	"	"	1-0	"	149	23	2' 44"		145			10-97	18-73	
4	3	3	"	"	"	1-2	"	149	23	1' 51"		196			16-22	12-68	
5	3	3	"	"	"	1-2	"	151	23.5	2' 25"		205			12-41	17-16	
SKETCH						MATERIAL				GN 10025 S355J2G3 H1W 970690124							
ENTERED / CHECKED BY												REVIEWED WITNESSED VERIFIED					
VERIFIED / CONFIRMED BY														NAME: V. RABINDRA DATE: 26/03/09			

Report No: NDT/RT/57668-01/09		RADIOGRAPHIC EXAMINATION REPORT										Page No: 1 of 1						
Client : VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN. BHD. Project : MINI CONTAINER UK/AUSTRALIA WPS/GMAW/009S 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 Weld Thickness Reinforcement Thickness	Film Position	Material Thickness (mm)	Pipe Diameter (mm)	Type of Defect												Result		Remarks
				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								Approved By :										
Interpreted By : AMAT HAMIDI -ASNT LEV II								Client's Approval :										



☒ REVIEWED
☐ WITNESSES
☐ 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

22/2

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 ☒ WITNESSED - 08/04/09 ☒ VERIFIED NAME: V. RASINDRA 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		
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 2 16.0 3 24.0	20.0
Fusion + 1.0 mm	1 28.0 2 28.0 3 20.0	25.3
Fusion Line + 5.0 mm	1 44.0 2 46.0 3 48.0	46.0





Name: Chandra
874109

The above mentioned test were witnessed by



Name: V.RABINDRA

☒ REVIEWED
☒ WITNESSED - 08/04/09
☒ VERIFIED - [Signature]
 NAME: V.RABINDRA
 DATE: 02/04/09

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

証明書番号 : A-27071
CERTIFICATE No. : A-27071
頁 : PAGE 2

発行年月日 : 2006-12-04
DATE OF ISSUE
A731

需要管理番号：
CUSTOMER'S CONTROL No. :
IP0 N0:106/00050
*****JV***
E07

需要家 : ANN JOO METAL SDN. BHD.

又書者号 :
DOCUMENT No.

寸 法 DIMENSION MM	量 数 QUAN TITY	質 量 MASS KG	製鋼番号 CAST No. 試験番号 TEST No.	製品番号 PLATE No. TEST No.	引 張 試 験 TENSILE TEST				衝撃試験 IMPACT TEST 2V - 20C	化 学 成 分 CHEMICAL COMPOSITION %											
					引張強さ T S	伸び E L	N/MM2	%		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	Nb	V	Ti
5X2438X9144	01	6.300	G8005 13624	FROM 970690141 TO 970690146	462	574	25		77	16	23	142	14	4					5		
5X2438X9144	01	4.200	G8300 13773	FROM 970690147 TO 970690150	451	578	28		92	16	23	143	13	3					5		
5X2438X9144	01	4.200	G8301 13794	FROM 970690151 TO 970690154	467	579	28		66	16	23	146	16	4					5		
8X2438X9144	02	7.000	G8002 12000	FROM 970690211 TO 970690215	452	566	28		88	15	22	143	22	5					5		

[illegible]

④ 輸入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

R. M. [Signature]
SURVEYOR TO
AMERICAN BUREAU OF SHIPPING

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED
MADE TO THE APPLICABLE SPECIFICATION BY THE B
AND TESTED IN ACCORDANCE WITH THE REQUIREMENT
EUROPEAN STANDARDS WITH SATISFACTORY RESULTS.

REIN HAS BEEN
OXYGEN PROCE
THE OXYGEN

B.V. Adachi

副製造所長兼管理グループリーダー
GROUP MANAGER
PLATE QUALITY CONTROL DEPT.
KIMTSUWORKS

金型課所厚板管理グループリーダー
GROUP MANAGER
PLATE QUALITY CONTROL DEPT.
KOMATSU WORKS

五言古詩

25/21

SECTION 6

WELDERS QUALIFICATION CERTIFICATES



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

Ref. No. : VG/LT/1129/10

PRODUCT TEST REPORT

Model No. : VG-DH-B-20-8-9
 Project : TIGER CONTROL VAN
 Manufacturer Serial No. : VG DNV 1129
 Drawing No : VG-DWG-DH-B-20-8-9
 Test Date : 1/4/2010
 Total No. of Production : 1 unit
 No(s) of Unit Tested : 1 unit
 Prototype Testing : ☐
 Production Testing : ☒
 Load Test : 2.5R ☒ 2.0R ☐

Weight Details:

Tare Weight (T) : 4182 kg
 Payload (P) : 10818 kg
 Maximum Gross Weight (R) : 15000 kg

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

Type of Test(s):**Pass (✓)****Fail (X)**

Load Test Weight (4 points lift) : 37500 Kg
 Load Test Weight (2 points lift) : N/A
 Drop Test Weight (4 point lift) : N/A
 Other test (Please Specify) : N/A

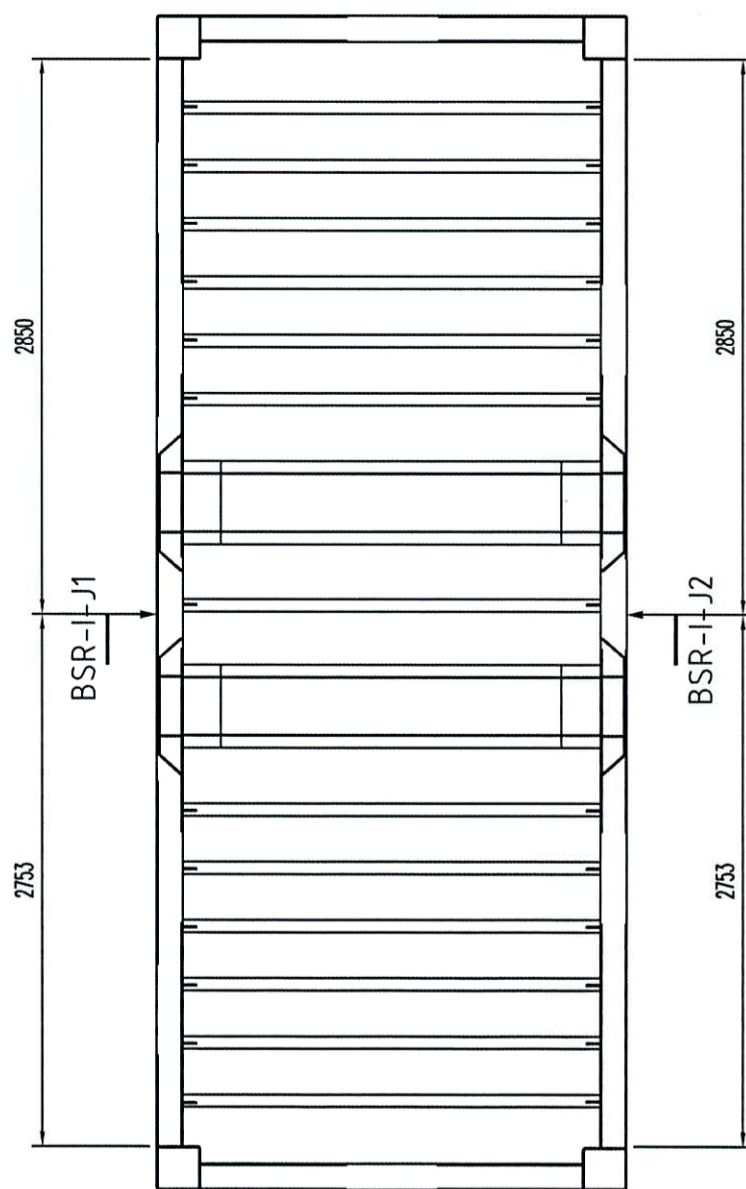
☒	

Product ready for ~~production~~ / next process ☒Modification Required ☐

Sign-off	Name	Signature & Stamp	Date	Comments
Project Management	Venn.			
QA/QC	Chandra		1/4/10	
Client (if applicable)				
Third party (if applicable)	Azure Yachet		1/4/10	

 VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD		APPENDIX DOC NO: VG-SOP-14b-02	Revision 0 Date: 21/11/2008
MFG SERIAL NO	VG DNV 1129	WELD MAP NO: WMR-VG-RT-1129-002	
CLIENT	ALLIANCE SEAWORKS SDN BHD (FORMERLY KNOWN AS BUMI MAGNITUD SDN BHD)	VERIFIED BY: 	
PROJECT	TIGER CONTROL VAN		
ASSEMBLY SECTION	BASE ASSEMBLY		
REMARKS	FOR BOTTOM SIDE RAIL INNER JOINT RADIOGRAPHIC TEST		





NO	WELD LOCATION	WELDER ID	PASS	FAIL	RE WORK	RE INSPECT	ACCEPTED
BOTTOM SIDE RAIL							
1	BSR-I-J1	W37	✓				
2	BSR-I-J2	W37	✓				



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

Report No: NDT/RT/62589-04/10		RADIOGRAPHIC EXAMINATION REPORT												Page No: 1 of 1				
Client : ALLIANCE SEAWORKS SDN. BHD. (FORMERLY KNOWN AS BUMI MAGNITUD SDN. BHD.)				IQI Type : ASTM 1B														
Project : TIGER CONTROL VAN				Film Type : AGFA D7 (CLASS II)														
Material : ABS EH 36				Density : 2.0 To 4.0														
Welding Process : GMAW				Sensitivity : 0.33 MM (5 WIRE VISIBLE)														
Inspection Code : AWS D1.1				Source to Object Distance : 457.2 MM														
Acceptance Code : AWS D1.1				Source Side of Object to the Film Distance : 6 MM + 3 MM														
Inspection Date : 08 TH MARCH 2010				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 (mm)	Type of Defect												Result		Remarks
				Excess Penetration	Burn Through	Slag Inclusion	Porosity	Concavity	Undercut	Incomplete Pen.	Root Fusion	Crack	Surface	No Significant Discontinuity	Acceptable	Rejectable		
VG DNV 1129																		
TSR O J1	0-1	6												X	X			
TSR O J2	0-1	6												X	X			
WN: W37																		
WT: 6 MM																		
RT: 3 MM																		
Radiographer : KHAIROL AZMI - ASNT LEVEL II				Approved By :														
Interpreted By : AMAT HAMIDI -ASNT LEVEL II				Client's Approval :														
Date : 09 TH MARCH 2010																		

[illegible]



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

Report No: NDT/RT/62589-05/10		RADIOGRAPHIC EXAMINATION REPORT										Page No: 1 of 1	
Client : ALLIANCE SEAWORKS SDN. BHD. (FORMERLY KNOWN AS BUMI MAGNITUD SDN. BHD.) Project : TIGER CONTROL VAN Material : ABS EH 36 Welding Process : GMAW Inspection Code : AWS D1.1 Acceptance Code : AWS D1.1 Inspection Date : 08 TH MARCH 2010 Source Type / Size : IR192 (1.7MM X 2.7 MM)					IQI Type : ASTM 1B Film Type : AGFA D7 (CLASS II) Density : 2.0 To 4.0 Sensitivity : 0.33 MM (5 WIRE VISIBLE) Source to Object Distance : 457.2 MM Source Side of Object to the Film Distance : 6 MM + 3 MM No. of Film Each Cassette : 1 FILM Radiographic Technique : SWSI								

Weld Reference	Weld Thickness Reinforcement Thickness	Film Position	Material Thickness (mm)	Pipe Diameter (mm)	Type of Defect												Result		Remarks
					Excess Penetration	Burn Through	Slag Inclusion	Porosity	Concavity	Undercut	Incomplete Pen.	Root Fusion	Crack	Surface	No Significant Discontinuity	Acceptable	Rejectable		
VG DNV 1129																			
TSR I J1		0-1	6														X	X	
TSR I J2		0-1	6														X	X	
WN: W37																			
WT: 6 MM																			
RT: 3 MM																			

Radiographer : KHAIROL AZMI - ASNT LEVEL II

Interpreted By : AMAT HAMIDI - ASNT LEVEL II

Date : 09TH MARCH 2010

Approved By :

Client's Approval :

VG VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD		APPENDIX	DOC NO: VG-SOP-14b-02	Revision 0 Date: 21/11/2008													
MFG SERIAL NO	VG DNV 1129	WELD MAP NO: WMR-VG-RT-1129-004			BOTTOM SIDE RAIL			NO	WELD	LOCATION	WELDER	ID	PASS	FAIL	RE WORK	RE INSPECT	ACCEPTED
CLIENT	ALLIANCE SEAWORKS SDN BHD(FORMERLY KNOWN AS BUMI MAGNITUD SDN BHD)	VERIFIED BY:			1			TSR-I-J1			W37						
PROJECT	TIGER CONTROL VAN				2			TSR-I-J2			W37						
ASSEMBLY SECTION	TOP ASSEMBLY																
REMARKS	FOR TOP SIDE RAIL INNER JOINT RADIOGRAPHIC TEST																

The diagram shows a rectangular rail assembly with four corner joints. The top and bottom horizontal rails are labeled with dimensions: 2530 on the left and 2753 on the right. The left and right vertical rails are labeled with dimensions: 2753 on the left and 2530 on the right. The top-left joint is labeled 'TSR-I-J1' and the bottom-right joint is labeled 'TSR-I-J2'. Each joint is represented by a small square with a diagonal line and a circle.

**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. : 62642	ULTRASONIC EXAMINATION REPORT	Page No. : 1 of 1 Report No. : NDT/UT/62642-01/10
------------------	--	--

Client : <u>ALLIANCE SEAWORKS SDN. BHD.</u> (formerly Known as Bumi Magnitud Sdn. Bhd.)	Ultrasonic Equipment / Serial No. : <u>USM 35X DAC (0807A)</u>
Project : <u>TIGER CONTROL VAN</u>	Cable Type/Length : <u>Coaxial Cable / 2 meter</u>
Material : <u>S355J2G3</u>	Procedure No. : <u>NT/UT/AWS Rev 3.0</u>
Thickness : <u>25 mm</u>	Couplant : <u>Wallpaper Paste</u>
Welding Process : <u>GMAW</u>	Calibration Block : <u>V1,V2 & AWS Blocks</u>
Weld. Preparation : <u>Single Bevel</u>	Examination Standard : <u>AWS D1.1</u>
Surface Condition : <u>Cleaned</u>	Acceptance Standard : <u>Table 6.2</u>
	Examination Date : <u>17th March 2010</u>

Probe Parameter :

Serial No	Beam Angle	Frequency	Size	PRE Level	Tr. Loss	Scanning	Range
44264	0°	5 Mhz	Ø10 mm	32 dB	-	+6 dB	100 mm
50762	45°	4 Mhz	8x9 mm	48 dB	+2 dB	+12 dB	100 mm
50772	60°	4 Mhz	8x9 mm	52 dB	+2 dB	+12 dB	100 mm
56781	70°	4 Mhz	8x9 mm	60 dB	+2 dB	+12 dB	150 mm

Sensitivity setting :

Angle probes : Angle probes, Set Reference Level at 80% FSH from 1.5 mm Ø reflector of VI block 25 mm

Normal probe : Set 1st BWE at 100% FSH

No.	Joint Reference	Interpretation	Result	Remark
	Ultrasonic testing was carried out on weldment area as follow: Item No. : PADEYE Serial No. : VG DNV 1129 Joint No. : P1, P2, P3, P4	No reportable indication was detected during the inspection time 	Accepted ↓	

NDT Inspector

Signature :

Name : Junaedi

Date :

Reviewed By :

Signature :

Name : MOHD ZAFFRAN MOHAMMAD

Date :

Approved By :

Signature :

Name of Client's Rep. :

Date :

**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. : 62692		MAGNETIC PARTICLE EXAMINATION REPORT		Page No. : 1 of 1	
				Report No. : NDT/MT/62692-05/10	
Client : <u>ALLIANCE SEAWORKS SDN. BHD.</u> <u>(formerly Known as Bumi Magnitud Sdn. Bhd.)</u>		Procedure No. : <u>NT/MT/AWS Rev. 0</u>			
Project : <u>Tiger Control Van</u>		Acceptance Standard : <u>AWS D1.1 (Table 6.1)</u>			
Material : <u>S355J2G3</u>		Inspection Date : <u>01st April 2010</u>			
Surface Preparation : <u>Cleaned</u>		Welding Process : <u>GMAW</u>			
		Stage of Examination : <u>Complete weld</u>			
MAGNETIC PARTICLE INSPECTION :					
☐ Dry ☒ Wet ☐ Fluorescent					
Magnetic Particle : <u>Magnaflux-7HF</u> Surface Contrast : <u>Magnaflux-WCP2</u>					
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 : <u>>1300</u> lux <u></u> $\mu W/cm^2$					
No.	Joint Reference	Interpretation	Result	Remark	
1.	Magnetic particle inspection was carried out on the following item : Item No. : PADEYE Serial No. : VG DNV 1129 Joint No. : P1, P2, P3, P4	No relevant indication was detected during the inspection time 	Accepted 	*Before Load test 	
NDT Operator :  Signature : Name : M. Farid Date : 		Reviewed By :  Signature : Name : M. Zafri Date : 		Approved By : Signature : Name of Client's Rep. : Date :	

**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. : 62692		MAGNETIC PARTICLE EXAMINATION REPORT		Page No. : 1 of 1	
				Report No. : NDT/MT/62692-06/10	
Client : <u>ALLIANCE SEAWORKS SDN. BHD.</u> (formerly Known as Bumi Magnitud Sdn. Bhd.)		Procedure No. : <u>NT/MT/AWS Rev. 0</u>			
Project : <u>Tiger Control Van</u>		Acceptance Standard : <u>AWS D1.1 (Table 6.1)</u>			
Material : <u>S355J2G3</u>		Inspection Date : <u>01st April 2010</u>			
Surface Preparation : <u>Cleaned</u>		Welding Process : <u>GMAW</u>			
		Stage of Examination : <u>Complete weld</u>			
MAGNETIC PARTICLE INSPECTION :					
☐ Dry ☒ Wet ☐ Fluorescent					
Magnetic Particle : <u>Magnaflux-7HF</u> Surface Contrast : <u>Magnaflux-WCP2</u>					
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 : <u>>1300</u> lux <u></u> $\mu W/cm^2$					
No.	Joint Reference	Interpretation	Result	Remark	
1.	Magnetic particle inspection was carried out on the following item : Item No. : PADEYE Serial No. : VG DNV 1129 Joint No. : P1, P2, P3, P4	No relevant indication was detected during the inspection time 	Accepted 	*After Load test 	
NDT Operator :  Signature : Name : M. Farid - NDT Level II Date : 		Reviewed By :  Signature : Name : MOHD ZAFFUL ANWAR Date : 		Approved By : Signature : Name of Client's Rep. : Date :	

**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. : 62692	MAGNETIC PARTICLE EXAMINATION REPORT	Page No. : 1 of 1 Report No. : NDT/MT/62692-07/10
------------------	---	--

Client : <u>ALLIANCE SEAWORKS SDN. BHD.</u> (formerly Known as Bumi Magnitud Sdn. Bhd.)	Procedure No. : <u>NT/MT/AWS Rev. 0</u>
Project : <u>Tiger Control Van</u>	Acceptance Standard : <u>AWS D1.1 (Table 6.1)</u>
Material : <u>ABS EH36</u>	Inspection Date : <u>01st April 2010</u>
Surface Preparation : <u>Cleaned</u>	Welding Process : <u>GMAW</u>
	Stage of Examination : <u>Complete weld</u>

MAGNETIC PARTICLE INSPECTION :☐ Dry☒ Wet☐ FluorescentMagnetic Particle : Magnaflux-7HFSurface Contrast : Magnaflux-WCP2Method of removing excess particle : ☒ Normal blowMagnetizing Technique : ☒ Yoke Technique☐ Prod TechniqueMagnetizing Current : ☒ AC electromagnetic☐ DC electromagnetic☐ Permanent MagnetLighting : ☒ Daylight
☐ Artificial light
☐ Black lightView Illumination : >1300 lux
 $\mu W/cm^2$

No.	Joint Reference	Interpretation	Result	Remark
1.	Magnetic particle inspection was carried out on the following item : Serial No. : VG DNV 1129 Item No. : FORK POCKET Joint No. : J1, J2, J3, J4 Item No. : BSR & BER Joint No. : J5, J6, J7, J8, J9, J10, J11, J12 Item No. : TSR & TER Joint No. : J13, J14, J15, J16, J17, J18, J19, J20	No relevant indication was detected during the inspection time 	Accepted 	

NDT Operator : Signature :  Name : M. Farid - NDT Level II Date : 	Reviewed By : Signature :  Name : MOHD ZAFRI APOLAH Date : 	Approved By : Signature : Name of Client's Rep. : Date :
--	---	--



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

WELDER LIST RECORD

REF NO : VG/WLST/001

Serial No.:	VG DNV 1129
Model No.:	VG-DH-B-20-8-9
Client Name:	ALLIANCE SEAWORKS SDN BHD (FORMERLY KNOWN AS BUMI MAGNITUD SDN BHD)
Project Name:	TIGER CONTROL VAN

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 VG METAL TECHNOLOGY (M) SDN BHD

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

Type of Welder SEMI-AUTO

Name: ASHOK KUMAR

Welding Procedure Specification No. : WPS/GMAW/009

Identification No. W35

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	-	3mm to Unlimited
Thickness : (Pipe/tube)	-	ALL THICKNESS
Groove	-	> 600mm OD
Fillet	-	3mm to Unlimited
Diameter : (Pipe)	-	ALL THICKNESS
Groove	-	ALL THICKNESS
Fillet	-	ALL THICKNESS
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
SIDE BEND	SATISFACTORY	-	-

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 MUHAMAD RIDZUAN AB.AZIZ

Test Number

MAT/0866-01/09

Organization 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



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



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 : **MASUD ABU KALAM**

Welding Procedure Specification No. : **WPS/GMAW/009**

Rev. **0**

Identification No. **W37**

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		
Fillet		ALL THICKNESS
Diameter : (Pipe)		> 600mm OD
Groove		3mm to Unlimited
Fillet		ALL THICKNESS
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: **-**
 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 4.1 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: MUKTER ALI

Welding Procedure Specification No. : WPS/GMAW/009

Rev. 0

Identification No. W38
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

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

Test Number NDT/RT/57602-02/09

Date 08TH APRIL 2009

Authorized By

ABS CONSULTING (M) SDN BHD

Date

02/04/09



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

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

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	-	3mm to Unlimited
Thickness : (Pipe/tube)	-	ALL THICKNESS
Groove	-	> 600mm OD
Fillet	-	3mm to Unlimited
Diameter : (Pipe)	-	ALL THICKNESS
Groove	-	
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

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



Test Number NDT/RT/57602-01/09

Date 08TH APRIL 2009

Authorized By ABS CONSULTING (M) SDN BHD

Date 22/04/09



Manufacturer serial no: VG DNV 1129

Report No. VG/FUI/ 1129
Page: 1 of 1

REVISION 0 21/11/2008

FIT-UP INSPECTION

[illegible]

PREPARED BY / CHECKED BY

PREP

Name: _____
Date: _____

VERIFIED / CONFIRMED BY (if applicable)

Name: _____
Date: _____



VISUAL INSPECTION REPORT

Revision 0 Date: 21/11/2008

DOC NO: VG-SOP-14b-04

APPENDIX 1

Client:	ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd	Report No. VG/ VIR / 1129
Project Name:	TIGER CONTROL UJIAN	

Assembly Section:	N/A
-------------------	-----

Drawing No:	VG-DWG-DH-B-20-8-9, REV 0
-------------	---------------------------

Model No:	VG-DH-B-20-8-9
-----------	----------------

Serial No:	VG DNV 1129
------------	-------------

Date:	31-Mar-10
-------	-----------

[illegible]

ENTERED / CHECKED BY



Name:

Date: 31/3/20

REVIEWED BY



Name: *VLM*.

Date: 31/3/16.

VERIFIED / CONFIRMED BY

Name:

Date:



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

APPENDIX 12

VG-SOP-14b-12

REVISION 1 14/04/2010

FINAL INSPECTION REPORT

MODEL NO.: VG-DH-B-20-8-9

PROJECT NAME: TIGER CONTROL VAN

REPORT NO.: VG/FIR/1129

MANUFACTURER'S SERIAL NO.: VG DNV 1129

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

DRAWING NO.: VG-DWG-DH-B-20-8-9, REV 0

No.	Item	Check	Inspection Date	Description	Comment
1	MANUFACTURER SERIAL NO. WELDED	✓	17/05/2010	Manufacturer ID no. is welded at a specific location.	
2	WIRE ROPE AND SHACKLES	✓	17/05/2010	Wire rope certificate no. are stamped on the wire rope tag. Ensure all shackles are as per specification.	
3	LASHING RING	✓	N/A	Lashing Rings are welded properly as per the drawing.	
4	DOORS CONDITION	✓	17/05/2010	All doors able to be closed and open smoothly. If keys are available attach it on the door handle.	
5	INTERIOR/EXTERIOR CONDITION	✓	17/05/2010	All surface must be free of any significant scratches, corrosion, dents, bare metal area or other significant defects.	
6	GASKET CONDITION	✓	17/05/2010	Gasket in good condition, no tears, significant defects and securely glued/riveted in and around lid - no gaps.	
7	INSPECTION DATA PLATE	✓	17/05/2010	Inspection data plate consists of all required details, and riveted at the specific location.	
8	APPROVAL DATA PLATE	✓	17/05/2010	Approval data plate consists of all required details, and riveted at the specific location.	
9	BV PLATE	✓	17/05/2010	Approval data plate consists of all required details, and riveted at the specific location.	
10	DECAL	✓	17/05/2010	Decals are placed according to the specification.	
11	SAFETY NET AVAILABLE	✓	N/A	Safety net in good condition, no tears, significant defects and placed on the points.	
12	GREASE NIPPLE	✓	17/05/2010	Grease nipples are place on specified location lightened and grease has been applied	
13	SHELF	✓	N/A	N/A	
14	SNAP HOOK	✓	N/A	N/A	
15	SHELF BOLT PROTECTION	✓	N/A	N/A	
16	LIGHT TEST	✓	17/05/2010	The offshore container shall be free from any observable light penetration.	
17	TARE WEIGHT	✓	17/05/2010	N/A	4182kg
18	1 unit of 3-phase Distribution Box	✓	17/05/2010	N/A	
19	2 units of 2HP Daikin air-con c/w brackets and metal trunking	✓	17/05/2010	N/A	
20	3 units of 2 x 36W Fluorescent Light (industrial type with protection)	✓	17/05/2010	N/A	
21	2 units of Light switch	✓	17/05/2010	N/A	
22	2 units of Air-con switch	✓	17/05/2010	N/A	
23	1 unit of emergency lamp c/w backup battery	✓	17/05/2010	N/A	
24	1 unit of Smoke Detector (battery operated)	✓	17/05/2010	N/A	
25	1 unit of 8" Ventilation Fan	✓	17/05/2010	N/A	
26	18 units of double switched European style 3 pin power socket	✓	17/05/2010	N/A	
27	1 unit of MCT	✓	17/05/2010	N/A	

INSPECTED BY:

REVIEWED / VERIFIED BY:

WITNESSED / REVIEWED BY:



Name: [Signature]
Date: 17/5/10



Name: [Signature]
Date: 17/5/10

Name: _____
Date: _____

SECTION 8

DIMENSION REPORT



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

DIMENSION REPORT

Model No :VG-DH-B-20-8-9

Project : TIGER CONTROL VAN

Ref No:VGOCI/DR/1129

No.	Mark No./ Drawing No.	Symbol	Drawing Dimension (mm)	Actual Dimension (mm)	Differences (mm)	Allowed Tolerance
	VG DNV 1129					
1	VG-DWG-DH- B-20-8-9 Rev 0	A	6058	6057	-1	- 5
		B	6058	6056	-2	- 5
		C	2438	2435	-3	- 5
		D	2438	2437	-1	- 5
		E	6058	6055	-3	- 5
		F	6058	6057	-1	- 5
		G	2438	2436	-2	- 5
		H	2438	2436	-2	- 5
		I	2750	2746	-4	- 5
		J	2750	2746	-4	- 5
		K	2750	2746	-4	- 5
		L	2750	2746	-4	- 5
		M	6530	6530	0	- 5
		N	6530	6527	-3	- 5

Inspected by

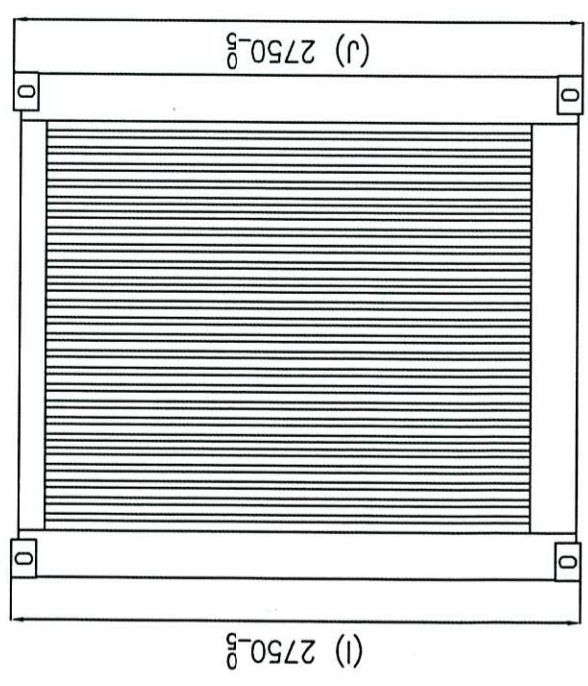
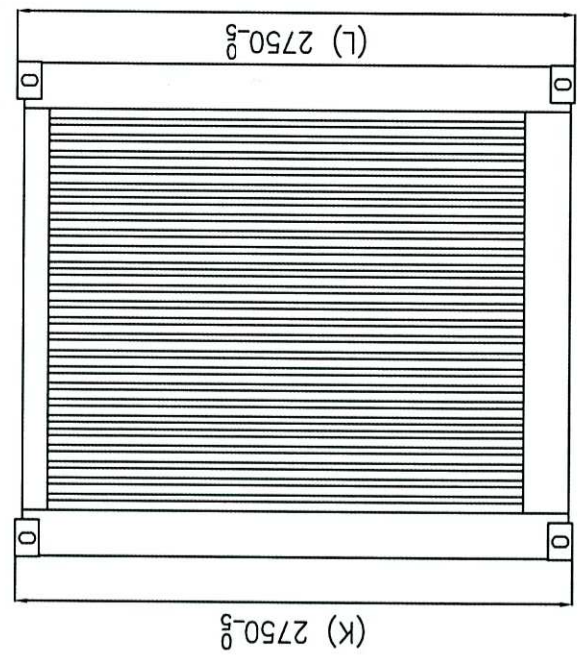
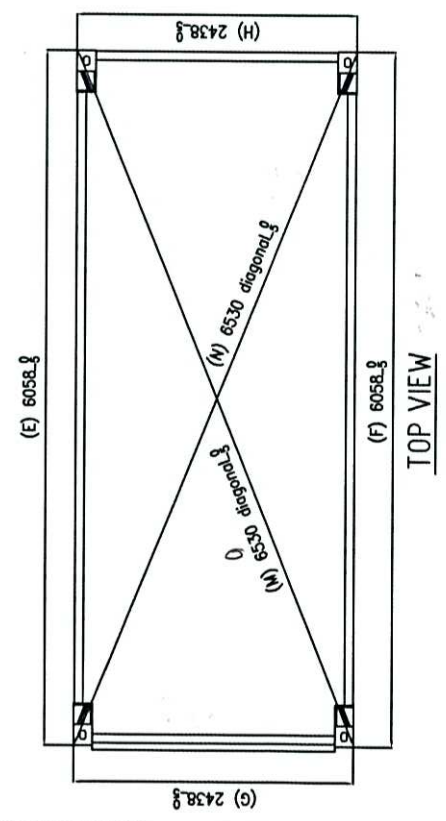
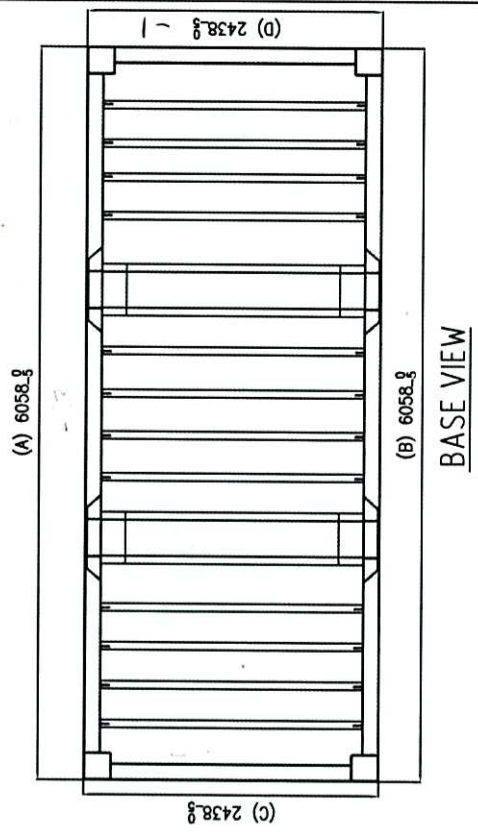
Sign :

Name :

Date :

Stamp :

Review/Inspected by ;



PROJECT / MODEL : TIGER CONTROL VAN
MODEL NO : VG-DH-B-20-8-9
DRAWING NO. : VG-DWG-DH-B-20-8-9
DESCRIPTION : GENERAL ASSEMBLY
DESIGNED / FABRICATED BY:
VG
VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD KEMPAS JAL. 6493-11
TITLE : DIMENSIONAL REPORT
DATE: 00/00/00
REV: 0
SCALE: 1:1

SECTION 9

NDT REPORTS C/W WELD MAPS

**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

Report No: NDT/RT/62589-02/10

RADIOGRAPHIC EXAMINATION REPORT

Page No: 1 of 1

Client : ALLIANCE SEAWORKS SDN. BHD.
(FORMERLY KNOWN AS BUMI
MAGNITUD SDN. BHD.)

Project : TIGER CONTROL VAN

Material : ABS EH 36

Welding Process : GMAW

Inspection Code : AWS D1.1

Acceptance Code : AWS D1.1

Inspection Date : 08TH MARCH 2010

Source Type / Size : IR192 (1.7MM X 2.7 MM)

IQI Type : ASTM 1B

Film Type : AGFA D7 (CLASS II)

Density : 2.0 To 4.0

Sensitivity : 0.33 MM (5 WIRE VISIBLE)

Source to Object Distance : 457.2 MM

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
				Excess Penetration	Burn Through	Slag Inclusion	Porosity	Concavity	Undercut	Incomplete Pen.	Root Fusion	Crack	Surface	No Significant Discontinuity	Acceptable	Rejectable	
VG DNV 1129																	
BSR O J1	0-1	6					X									X	
WN: W37																	
WT: 6 MM																	
RT: 3 MM																	
Radiographer : KHAIROL AZMI – ASNT LEVEL II				Approved By :													
Interpreted By : AMAT HAMIDI - ASNT LEVEL II				Client's Approval :													
Date : 09 TH MARCH 2010																	

**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

Report No: NDT/RT/61352-01/10		RADIOGRAPHIC EXAMINATION REPORT										Page No: 1 of 1						
Client : ALLIANCE SEAWORKS SDN. BHD. (FORMERLY KNOWN AS BUMI MAGNITUD SDN. BHD.)				IQI Type : ASTM 1B														
Project : TIGER CONTROL VAN				Film Type : AGFA D7 (CLASS II)														
Material : ABS EH 36				Density : 2.0 To 4.0														
Welding Process : GMAW				Sensitivity : 0.33 MM (5 WIRE VISIBLE)														
Inspection Code : AWS D1.1				Source to Object Distance : 457.2 MM														
Acceptance Code : AWS D1.1				Source Side of Object to the Film Distance : 6 MM + 3 MM														
Inspection Date : 09 TH MARCH 2010				No. of Film Each Cassette : 1 FILM														
Source Type / Size : IR192 (1.7MM X 2.7 MM)				Radiographic Technique : SWSI														
Weld Reference	Film Position	Material Thickness (mm)	Pipe Diameter (mm)	Type of Defect												Result		Remarks
				Excess Penetration	Burn Through	Slag Inclusion	Porosity	Concavity	Undercut	Incomplete Pen.	Root Fusion	Crack	Surface	No Significant Discontinuity	Acceptable	Rejectable		
VG DNV 1129																		
BSR O J1 R1	0-1	6													X	X		
WN: W37																		
WT: 6 MM																		
RT: 3 MM																		
Radiographer : KHAIROL AZMI - ASNT LEVEL II				Approved By :														
Interpreted By : AMAT HAMIDI -ASNT LEVEL II				Client's Approval :														
Date : 10 TH MARCH 2010																		



**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

Report No: NDT/RT/62589-01/10		RADIOGRAPHIC EXAMINATION REPORT												Page No: 1 of 1					
Client : ALLIANCE SEAWORKS SDN. BHD. (FORMERLY KNOWN AS BUMI MAGNITUD SDN. BHD.)					IQI Type : ASTM 1B														
Project : TIGER CONTROL VAN					Film Type : AGFA D7 (CLASS II)														
Material : ABS EH 36					Density : 2.0 To 4.0														
Welding Process : GMAW					Sensitivity : 0.33 MM (5 WIRE VISIBLE)														
Inspection Code : AWS D1.1					Source to Object Distance : 457.2 MM														
Acceptance Code : AWS D1.1					Source Side of Object to the Film Distance : 6 MM + 3 MM														
Inspection Date : 08 TH MARCH 2010					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		Type of Defect												Result		Remarks	
		Film Position	Material Thickness (mm)	Pipe Diameter (mm)	Excess Penetration	Burn Through	Slag Inclusion	Porosity	Concavity	Undercut	Incomplete Pen.	Root Fusion	Crack	Surface	No Significant Discontinuity	Acceptable	Rejectable		
VG DNV 1129																			
BSR O J2		0-1	6												X	X			
WTN: W37																			
WT: 6 MM																			
RT: 3 MM																			
Radiographer : KHAIROL AZMI - ASNT LEVEL II										Approved By :									
Interpreted By : AMAT HAMIDI -ASNT LEVEL II										Client's Approval :									
Date : 09 TH MARCH 2010																			

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

APPENDIX

DOC NO: VG-SOP-14b-02

Revision 0 Date: 21/11/2008

MFG SERIAL NO
VG DNV 1129

CLIENT
ALLIANCE SEAWORKS SDN BHD(FORMERLY KNOWN AS BUMI MAGNITUD SDN BHD)

PROJECT
TIGER CONTROL VAN

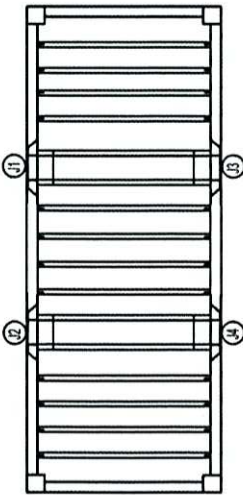
ASSEMBLY SECTION
GENERAL ASSEMBLY

REMARKS
JOINT TRACEABILITY FOR NDT (MPI AND UT)

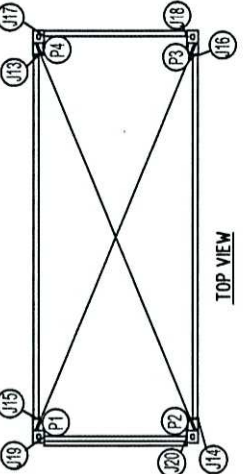
WELD MAP NO: WMR-VG-MPI-1129-005

VERIFIED BY:

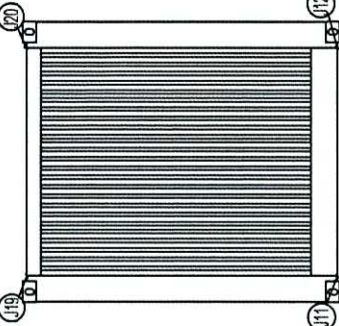

NO	WELD	LOCATION	WELDER	ID	PASS	FAIL	RE WORK	RE INSPECT	ACCEPTED
FORK POCKET									
1	J1		W39		✓				
2	J2		W39		✓				
3	J3		W39		✓				
4	J4		W39		✓				
BOTTOM SIDE RAIL AND BOTTOM END RAIL									
5	J5		W39		✓				
6	J6		W39		✓				
7	J7		W39		✓				
8	J8		W39		✓				
9	J9		W39		✓				
10	J10		W39		✓				
11	J11		W39		✓				
12	J12		W39		✓				
TOP SIDE RAIL AND TOP END RAIL									
13	J13		W39		✓				
14	J14		W39		✓				
15	J15		W39		✓				
16	J16		W39		✓				
17	J17		W39		✓				
18	J18		W39		✓				
19	J19		W39		✓				
20	J20		W39		✓				
PADEYE									
1	P1		W38		✓				
2	P2		W38		✓				
3	P3		W38		✓				
4	P4		W38		✓				
PADEYE (UT)									
1	P1		W38		✓				
2	P2		W38		✓				
3	P3		W38		✓				
4	P4		W38		✓				



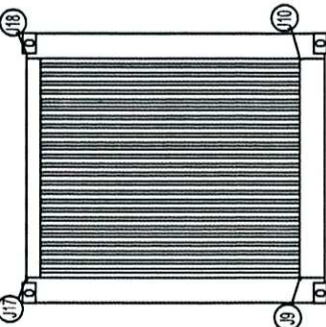
BASE VIEW



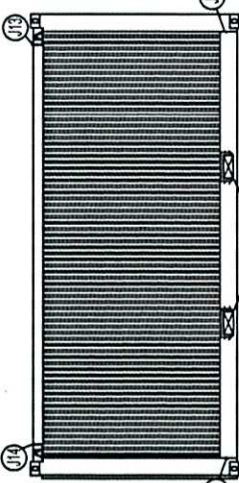
TOP VIEW



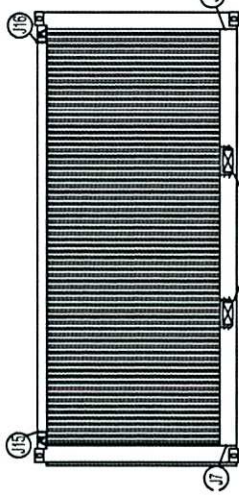
FRONT END ASSEMBLY



REAR VIEW



LEFT SIDE ASSEMBLY



RIGHT SIDE ASSEMBLY

VG VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD VG METAL TECHNOLOGY (M) SDN BHD		APPENDIX	DOC NO: VG-SOP-14b-02	Revision 0 Date: 21/11/2008										
MFG SERIAL NO	VG DNV 1129	WELD MAP NO: WMR-VG-RT-1129-001			NO WELD	LOCATION	WELDER ID	PASS	FAIL	RE WORK	RE INSPECT	ACCEPTED		
CLIENT	ALLIANCE SEAWORKS SDN BHD(FORMERLY KNOWN AS BUMI MAGNITUUD SDN BHD)	VERIFIED BY:												
PROJECT	TIGER CONTROL VAN	QA/QC DEPARTMENT			BOTTOM SIDE RAIL									
ASSEMBLY SECTION	BASE ASSEMBLY				1	BSR-0-J1	W33							
REMARKS	FOR BOTTOM SIDE RAIL OUTER JOINT RADIOGRAPHIC TEST				2	BSR-0-J2	W33							

2850

BSR-0-J1

2753

2850

BSR-0-J2

2753

SECTION 10

PRODUCTION / PROTOTYPE TESTING



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

Report No: NDT/RT/62589-03/10		RADIOGRAPHIC EXAMINATION REPORT										Page No: 1 of 1					
Client : ALLIANCE SEAWORKS SDN. BHD. (FORMERLY KNOWN AS BUMI MAGNITUD SDN. BHD.) Project : TIGER CONTROL VAN Material : ABS EH 36 Welding Process : GMAW Inspection Code : AWS D1.1 Acceptance Code : AWS D1.1 Inspection Date : 08 TH MARCH 2010 Source Type / Size : IR192 (1.7MM X 2.7 MM)				IQI Type : ASTM 1B Film Type : AGFA D7 (CLASS II) Density : 2.0 To 4.0 Sensitivity : 0.33 MM (5 WIRE VISIBLE) Source to Object Distance : 457.2 MM Source Side of Object to the Film Distance : 6 MM + 3 MM No. of Film Each Cassette : 1 FILM Radiographic Technique : SWSI													
Weld Reference Weld Thickness Reinforcement Thickness	Film Position	Material Thickness (mm)	Pipe Diameter (mm)	Type of Defect										Result		Remarks	
				Excess Penetration	Burn Through	Slag Inclusion	Porosity	Concavity	Undercut	Incomplete Pen.	Root Fusion	Crack	Surface	No Significant Discontinuity	Acceptable		Rejectable
VG DNV 1129																	
BSR I J1	0-1	6													X	X	
BSR I J2	0-1	6													X	X	
N: W37																	
WT: 6 MM																	
RT: 3 MM																	
Radiographer : KHAIROL AZMI - ASNT LEVEL II				Approved By :													
Interpreted By : AMAT HAMIDI - ASNT LEVEL II				Client's Approval :													
Date : 09 TH MARCH 2010																	

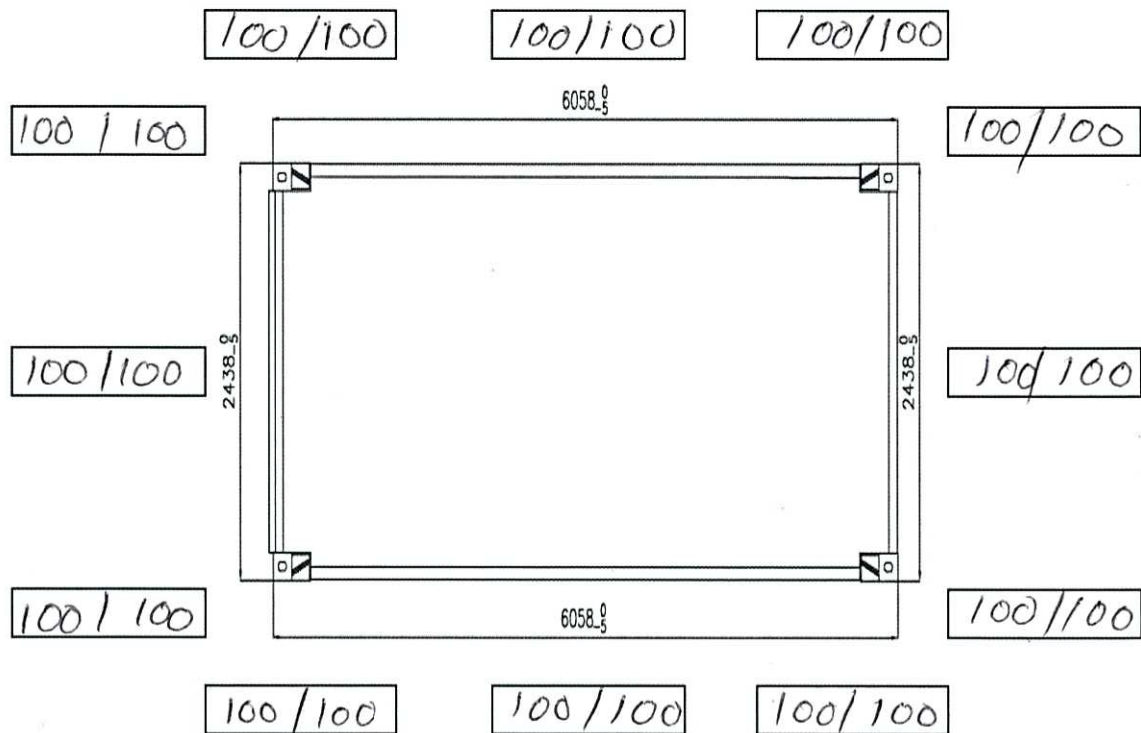




**VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
VG METAL TECHNOLOGY (M) SDN BHD**

DEFLECTION TEST REPORT

Model No. : VG-DH-B-20-8-9
Project : TIGER CONTROL VAN
Manufacturer Serial No. : VG DNV 1129
Test Date : 1/4/2010



CHECKED BY,



VGQC

Name: *[Signature]*
Date: 1/4/10

VG-SOP-14b-14
REVISION 0 21/11/2008

WITNESSED / REVIEWED BY,

CLIENT

Name:
Date:

WITNESSED / REVIEWED BY,

THIRD PARTY

Name: *[Signature]*
Date: 01/04/10



SECTION 11

WIRE ROPE SLINGS PROOF LOAD CERTIFICATE AND MATERIAL CERTIFICATES

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

南 達 Southern Wire

Certificate No : 1000004121

Date Of Issued : 22.04.2010

Customer :	GOFORTH CORPORATION SDN BHD NO. 2 JALAN SUNGAI BETING 2 OFF JALAN SUNGAI PUTUS 42100 SELANGOR DARUL EHSAN	P.O. No. :	14552
Product :	6 X 29 GALV 26MM RHOL IWRC EIPS 1000M (1 REEL X 1000 M)	S.O. No. :	4000101680
Rope Diameter :	26 MM	D.O. No. :	8000406397
Specification :	API SPECIFICATION 9A	L/C No. :	-
		Quantity :	1,000.000 M / 1
		Lay / Forming :	RIGHT HAND ORDINARY LAY

Mechanical Properties

Batch No.	Reel No.	Diameter (mm)			Breaking Load (KN)	
		Specification		Actual	Specification	Actual
		Min	Max		Min	
B1822A0185	1 REEL	26.00	27.30	26.54	482	490

Remarks :

CERTIFIED TRUE COPY

This is to certify that the above results are correct

P/O NO. : 00003601

D/O NO. : 00783

DATE : 05-05-10

[Signature]

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)

**VAN BEEST**

MANUFACTURER TEST CERTIFICATE

Certificate No : 200812010

1 Particulars

Distinguishing no. or mark	Description of item and catalogue no.	Quant.	Date of test and examination	Proof load applied (PL)	Working load limit (WLL)
Bs S.W.L. 9.5 Ton	28mm Dia G-4163 Safety Anchor Shackles Material : Body and Pin High Tensile Steel Quenched And Tempered Safety Factor : 6 times S.W.L. = MBL Specification : U.S.Federal Spec. RR-C-271 Type IVA. Class 3	1000	11/12/08	19 Tons	9.5 Tons

EC-DECLARATION OF CONFORMITY

(according to appendix IIA of the machinery directive)

We, Van Beest BV, P.O. Box 57, 3360 AB Sliedrecht, Netherlands, declare under our sole responsibility that the above mentioned product(s), with CE marking, comply with the machinery directive 98/37/EG.

This certificate is only valid for Van Beest BV products, used for fittings for lifting equipment, marked as such.

2 Name of maker, supplier or repairer

van Beest B.V.
Industrieweg 6
3361 HJ SLIEDRECHT
HOLLAND

4 I certify on behalf of the firm, company, association or person named in 3 that the items described herein were tested and thereafter examined and were found to be free from cracks, flaws or other defects.

12th Dec 2008

Signature

Date

3 Name of firm, company, association or person undertaking (carried out) the test and examination.
Approved testhouse

5 Name of owner or occupier**CERTIFIED TRUE COPY**

P/O NO. : 00003601

D/O NO. : 00782

DATE : 05-05-10



PROVNINGSINTYG

No H-1009

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 90° 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 90° mellan parterna (t*)	Prov-kraft Ton	Min. Brott-kraft Ton
MT-13-10	40 MM DIA MASTERLINK	GRADE 10	300		17.0	34.0	
	ASSEMBLY						
	TYPE "MT"						
CERTIFIED TRUE COPY P/O NO. : 0000-3601 D/O NO. : 08783 DATE : 05-05-10							

*) 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 Provningsanstalt godkänd dragprovsmaskin.

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

Signature: Ann Gunnar 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

SECTION 12

SURFACE PREPARATION & COATING APPLICATION REPORT



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. :	VG-DH-B-20-8-9	REPORT NO. :	VG / PR / 01 / 10
PROJECT NAME :	TIGER CONTROL VAN	COATING APPLICATOR :	VGOCI
MANUFACTURER'S SERIAL NO. :	VG DNV 1129	INHOUSE PAINT INSPECTOR :	CHANDRAN
OWNER NAME :	ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)	PAINTER :	NANDU/FIRUJ
DRAWING NO. :	VG-DWG-DH-B-20-8-9 , REV 0	APPLICATION AREA :	EXTERNAL

CLIMATIC CONDITION

No. of Coats	Blasting	1st Coat	2nd Coat	3rd Coat	4th Coat
Time (Hour)	10.00 am	2.00pm	2.00pm	2.00pm	
Weather Condition	SUNNY	SUNNY	SUNNY	SUNNY	
Dry/ Wet/ Dew Point °C	31/26/24	34/28/26	36/30/28	35/29/28	
Relative Humidity %	67%	64%	65%	65%	
Steel temperature °C	33°C	36°C	39°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
22/04/2010	At Shop	SA2.5	1	Barrier ZEP	Zinc Epoxy	Grey	138-150	75-100	75 micron
24/04/2010			1	Duramastic	High Solid Primer	Mist Grey	192-200	125-175	125 micron
26/04/2010			1	Hardtop XP	Polyurethane	Red	80-90	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	KF355039A-109	189076-1-0310	
3	Hardtop XP	JOTUN	192614-1-0410	193380-1-0410	

INSPECTION

Coat	Date	Average Dry Film Thickness - DFT (microns μ)					Average	# of readings taken
		1st	2nd	3rd	4th	5th		
1st Coat	23/04/2010	96	102	98	86	100	96	5
2nd Coat	26/04/2010	248	235	221	222	230	231	5
3rd Coat	27/04/2010	296	287	293	274	299	290	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: 27/04/2010	Name: VENU Date: 27/04/2010	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 :	VG-DH-B-20-8-9	REPORT NO. :	VG / PR / 02 / 10
PROJECT NAME :	TIGER CONTROL VAN	COATING APPLICATOR :	VGOCI
MANUFACTURER'S SERIAL NO. :	VG DNV 1129	INHOUSE PAINT INSPECTOR :	CHANDRAN
OWNER NAME :	ALLIANCE SEAWORKS SDN BHD (Formerly known as Bumi Magnitud Sdn Bhd)	PAINTER :	NANDU/FIRUJ
DRAWING NO. :	VG-DWG-DH-B-20-8-9 , REV 0	APPLICATION AREA :	INTERNAL

CLIMATIC CONDITION

No. of Coats	Blasting	1st Coat	2nd Coat	3rd Coat	4th Coat
Time (Hour)	10.00 am	2.00pm	2.00pm		
Weather Condition	SUNNY	SUNNY	SUNNY		
Dry/ Wet/ Dew Point °C	32/27/25	34/28/26	36/30/28		
Relative Humidity %	68%	64%	65%		
Steel temperature °C	33.8°C	36°C	39°C		

Date of Application	Location	Surface Preparation	No. of Coats	Paint Type	Type of Paint Generic	Colour	Film Thickness (microns)		
							WFT	DFT	TDFT
21/04/2010	At Shop	SA2.5	1	Barrier ZEP	Zinc Epoxy	Grey	138-150	75-100	75 micron
24/04/2010			1	Duramastic	High Solid Primer	Mist Grey	96-100	75-100	75 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	KF355039A-109	189076-1-0310	

INSPECTION

Coat	Date	Average Dry Film Thickness - DFT (microns μ)					Average	# of readings taken
		1st	2nd	3rd	4th	5th		
1st Coat	22/04/2010	100	98	104	98	86	97	5
2nd Coat	26/04/2010	193	170	164	189	201	183	5
3rd Coat								
4th Coat								

SURFACE PREPARATION

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

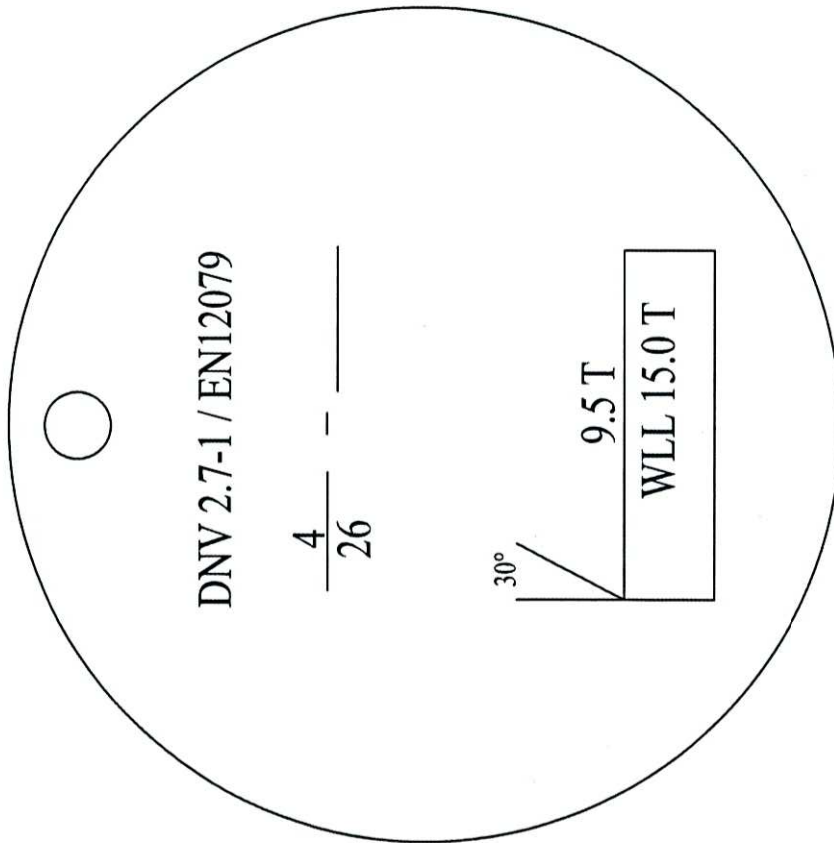
INSPECTED BY :	REVIEWED BY :	VERIFIED BY 3rd PARTY PAINT INSPECTOR :	VERIFIED BY CLIENT :
 Name: CHANDRAN Date: 26/04/2010	 Name: VENU Date: 26/04/2010		
		Name: Date:	Name: Date:

SECTION 13

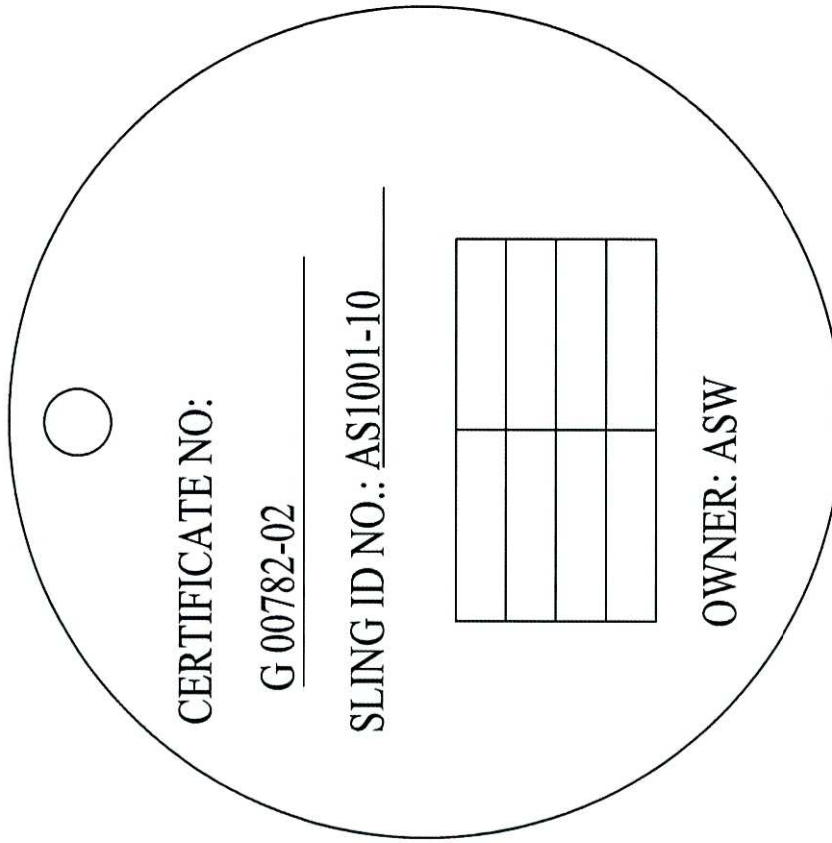
OFFSHORE CONTAINER APPROVAL PLATE & DATA PLATE

OFFSHORE CONTAINER DATA PLATE - DNV 2.7-1/EN12079	
CERTIFICATE NO. : 08 197/VGO/078/00	
MODEL NO. : VG-DH-B-20-8-9	
MONTH / YEAR OF MANUFACTURE. : 04/2010	
MANUFACTURER'S SERIAL NO. : VG DNV 1129	
MAX GROSS WEIGHT : 15000	KGS AT 30° SLING ANGLE
TARE WEIGHT : 4182	KGS
PAYLOAD : 10818	KGS
INTERMEDIATE DECK : N/A	KGS
DESIGN TEMPERATURE : -20°C	
 MANUFACTURER VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD LOT NO.66, SECTION 12, PHASE 1B, JALAN PERIGI NENAS 8/10, SEK. 8, TAMAN PERINDUSTRIAN PULAU INDAH, 42920 PELABUHAN KLANG, SELANGOR DARUL EHSAN, MALAYSIA WEBSITE: www.vgoci.com EMAIL: enquiry@vgoci.com	

OFFSHORE CONTAINER INSPECTION DATA PLATE - DNV 2.7-1/EN12079			
CONTAINER ID NO.: AS1001-10			
MAX GROSS WEIGHT : 15000		KGS AT 30° SLING ANGLE	
TARE WEIGHT : 4182		KGS	
PAYLOAD : 10818		KGS	
INTERMEDIATE DECK : N/A		KGS	
OWNER NAME : ALLIANCE SEAWORKS SDN BHD			
TEST / INSPECTION DATES			
VG VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD WEBSITE: www.vgoci.com EMAIL: enquiry@vgoci.com			



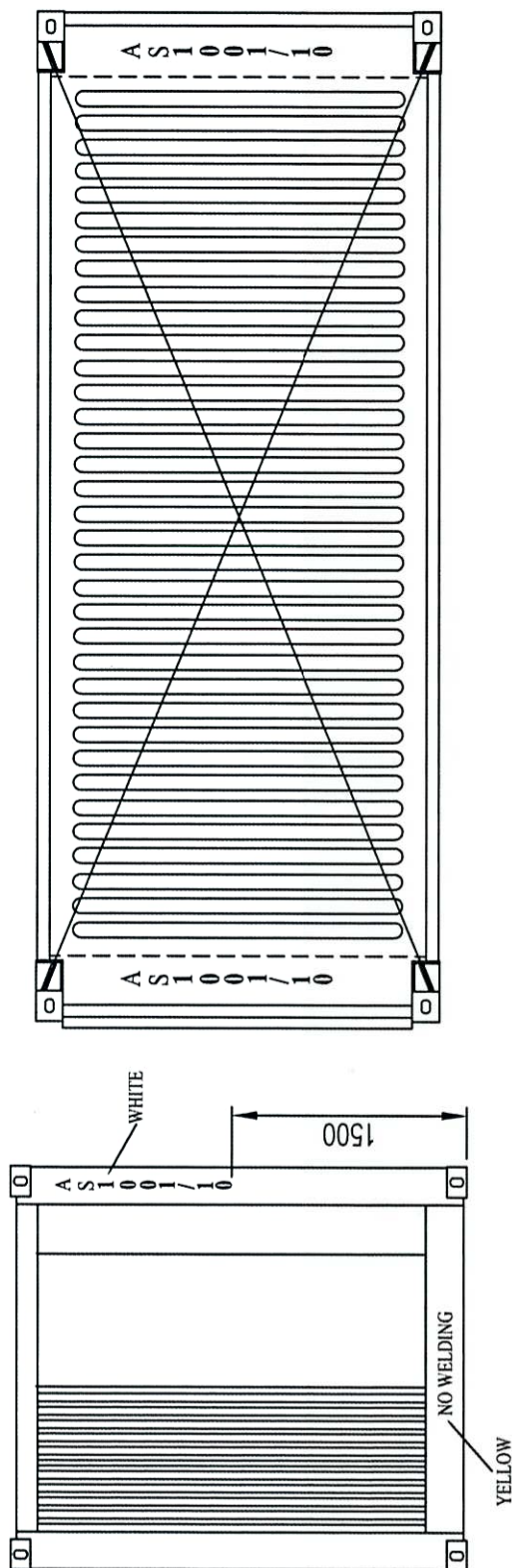
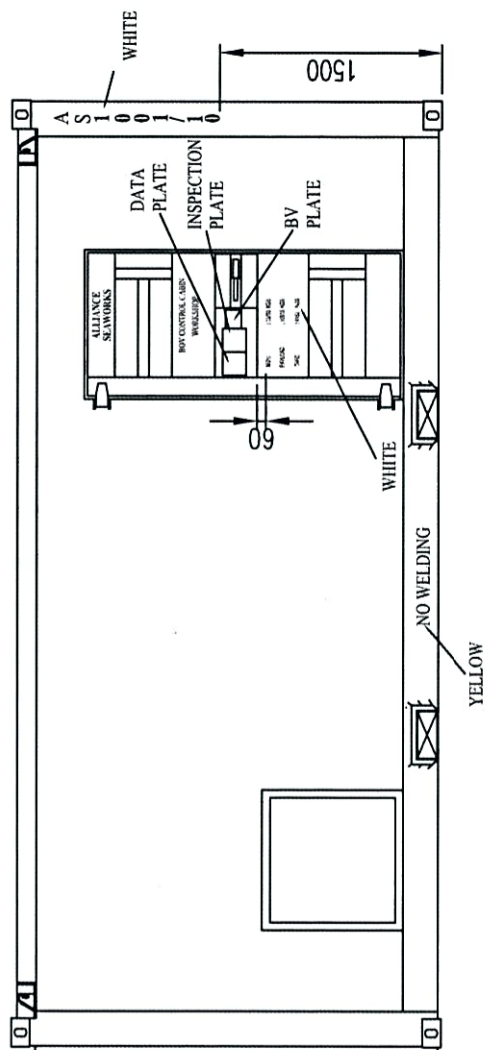
FRONT OF THE TAG
TAG DIAMETER: 50MM



BACK OF THE TAG
TAG DIAMETER: 50MM

SECTION 14

MARKING



DESIGNED / FABRICATED BY:

WING OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD
(COMPANY NO. 669923-T)

NAME :

MARKING

DRAWN: SK DATE: 08.06.09

CHECKED: VK	DATE: 08.06.09
-------------	----------------

VERIFIED: VK	DATE: 08.06.09
--------------	----------------

VERIFIED: VK DATE: 08.06.09
SCALE: 1:10 DWG. NO. 12

PROJECT: 2021 OFFSHORE CONTAINER

MODEL NO.:

THE CONTENTS OF THIS SHEET ARE COPYRIGHTED.
UNAUTHORISED USE OF THIS SHEET OR ANY INFORMATION
CONTAINED HEREIN IS NOT PERMITTED WITHOUT WRITTEN
PERMISSION FROM VIG OFFSHORE CONTAINERS INTERNATIONAL

	XA	XA	XS

ISSUED FOR APPROVAL

1561

--	--	--	--	--	--

SECTION 15

INSPECTION RELEASE CERTIFICATE



VG OFFSHORE CONTAINERS INTERNATIONAL (M) SDN BHD

Inspection Release Certificate

CERTIFICATE NO.: VG/IRC/1129

DRAWING NO. : VG-DWG-DH-B-20-8-9, REV 0

MODEL NO. : VG-DH-B-20-8-9

MANUFACTURER'S SERIAL NO. : VG DNV 1129

QUANTITY: 1 UNIT

THIS IS TO CERTIFY

PROJECT NAME:
TIGER CONTROL VAN

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

P.O/CONTRACT NO.: ALSB0001

THAT HAS BEEN FABRICATED AT THE MANUFACTURER'S WORKSHOP
HAVE 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

SECTION 16

**OTHERS
(IF APPLICABLE)**



VL 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 /1129/ REV 0

INSPECTION AND TEST PLAN

Client:	ALLIANCE SEAWORKS SDN. BHD (formerly known as Bumi Magnitud S/B)	Manufacturer ID: VG DNV 1129	Prepared By	Verified By	Approved By
Project:	TIGER CONTROL VAN	Model Name: VG-DH-B-20-8-9	Chandran	Venukanna	
Drawing No.: VG-DWG-DH-B-20-8-9	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.				
D : Document Review Client or 3rd party shall review inspection record					
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					

			INSPECTION INVOLVEMENT		
Ref	PROCESS/ OPERATION DESCRIPTION	ACTIVITY REQUIRED	CONTROLLING SPEC./STANDARD PROC.	ACCEPTANCE CRITERIA	VERIFYING DOCUMENTS
A.	DOCUMENTATION				
1	SPECIFICATION DOCUMENT OF CLIENT	Review client specifications, finalize deviations & amendments, clarified technical issues	- Client Specification - As per Fabrication Drawing	DNV 2.7-1 / EN12079	Sign Off Client spec (if required)
2	WELDING PROCEDURE SPECIFICATIONS	Study and comply to the clients' requirements. Submit WPS and WPQR	WPS/GMAW/009	- DNV 2.7-1 / EN12079 - AWS D1.1	- Sign Off WPS - Sign Off WPQR
3	WELDING QUALIFICATION REPORT	Comply to clients' requirement and submit list of welders with welders qualifications for approval.	WPS/GMAW/009	- DNV 2.7-1 / EN12079 - AWS D1.1	Sign Off Welders Certificates
4	NDT PROCEDURE	Check NDT procedure compliance with client specifications.	- NT/GMT/AWS REV1 - NT/G/UT/AWS REV1 - NT/G/RT/AWS REV 0	AWS D1.1	Sign Off NDT Procedures
5	NDT OPERATORS QUALIFICATION	Comply to clients' requirement and submit list of operators qualifications for approval	NUSATEK Operator Certificates	SNT-TC-1A-NDT Level II	Sign Off NDT operators Certificates
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	DNV 2.7-1 / EN12079	Sign of Incoming Material Inspection Record
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	DNV 2.7-1 / EN12079	- Sign Off Mill certificate - Sign Off Material Traceability Report (VG-SOP-14a-03)
3	IDENTIFICATION OF MATERIALS	All received material should be marked according to the Material traceability record.	VG-SOP-14a	DNV 2.7-1 / EN12079	H



COASTAL 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 /1129/ REV 0

INSPECTION AND TEST PLAN

Client:	ALLIANCE SEAWORKS SDN. BHD (formerly known as Bumi Magnitud S/B)	Manufacturer ID: VG DNV 1129	Prepared By	Verified By	Approved By
Project:	TIGER CONTROL VAN	Model Name: VG-DH-B-20-8-9	Chandran	Venukanna	
Drawing No.: VG-DWG-DH-B-20-8-9					
D : Document Review Client or 3rd party shall review inspection record					
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					

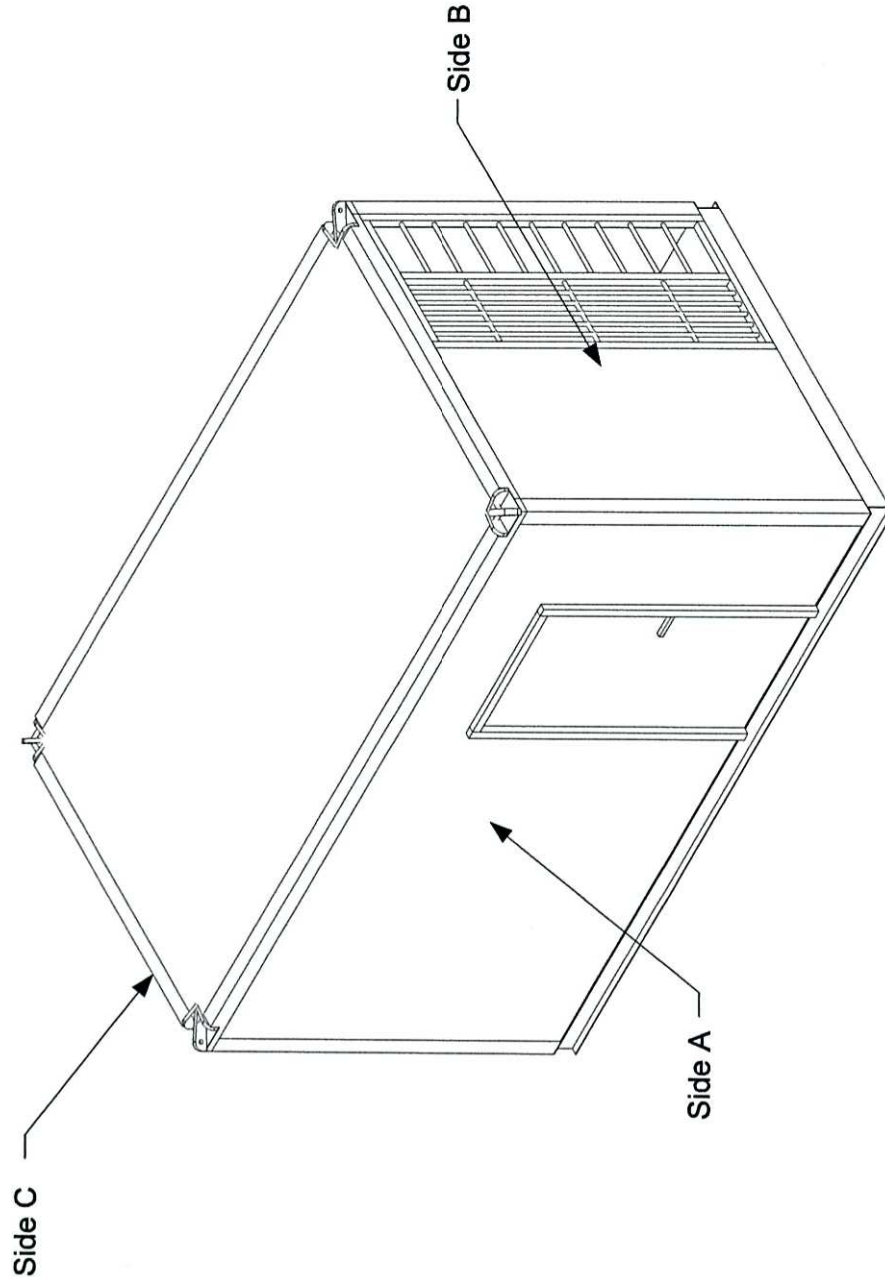
H : Hold Point Client or 3rd party requires notification of the inspection or test timing and inspection shall be carried out with client or 3rd party attendance.
Note : "H " In VG column is itended for VG QC Dept.

Ref	PROCESS/ OPERATION DESCRIPTION	ACTIVITY REQUIRED	CONTROLLING SPEC./STANDARD PROC.	ACCEPTANCE CRITERIA	INSPECTION INVOLVEMENT		
					VERIFYING DOCUMENTS	VG	3rd PARTY SURVEYOR
C.	FABRICATION						
1	MATERIAL SHEARING AND FORMING	Shear and Form Material as per shop drawing	- VG-PRO-WI-04 - VG-SOP-14b	As Per Drawing	Sign Off Dimension Report (VG-SOP-14b-01)	H	
2	FIT UP	Fit up Inspection prior to welding	- As per Fabrication Drawing - VG-PRO-WI-04 - VG-SOP-14b	As per Fabrication Drawing	Sign Off Fit Up Report (VG-SOP-14b-13)	H	
3	WELDING PROCESS	Verify approved Welding Quality as per required standard	- WPS/GMAW/009 - VG-SOP-14b	- AWS D1.1 - DNV 2.7-1 / EN12079		H	
4	NDT CONDUCTED AND RESULT	Conduct NDT as per clients' requirements or Certification Body requirements.	- NT/GMT/AWS REV1 - NT/GUT/AWS REV1 - NT/GRT/AWS REV 0 - VG-SOP-14b	- AWS D1.1 - DNV 2.7-1 / EN12079	Sign Off Visual inspection report (VG-SOP-14b-04)	H	
5	WELD DEFECTS	Conduct repairs on any weld defects identified. Record all major defects and request for NDT after repair. Client to be notify on major repairs	- VG-SOP-14b - VG-SOP-18	- AWS D1.1 - DNV 2.7-1 / EN12079	- Sign Off Weld map report (VG-SOP-14b-02) - Sign Off NDT Report	H	
6	NDT AFTER REPAIR	Evaluate defect, check manufacturing specification and relevant codes for weld defects.	- VG-SOP-14b - VG-SOP-18 - NT/GMT/AWS REV1 - NT/GUT/AWS REV1 - NT/GRT/AWS REV 0	- AWS D1.1 - DNV 2.7-1 / EN12079		H	
7	DIMENSIONAL CHECK	Conduct Dimensional check on completed products.	- VG-SOP-16 - VG-SOP-14b	- As per Fabrication Drawing - DNV 2.7-1 / EN12079 - DIN 8570	Sign Off Dimension Report	H	

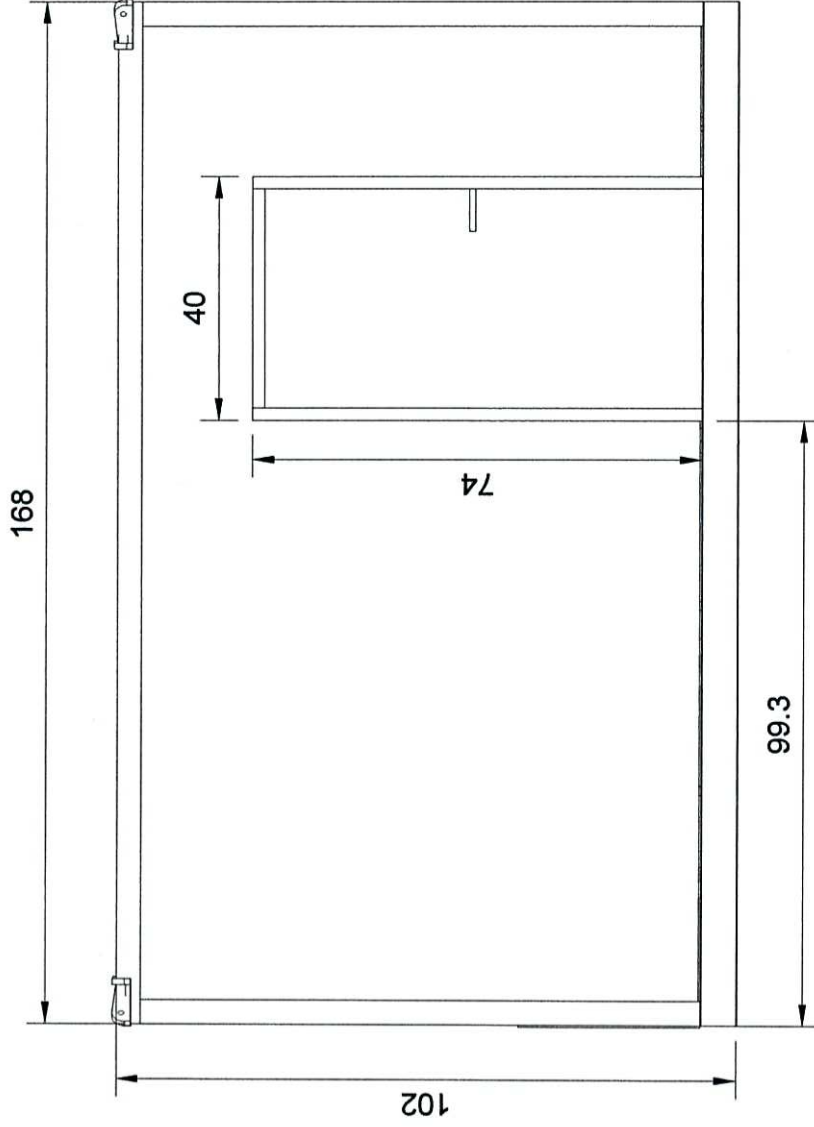


VG/ITP /1129/ REV 0

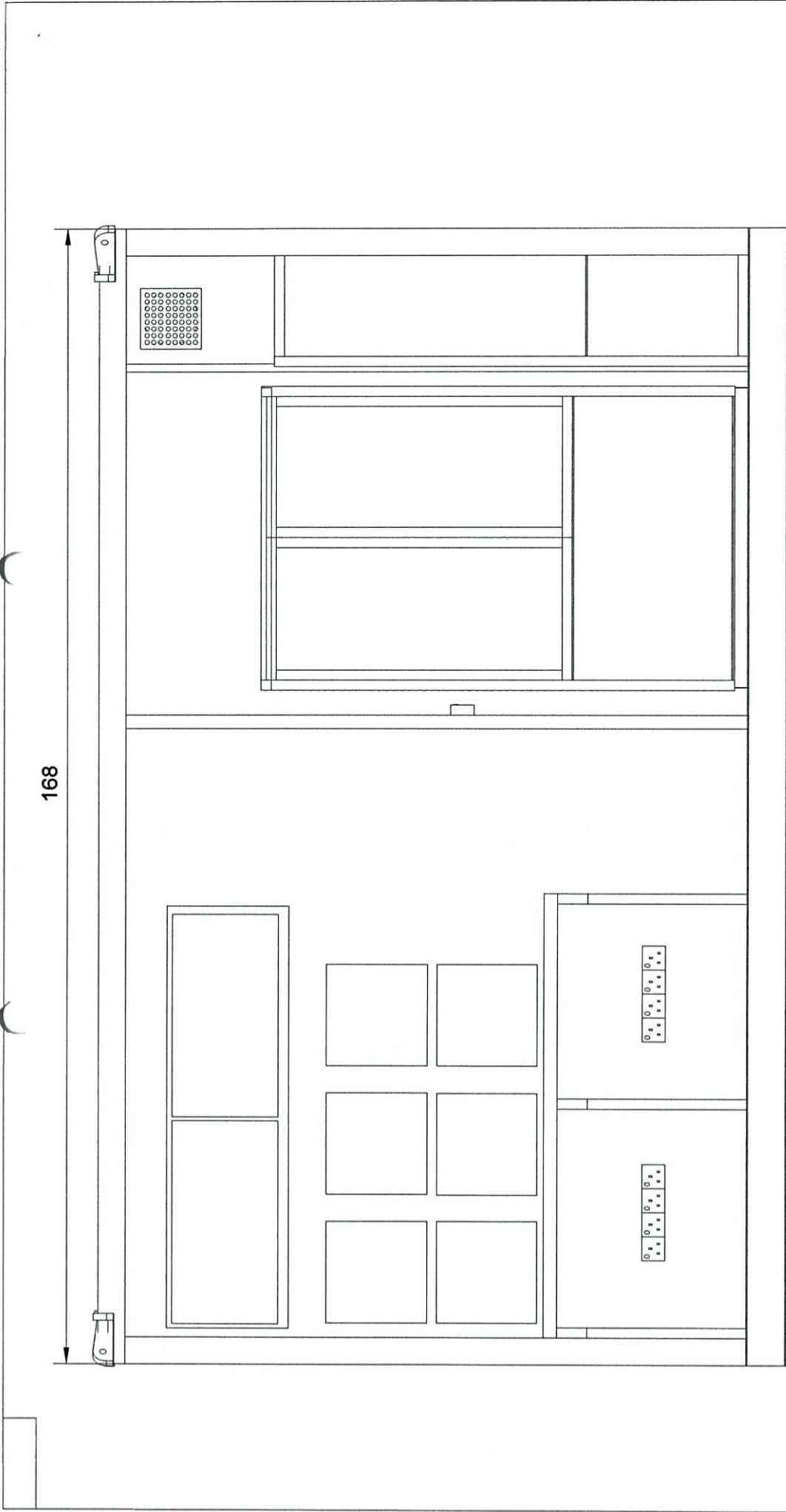
Page 3 of 3



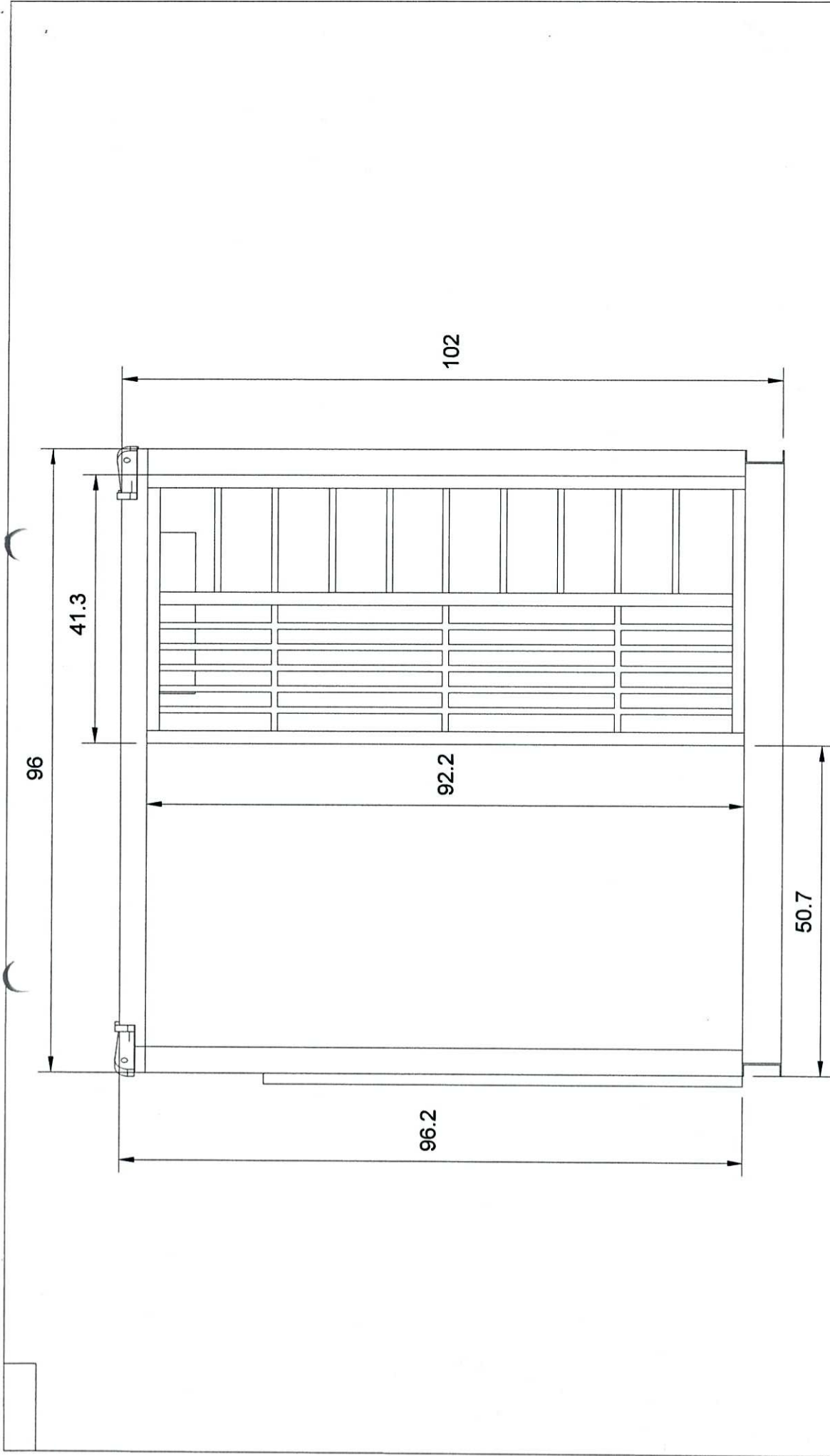
Item Ref:	Quantity:	Material:	Title Project: TIGER O1	Drawn By: SYED SSABRI Checked: WAN M.SAPUAN	Date: 09/01/2010
			Description:	Title: Container Layout	Unit: inches Scale: 1 : 40
					Drwn.Nr: TIG-01-10



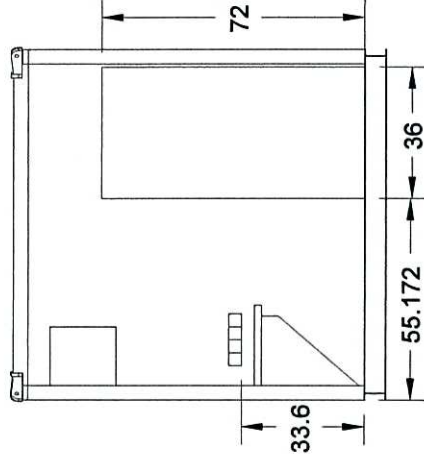
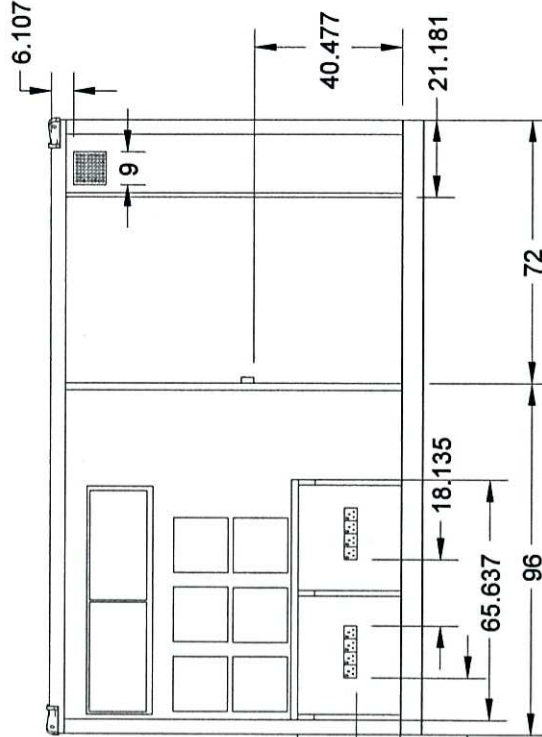
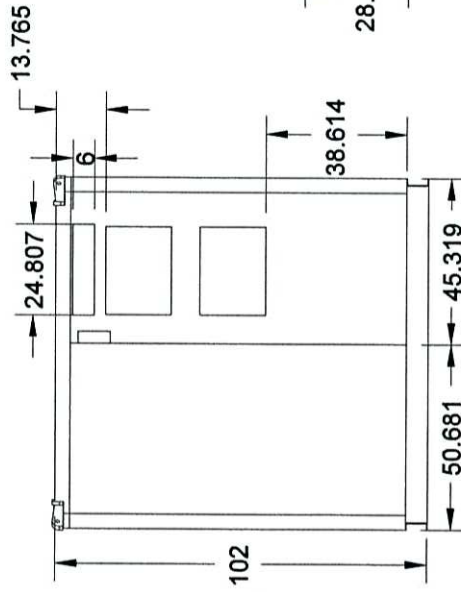
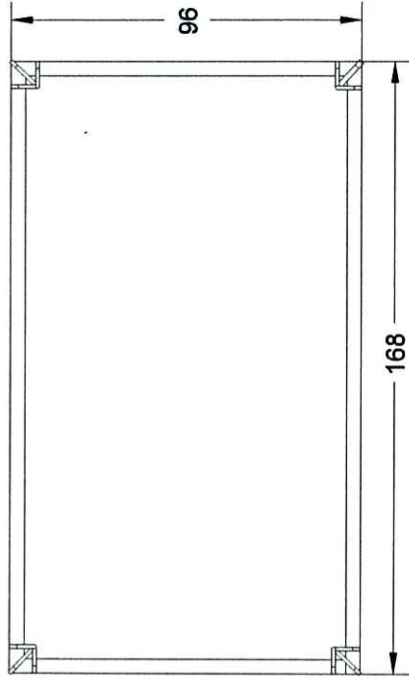
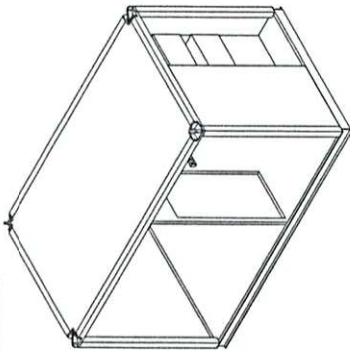
Item Ref:	Quantity:	Material:	Title Project: TIGER 01	Drawn By: SYED SSABRI	Checked: WAN M.SAPUAN	Date: 09/01/2010			
			Description: Date: Issues by:	Side A					
							Unit: Inches		Scale: 1 : 30
							Drwn.Nr: TIG-01-10		



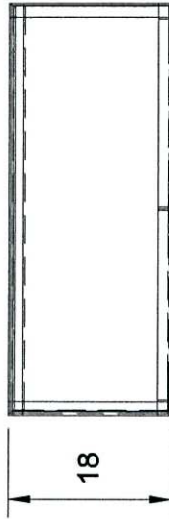
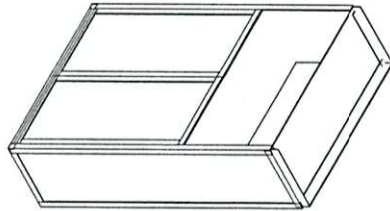
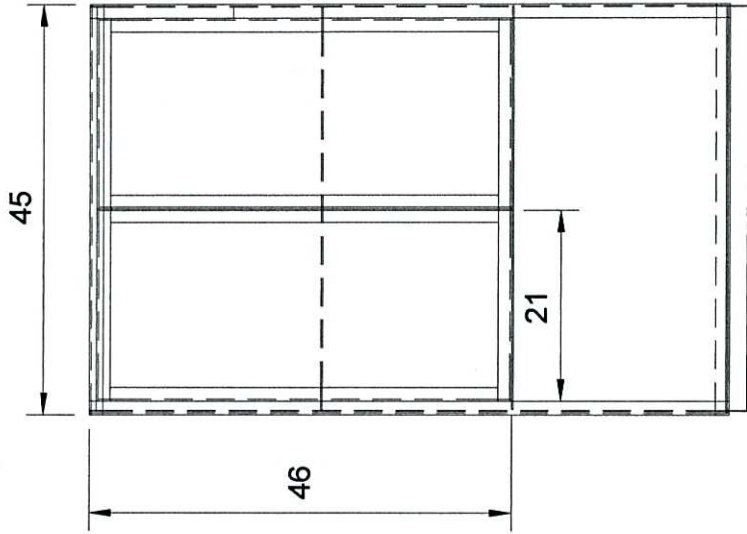
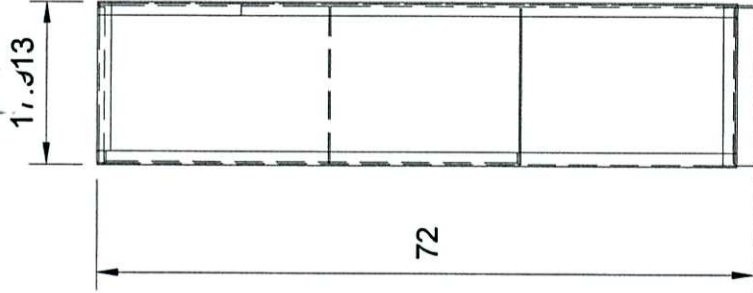
Item Ref:	Quantity:	Material:	Title Project: TIGER O1	Drawn By: SYED SSABRI	Checked: WAN M.SAPUAN	Date: 09/01/2010
			Description:	Title: Side A (inside)		
			Date:	Unit: Inches	Scale: 1 : 20	Drwn.Nr: TIG-01-10
			Issues by:			



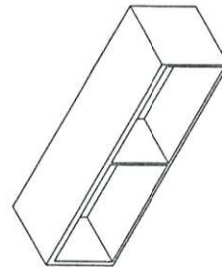
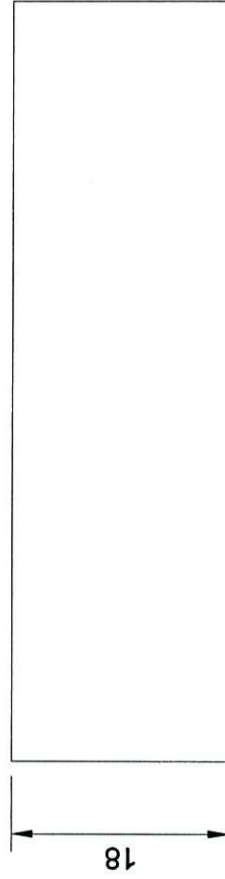
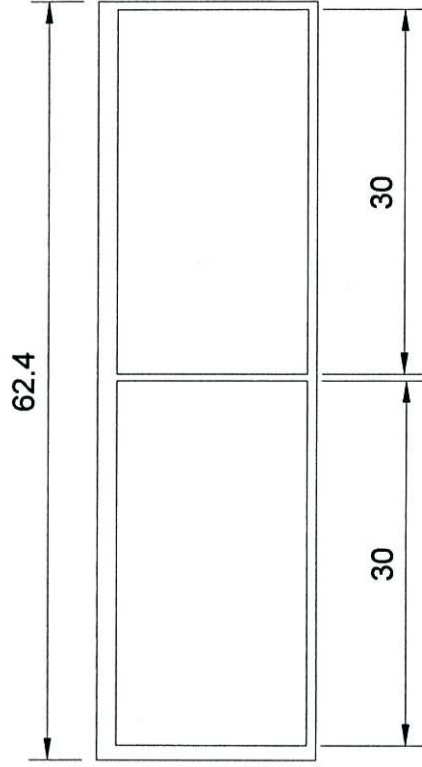
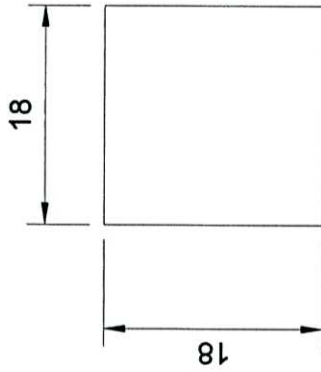
Item Ref:	Quantity:	Material:	Title Project: TIGER O1	Drawn By: SYED SSABRI	Checked: WAN M.SAPUAN	Date: 09/01/2010
			Description:	Title: Side B		
			Date:	Unit: Inches	Scale: 1 : 20	
			Issues by:	Drwn.Nr:	TIG-01-10	



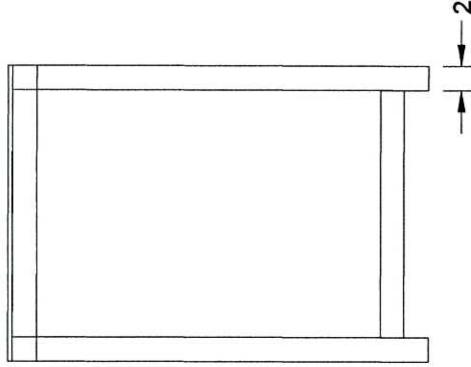
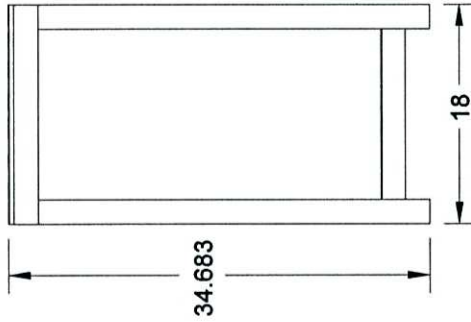
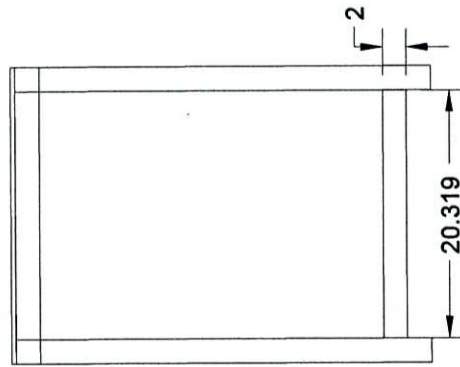
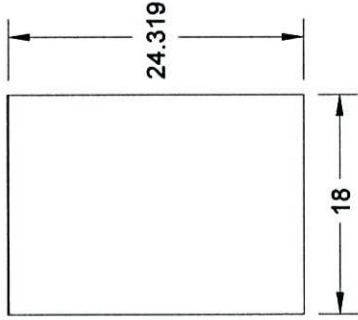
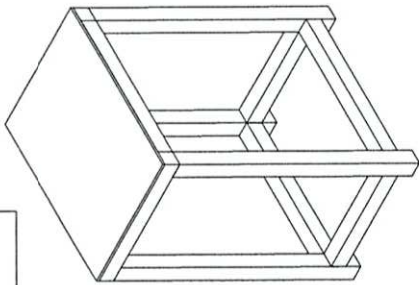
Item Ref:	Quantity:	Material:	TIGER O1	Title Project:	SYED SSABRI	Checked:	WAN M.SAPUAN	Date:	09/01/2010
Description:				Unit:		inches		Scale:	
Date:				Title:		1 : 50		Drwn.Nr:	
Issues by:				Container inside layout		TIG-01-10			



Item Ref:	Quantity:	Material:	Title Project: TIGER O1	Drawn By: SYED SSABRI	Checked: WAN M.SAPUAN	Date: 09/01/2010
			Description:	Title: Cabinet		
			Date:	Unit: Inches	Scale: 1 : 20	
			Issues by:	Drwn.Nr:	TIG-01-10	



Item Ref:	Quantity:	Material:	Title Project: TIGER O1	Drawn By: SYED SSABRI	Checked: WAN M.SAPUAN	Date: 09/01/2010
			Description:	Title: Cabinet 2	Unit: inches	
					Scale: 1 : 15	
					Drwn.Nr: TIG-01-10	
			Date:			
			Issues by:			



Item Ref:	Quantity:	Material: METAL	Title Project: TIGER O1	Drawn By: SYED SSABRI	Checked: WAN M. SAPUAN	Date: 09/01/2010			
			Description:	Title: workbench		Unit: inches	Scale: 1 : 15		
			Date:						
			Issues by:					Drwn.Nr: TIG-01-10	

