Tankspan Leasing Limited **MANAGER/ OPERATOR:**

The Old Farm Office

Peper Harow

Godalming, Surrey, GU8 6BQ

England

OWNER: Ocean Container Investments

St James House, 20 Georgian Crescent

Bryanstan East 2152 Republic of South Africa

1. **Technical Characteristics**

1	1	Design & Testin	'n
		Design & resin	ıcı

Tank – in accordance with: IMDG, RID/ADR and ASME VIII, Div 1 IMDG Equivalent Thickness (mm): 6 mm

Frame – generally in accordance with: ISO Standard 1496/3

1.2 2MT6 **ISO Type**

1.3	ІМО Туре	1			
1.4	Nominal Capacity (-0,5 +1% Tolerance)	SI 26 000 _	US 6868	US gal	
1.5	Frame Dimensions and Weight Max Gross Weight Tare Weight (± 3% Tolerance) Length Width Height	36 000 kg 3910 kg 6058 mm 2550 mm 2670 mm	79366 8620 20 8 ft 4,4 8 ft 9,5	lb. lb. ft in in	
1.6	Tank Dimensions Internal Diameter Seam to Seam Shell Minimum Thickness Shell Order Thickness Head Minimum Thickness Knuckle Crown Corrosion Allowance Dished Ends	2416 mm 4991 mm 4.40 mm 4.5 mm 5.15 mm 4.40 mm 0 mm Torispherical	95.12 196.50 0.1732 0.1772 0.2028 0.1732 0.0	in in in in in in	
1.7	Pressure & Temperature Rating Tank Design Temperature RID/ADR Calculation Pressure Maximum Allowable Working Pressure	120 °C 6,0 bar 4,0 bar	248 87,0 58,0	°F psi psi	

i ressure & reinperature reating				
Tank Design Temperature	120	°C	248	°F
RID/ADR Calculation Pressure	6,0	bar	87,0	psi
Maximum Allowable Working Pressure	4,0	bar	58,0	psi
Test Pressure	6,0	bar	87,0	psi
Vacuum Pressure	0,4	bar	5,8	psi
Steam Heating				
Maximum Allowable Working Pressure	4,0	bar	58,0	psi
Test Pressure	10,5	bar	152,25	psi

1.8 **Material of Construction**

EN 10210-1 S355 J2H (Hollow section) Framework 50D or Equivalent (Tested to -40°C)

Corner Castings ISO Standard 1161

Shell DIN 17441 W1.4401 Low Carbon C ≤ 0.03% Cold Rolled 2B (ASTM A 240-93B, 316) DIN 17441 W1.4401 Low Carbon C ≤ 0.03% Heads (Columbus Material)

Cold Rolled, Ra ≤ 1.6 (ASTM A 240-93B, 316)

Vacuum Stiffening Rings ASTM A240 Gr. 304

2. Finish

Internal Welds Finish

Longitudinal Not ground, smooth low bead scotch brite polished

Circumferential Bottom ± 400 mm ground flush and polished (Ra ≤ 1.6) Circ weld roots to

be scotch brite polished.

Repairs Ground flush and polished (Ra ≤ 1.6)

3. <u>Tank Fitting and Accessories</u>

3.1 Manhole

Supplier Swift

Dimensions 500 mm ID, Neckring Radius 1182 mm

Material 316 L

Description Low profile, 8 point fixing

Gasket PTFE braided fibre, non-leaking type

3.2 Safety Relief Valve

Supplier Perolo

Quantity One plus provision for a second valve

Description 2_" BSP Mega Superventix Specifications +4,4 pressure only (+63,8 psi)

Gasket Solid PTFE

Gauze ring Yes Flanged Adaptor Yes Weld In Flange Yes

3.3 Air Inlet Valve

Supplier Gestra
Quantity One
Description 1_" BSP
Gasket PTFE
Manometer None
Weld In Flange Yes

3.4 Top Discharge Provision

Quantity One Dimensions DN 80 (3")

Specification Blank flange (4 x M16 on 160 mm PCD)

Gasket Klinger SIL C-4430 and PTFE

Remarks Provision is made for the future fitting of a clamped

3" butterfly valve and 3" syphon tube

Guide for Syphon tube Yes Weld In Flange Yes Blind Flange Yes

3.5 Thermometer

Supplier WIKA Quantity One

Description Surface type, 100 mm dial diameter

Dual scale -20°C to 150°C, -4°F to 302°F (Silicon oil filled)

Type Gas in metal / Contact type Position Rear end (8 o'clock)

3.6 Bottom Discharge

Supplier Perolo

Dimensions DN 80 (3") opening diameter

Specification Internal valve - 30° foot valve with steam heated tank pad

Gasket Klinger SIL C-4430 / PTFE Envelope

External valve - L.H. operated clamped butterfly valve

Gasket Klinger SIL C-4430 / PTFE

3" BSP threaded connector closed by a stainless steel cap with

retaining chain

Remarks A remote control is connected to the internal valve handle with

fusible link provision

3.7 Spillbox (s)

Quantity Two, manhole with safety relief and accessories

Position: On centre line around Manhole and Off centre around Top Discharge

Dimensions 950 mm x 900 mm and 550 mm x 400 mm

Material ASTM A240 316L, 2 mm

Drain Pipes External

Material Reinforced plastic 25 mm NB

3.8 Steam Heating

Heating area 6.64 m_ (effective)

No. of runs 8

Inlet diameter _ inch BSP male threaded
Outlet diameter _ inch BSP male threaded
Drain valve Yes, _ inch BSP Ball Valve

End cap material PVC

3.9 Tank Treatment

Pickling

Internal Yes

External Welds & Heat marks

Passivation

Internal Yes

External Spillboxes only

Anti-stress lacquer Whole exterior of tank including skirts

3.10 Insulation and Cladding

Material Mineral Wool Polyurethane

Shell 30 mm (min 60kg/m_) 20 mm (min 35kg/m_)

Ends varies (min 60kg/m_)

Cladding 0,8 mm thick pre-painted white aluminium (Grade Alloy 5251 H44)

or equivalent

3.11 Walkway

Layout "T" Type

Width / thick 475 mm / 3.0 mm

Material Aluminium Grade 5042-0

Note: With stainless steel collapsible handrail fitted on the right hand side

3.12 Ladder

One ladder 300 mm (32 x 32 mm section) wide is provided on the right hand side of the rear frame. The ladder rungs are made from stainless steel and have an anti-slip surface. One handhold is provided adjacent to the ladder.

3.13 Corner Protection

8 off per tank located at the top and bottom frame corners.

3.14 Earthing Connection

One stainless steel lug 50 x 30 x 3 mm, with 15 mm hole, located at rear of tank frame.

3.15 Document Holder

1-off PVC document holder 90 mm diameter 300 mm long.

Colour: Opaque Drain hole diameter 6mm

3.16 Data Plates

One stainless steel data plate per tank as per code requirements.

3.17 Dipstick No Bracket: Yes

3.18 U.I.C. Plate : 2 off per tank 120 mm X 350 mm

3.19 Calibration

Actual paper chart Yes, supplied in document holder

Calibration plate Yes, marked in litres and US gallons/cm, tack-welded inside the main

Spillbox.

Chart Material 316 Stainless Steel

3.20 Frame Treatment

Surface Preparation Shot Blasting to SA 2,5 Finish

3.21 Painting of Frame

CoatTypeDFT (min)PrimerZinc Rich30 micronIntermediateZinc Phosphate40 micronTop coatCTC free chlorinated rubber50 micron

Colour of frame French 'Mason' blue;

BS Number BS 381, C166

Supplier KCC

3.22 Decals

Standard, Mandatory decals:

Description	Quantity
Operator's Code and Serial Number	6
Size and Type Code "2MT6"	3
IMO 1	2 "R3"
Weight (Max Gross Weight 36 000kg)	1
RID / ADR	2
Warning Overhead Electrical Cables	1
Working Pressure "4 Bar MAWP"	2
Earthing	1
Remote Control "EMERGENCY – PULL CABLE TO CLOSE"	1
Nominal Capacity (26 000_/6870 US Gal)	1
Classification Society (Bureau Veritas)	1
Foot Valve Warning	1
Steam Outlet	1
Steam Inlet Maximum Pressure 4 Bar	1
Manufacturer "Trencor"	3
No Walking	2
No Forklift	2
UIC "Super Heavy"	3
MAGW for UIC Rail 34000 kg	1
BSLT	1
Steam Heating Drain Valve	1
Height decal (2,7)	2
Chevron	8
2 nd SRV	1 "R2"
Empty lift only	4
	"R1"
Owner's Logo's (Free Issue)	
Side Logo	2
-	

"R1"

Decal Warranty: Mandatory Decals 7 years

4. Tests and Approvals

- 4.1 These tanks containers are constructed according to an approved design.
- 4.2 Each production unit is subject to testing and non-destructive examination as required by ASME VIII Division 1, UIC and Suppliers own quality requirements. The independent Inspection Authority, Bureau Veritas, inspects each unit.
- 4.3 The tank container has been approved for a stacking load of 81000 kg per corner post, which corresponds to six-high stacking at 36 000kg MGW.
- 4.4 The tank container fulfils the performance specification of the following International Organization's regulations and recommendations and is supplied with their Approvals / Registrations.

"R3"

IMDG CSC TIR (Customs) UIC

RID / ADR

4.5 Radiography (UW51 and UW52)

Shell Spot Dished Ends 100%

5. Documentation

The following documentation will be provided:

- 5.1 Details and GA drawings with indication of the serial number
- 5.2 Technical data sheet
- 5.3 Cleanliness Certificate issued by an Independent Party (one copy in plastic pouch in document holder)
- 5.4 Initial Inspection Certificate
- 5.5 BV technical note / approvals
- 5.6 User's Manual in English

Files must be prepared as specified hereafter:

1 x paper file

1 x CD ROM

6. Products (RID / ADR)

Approved for products in classes 3; 6.1; 8 & 9 as applicable.