

MANAGER/ OPERATOR:

Tankspan Leasing Limited
Suite 5, 50 Churchill Square
Kings Hill, West Malling
Kent ME19 4YU
England

OWNER:

Ocean Container Investments
St James House, 20 Georgian Crescent
Bryanstan East 2152
Republic of South Africa

1. Technical Characteristics

1.1 Design & Testing

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 ISO Type

2MT6

1.3 IMO Type

1

1.4 Nominal Capacity (-0,5 +1% Tolerance)

SI	US	
26 000	6868	US gal

1.5 Frame Dimensions and Weight

Max Gross Weight	36 000	kg	79366	lb.
Tare Weight (± 3% Tolerance)	3910	kg	8620	lb.
Length	6058	mm	20	ft
Width	2550	mm	8 ft 4,4	in
Height	2670	mm	8 ft 9,5	in

1.6 Tank Dimensions

Internal Diameter	2416	mm	95.12	in
Seam to Seam	4991	mm	196.50	in
Shell Minimum Thickness	4.40	mm	0.1732	in
Shell Order Thickness	4.5	mm	0.1772	in
Head Minimum Thickness				
Knuckle	5.15	mm	0.2028	in
Crown	4.40	mm	0.1732	in
Corrosion Allowance	0	mm	0.0	in
Dished Ends	Torispherical			

1.7 Pressure & Temperature Rating

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

Framework	EN 10210-1 S355 J2H (Hollow section) 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)
Heads (Columbus Material)	DIN 17441 W1.4401 Low Carbon C ≤ 0.03% 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. Tank Fitting and Accessories

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
Gasket	External valve – L.H. operated clamped butterfly valve Klinger SIL C-4430 / PTFE
Remarks	3” BSP threaded connector closed by a stainless steel cap with retaining chain 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 m₂ (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/m₂) 20 mm (min 35kg/m₂)
Ends varies (min 60kg/m₂)
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

Coat	Type	DFT (min)
Primer	Zinc Rich	30 micron
Intermediate	Zinc Phosphate	40 micron
Top coat	CTC free chlorinated rubber	50 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.

IMDG	CSC
TIR (Customs)	UIC
RID / ADR	

“R3”

- 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.