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I. TECHNICAL SPECIFICATION

OWNER:	OCEAN CONTAINER INVESTMENTS
OPERATOR:	VOTG TANKTAINER GmbH
MODEL NUMBER:	25FSTD
QUANTITY:	20
MANUFACTURERS SERIAL NUMBERS:	20-2081 to 20-2100
OWNERS' SERIAL NUMBERS:	VTGU 165150 to VTGU 165169
CONTRACT:	ITL 013

1. Technical Characteristics

1.1 Design & Testing

Tank - in accordance with: IMDG, CFR49 and RID/ADR
 Frame - in accordance with: ISO Standard 1496/3

1.2 ISO type 1CC / 22T6

1.3 Un Portable Tank Instruction T11

1.4 Nominal Capacity (- 0,75 +0,75% Tolerance)

SI	US	
25000 l	6604	US gal

1.5 Frame Dimensions and Weight

Max Gross Weight	36000 kg	79366	lbs.
Tare Weight (± 3% Tolerance) Estimated	3960 kg	8730	lbs.
Length	6058 mm	20	ft
Width	2438 mm	8	ft
Height	2591 mm	8 ft 6	in

1.6 Tank Dimensions

Internal Diameter	2370 mm	93,31	in
Seam to Seam length	5007 mm	197,13	in
Shell Minimum Thickness	4,132 mm	0,1627	in
Shell Order Thickness	4,5 mm	0,1772	in
Head Minimum Thickness			
Knuckle	4,695 mm	0,1849	in
Crown	4,132 mm	0,1627	in
Head Order Thickness	5,8 mm	0,2283	in
Corrosion Allowance	0,25 mm	0,0098	in
Dished Ends	Torispherical		

1.7 Pressure & Temperature Rating

Tank Design Temperature	130 °C	266	°F-
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

1.8 Materials of Construction

Framework	EN 10210-1 S355 J2H (Hollow section) 50D or Equivalent (Tested to -40°C)
Corner Castings	ISO Standard 1161
Shell	Columbus Grade TCG316L Low Carbon C ≤ 0.03%, Cold Rolled 2B finish (Dual designated as DIN 17441 W1.4401 ASTM 240, 316/316L)
Heads	Columbus Grade TCG316L Low Carbon C ≤ 0.03%, Cold Rolled 2B finish (Dual designated as DIN 17441 W1.4401 ASTM 240, 316/316L)
Vacuum Stiffening Rings	ASTM A240 Gr. 304

2. Tank Fittings and Accessories

2.1 Manhole

Supplier	Fort Vale	(Part No. EUB/7401118P)
Dimensions	500mm ID, Neckring Radius 1180mm	
Material	316L	
Description	low profile, 8 point fixing	
Gasket	PTFE braided fibre	

2.2 Safety Relief Valve Assembly

Supplier	Fort Vale	(Part No. 010/16300)
Quantity	One plus provision for a second valve.	
Description	2½" BSP MK III Super Maxi	
Specifications	+ 4,4 bar pressure only (+63.8 psi)	
Gasket	Solid PTFE	
Gauze Ring	no	
Flanged Adapter	yes	
Weld in Flange	yes, off centre line horizontal	

2.3 Air Inlet Assembly

Supplier	Fort Vale	(Part No. 530/0000)
Quantity	One	
Description	1½ BSP, Ball valve with a cap	
Gasket	PTFE	
Weld in Flange	yes, off centre line	

2.4 Top Discharge Provision

Supplier	Swift Engineering	
Quantity	One	
Dimensions	DN 80 (3")	
Specification	Blank flange (4 x M16 on 160mm 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	
Weld in Flange	yes, off centre line	
Guide fitted	yes	

2.5 Thermometer

Supplier	Wika	
Quantity	One	
Description	Surface type, 100mm dial diameter Dual scale -20°C to 160°C, -4°F to 320°F	
Type	Gas in metal / Contact type	
Position	Rear end (8 o'clock)	

2.6 Bottom Discharge

Supplier	Fort Vale	
Dimensions	DN 80 (3") opening diameter	
Specification	Internal valve—30° Cleanflow foot valve. (Part No. 848/1000A) External valve—clamped (Part No.368/7000B) butterfly valve, left hand operated	
Gasket	Klinger SIL C-4430 / PTFE	
Adaptor	3" BSP threaded connector closed by a stainless steel cap with retaining chain.	
Weld in Flange	yes, c/w steam heated port.	
Outlet Box	yes, fully insulated with lockable and customs sealable lid.	
Remarks	A full-length remote control, with provision for a fusible link is connected to the internal valve handle.	

- 2.7 Spill-boxes**
Quantity Two (Insulated)
Position Main Spillbox on centre line around Manhole, Safety Relief Valve and Safety Relief Valve Provision. Accessories Spillbox on centre line around Top Discharge Provision and Air Line.
Dimensions 950 mm x 780 mm and 820mm x 400mm
Material ASTM A240 Gr. 316L, 2mm thick.
Drain Pipes External
Material Reinforced plastic 25mm NB
Lids yes, c/w 15mm thick insulated (Customs sealable and lockable).
- 2.8 Steam Heating**
Heating area 6.64 m² (effective)
No of runs 8 at 168mm centre to centre.
Inlet diameter ¾" BSP male threaded
Outlet diameter ¾" BSP male threaded
Test pressure 10.5 bar (152.25 psi)
Working pressure 7 bar (101.5 psi)
End cap material PVC
- 2.9 Walkways**
Layout "F" Type (²/₃ x longitudinal and 2 x transverse members)
Width / Thick 475mm / 3.0mm
Material Aluminium Grade 5042-0
- 2.10 Ladder**
One ladder 300mm wide (32 x 32mm section) and painted in the same colour as the frame 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 handle is provided adjacent to the ladder.
- 2.11 Corner Protection Plates**
8 off per tank located at the top and bottom frame corners. One handhold cutout is provided in the corner protection plate above the ladder.
- 2.12 Electrical Heating**
One Mannings harness electrical heating system to the following specification will be fitted:
Control unit with cargo Thermostat 0-150 deg C (with stop at 120 deg C) Rating 380-440V
3 phase 50/60 Hz. supply and rated at 15kW (nom.) at 415 V.
A stainless steel control box will be fitted at the top left corner of the right-hand side frame.
- 2.13 Earthing Connection**
One stainless steel lug 50x30x3mm, with a 15mm diameter hole, located at rear of tank frame.
- 2.14 Document Holder**
1-off water resistant PVC document holder 90mm diameter 300mm long is mounted in a protected position near the left rear corner of the frame.
Colour: Clear
Drain hole diameter: 6mm

3. Insulation and Cladding

3.1 Insulation

Material	Mineral Wool	Polyisocyanurate
Shell	30mm (min 55kg/m ³)	20mm (min 32kg/m ³)
Ends	varies (min 55kg/m ³)	

3.2 Cladding

Cladding material	0.8 mm thick pre-painted white (RAL 9010); aluminum (Grade 5251 H44) or equivalent
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4. Decals and Markings

4.1 Decals

Standard, Mandatory decals:

Description	Quantity
Operator's Code and Serial Number	6
Size and Type Code "22T6"	3
TC Impact Approved	2
UIC "IC70"	2
Weight (Max Gross Weight 36000kg)	1
RID / ADR	2
Warning Overhead Electrical Cables	1
Working Pressure "4 Bar MAWP"	2
Earthing	1
Remote Control "EMERGENCY-PULL CABLE CLOSE"	1
Nominal Capacity (25 000ℓ/ 6604 US Gal)	1
Classification Society (Bureau Veritas)	1
AAR 600	2
Foot Valve Warning	1
Steam Outlet	1
Steam Inlet Maximum Pressure 7 Bar	1
Manufacturer "Trencor"	3
No Walking	2
No Forklift	2
UIC "Super Heavy"	3
MAGW For UIC Rail 34000kg	1
BSLT	1
Height Decal (2,6)	2
Lightning Symbol Decals	6
2 nd SRV Manger Approval Decal	1
Un Portable Tank "T11" Decal	2
Control Unit Decal	1
Electrical CCT Decal	1
Owner's Logo:	
Side Logo	2
Decal Warranty: Mandatory Decals	7 years

4.2 Data Plate

One stainless steel data plate as per code requirements

4.3 Calibration

Calibration plate	Yes, marked in cm/litres/US gallons, tack-welded to the side of the main Spillbox
Chart material	316 Stainless Steel
Actual paper chart	Yes, supplied in document holder

5. Finish, Surface Treatment and Painting

5.1 Internal welds

Longitudinal	Not ground, smooth low bead scotch brite polished.
Circumferential	Bottom ± 400 mm ground flush and polished (Ra ≤ 1.6) Circ weld roots are to be scotch brite polished.
Repairs	Ground flush and polished (Ra ≤ 1.6)

5.2 Cleaning

On completion of fabrication, the vessel's internal surface is de-greased, pickled, passivated and neutralized. The opening points are sealed so that the tank is supplied clean and ready for use.

5.3 Frame Treatment

Surface Preparation The entire frame is shot blasted to SA 2,5 Finish.

5.4 Painting of Frame

Coat	Type	DFT (min)
Primer	Zinc Rich	30 micron
Intermediate	Zinc Phosphate	40 micron
Topcoat	CTC free chlorinated rubber	50 micron
	Total minimum DFT	120 micron
Colour of frame:	Cobalt Blue (Matt)	
RAL Number	5013	

5.5 Painting of Tank

Full exterior of tank is coated with anti – stress corrosion lacquer (15 – 25 micron DFT)

6. Tests and Approvals

6.1 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.

6.2 The tank container has been tested and approved for a stacking load of 86400 kg per corner post.

6.3 The tank container fulfills the performance specification of the following International Organization's regulations and recommendations and is supplied with their Approvals / Registrations.

US-DOT	IMDG – (via US DOT)
TIR/Customs	CSC
RID/ADR	Transport Canada
AAR 600	UIC (IC 70)

6.4 Radiography (UW51 and UW52)

Shell: Spot
Dished Ends: 100%

7. Products (RID/ADR)

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

Note: These products are allowed to be transported within the limits of the applicable regulations and according to equipment options (operator's responsibility to check prior to loading).

II. OPERATING INSTRUCTIONS

1. FILLING

Before any filling operations:

- Make sure that the tank is empty and clean.
- Connect the earth wire to the earthing lug on the rear frame, identified by a circular earthing decal.
- If vapours of the transported liquid are hazardous, a pipe should be connected to the airline valve to capture gas from the tank into a closed system, according to local environmental regulations.

1.1 FILLING VIA MANHOLE

- (a) Make sure that the airline valve, top and bottom discharge valves, foot valve, butterfly valve and blank flange or end cap are closed.
- (b) Fill the tank to the correct level leaving the required ullage space.
- (c) Close the manlid and tighten the swingbolts.

1.2 FILLING VIA BOTTOM OUTLET

- (a) Open the manhole or the airline valve.
- (b) Remove end cap or blind flange on bottom discharge.
- (c) Connect the filling hose to the bottom outlet.
- (d) Open the foot valve and discharge valve.
- (e) Fill the tank to the correct level leaving the required ullage space.
- (f) Close the foot valve, butterfly valve and blank flange or end cap and then the airline valve and / or manlid.

1.3 FILLING VIA TOP OUTLET (IF CONVERTED)

- (a) Open the manhole or airline valve.
- (b) Make sure that the foot valve and butterfly valve and blank flange or end cap are closed.
- (c) Connect the filling hose.
- (d) Open the top outlet butterfly valve.
- (e) Fill the tank to the correct level leaving required ullage space.
- (f) Close top discharge valve and then the manhole and airline valve.

1.4 FILLING FOR TRANSPORT UNDER INERT GAS

- (a) Fill the tank 100% as per method in 1.2 or 1.3 above.
- (b) Allow the inert gas blanket through the airline to force the required quantity of liquid (ullage) out of the tank.

Alternatively:

- (a) Purge the tank with inert gas via the airline.
- (b) Fill the tank to the required volume as per method 1.2 or 1.3 above with manlid closed allowing excess gas to escape via the airline.
- (c) Close all valves and replace cap.

When filling has been completed and filling pipes have been removed:

- Disconnect the earth wire.
- Apply seals to all sealing points.

2. EMPTYING

Before any emptying operations:

- Connect the earth wire to the earthing lug on the rear frame, identified by a circular earthing decal.

2.1 GRAVITY DISCHARGE

- (a) Remove the cap or blank flange and connect discharge pipe to the bottom outlet.
- (b) Open the manhole or the airline valve.
- (c) Open the foot valve and butterfly valve.

2.2 PRESSURE DISCHARGE (Air or gas) VIA BOTTOM OUTLET

- (a) Remove the cap or blank flange.
- (b) Connect the discharge pipe to the bottom outlet and the air or gas line to the airline valve.
- (c) Open the foot valve and the butterfly valve.
- (d) Apply pressure (max. 4 bar or 58 PSI).

2.3 PRESSURE DISCHARGE (Air or gas) VIA TOP OUTLET (IF CONVERTED)

- (a) Remove the blank flange.
- (b) Connect the discharge pipe to the top discharge and the air or gas line to the airline valve.
- (c) Open the butterfly valve.
- (d) Apply pressure (max. 4 bar or 58 PSI).

2.4 VACUUM DISCHARGE VIA BOTTOM OUTLET

- (a) Remove the cap or blank flange.
- (b) Connect the discharge pipe to the bottom outlet.
- (c) Open the manhole or the airline valve.
- (d) Open the foot valve and the butterfly valve.

2.5 VACUUM DISCHARGE VIA TOP OUTLET (IF CONVERTED)

- (a) Remove the cap or blank flange.
- (b) Connect the discharge pipe to the top discharge flange.
- (c) Open the manhole or the airline valve.
- (d) Open the butterfly valve.

2.6 VACUUM DISCHARGE VIA MANHOLE

- (a) Open the manhole and dip the suction pipe into the liquid.

When emptying has been completed and air/or discharge pipes have been removed:

- Disconnect the earth wire.

3. CLEANING

Due to the hazardous nature of the products generally transported in this container and due to the risk of incompatibility with cleaning products we are not in a position to recommend any cleaning process.

However, we bring to the operator's attention that there is a general code of practice on the subject.

Chlorinated disinfectants are not recommended, due to the adverse effects of chlorine on stainless steel; if unavoidable they must be used with great care (cold cleaning, diluted solution, short lying time, thorough rinsing).

Never use steel wool or an iron/steel brush to wipe the tank.

4. STEAM HEATING

Maximum allowable working pressure: 7 bar (101.5 PSI)

Maximum allowable working temperature: 130° C or 266° F

The steam inlet is located on the left-hand side of the rear end frame, and the condensate outlet on the right-hand side of the rear end frame.

Return of the condensate to the steam generator saves energy.

5. ELECTRICAL HEATING

Confirm voltage of mains supply is compatible with unit voltage (380-440V).

Ensure main switch "SW1" is in OFF position.

Select heater element temperature "TH1"

Select cargo temperature "TH2"

Check CS1 to CS7 are set to 1

Switch on at main power source.

Switch on SW1

Ensure door is securely closed.

Ensure mains indicator light is on.

III. MAINTENANCE AND REPAIR

1. FRAME

The frame, of welded EN 10201-1 steel S355J2H tubular sections and BS 4360 – Gr. 50D plates is protected with a minimum of 30 micron of zinc rich primer, a minimum of 40 micron zinc phosphate intermediate primer and a minimum of 50 micron chlorine free chlorinated rubber top coat (Colour: Cobalt Blue, Matt, RAL 5013).

2. TANK

Tank repairs must be made in a workshop approved by the owner of the tank container using skilled labour. Before commencement, a repair procedure must be approved by the classification society and the repair approved according to the procedure.

Damage on the shell can only be repaired with ASTM A240 grade 316/316L (C < 0.03%) stainless steel or equivalent.

After any repair work to the tank, a full hydrostatic test must be carried out in the presence of an approved classification society, with the safety devices removed.

3. INSULATION

Layer of 30mm rock wool (against shell) and 20mm polyisocyanurate foam all round shell. Rock wool over dished ends.

External protection by 0,8mm pre-painted white, (RAL 9010); grade 5251 H44 aluminium cladding.

If cladding is damaged, it must be repaired immediately to avoid water penetration.

4. MANHOLE

The manhole is closed by swing-bolts. Damaged swing-bolts, pivot pins must be replaced immediately.

It is recommended that they be lubricated with either of the following:

- 1) Molybdenum disulphide (grease, oil, spray)
- 2) Graphite grease.

Replacement of the gasket:

Place the gasket on a flat surface, as it would go into the groove of the manlid. Turn one end of the gasket on its side and cut the end at a 45° angle. After checking that the groove of the lid is clean, position the gasket on top of the groove with the "0" thickness cut end at the bottom of the groove and with the end of the gasket aligned with a centre of a swing bolt bracket. Starting at the end of the seal, insert the gasket progressively into the groove around the full circumference. Where the gasket overlaps, mark the position and cut that end at a 45° angle in such a way that the joint will blend in with the other end of the gasket.

5. BOTTOM DISCHARGE

The discharge assembly is composed of:

80mm (3") diameter bottom operated foot valve with remote control (see below).

80mm (3") diameter butterfly valve (see below).

80mm (3"BSP) diameter flange adapter and cap.

6. FOOT VALVE

Fitted onto the tank by means of 8 bolts. TIR sealing wires are welded to the heads of fasteners according to the relevant customs regulations. They must be welded back in place after any repair or replacement has been undertaken.

The pressure plate seal can be changed either from inside the tank, or by removing the foot valve.

Repair the valve according to the repair procedure of the manufacturer.

Note: if the foot valve has been removed from the tank, the tensioning of the remote control cable must be adjusted to suit the valve operation.

7. BUTTERFLY VALVE

Replacement of the valve:

The TIR sealing wires are welded onto the heads of the fasteners of the valve for customs purposes. They must be welded back in place after repair or replacement has been made.

It is imperative that the valve is in the fully closed position when the bolts are being tightened. Bolts to be progressively cross-tightened.

Repair the valve according to the repair procedure of the manufacturer

8. SAFETY RELIEF VALVE

Valve to be screwed into position using a pin wrench (Max. tightening torque: 20daN.m)

Repair the valve according to the repair procedure of the manufacturer.

Regular cleaning of the gauze filter is recommended to maintain original operating characteristics. (tank valve was not fitted with a gauze fitter).

9. AIR LINE VALVE

The valve is fitted to the tank by means of 4 bolts. If the valve is repaired or replaced make sure that the valve orientation is in such a way that the side of the spill box does not interfere with the operating of the valve.

Repair the valve according to the repair procedure of the manufacture.

10. PARTS IN CONTACT WITH THE LIQUID

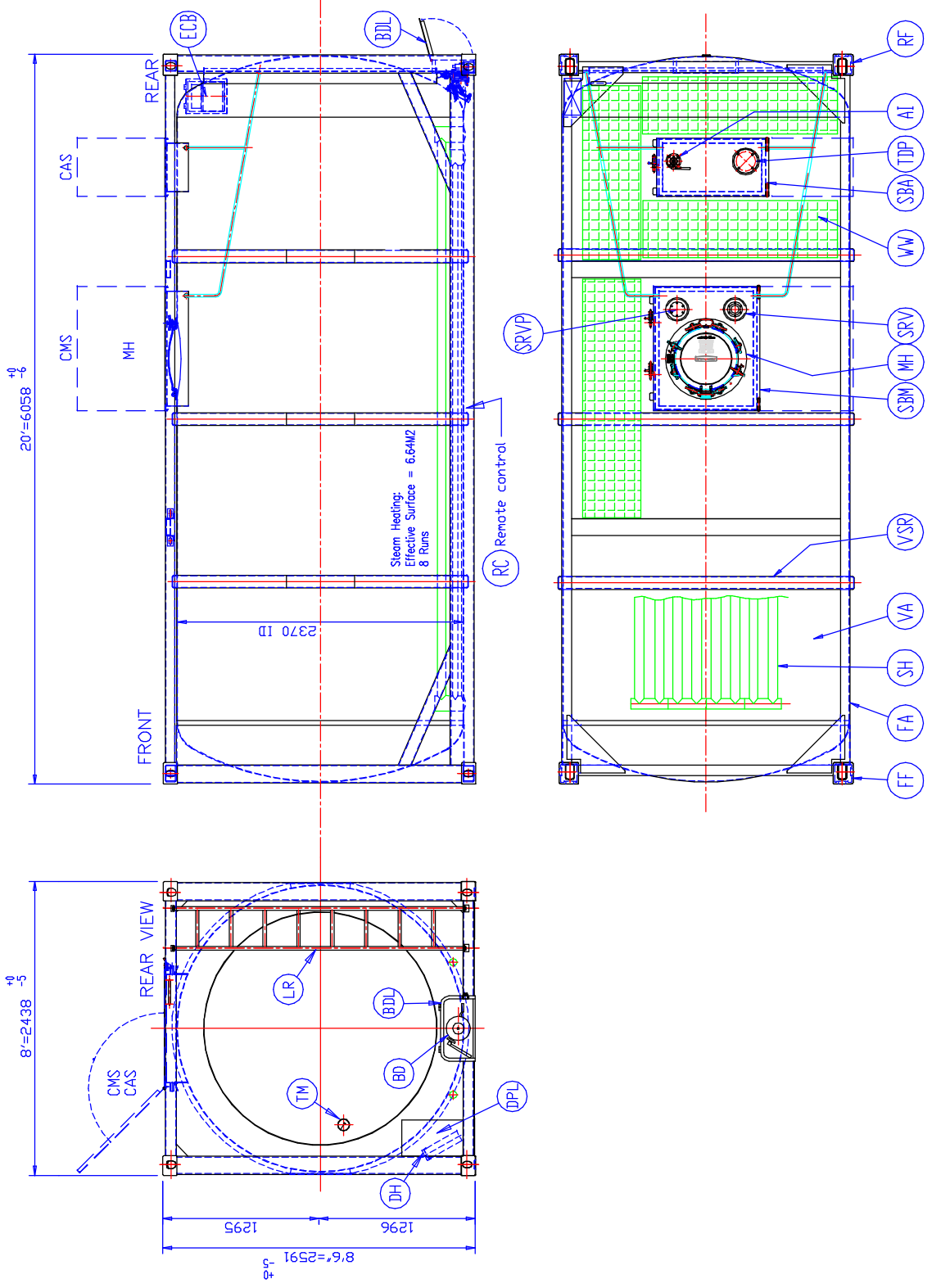
PART:	MATERIAL:	PART NUMBER:
Barrel	DIN 17441 W1.4401	VA25FCOL8_1
Dished ends	DIN 17441 W1.4401	VA25FCOL2_2
Dished end plug	ASTM A240 Gr. 316	STF 705601
Tankpads	ASTM A240 Gr. 316L	-
Blind flanges	ASTM A240 Gr. 316L	-
Air inlet valve	ASTM A240 Gr. 316L	530/0000
Safety relief valve	AISI 316L	010/16300
Manhole	AISI 316L	EUB/7401118P
Bottom outlet butterfly valve	AISI 316L	368/7000B
Bottom outlet footvalve	ASTM A240 Gr. 316L	848/1000A
Bottom outlet flanged adapter	ASTM A240 Gr. 316L	STF 700601
Bottom outlet threaded cap	ASTM A240 Gr. 316L	STF 700901

IV. PARTS LIST AND DRAWINGS

GA – GENERAL ARRANGEMENT

FA	FRAME ASSEMBLY
FF	FRONT FRAME ASSEMBLY
RF	REAR FRAME ASSMEBLY
VA	VESSEL ASSEMBLY
SH	STEAM HEATING
VSR	VACUUM STIFFENER RINGS
SBM	SPILL BOX MANHOLE
SBA	SPILL BOX ACCESSORIES
MH	MANHOLE
SRV	SAFETY RELIEF VALVE
WW	WALKWAY ASSEMBLY
AI	AIR INLET VALVE
TDP	TOP DISCHARGE PROVISION
DPL	DATAPLATE
DH	DOCUMENT HOLDER
BD	BOTTOM DISCHARGE
TM	THERMOMETER
LR	LADDER ASSEMBLY
ECB	ELECTRICAL CONTROL BOX
RC	REMOTE CONTROL
SRVP	SAFETY RELEIF VALVE PROVISION
BDL	BOTTOM DISCHARGE LID
CMS	COVER FOR MANHOLE SPILLBOX
CAS	COVER FOR ACCESSORIES SPILLBOX

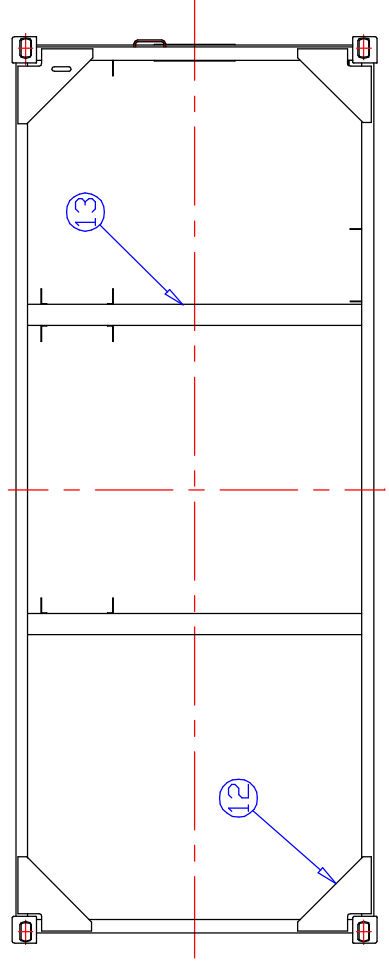
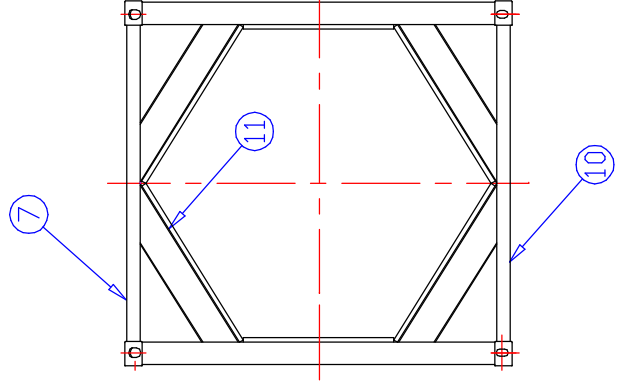
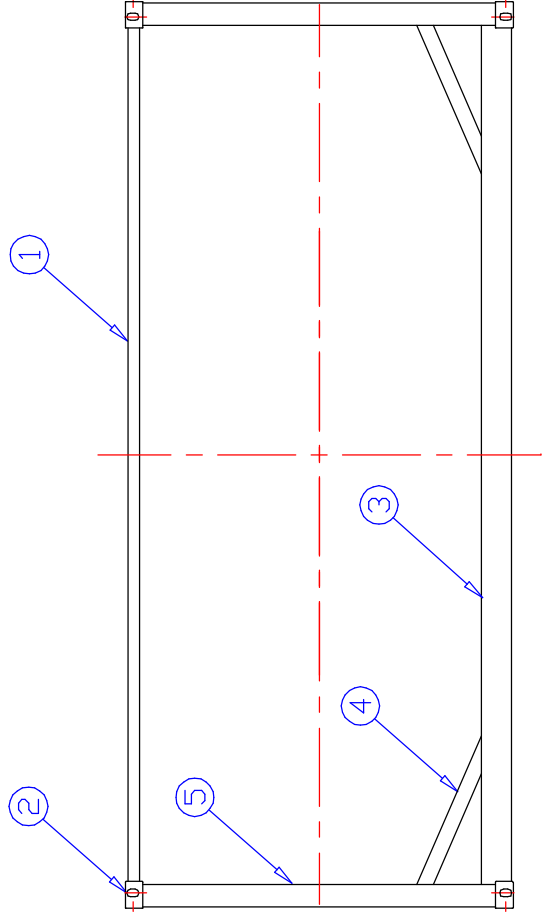
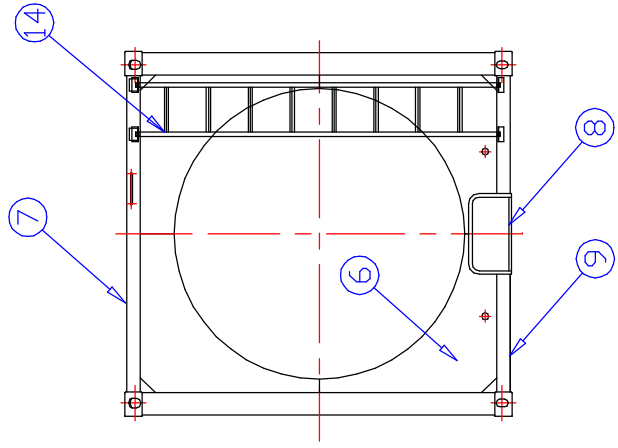
General Arrangement



FA – FRAME ASSEMBLY

No	Description	Size	Material
1	Top longitudinal	80 x 80 x 3.2mm	EN10210-1 S355J2H
2	Corner casting	STD ISO 1161	Cast Steel
3	Bottom Longitudinal	200 x 100 x 5mm	EN10210-1 S355J2H
4	Side diagonals	100 x 100 x 5mm	EN10210-1 S355J2H
5	Corner posts	150 x 150 x 6mm	EN10210-1 S355J2H
6	Rear end plate	6 mm plate	BS4360 Gr. 50 D or eqv.
7	Top cross members	90 x 90 x 5mm	EN10210-1 S355J2H
8	Sill plate	140 x 16mm	BS4360 Gr. 50 D or eqv.
9	Bottom cross member, Rear	90 x 90 x 5mm	EN10210-1 S355J2H
10	Bottom cross member, Front	90 x 90 x 5mm	EN10210-1 S355J2H
11	Front frame diagonals	215 x 65 x 6mm	BS4360 Gr. 50 D or eqv.
12	Corner protection spreader	500 x 500 x 6mm	BS4360 Gr. 50 D or eqv.
13	Upper cross members	140 x 40 x 3.2mm	EN10210-1 S355J2H
14	Ladder - Frame	32 x 32 x 2.5mm	Mild Steel
	- Rungs	300 x 73 x 2mm	AISI 304

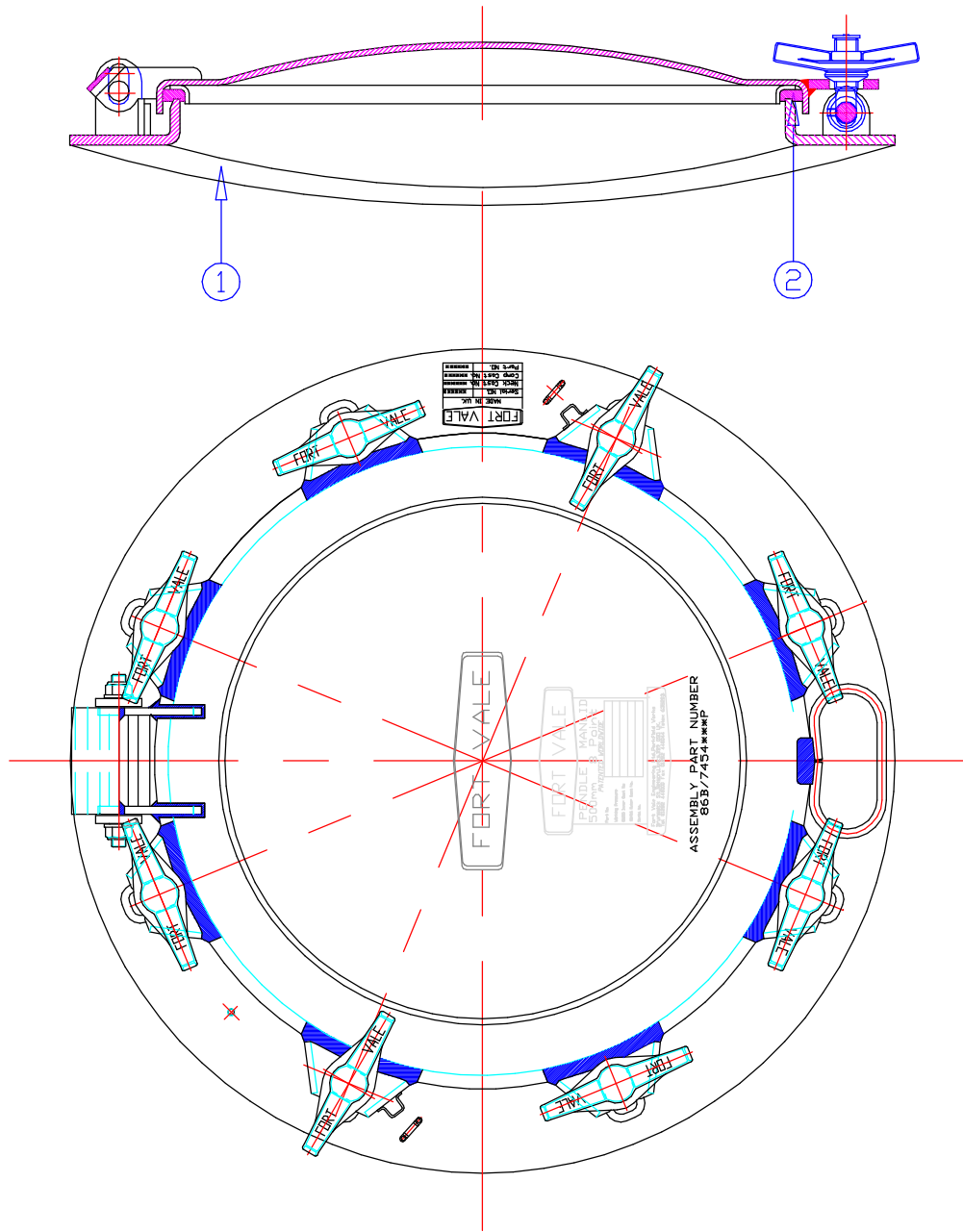
Frame Assembly



MH – MANHOLE

No.	Description	Supplier	Part Number
1	500MM Low Profile Manlid neck-ring radius 1180mm	Fort Vale	EUB/7401118P
2	Manlid Seal	Wright Seal & Plastics	STZS 14141625

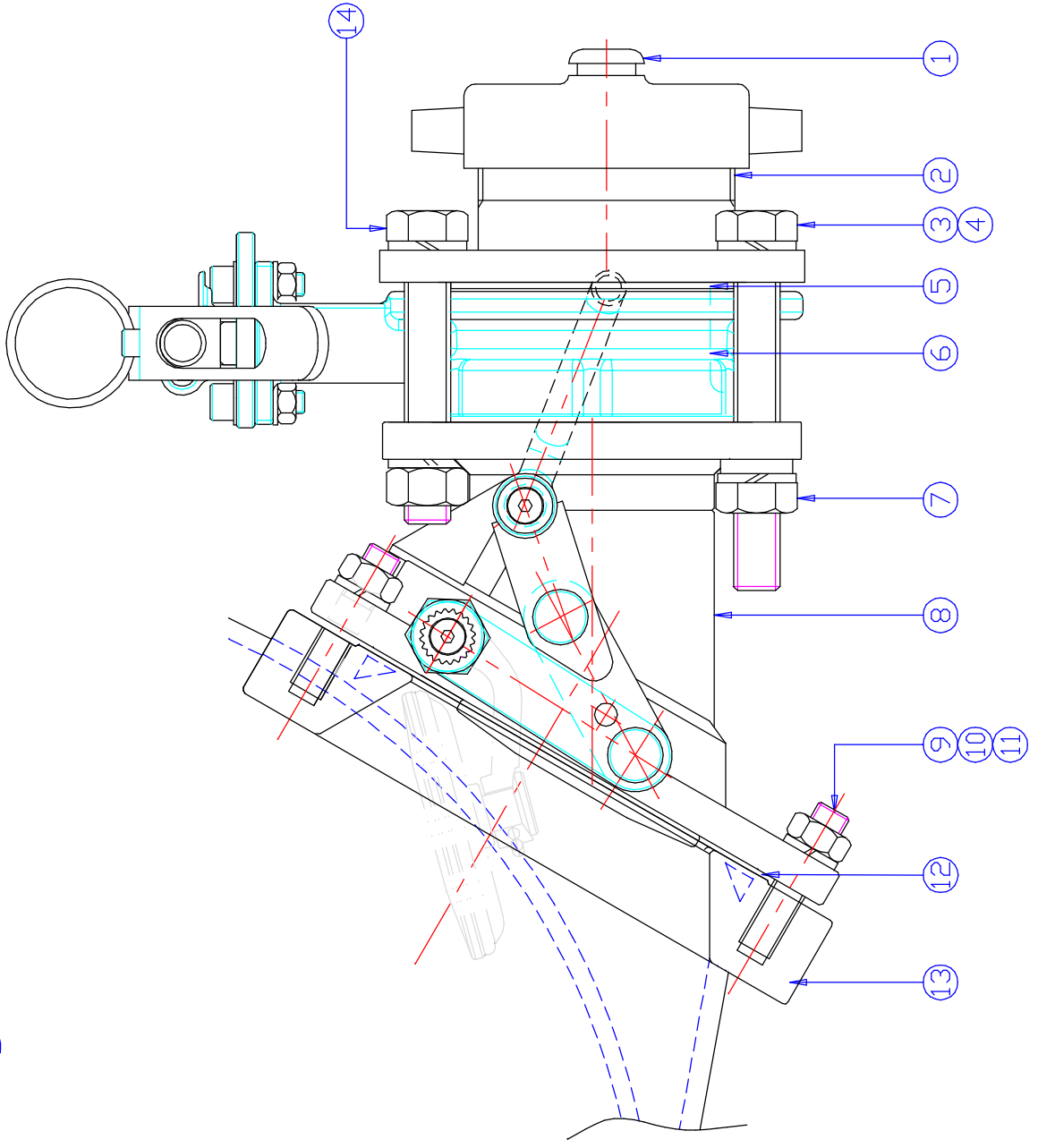
Manhole



BD – BOTTOM DISCHARGE

No.	Description	Supplier	Part Number
1	Cap with PTFE gasket	Swift	STF 700901
2	Flanged Adaptor	Swift	STF 700601
3	Bolt St/St M16 x 120lg	-	-
4	Spring washer St/St M16	-	-
5	Gasket PTFE	Gasket & Shim Industries	BD-210-002
6	Butterfly valve	Fort Vale	368/7000B
7	Nut St/St M16	-	-
8	Foot Valve	Fort Vale	848/1000A
9	Stud St/St M12 X 55 lg.	-	-
10	Nut St/St M12	-	-
11	Spring washer St/St M12	-	-
12	Gasket Klinger Silicon	Gasket & Shim Industries	BD-210-005
13	Weld in Flange	Swift	BD-200-015
14	Bolt St/St M16 x 100lg	-	-

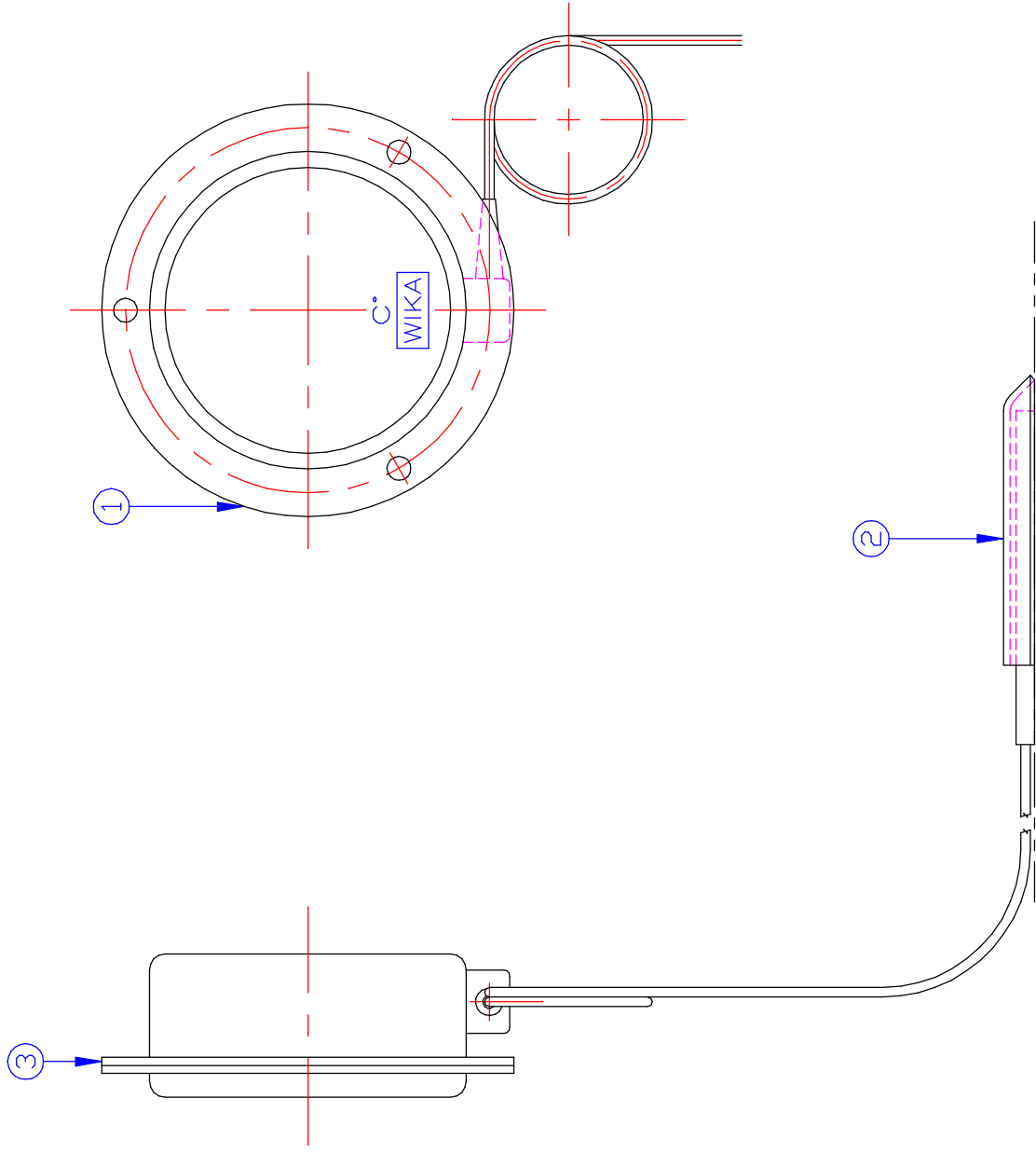
Bottom Discharge



TM – THERMOMETER

No	Description	Supplier	Part Number
1	Thermometer	Wika	K1V7132180TR003
2	Pocket plate on dished end	-	TA-040-001
3	Gasket	Gasket & Shim Industries	TA-210-001

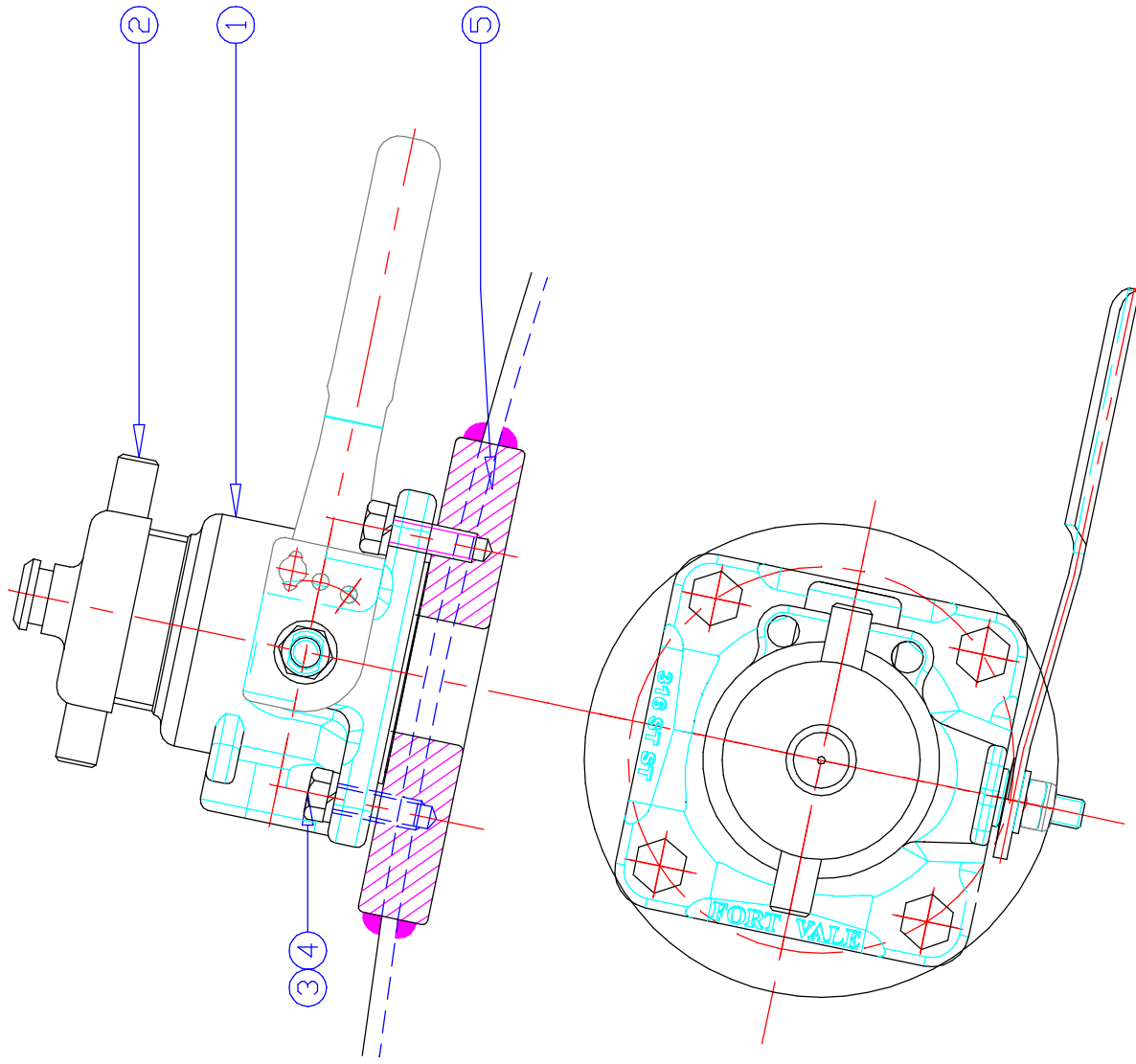
Wika Thermometer



AI – AIRLINE VALVE

No	Description	Supplier	Part Number
1	1.5" Ball Valve	Fort Vale	530/0000
2	End Cap with Chain	Fort Vale	10300PS
3	Bolt St/St M10x25 lg.	-	-
4	Spring Washer St/St M10	-	-
5	Weld in Flange	Swift	STF 7015-01

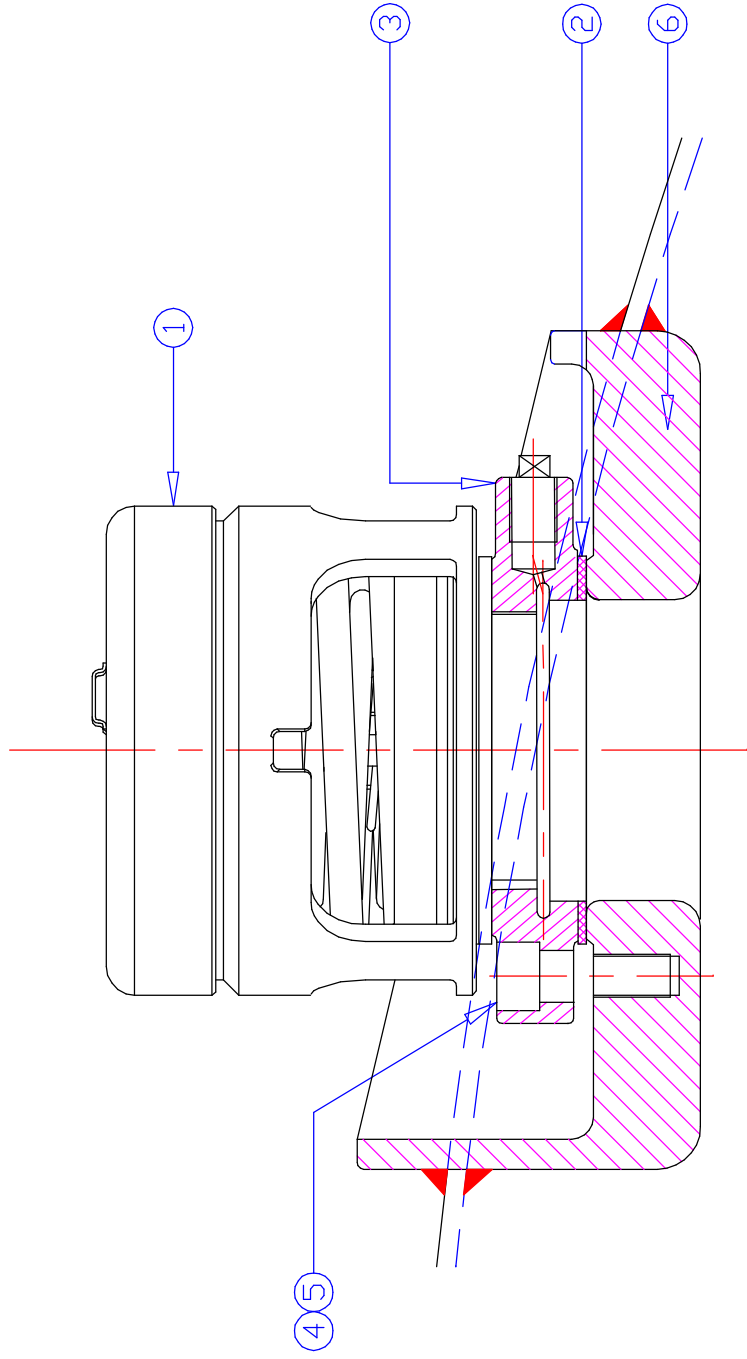
Airline Valve



SRV – SAFETY RELIEF VALVE

No.	Description	Supplier	Part Number
1	'MK III Super Maxi	Fort Vale	010/16300
2	Gasket, solid PTFE	Gasket & Shim Industries	MH-210-005
3	Adaptor Flange	Swift	STF 7008-01
4	Cap Screw St/St M10x20	-	-
5	Spring Washer St/St M10 (Square section)	-	-
6	Weld in Flange	Swift	STF 7057-01

Safety Relief Valve



SI/O – STEAM HEATING INLET AND OUTLET

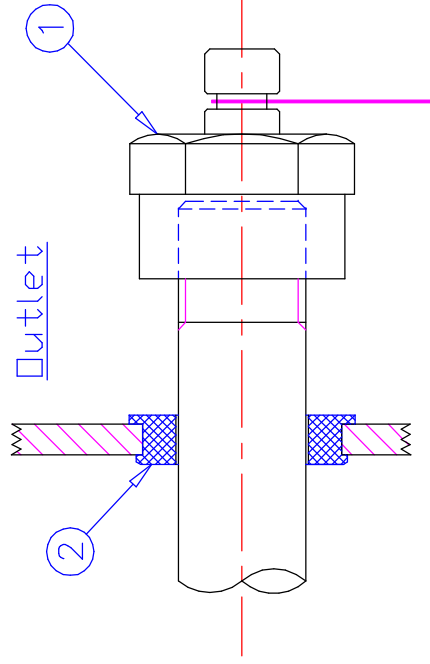
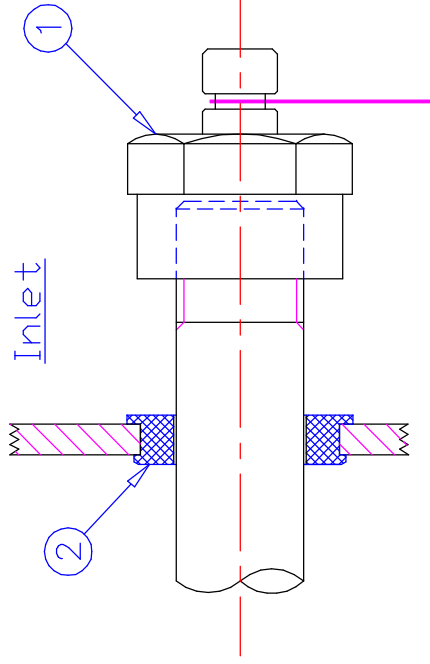
STEAM INLET $\frac{3}{4}$ ”

No	Description	Supplier	Part Number
1	PVC End Cap	Faph Engineering	SH-080-005
2	Grommet Silicon	Rubber Products & Mouldings	DP-310-012

STEAM OUTLET $\frac{3}{4}$ ”

No	Description	Supplier	Part Number
1	PVC End Cap	Faph Engineering	SH-080-005
2	Grommet Silicon	Rubber Products & Mouldings	DP-310-012

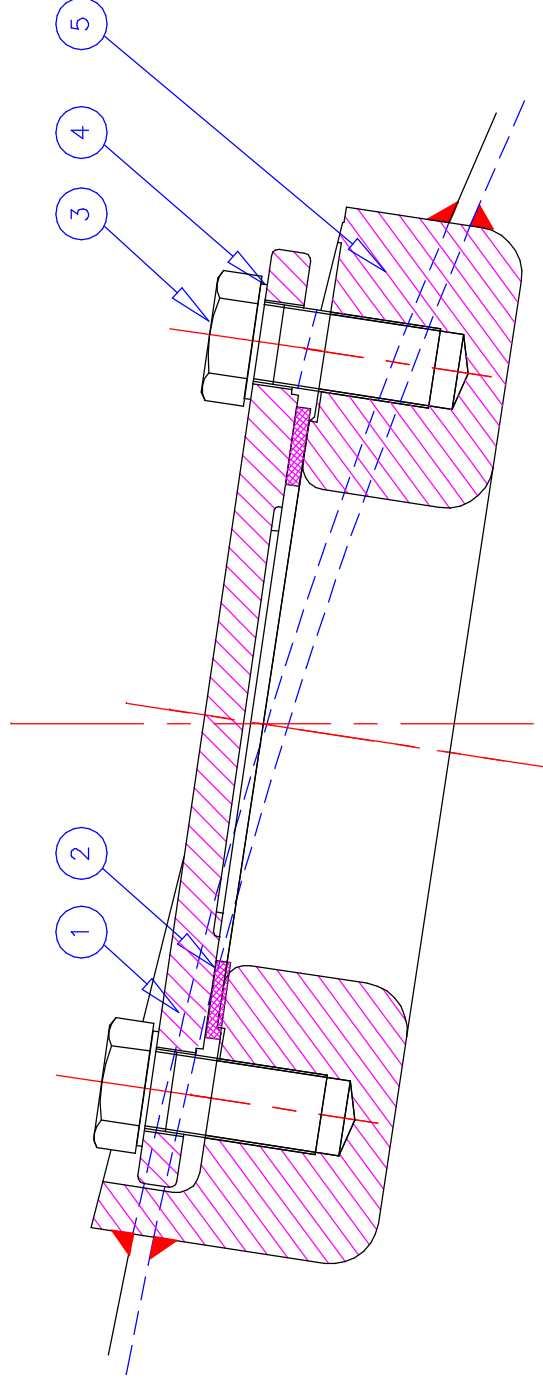
Steam Inlet and Outlet



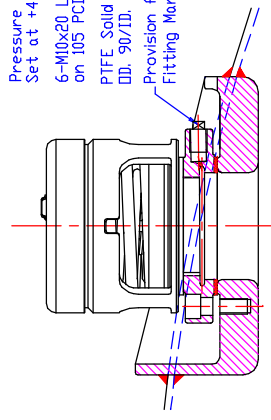
TDP - TOP DISCHARGE PROVISION

No	Description	Supplier	Part Number
1	Blank Flange	Swift	STF 701401
2	Gasket TDP Envelope	Gasket & Shim Industries	TD-210-001
3	Bolt St/St M16x30 lg.	-	-
4	Spring Washer St/St M16	-	-
5	Weld in Flange	Swift	TD-200-025

Top Discharge Provision

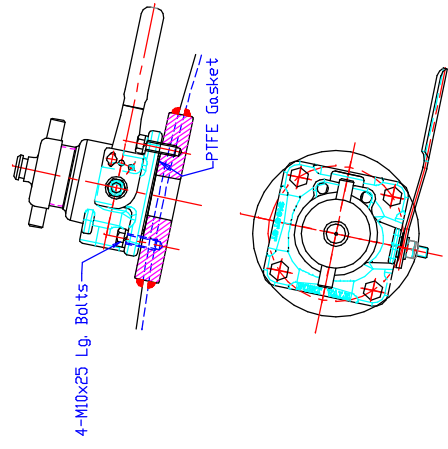


SRV 2 1/2" BSP MK III Super Maxi
FORT VALE Part No. 010/16300



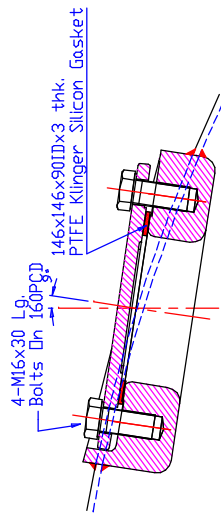
Pressure Only
Set at +4,4 Bar
6-M10x20 Lg. Cap Screws
on 105 PCD.
PTFE Solid Gasket
ID: 90/ID: 66 x 2 Thk.
Provision for
Fitting Manometer

AI SINGLE 1 1/2" BSP. AIR INLET
FORT VALE Part No. 530/0000



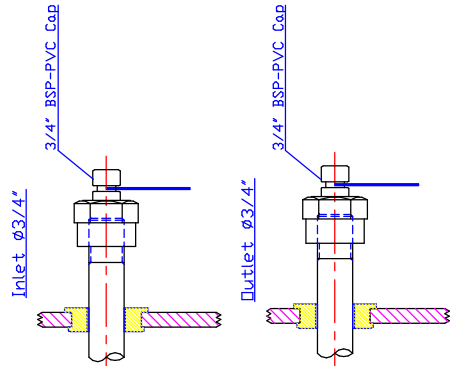
4-M10x25 Lg. Bolts
PTFE Gasket

TDP TOP DISCHARGE PROVISION
DN 80 - 3"



4-M16x20 Lg. Bolts on 100PCD
146x146x90IDx3 thk.
PTFE Klingner Silicon Gasket

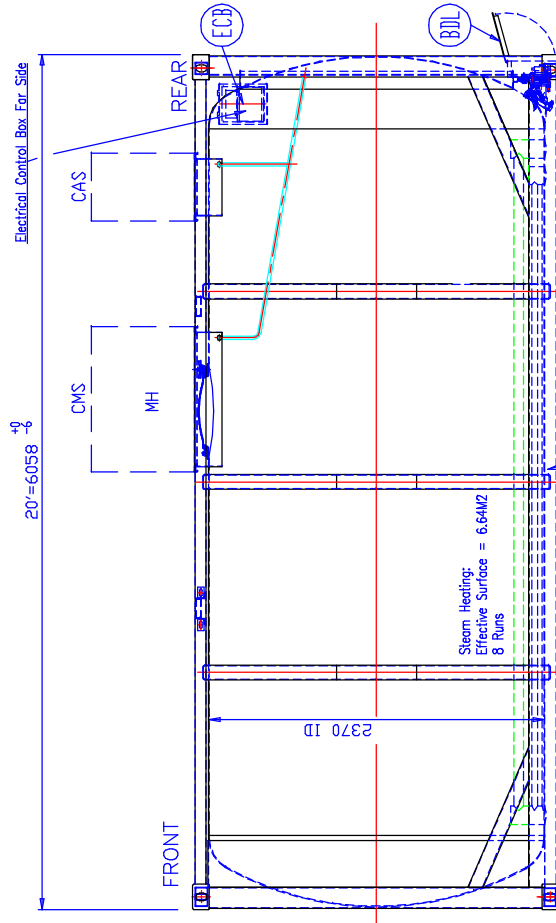
SH STEAM HEATING IN AND OUT



Inlet: Ø3/4"

Outlet: Ø3/4"

NOTE:
15 KV (NDM) TANK ELECTRICAL
HEATING SYSTEM
Electrical Control Box For Side



20'-6058 ±0

8'-2438 ±5

FRONT REAR

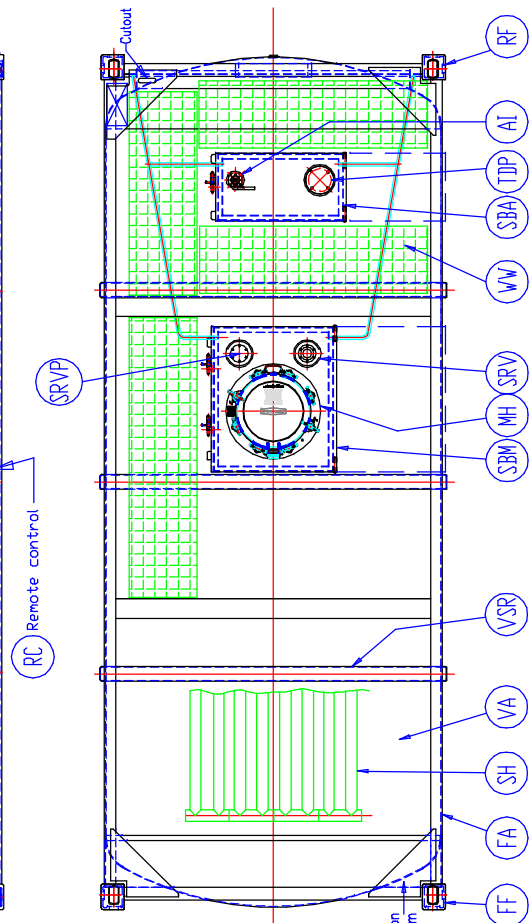
CAS CMS MH

2370 ID

Remote control

SRVP

Steam Heating:
Effective Surface = 6.64M2
8 Runs



8'-2438 ±5

1296

REAR VIEW

CMS CAS

135°

LR TM

BD BDL

DPL

Manufacturer Serial No.
Hard Stamped

Steam inlet 3/4"

Steam outlet 3/4"

Owner Serial No.
Hard Stamped

Spreader Protection
Top and Bottom

FF FA SH VA VSR

SBM MH SRV

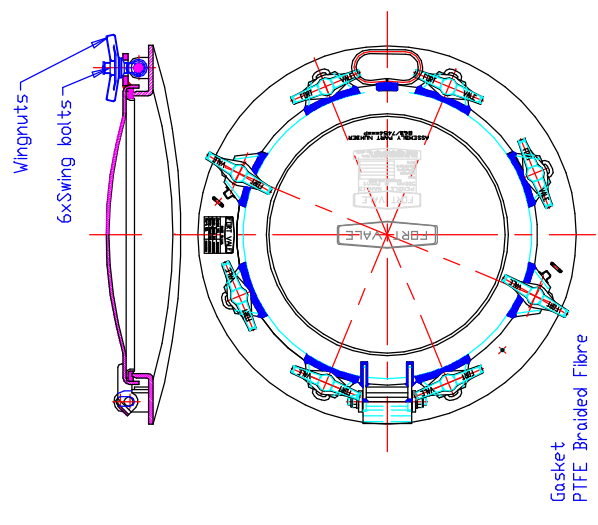
WV SBA TDP AL

RF

Shell
MDMT
Nom. Order 4,132mm Thk.
4,5mm Thk.

Dished Ends
MDMT Knuckle 4,132mm Thk.
MDMT Crown 4,695mm Thk.
Nom. Order 5,8mm Thk.

MH MANHOLE I.D. 500 Nom.
Fort Vale Part No. 8PB/7401.118 P
Opening to Front of Container



Wingnuts

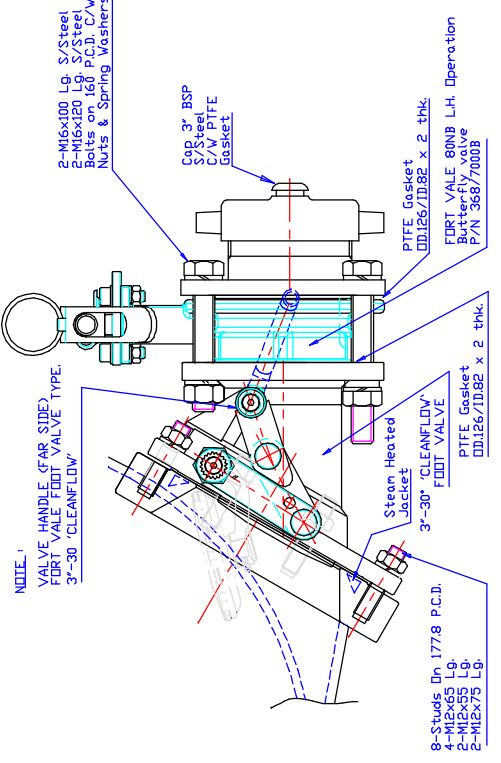
6xSwing bolts

Gasket
PTFE Braided Fibre

BD BOTTOM DISCHARGE

Foot Valve 30° 80NB-3" Cleanflow
FORT VALE Part No. 848/1000A

Butterfly Valve 3" Left Hand Operation
FORT VALE Part No. 368/7000B



NOTE:
VALVE HANDLE (FAR SIDE)
FORT VALE FOOT VALVE TYPE
3"-30° CLEANFLOW

2-M16x20 Lg. S/Steel
Bolts on 100 P.C.D. C/V
Nuts & Spring Washers

Cap 3" BSP
C/V PTFE
Gasket

PTFE Gasket
DB126/ID86 x 2 thk.
FORT VALE 80NB L.H. Operation
Butterfly valve
P/N 368/7000B

PTFE Gasket
DB126/ID82 x 2 thk.

6-Std. Dn. 1778 P.C.D.
6-M16x25 Lg.
2-M12x75 Lg.
2-M12x75 Lg.

GA	1	GENERAL ASSEMBLY	-
FA	1	FRAME ASSEMBLY	-
RF	1	REAR FRAME ASSEMBLY	S365/PH
FF	1	FRONT FRAME ASSEMBLY	S365/PH
DH	1	DOCUMENT HOLDER	S/STEEL
DPL	1	DATA PLATE	316L
WV	1	WALKWAY ASSEMBLY	AL 5042-0
LR	1	LADDER ASSEMBLY	M40H-C-C-03X
VA	1	VESSEL ASSEMBLY	-
VSR	3	VACUUM STIFFENER RINGS	304
TM	1	THERMOMETER ASSEMBLY	-
SH	1	STEAM HEATING	304
BD	1	BOTTOM DISCHARGE	-
MH	1	MANHOLE	-
SRV	1	SAFETY RELIEF VALVE PLUS PROVISION FOR SECOND SRV	-
SBM	1	SPILLBOX FOR MANHOLE	316L
SBA	1	SPILLBOX FOR ACCESSORIES	316L
TDP	1	TOP DISCHARGE PROVISION	-
AI	1	AIR INLET VALVE	-
BDL	1	BOTTOM OUTLET LID	316L
CAS	1	COVER FOR MANHOLE SPILLBOX	316L
CMS	1	COVER FOR ACCESSORIES SPILLBOX	316L
ECB	1	ELECTRICAL CONTROL BOX	-
Ref Qty		Description	Material

Parts List

Pickling and Passivation	Tank Internal : Yes Tank External : Welds + Heat marks Spillboxes : Yes
Paint	Primer : Zinc Rich 30 µm Mn Intermediate : Zinc Phosphate 40 µm Mn Coat : CTC Free Chlorinated Rubber 50 µm Mn
Colour	Total DFT : 120 µm Mn RAL No. : 5013 Description : Cobalt Blue Glass : Matt
Insulation	Mineral Wool : 30mm (min 55 kg/m³) Polysocyanurate : 20mm (min 32 kg/m³)
Cladding	Aluminum Grade Alloy 5052 H44 0.8mm Thk. Pre-Painted White Aluminum(RAL9010)
Max gross weight	36000 Kg.
Tare weight	3960 Kg. ±3%
Capacity	25000 L -0.75±0.75%
Liquid density	<1.2816
Products (Operator Responsibility to Check Compatibility)	Class: 3, 6, 1, 8 & 9
DESIGN	Pressure : 4/-0.4 Bar Max. Product Temperature : 130°C
WORKING	Max Allowable Working Pressure : 4/-0.4 Bar Temperature : 130°C
TEST	Steam Heating : 7 Bar Hydrostatic pressure : 6 Bar Air Leakage : 1 Bar Steam Heating : 10.5 Bar
Inspection	Bureau Veritas
Design Code	ASME VIII div.1
Joint Efficiency	0.85 to 1
Corrosion Allowance	0.25mm
Radiography (UMS1/UMS2)	Shell : Spot Dished Ends : 100%
Heat Treatment	No
Stacking Load	86400 Kg./Corner Post
Welding Specifications	ASME IX
Consolidated Data Plate	Yes
Calibration	Every cm up to 85cm Calibration Below 85cm in 1000L increments
Supply of dipstick	No
UN Portable Tank Instruction	T11
APPROVAL: TIR-RIQ/ADR-CSC-USDOT-IMDG(Via US DOT)-UIC(U70)-AAR600-TC	

General Requirements	APPROVAL: TIR-RIQ/ADR-CSC-USDOT-IMDG(Via US DOT)-UIC(U70)-AAR600-TC
Design Code	ASME VIII div.1
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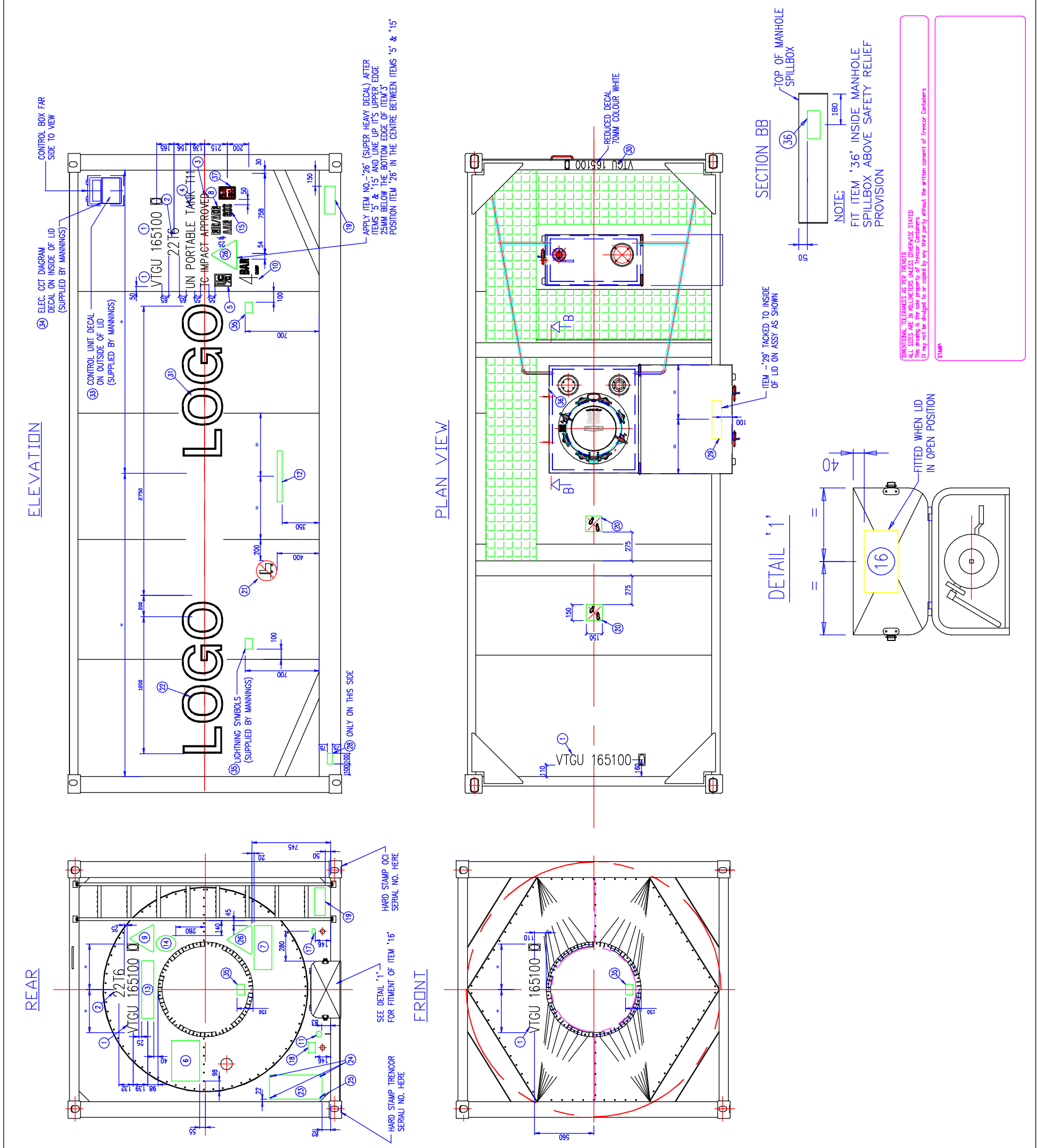
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Supply of dipstick	No
UN Portable Tank Instruction	T11
APPROVAL: TIR-RIQ/ADR-CSC-USDOT-IMDG(Via US DOT)-UIC(U70)-AAR600-TC	

TRENCOR CONTAINERS Contract

25000 L TYPE: 25FSTD
GENERAL ASSEMBLY

CLIENT: DCL / VOITG Drawing: GA25FITL-013 Contract No: ITL-013

37	DE-164-036	2	Decal Height 8'6"
36	-	1	Decal 2nd SRV Manager Approval
35	-	6	Mannings Lighting Symbols
34	-	1	Mannings Electrical CCT Decal
33	-	1	Mannings Control Unit Decal
32	-	-	-
31	DE-166-077	2	TANKTAINER Side Logo
30	-	1	Operator Code & Serial Number 70mm
29	WH-320-007	1	Calibration Plate 25000L
28	-	1	BSLT Decal
27	-	-	-
26	DE-164-009	3	Decal UIC SUPER HEAVY
25	IN-340-015	1	Mono Bolt 6.4mm 2711-0824
24	IN-340-022	3	Rivet 4.8mm x 19mm
23	DA-320-077	1	Data Plate ITL-013
22	DE-166-076	2	VOTG Side Logo
21	DE-164-002	2	Decal No Forklift
20	DE-164-073	2	Decal No Walking (150x150 SQ.)
19	DE-164-060	3	Decal Trenchor
18	-	1	Decal Steam Pressure 7 Bar Inlet
17	DE-164-005	1	Decal Steam Outlet
16	DE-164-006	1	Decal Foot Valve Warning
15	DE-164-013	2	Decal AAR600
14	-	1	Decal Classification Bureau Veritas (Free Issue)
13	-	1	Decal Nominal Capacity (25 000 l / 6604 US gal)
12	DE-164-001	1	Decal Remote Control
11	DE-164-007	1	Decal Earthing
10	DE-164-014	2	Decal Working Pressure 4 Bar MAMP
9	DE-164-008	1	Decal Warning Overhead Electrical Cables
8	DE-164-011	2	Decal RID/ADR
7	DE-164-023	1	Decal MAGW For UIC Rail 34000Kg
6	-	1	Decal Tare TBA & MGW 36000kg
5	DE-164-010	2	Decal UIC IC-70
4	DE-164-074	2	Decal UN Portable Tank T11
3	DE-164-015	2	Decal TC Impact Approved
2	-	3	Decal Size & Type Code 22T6
1	-	5	Operator Code & Serial Number 100mm
No	Item No	Qty	DESCRIPTION
REVISIONS	d	15/07/20	Item '19' Steam Heating Inlet Changed to 7 BAR Was 4 BAR
	c	15/07/20	Item '1' UN Portable Tank Added & Item '3' RID/ADR Moved
	b	08/07/20	Customer Size Logos Addition '2' & Item '3'
	a	25/06/20	First Issue
	Revision	Date	DESCRIPTION
			Drawn
			Checked
			Approved
			DATE



INTENTIONAL TELEMARKS AS PER REQUEST
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 IT MAY NOT BE REPRODUCED OR COPIED BY ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF TRENCOR CONTAINERS

STAMP

TRENCOR CONTAINERS

Marking Drawing ITL-013

DE-405-054

CLIENT: OCI

Drawing: MD25FITL-013

478

231

STAMP



OWNER:
OCEAN CONTAINER INVESTMENTS
ST. JAMES HOUSE,
20 GEORGIAN CRESCENT
BRYANSTON EAST 2152
REPUBLIC OF SOUTH AFRICA

OPERATOR:
VOTG TANKTAINER GmbH
HAMMERBROOKSTRASSE 5
D20097 HAMBURG
GERMANY

**APPROVED FOR TRANSPORT
UNDER CUSTOMS SEAL**

GB/C 4501 BV/1999

MODEL CODE 25FSTD **MANUFACTURER'S NUMBER** 20/2

CSC SAFETY APPROVAL

DATE MANUFACTURED	F/BV/8039/02		/2002
IDENTIFICATION NUMBER			20/2
MAXIMUM GROSS WEIGHT	36 000 kg	79 366 lb	
ALLOWABLE STACKING WEIGHT 1.8g	192 000 kg	423 283 lb	
RACKING TEST VALUE	15 240 kg	33 598 lb	
NEXT EXAMINATION DATE	/2007		

OWNER'S SERIAL NUMBER VTGU 1651
MANUFACTURER'S SERIAL NUMBER 20/2 **MANUF. MODEL CODE:** 25FSTD
YEAR OF MANUFACTURE / 2002
DESIGN CODE ASME SECTION VIII, DIV. 1

UN PORTABLE TANK
 "AA" ALTERNATE ARRANGEMENTS
COUNTRY OF MANUFACTURE / APPROVAL SOUTH AFRICA / FRANCE
CLASSIFICATION SOCIETY BUREAU VERITAS
CLASS. SOCIETY TYPE APPROVAL NO. BVCT / 0270107 / J
US / DOT APPROVAL NUMBER US / BV / 107 / 81 / 06
IMO CERTIFICATION NUMBER BVCT 0270100 / J
RID / ADR NUMBER F / 5223 / BV / 02
UIC APPROVAL RAILWAYS CODE Ic / 70
TRANSPORT CANADA APPROVAL TC IMPACT APPROVED
OTHER APPROVALS AAR 600, CSC, TIR, US DOT
TANK SHELL MATERIAL DIN 17441 W 1.4401; C<0.03%; ASTM A240, TCG 316L
TANK DISHED END MATERIAL DIN 17441 W 1.4401; C<0.03%; ASTM A240, TCG 316L
TANK M.A.W.P. 4 bar 58 p.s.i.
TANK TEST PRESSURE 6 bar 87 p.s.i.
TANK EXTERNAL DESIGN PRESSURE 0.4 bar 5.8 p.s.i.
TOTAL WATER CAPACITY AT 20°C / 68°F 25000 litre + 0.75 % - 0.75 % 6604 US gallon
AMBIENT TEMPERATURE RANGE - 40 °C TO + 65 °C - 40 °F TO + 149 °F
MAXIMUM LOADING TEMPERATURE 130 °C 266 °F
APPROVED PRODUCTS OF CLASSES 3, 6.1, 8, AND 9

OPERATORS RESPONSIBILITY TO CHECK BEFORE LOADING

MAXIMUM GROSS WEIGHT 36000 kg 79366 lb
MAXIMUM PAYLOAD 32040 kg 70636 lb
TARE WEIGHT 3960 kg 8730 lb

EQUIVALENT THICKNESS IN REFERENCE STEEL:
U.S DOT [CFR 49] / IMDG / RID / ADR 6.00 mm 0.236 in
VESSEL MINIMUM DESIGN THICKNESS 4.132 mm / 4.695 mm 0.162 in / 0.185 in
CORROSION ALLOWANCE 0.25 mm 0.0098 in

DATE OF INITIAL HYDRAULIC TEST AND AUTHORITY / 2002
DATE OF LAST PERIODICAL INSPECTION AND AUTHORITY
 / 2007

DIMENSIONAL TOLERANCES AS PER TRENCO
 ALL SIZES ARE IN MILLIMETERS UNLESS OTHERWISE STATED
 This drawing is the sole property of Trencor Containers
 It may not be divulged to or copied by any third party without the written consent of Trencor Containers

1	-	1	478x231x1.6	316L or Eqv.	
No	Item No.	Qty	DESCRIPTION	MATERIAL	
REVISIONS	C	01.07.02	MDMT Updated & New Prototype References Used	BC	
	D	26.06.02	ISAM No Updated Vos ***-083	BC	
	Q	21.06.02	First Issue	ABH	
Revision	Date	DESCRIPTION	Drawn	Checked	Approved

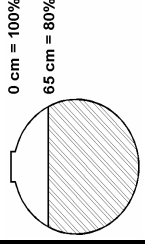


Data Plate ITL-013-25000
 DA-320-077

CLIENT/OWNER: Drawing: DPL25FITL-013

c
b
a

SERIAL NUMBER:										ACTUAL CAPACITY:										LITRES						US GALLON					
LEVEL cm	CAPACITY		LEVEL cm	CAPACITY		LEVEL cm	CAPACITY		LEVEL cm	CAPACITY		LEVEL cm	CAPACITY		LEVEL cm	CAPACITY		LEVEL cm	CAPACITY		LEVEL cm	CAPACITY		LEVEL cm	CAPACITY		LEVEL cm	CAPACITY			
	litre	US gal		litre	US gal		litre	US gal		litre	US gal		litre	US gal		litre	US gal		litre	US gal		litre	US gal		litre	US gal		litre	US gal	litre	US gal
0	25037	6614	18	24380	6441	32	23321	6161	46	21992	5810	60	20461	5405	74	18781	4961	89	16990	4488	179	5056	1336								
5	24991	6602	19	24316	6424	33	23234	6138	47	21888	5782	61	20346	5375	75	18656	4928	96	16063	4243	188	4022	1062								
6	24964	6595	20	24249	6406	34	23146	6115	48	21785	5755	62	20230	5344	76	18531	4895	104	14988	3959	198	2954	780								
7	24931	6586	21	24181	6388	35	23056	6091	49	21679	5727	63	20113	5313	77	18405	4862	111	14035	3708	208	1990	526								
8	24896	6577	22	24111	6369	36	22965	6067	50	21572	5699	64	19995	5282	78	18279	4829	118	13076	3454	220	1004	265								
9	24857	6567	23	24039	6350	37	22873	6042	51	21465	5670	65	19876	5251	79	18152	4795	126	11978	3164											
10	24815	6555	24	23966	6331	38	22780	6018	52	21357	5642	66	19757	5219	80	18025	4762	133	11002	2906											
11	24769	6543	25	23891	6311	39	22685	5993	53	21248	5613	67	19637	5188	81	17897	4728	140	10066	2659											
12	24721	6531	26	23814	6291	40	22589	5967	54	21138	5584	68	19517	5156	82	17765	4693	148	8990	2375											
13	24670	6517	27	23736	6270	41	22492	5942	55	21028	5555	69	19396	5124	83	17640	4660	155	8064	2130											
14	24617	6503	28	23656	6249	42	22394	5916	56	20916	5525	70	19274	5092	84	17511	4626	163	7028	1857											
15	24561	6488	29	23574	6228	43	22295	5890	57	20804	5496	71	19151	5059	85	17381	4592	171	6023	1591											
16	24503	6473	30	23491	6206	44	22195	5863	58	20690	5466	72	19029	5027																	
17	24442	6457	31	23407	6183	45	22094	5837	59	20576	5436	73	18905	4994																	



GENERIC CHART - FOR ACTUAL READING REFER TO THIS TANKS SPECIFIC CHART

1	1	Plate 1.6mm 90 x 360	316 or EQV
No	QTY	DESCRIPTION	MATERIAL
d	#####	Value revised	BC
c	30/11/00	Value revised	
b	23/11/00	Vessel geometry update	
Rev	Date	Revision Description	Drawn Approved
		DRG. NO.	
		VA25FSTD_104	



Calibration Plate 25000 CR MH-320-007

TANK CONTAINERS
PO BOX 19013
TYGERBERG
7505
TELEPHONE (021) 959 5900
FAX (021) 959 5909

Wednesday, June 26, 2002

TO WHOM IT MAY CONCERN

Tank Container Contract:
ITL-013

Compatibility Approval

This is to confirm that the materials used for the manufacture of all of the following items, i.e. piping, valves, gaskets and valve seats, incorporated in the above tank container are compatible with the products to be carried under normal operating conditions.

The products are listed on page one of the FT117 data sheet.

Yours Faithfully

MALCOLM ELSTON





**BUREAU
VERITAS**

**CENTRE TECHNIQUE TRANSPORT
TRANSPORT TECHNICAL CENTRE**

**RAPPORT D'EXAMEN DE DOCUMENTS TECHNIQUES CONCERNANT LE CONTROLE DE
CITERNES MOBILES**

**EXAMINATION REPORT OF TECHNICAL DOCUMENTS FOR INSPECTION OF PORTABLE
TANKS**

TYPE UN Portable Tank/ T11

Constructeur / Manufacturer	TRENCOR CONTAINERS CAPE TOWN SOUTH AFRICA
Propriétaire / Owner	OCI / OCEAN CONTAINER INVESTMENTS JOHANNESBURG SOUTH AFRICA
Immatriculation / Registration Nr N° de série / Serial Nr	VTGU 165150 à/to VTGU 165169 20-2081 à/to 20-2100
Quantité / Quantity Modèle / Model	20 25F-STD
Dimensions / Dimensions M.B.M.A. / M.A.G.W. Capacité / Capacity Tare / Tare weight	6058 mm x 2438 mm x 2591 mm 36000 kg 79366 lb 25000 l 6604 US gal 3910 kg 8620 lb

A la demande de / *At the request of* : TRENCOR CONTAINERS
Par lettre/ *By letter* : du / *dated* 12/07/2002

Le dossier technique relatif à la fabrication des citernes mobiles en objet, présenté par les services concernés de cette Société et comprenant les documents cités en Annexe 1 a été examiné dans le cadre des conditions générales régissant les activités du BUREAU VERITAS, sur la base des indications figurant sur l'Instruction technique IND/IT 178.2 "Règlement pour la classification et l'inspection des conteneurs et caisses mobiles citernes" et des prescriptions réglementaires applicables et fait l'objet des observations mentionnées ci-après :

Tout ce qui n'est pas prévu dans ces documents est supposé être conforme aux règles de construction et aux prescriptions des réglementations applicables.

The technical file relating to the manufacture of the above portable tanks presented by the Company's relevant department and including the documents mentioned in Annex 1, has been examined within the general conditions governing the BUREAU VERITAS Technical Instruction IND/IT 178.2 "Rules for the classification and the survey of tank containers and swap bodies" and the applicable regulatory provisions and is subject to the following remarks :

All details not shown in these documents are assumed to be in compliance with the construction practices and within the provisions of the applicable regulations.





A – STRUCTURE

Les valeurs satisfaisantes des contraintes auxquelles sont soumises la structure extérieure, la citerne et leurs liaisons lors des opérations de transport et de manutention, ont été confirmées par les essais réalisés sur les différentes évolutions du modèle :

A – FRAME

The satisfactory stress values to which the framework, the tank and their mountings are submitted during transport and handling operations have been confirmed by the prototype tests carried out on the following portable tank :

- Modèle initial / <i>Initial Model</i>	: 26WIDE
- Rapport d'essais / <i>Test report</i>	: BVCT 0270107/J
- Modèle actuel / <i>Present model</i>	: 25F-STD
- Rapport d'essais / <i>Test report</i>	: BVCT 0270107/J

Base des essais (R) / <i>Test basis (R)</i>	: 36000 kg	79366 lb
- Charge admissible de gerbage pour 1,8 g <i>Allowable stacking weight for 1.8 g</i>	: 192000 kg	(423287 lb)
	testé à / <i>tested at</i> : 86400 kg (190479 lb)	
	par montant / <i>per post</i>	
- Rigidité transversale / <i>Racking test</i>	: 15295 kg	33720 lb
- Levage par pinces / <i>Grappler lifting</i>	: NO	
- Essai dynamique / <i>Impact test</i>	: EDC/ETS/023/1991-06 @ 36000 kg	

B – CITERNE

Nous n'avons pas d'observation à formuler sur le dimensionnement de la citerne et des éléments constituant de l'enveloppe sous pression. La conformité aux prescriptions du Code ASME VIII-1 et aux réglementations concernées a été vérifiée sur la base des paramètres et caractéristiques suivants

B – TANK

We have no comment to make about the dimensions of the tank pressure vessel components which conform with the provisions of the ASME VIII-1 Code with regard to the following values :

- Pressions de calcul / <i>Design pressures</i>	4 bar	58 psig
- ADR/RID Pressions de calcul / <i>Design pressures</i>	6 bar	87
Pression maxi de service <i>Maxi allowable working pressure</i>	4 bar	58
Pression mini de service <i>Mini allowable working pressure</i>	0.4 bar	5.8 psig
- Pression d'épreuve / <i>Test pressure</i>	6 bar	87 psig





Pour ce dernier essai, la contrainte générale de membrane dans le réservoir est inférieure à la valeur maximale admise par les réglementations concernées.

For this last test, the general membrane stress in the tank is lower than the maximum value allowed by the relevant regulations:

Température de calcul / <i>Design temperature</i>	130 °C	266	°F
Températures maxi d'utilisation <i>Maxi working Temperature</i>	130 °C	266	°F
Températures mini d'utilisation <i>Mini working Temperature</i>	-40 °C	-40	°F
Diamètre extérieur / <i>Outside diameter</i>	2379 mm	93.66	

- Matériau citerne / <i>Tank material</i>	<u>Virole / Shell</u>	<u>Fonds / Heads</u> (knuckle/ crown)
Normes / <i>Standards</i> Nuance / <i>Grade</i>	COLUMBUS TCG316L-CR	COLUMBUS TCG316L-CR
Contrôle non destructif des soudures <i>Examination of welded joints</i>	10 %	100 %
RmA pour ADR / <i>ADR RmA value</i>	30000	30000
RmA pour RID / <i>RID RmA value</i>	30000	30000
- RmA pour IMDG / <i>IMO RmA value</i>	30000	30000
RmA pour US-DOT / <i>US-DOT RmA value</i>	30000	30000
Ep. Mini calculée <i>Mini design thickness</i>	4.13 mm 0.163 "	4.695/ 4.4 mm 0.185/ 0.163 "
Ep. Nominale / <i>Nominal thickness</i>	4.5 mm 0.177 "	4.95/ 4.4 mm 0.195/ 0.173 "
Ep. Mini de construction <i>Constructional mini thickness</i>	4.13 mm 0.163 "	4.95/ 4.4 mm 0.195/ 0.173 "
- Ep.équivalente d'acier doux <i>Equivalent thickness of mild steel</i>		
	ADR: 6.39 mm 0.252 "	7.19/ 6.39 mm 0.283/ 0.252 "
	RID 6.39 mm 0.252 "	7.19/ 6.39 mm 0.283/ 0.252 "
	IMDG 6.39 mm 0.252 "	7.19/ 6.39 mm 0.283/ 0.252 "
	US-DOT: 6.39 mm 0.252 "	7.19/ 6.39 mm 0.283/ 0.252 "
Including corrosion allowance	0.25 mm	





Ces épaisseurs sont conformes aux épaisseurs minimum requises par les réglementations :

These thicknesses are in conformity with the minimum thicknesses required by the regulations :

ADR :	6	mm	0.24
RID :	6	mm	0.24
IMDG :	6	mm	0.24
US-DOT :	6	mm	0.24

C – EQUIPEMENTS

La constitution, les protections, les valeurs de réglage et le dimensionnement des équipements de vidange et de sécurité décrits ci-après sont conformes aux prescriptions des réglementations concernées :

Surface extérieure exposée
Exposed external area

48.1 m² 517.7 sqft

Protection calorifuge
Protective insulation

: 20mm Polyisocyanurate 30mm Rockwool

vidange / *discharge*

Haute Nb fermt.: 0 / *Top Nb clos.: 0*
Gravit. Nb fermt.: 3 / *Bottom Nb clos.: 3*

Dispositif(s) de sécurité / *Safety device(s)*

▪ composé(s) de / *composed of :*
1 Soupape(s) de sécurité à ressort /
spring loaded safety valve(s)

Pression de tarage / *Setting pressure*
4.4 bar 63.8 psig

Spillbox

Disposition / *Arrangement*

: N/A

Débit total en air / *Total vent capacity*

13310 m³/h 3.7 m³/s

Débit minimal réglementaire
Minimum required vent capacity

11402 m³/h 3.17 m³/s





D - CONCLUSIONS

Les citernes mobiles citées en objet sont donc conformes aux prescriptions générales applicables des réglementations suivantes :

D - CONCLUSIONS

The portable tanks referred to conform with the general prescriptions of the following regulations :

AAR600

Dossier de référence / Reference file : 0270100/J
Reglement Ferroviaire US American Railways agreement

CSC: F/BV/8039/02

Dossier de référence / Reference file : 0270107/J
Convention Securite des Conteneurs Convention for Safety of Containers

IMO: 0270100/J

Dossier de référence / Reference file : 0270100/J
Agrement Maritime International International Maritime agreement

TC IMPACT APPROVED

Dossier de référence / Reference file : 0270100/J
Agrement Transports Canada Canadian transport agreement

TIR: GB/C 4501 BV/1999

Dossier de référence / Reference file : 0270100/J
Agrement Douanes Customs agreement

UIC : IC/70

Dossier de référence / Reference file : 0270100/J
Agrement International Rail International Rail transport agreement

USDOT: US BV-107-81-06

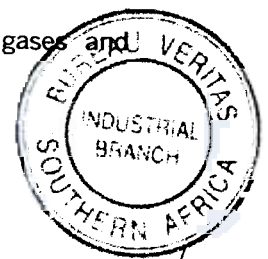
Dossier de référence / Reference file : 0270100/J
Departement Transports Etats Unis US transport authority

BV: IND-IT 178.2

Dossier de référence / Reference file : 0270100/J
Règlement pour la classification et l'inspection des conteneurs et caisses mobiles citernes' Rules for the Classification and the survey of Tank Containers and Swap Bodies

ISO 1496-3

Dossier de référence / Reference file : 0270100/J
Conteneurs-citernes pour les liquides, les gaz et les produits solides en vrac pressurisés Tank containers for liquids, gases and pressurized dry bulk





**BUREAU
VERITAS**

ADR/ RID : F/5223/BV/02
Dossier de référence / Reference file : 0270107/J

Règlement concernant le Transport international ferroviaire des Marchandises Dangereuses, édition 2001

Regulation concerning the International transportation of Dangerous goods by Rail, 2001 edition

Accord Européen relatif au transport international des marchandises Dangereuses par Route, édition 2001

European Agreement for the International transportation of Dangerous goods by Road, 2001 edition

Liste de Produits:

Product list:

Produits des Classes 3 à 9 selon Tableau A : Listes de Matières Dangereuses (Chapter 3.2 du, ADR & RID) qui exigent la classification T11 pour les réservoirs mobiles UN (colonne 10)

Products Classes 3 to 9 as per Table A: Dangerous Goods List (Chapter 3.2 of; ADR & RID) that require code T11 for UN Portable Tank (Column 10)

Emis à / Issued at JOHANNESBURG, le/on 1 October 2002

L'Ingénieur en charge
The Engineer in charge

Pour le Responsable du Centre Technique
For the Manager of the Technical Centre

S. BOZIC

G. BIESSY



**BUREAU
VERITAS**

ANNEXE / ANNEX

DOCUMENTS EXAMINES / EXAMINED DOCUMENTS

Type of document	Ref.	Date
Frame Assembly Drawing	FAFSTD1(1-2)-B	26/06/2002
Tank Detail Drawing	VA25FSTD8-A	26/06/2002
Data Plate Drawing	DPL25FITL-013-C	01/07/2002
Marking Drawing	MD25FITL-013-A	26/06/2002
General Assembly Drawing	GA25FITL-013-C	01/07/2002
Compatibility Certificate	Comp Sert ITL-013	26/06/2002
Material List	Mat List ITL-013	12/07/2002
Material Properties	Mech Prop ITL-013	12/07/2002
FT 117 Technical Data Sheet	FT ITL-013-C	12/07/2002
Calculation Sheet	WO ITL-013	01/07/2002





**BUREAU
VERITAS**

BVCT 0270100/J rev 0

TRANSPORT TECHNICAL CENTRE

**AAR 600 CONFORMANCE - EXAMINATION REPORT OF TECHNICAL DOCUMENTS FOR
INSPECTION OF PORTABLE TANKS**

Type: UN Portable Tank/ T11

Manufacturer	: TRENCOR CONTAINERS CAPE TOWN SOUTH AFRICA
Owner	: OCI / OCEAN CONTAINER INVESTMENTS JOHANNESBURG SOUTH AFRICA
Registration Nr	: VTGU 165150 to VTGU 165169
Serial Nr	: 20-2081 to 20-2100
Quantity	: 20
Model	: 25F-STD
Dimensions	6058 mm x 2438 mm x 2591 mm
M.A.G.W.	36000 kg 79366 lb.
Capacity	25000 l 6604 US gal
Tare weight	3910 kg 8620 lb.

At the request of : TRENCOR CONTAINERS
By letter dated 12/07/2002

The technical file relating to the manufacture of the above portable tanks presented by the Company's relevant department and including the documents mentioned in Annex 1, has been examined within the general conditions governing the BUREAU VERITAS Technical Instruction IND/IT 178.2 « RULES FOR THE CLASSIFICATION AND THE SURVEY OF TANK CONTAINERS-AND SWAP BODIES » and the applicable regulatory provisions and is subject to the following remarks.

All details not shown in these documents are assumed to be in compliance with the construction practices and within the provisions of the applicable regulations.





1 - COMMENTS

The conformance of these units with the provisions of AAR 600 has been checked, namely

AAR 600-1	Type	: UN Portable Tank/ T11	
AAR 600-4	Design Pressure	58 psig	
AAR 600-5	Thickness of plates	Shell	Heads
	Material	: TCG316L-CR	TCG316L-CR
	Standard	: COLUMBUS	COLUMBUS
	Thickness	: 4.132 mm	4.695 mm
AAR 600-11 § c	Gaging devices, top loading and unloading devices and air inlet devices	Spillbox	
AAR 600-12	Bottom outlet devices	3	
AAR 600-13	Safety relief device(s)	1 composed of : - 2 1/2" Fort Vale (Model 010/16300) spring-loaded safety valve with setting pressure 63.8 psig	
		Total Flow rate at 15°C, 1 atm : 13310m ³ /h	
AAR 600-15 (d)	Impact test	EDC/ ETS/023/000/1991-06 / 36000 kg	

2 - CONCLUSION

The tank containers are in accordance with the requirements of the AAR 600 specifications (dated 09/01/1996).

✍ The present Examination Report does not exempt the owner or the manufacturer from observing the relevant requirements of the AAR 600-17 prescription.

Issued at JOHANNESBURG, on 01/10/2002

The Engineer in charge

The Manager of Transport Technical Centre

Božić Števan

S. BOZIC



G. Biessy

G. BIESSY



CERTIFICAT DE CONFORMITE AU PROTOTYPE

CONTENEUR CITERNE (X)
TANK CONTAINER

PROTOTYPE CONFORMITY CERTIFICATE

CITERNE MOBILE ()
SWAP-BODY

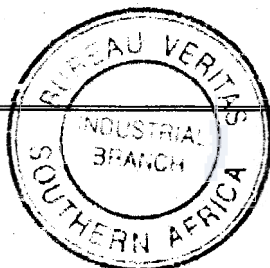
N° F/5223/BV/02

REGLEMENTS DE REFERENCE	REFERENCE REGULATIONS :	ADR / RID
Conditions générales	General characteristics	
N° certificat d'agrément du prototype	Prototype approval number	: F/5223
N° BVCT d'agrément du prototype	BVCT prototype approval number	: 0270107/J
Identification du prototype	Identification of the prototype	: 26F-STD
N° d'identification du modèle en objet	Subject Model id. number	: 25F-STD
N° BVCT de la série	BVCT inspection number	: 0270100/J
N° d'immatriculation	Registration number	: VTGU 165150 à/to VTGU 165169
Date de construction	Date of manufacture	: 2002
Nom du constructeur	Manufacturer's name	: TRENCOR CONTAINERS
Adresse	Address	: CAPE TOWN : SOUTH AFRICA
Nom du propriétaire	Owner's name	: OCI / OCEAN CONTAINER INVSTMT
Adresse	Address	: JOHANNESBURG : SOUTH AFRICA
Masse brute maximale	Maximum gross weight	: 36000 Kg
Tare	Tare weight	: 3910 Kg
Plan d'ensemble	General assembly	: GA25FITL-013-C
Caractéristiques du cadre	Characteristics of the frame	
Dimensions hors tout :	Overall dimensions :	
--> Longueur	--> Length	: 6058 mm
--> Largeur	--> Width	: 2438 mm
--> Hauteur	--> Height	: 2591 mm
Matériau de construction	Material of construction	
Caractéristiques du réservoir	Characteristics of the tank	
Capacité nominale	Nominal capacity	: 25000 l
Diamètre intérieur	Internal diameter	: 2370 mm
Nombre de compartiments	Number of compartments	: 1
Matériau de construction	Material of construction	: TCG316L-CR COLUMBUS ; TCG316L-CR COLUMBUS
Epaisseur minimale de calcul :	Minimum design thickness :	
--> Virole	--> Shell	: 4.132 mm
--> Fonds	--> Heads (knuckle/ crown)	: 4.695/ 4.132 mm
Epaisseur minimale de construction :	Minimum construction thickness :	
--> Virole	--> Shell	: 4.4 mm
--> Fonds	--> Heads (knuckle/ crown)	: 4.695/ 4.4 mm
Epaisseur équivalente d'acier doux	Equivalent mild steel thickness	
--> Virole	--> Shell	: 6.39 mm
--> Fonds	--> Heads (knuckle/ crown)	: 7.19/ 6.39 mm





REGLEMENTS DE REFERENCE	REFERENCE REGULATIONS :	ADR/RID
Caractéristiques du réservoir (suite)	Characteristics of the tank (cont'd)	
Pression maximale de service	Maximum working pressure	: 4 bar
Température maximale de service	Maximum working temperature	: 130 °C
Température minimale de service	Minimum working temperature	: -40 °C
Pression d'épreuve	Test pressure	: 6 bar
Pression de calcul réglementaire	Regular design pressure	: 4 bar
Code de calcul	Design code	: ASME VIII-1
Pression de calcul selon code	Design pressure according to code	: 6 bar
Température de calcul	Design temperature	: 130 °C
Revêtement intérieur réglementaire	Regular internal lining	: No
Equipements du réservoir	Equipment of the tank	
Fiche technique de référence	Reference technical data FT 117	: FT ITL-013-C
Organes de remplissage	Filling devices	: Manhole, DN 500
Organes de vidange	Discharge devices	
---> Haute	---> Top	: 0 closure(s)
---> Basse	---> Bottom	: 3 closure(s)
Ouvertures d'inspection	Inspection openings	: FORT VALE F-Vale 8PB/7401118P
Nombre de soupapes	Relief valves number	: 1
Tarage	Setting	: 4.4 bar
Nombre de disques de rupture	Rupture discs number	: No
Pression d'éclatement	Bursting pressure	: N/A
Montage :	Arrangement :	: N/A
Autres organes de sécurité	Other safety devices	: No
Protection des organes de sécurité	Protection of safety devices	: Spillbox
Isolation thermique	Thermal insulation	: Isolation/Cladding
Protection solaire	Sun shield	: No
Réchauffeur	Heater	: Vapeur/Stream
Pression d'épreuve	Test pressure	: 10.5 bar
Essais	Tests	
N° du rapport d'essai	Test Report Nr	: 9870610/G
Date de l'épreuve hydraulique initiale	Date of initial hydraulic test	: 29/06/2002
Date de l'épreuve d'étanchéité initiale	Date of initial leakage test	: 10/07/2002
Produits transportables/ Substances suitable for carriage		
Applicable products of Classes 3 to 9 as per Table A : Dangerous Goods List (Chapter 3.2) that require code T11 (or lower) for UN Portable Tanks, Column 10		
Etabli par le Bureau Veritas, agréé par le Ministère de l'Équipement, des Transports et du Tourisme à délivrer les certificats de conformité au prototype, conformément aux réglementations précitées.		
Issued by Bureau Veritas, approved by the French "Ministère de l'Équipement, des Transports et du Tourisme" to deliver the prototype conformity certificates, according to the hereabove regulations.		
Johannesburg, le / on 1 October 2002		
L'ingénieur en charge / The engineer in charge		
S. BOZIC		



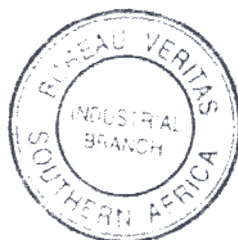


**BUREAU
VERITAS**

ANNEXE / ANNEX

DOCUMENTS EXAMINES / EXAMINED DOCUMENTS

Type of document	Ref.	Date
Frame Assembly Drawing	FAFSTD1(1-2)-B	26/06/2002
Tank Detail Drawing	VA25FSTD8-A	26/06/2002
Data Plate Drawing	DPL25FITL-013-C	01/07/2002
Marking Drawing	MD25FITL-013-A	26/06/2002
General Assembly Drawing	GA25FITL-013-C	01/07/2002
Compatibility Certificate	Comp Sert ITL-013	26/06/2002
Material List	Mat List ITL-013	12/07/2002
Material Properties	Mech Prop ITL-013	12/07/2002
FT 117 Technical Data Sheet	FT ITL-013-C	12/07/2002
Calculation Sheet	WO ITL-013	01/07/2002





**BUREAU
VERITAS**

CERTIFICAT D'AGREMENT C.S.C. / C.S.C. TYPE APPROVAL

C.S.C. N° F/BV/8039/02

Nom et adresse du Demandeur : OCI / OCEAN CONTAINER INVESTMENTS
Name and adress of Applicant : JOHANNESBURG, SOUTH AFRICA

Nom et adresse du titulaire : OCI / OCEAN CONTAINER INVESTMENTS
Name and adress of Owner : JOHANNESBURG, SOUTH AFRICA

Nom du Constructeur : TRENCOR CONTAINERS
Name of Manufacturer : CAPE TOWN, SOUTH AFRICA

CONTENEURS-CONTAINERS

Référence du prototype / Design type référence : 0270107/J

Type / Type : UN Portable Tank/ T11 **Modèle / Model** : 25FSTD **Designation ISO** : 22T6

Dimensions H.T./ Overall dimensions : 6058 mm x 2591 mm x 2438 mm

Masse brute maximale : 36000 Kg **Tare** : 3910 Kg **Capacité** : 25000 l
Maximum gross weight : 79366 lbs **Tare** : 8620 lbs **Capacity** : 6604 US Gal

Conditions d'essais / Testing conditions

- **Charge admissible de gerbage / Allowed stacking weight** 192000 Kg 423287 lbs
- **Rigidité transversale / Transverse racking test load** 15295 Kg 33720 lbs

SERIES / SERIES

Numéros de série de construction : 20-2081 à/to 20-2100
Serial numbers of manufacture

Numéros d'immatriculation VTGU 165150 à/to VTGU 165169
Registration numbers

Année de construction 2002
Year of construction

Par la présente et par délégation des Autorités Françaises, le BUREAU VERITAS autorise le Demandeur à opposer la plaque d'agrément aux fin de la sécurité sur tous les conteneurs de la série définie ci-dessus.

By the present, and by delegation of the French Authorities, BUREAU VERITAS authorises the Applicant to affix the Safety Approval Plate to each container of the hereabove defined series.

A / At : JOHANNESBURG
Le / On : 1 October 2002

Pour le BUREAU VERITAS,
la personne habilitée
FOR the BUREAU VERITAS
the person in charge

Bozic' Stvan

S. BOZIC





**BUREAU
VERITAS**

Réf N° TLD/X-0100/02/LV

**TRANSPORT CANADA
Transport Dangerous Goods Directorate
Canada Building
344 Slater Street
OTTAWA, ONTARIO K1A 0W5**

**Kind attention of M. K. GREEN
Senior Specialist Tanks**

Singapore, on 1 October 2002

Subject : PRENOTIFICATION OF INTENT TO MARK PORTABLE TANKS

Dear Sirs,

Would you please find herewith enclosed, original copy of our report concerning ISO tanks built by

- Manufacturer : TRENCOR CONTAINERS
CAPE TOWN,
SOUTH AFRICA REP.
- Owner : OCI / OCEAN CONTAINER INVESTMENTS
JOHANNESBURG,
SOUTH AFRICA
- Model : 25F-STD
- BVCT : 0270100/J
- Registration number : VTGU 165150 to VTGU 165169

We wish you safe receipt of this document and remain at your disposal to provide you any further information.

Encl. : Prenotification of intent to mark



**BUREAU
VERITAS**

**TRANSPORT CANADA REPORT
Yr REF. ASD4067-28- TC IMPACT APPROVED**

**TRANSPORT TECHNICAL CENTRE
Report Nr BVCT 0270100/J. Revision 0**

PRENOTIFICATION OF INTENT TO MARK PORTABLE TANKS

We, the undersigned, Manager of Transport Technical Centre of **BUREAU VERITAS**,

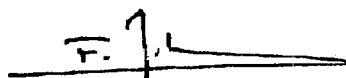
acting at the request of **TRENCOR CONTAINERS**,

within the scope of the general conditions and practices of our Company,

hereby submit notification in respect of new tank containers to be marked « TC IMPACT APPROVED » which are now under construction to be undernoted design and which will be certified by BUREAU VERITAS on satisfactory completion under BUREAU VERITAS survey as complying with requirements and also Society's Container Certification Scheme, Convention for Safety of Containers, European Road transport agreement, European Rail transport agreement, and the conditions of Certificate of Registration n° 25-052.

Name of manufacturer	TRENCOR CONTAINERS, CAPE TOWN, SOUTH AFRICA
Name of owner	OCI / OCEAN CONTAINER INVESTMENTS JOHANNESBURG, SOUTH AFRICA
Quantity	20
Owner serial numbers	VTGU 165150 to VTGU 165169
Manufacturer serial numbers	20-2081 to 20-2100
Model	25FSTD
Nominal capacity (litres)	25000 l
Maximum gross weight (R)	36000 kg 79366 lbs
Tare weight	3910 kg 8620 lbs
Dimensions	6058 mm x 2438 mm x 2591 mm
Design code	ASME VIII-I.
Design pressure	4 bar 58 psig
Design temperature	130 °C 266 °F
Maxi allowable working pressure	4 bar 58 psig
Test pressure	6 bar 87 psig
Main frame drawing	FAFSTD1(1-2)-B
Main general drawing	GA25FITL-013-C
Impact test value	EDC/ETC/023/000/1991-06 / 36000 kg

Issued at SINGAPORE, on 1 October 2002



F. MIDY

Manager, Corporate Technical Services

RAILTRACK

Vehicle Acceptance Body

Bureau Veritas (Republic of South Africa)
151 Katherine Street
Softline Technology Park
Leaseplan House, Ground Floor
Atholl Ext 12
Sandton
Johannesburg
South Africa

Your Reference: BVCT 0270100/J
Our Reference: C3730/I

Date: 21 October 2002

Dear Sir/Madam,

UIC REGISTRATION - LETTER OF CONFORMITY

In connection with your recent application, I can confirm that the containers detailed below, complying with the design previously registered under Railtrack Registration Certificate No. **C3730** are hereby accepted for transit on **UIC** member railways in accordance with UIC 592-2 for a rating of 34000 kg.

Container Type:	20' ISO Tank Container
Manufacturer:	Trencor Containers
CSC Type Approval Number:	F/BV/8039/02
Model:	25F-STD
Manufacturer's Serial Numbers:	20-2081 - 20-2100
Lessor / Operator:	Ocean Container Investment
Owner:	Ocean Container Investment
Lessor / Owner Serial Numbers:	VTGU 165150 - VTGU 165169

Yours faithfully,


Andy Hurst
Intermodal Engineer

Vehicle Acceptance Body 2nd Floor Derwent House RTC Business Park London Road Derby DE24 8UP
Tel 01332 263089 Fax 01332 263182 e-mail hursta.railtrack@ems.rail.co.uk



**Customs Convention on the International
Transport of Goods under cover of TIR
Carnets (TIR Convention) 1975
Customs Convention on Containers 1972
Certificate of approval of containers by design type**

Unique
reference number

4501

Certificate number GB/C 4501 BV/1999

2. This is to certify that the container design type described below has been approved and that containers manufacture to this type can be accepted for the transport of goods under Customs Seal.
3. Kind of container IMO 1 TANK CONTAINER, WELDED FRAME AND TANK
4. Identification number or letters of the design type 25F (STD)
5. Identification number of the working drawings. GA25FTPI-040
6. Identification number of the design specifications 25F (STD)
7. Tare weight 3980 kg.
8. External dimensions in centimetres 605.8 X 243.8 X 260.0
9. Essential characteristics of structure (nature of materials, kind of construction, parts which are reinforced, whether bolts are riveted or welded etc.) FITTED IN DISMOUNTABLE FRAME FOR THE TRANSPORT OF DANGEROUS GOODS.
10. Details of any unusual features NONE
11. This certificate is valid for all containers manufactured in conformity with the drawings and specifications referred to above.
12. Issued to TRENCOR CONTAINERS
(manufacturer's name and address)

JUNCTION STREET, PARROW INDUSTRIA, 7490, CAPE TOWN, SOUTH AFRICA

who is authorised to affix an approval plate to each container of the approved design type manufactured by him.

at LONDON
(place)

by M. C. Stephens
Signature and stamp of issuing authority)



Note: If a container no longer complies with the technical conditions prescribed for approval it shall, before it can be used for the transport of goods under Customs Seal, be so repaired as to comply with the said technical conditions.

This certificate shall only apply to containers of the design type specified above. Any change to the approved design, however small, shall be treated as creating a new type which will require approval by the competent authorities before it can be used for the transport of goods under Customs Seal.



22T6
VOTG 165169 4

WT 3310
HT 1070
VL 350
TL 121



MAX GROSS WEIGHT
ON US RAILWAY
30000kg

VOTG TANKTAINER

VOTG 165169 4
22T6

ON PORTABLE TANKS
TO IMPACT APPROVED

VOTG TANKTAINER

KONECRANES

D.C.S.

22T6

VTGU 165169 4

NOMINAL 25000 litre
CAPACITY 6604 US gal



MAX. GROSS 36000 kg
79366 lb

TARE 3960 kg
8730 lb



MAX GROSS WEIGHT
ON UIC RAILWAYS
34000kg



VOTG TANKTAINER

VTGU 165169 4

22T6

UN PORTABLE TANK T11

TC IMPACT APPROVED

IC



RID/ADR

AAR 600



4 BAR



MADE IN GERMANY

VTGU 165169 4

WARNING
CAUTION



VOTG TANKTAINER

VTGU 165169 4

22T6

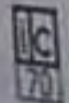
UN PORTABLE TANK T11

TC IMPACT APPROVED

RIDADR

AAR 600

4 BAR



22T6
VTGU 165169 4

MAX GROSS 35000 kg
19355 kg

TARE 2550 kg
2730 kg



22T6
VTGU 165169 4

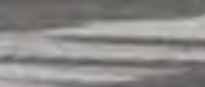
UN PORTABLE TANK T11

TC IMPACT APPROVED

RIDADR

AAR 600

4 BAR



22T6
VTGU 165169 4
NOMINAL 25000 liter
CAPACITY 6604 US gal

MAX. GROSS 36000 kg
79366 lb
TARE 3960 kg
8730 lb



MAX GROSS WEIGHT
ON UIC RAILWAYS
34000kg



KONECRANES



VTGU 165159 1

22T6

VTGU 165159 1



VTGU 165169 4



11 3 MAKE SET UP IN 10
MANUFACTURE BY APT/PT/PT/PT

F01
F02
F03
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F100









ON UIC RAILWAY
34000kg



IMPORTANT!

CLOSED
BEFORE OPENING
THE DOOR
THE DOOR MUST BE
CLOSED AND
LOCKED
BEFORE
OPERATING
THE
MACHINE

OPEN
BEFORE
CLOSING
THE DOOR
THE DOOR MUST
BE OPEN AND
UNLOCKED
BEFORE
CLOSING
THE
MACHINE

BEFORE OPERATING
THE MACHINE
THE DOOR MUST
BE OPEN AND
UNLOCKED
BEFORE
CLOSING
THE
MACHINE

BEFORE OPERATING
THE MACHINE
THE DOOR MUST
BE OPEN AND
UNLOCKED
BEFORE
CLOSING
THE
MACHINE

INLET
PRESSURE

STEAM
OUTLET



CONTROL UNIT TANK CONTAINER ELECTRIC HEATING

Voltage	240V AC 50Hz 3 Phase	Building Reference	124
Power	30kW	Building Reference	124
Temperature Control	On/Off	Control System	On/Off

OPEN BOX LID TO ACCESS CONTROLS

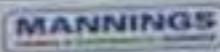
OPERATING PROCEDURE

1. Check voltage of power supply.
2. Switch ON to 240V position.
3. Select desired temperature set.
4. Check digital temperature rise.
5. Switch ON to 240V position.
6. Switch ON to 240V position.
7. Switch ON to 240V position.
8. Switch ON to 240V position.

TO SET THE TEMPERATURE CONTROL UNIT

1. Select the desired control to maintain temperature range.
2. The desired temperature must be at least 10% above desired range temperature.
3. Adjust the range control to the desired range temperature.

TANKSPAN LEASING LIMITED
SUITE 5, 30 CHURCHILL SQUARE,
KINGS HILL, WEST MALLING,
KENT, ME19 4YU
U.K.









VOTG TANKTAINER

VOTG TANKTAINER

VOTG 185104 /
0276
IN PORTUGAL TAN T1
TO IMPACT APPROVED
ROADS
AAR 500

SWL 23 833 483

S.A.R.



2276
VOTG 165151 8
NORMAL 25000 LBS
CAPACITY 100% 45 gal

VOTG TANKTAINER

VOTG 165151 8
2276
IN PARTIAL COMPLIANCE
WITH DOT REGULATIONS
4 BAR

VOTG TANKTAINER

VOTG TANKTAINER

VOTG TANKTAINER

VOTG TANKTAINER

VOTG TANKTAINER

VOTG TANKTAINER

3-812 567

MLJ

1000 812 567

MLJ 812 567



VOTG TANKTAINER

J-812 567

VOTG TANKTAINER

