

## CRYOGENIC 40FT LNG TANK CONTAINER



**40ft ISO 45000 Litre 10.5 bar**

## **DESCRIPTION**

This technical specification presents the 40ft vacuum insulated cryogenic container system, developed for use as an intermodal transport unit or as a semi trailer alternative where weight limits, whilst retaining the flexibility to operate as a temporary static storage/distribution system.

The containers are intended for long distance transport and distribution of LNG

The cryogenic container is a double walled vacuum shell manufactured in all stainless steel construction which includes the outer jacket.

The construction of the tank is a double shell vacuum insulated.

## 1. BASIC DATA

Volume: 45,000 litre nominal

M.A.W.P: 10.5 bar

Test Pressure: 14.95 bar

Gross: 36,000 kg During Transport

Tare: 12,750 kg

Dimensions: (l x w x h) 12192 x 2438 x 2591 mm **Ref Drg K160551**

## 2. TANK

### 2.1 Inner Vessel:

Water capacity: 45,000 litres.

Material: Austenitic stainless steel grade Tp 304

Working Pressure: 10.5 bar to EN13530-2 2004 and ADR 2019

Design Code: EN13530-2 2004 and ADR 2019

Design Approval Authority: Lloyds Register

Inspection Agency: Lloyds Register

### 2.2 Outer Jacket:

Material: Austenitic Stainless Steel Grade Tp 304

Design Code: EN 13530-2

### 2.3 Insulation:

Type: Vacuum + Multilayer Insulation or Superinsulation

Holding Time LNG 80days

Vacuum level @ Delivery: No more than 10 microns warm tank

Vacuum couplings: Hastings DV-6S Thermocouple

### 2.4 Frame:

Type: Integral reinforced

Material: Carbon Steel

Corner positioning: ISO 40' x 8' x 8'6"

## 2.5 Fittings:

Flow diagram: In accordance with drawing **K170886 t1**

## 2.6 Instrumentation:

Liquid level meter: Samson Media 5 Differential Pressure Gauge  
Manometer: Indicating tank pressure 1-20 bar

2.7 Pumping System: Not fitted.

2.8 Flow Meter: Not fitted.

2.9 Pressure Build Up Coil:  
Aluminium Star Fin coil capacity 80Nm<sup>3</sup>/h

## 2.11 Painting:

Tank and frame: Blasted to surface finish SA 2.5 and 3 Coat System Applied  
Symbols: According to ISO, UIC, ADR, RID, IMO, TIR, UN T75.

## 2.12 Delivery Standards:

Test: Tank charged with LIN for thermal shock test.

## 3. APPROVALS

3.1 International: ADR, ISO, CSC, TIR, TPED, RID, IMO, UN T75,

## 4. DOCUMENTATION

4.1 Manuals: Operations and Maintenance Manuals in English will be included in delivery.

4.2 Certificates: Pressure Vessel Certificate, ADR, CSC, TPED, and IMO approval documents will be included in the delivery.

## 5. VESSEL TESTS

5.1 Inner vessel: 100% RT and 100% PT, helium mass-spectrometer, nitrogen thermal.

5.2 Outer jacket: Helium mass-spectrometer.