

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 80Nm³/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.