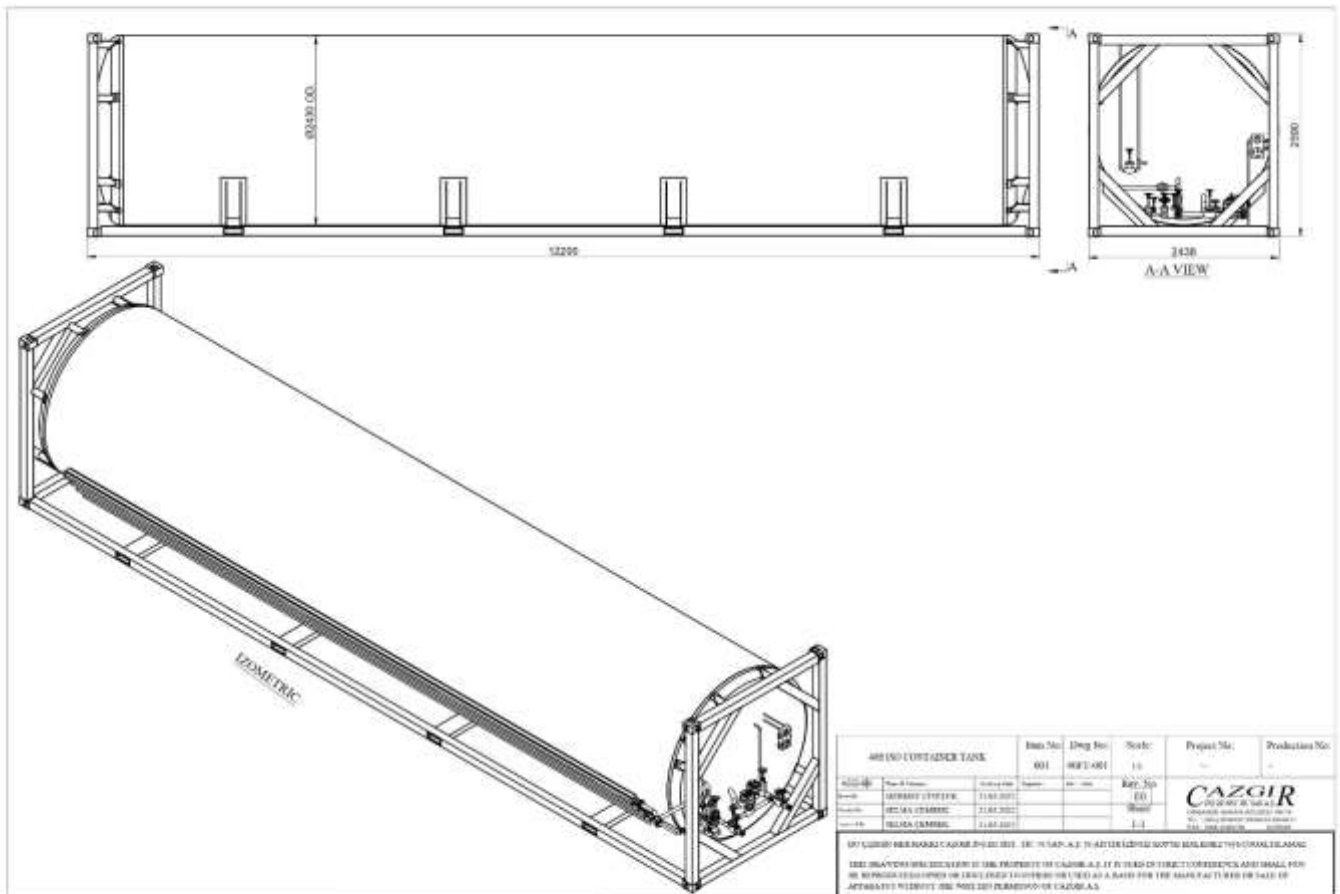


40 FT CRYOGENIC CONTAINER SPECIFICATIONS

TYPE TANK	Volume	Dimension Container (mm)	MAWP	Container Empty Weight (kg) (±3%)	Payload(kg) (±3%)
40 FT	45000 litres	W2438/L12200/H2590	8 barg	10500	LNG 18126 kg



Dennewartstr 25-27 52068 Aachen/GERMANY
Tax number: 5201/5950/4908
Tax office: Aachen-Stadt VAT ID: DE335267379
Trade register of Aachen, Trade register number: HRB 24105

Turkey Facility: CAZGIR CRYOGENICS
Address: Organize Sanayi Bölgesi 7. Cad No:15
ÇORUM/TURKEY

1. INNER VESSEL SPECIFICATIONS

1.1 Design Codes : ISO 1496-3 /ADR/RID/IMDG / EN 13530-2 /CSC /T-75

1.2 Design Temperature: -196 °C / + 50 °C

1.3 Material: Stainless Steel EN 10028-7

1.4 Maximum Working Pressure: 8 bar

1.5 Baffles: According Standard Requirements

1.6 NDT: %100 VT, %100 X-RAY on the inner vessel, 100% dye penetrant on the inner vessel nozzles

2. OUTER VESSEL SPECIFICATIONS:

2.1 Material: Carbon Steel / **Optional Stainless Steel**

2.2 Design Temperature: -20 °C / + 50 °C

2.3 Design Pressure: -14 PSI / -1 bar

2.4 NDT: %100 VT,

2.5 %100 Helium Check

3. SAFETY DEVICES (PLEASE SEE THE P&I DIAGRAM)

3.1. Safety Valves:

- ✓ 4 x 8 barg each pair is connected to each other with a diverter valve. Line safety valves will be placed on locations where gas pressure might potentially increase at.
- ✓ Herose

3.2. Vacuum Accessories

- ✓ **Vacuum evacuation valve:**
Jacket Relief (Vacuum safety disc) calculated in accordance with design codes mounted on outer vessel surface.
- ✓ **Vacuum Reading TC Tube:** (DV6-R) + Hokes TC Tube Valve
- ✓ **Vacuum Valve**

3.3. EMERGENCY ACCESSORIES:

- ✓ **Emergency buttons:**
1 emergency buttons are mounted, (To be able to open/close each of the pneumatic valves on the Container.)

- ✓ **Emergency button panel:**

Within the cabinet to be able to open/close each of the pneumatic valves

4 PIPING

- ✓ **Material:** Seamless SA 312-Type 304/304L stainless steel or equivalent sizes and thicknesses are ranged from.
SCH 10 to 80 (2mm to 6mm) according to EN 13530-2 requirements

Note: All pipe connections will be welded with TIG welding method

5 VALVES

- ✓ **Globe Valves:** Herose
- ✓ **Safety Valves:** Herose
- ✓ **Actuator Valves:** Herose **Herose Type 1353**
- ✓ **3-way diverter valve:** Herose
- ✓ **Self regulation pressure valve in PBU Herose Pneumatic valves Herose Type 1353**
- ✓ Please see attached P&I Diagram

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6 PRESSURE GAUGE/MANOMETER

- ✓ 0-25 Barg and another one for oil pressure. One within the cabinet
- ✓ Pakkens
 - Please check option tables for brand.

7 LIQUID LEVEL GAUGE

- ✓ Readings to be in 83% and 95%
- ✓ Samson Media 5

8 CGA – FILL CONNECTIONS

- ✓ Customer will supply the filling connections.

9 INSULATION

- ✓ **Insulation Type:** Super insulation + Vacuum
- ✓ **Warm Vacuum retention test:** To be applied over 72 hours at ambient temperature within the inner vessel warm vacuum guarantee at below 50 microns
- ✓ **Cold Retention Test:** To be applied over 72 hours with liquid nitrogen up to at least 25% of the inner vessel. Cold retention vacuum is below 10 microns.

10 WELDING PROCEDURES

- ✓ Circumferential Welds-SAW / GMAW
- ✓ Parts exposed to pressure – GTAW
- ✓ WPS, PQR's, and process tests (Destructive tests according to code requirement, vs.) will be placed in technical document.

11 CLEANING PROCEDURE

- ✓ Cleaning Procedures to be performed in accordance with, EN 12300 "Cryogenic Vessels-Cleanliness for cryogenic Service".
- ✓ All piping and inside of tank will be purified from oil.

12 PAINT PROCEDURE

- ✓ SA 2 ½" Sand blasting
- ✓ 50-75 microns zinc primer
- ✓ 100-150 microns epoxy prime coating
- ✓ 70-80 microns – polyurethane coating
- ✓ Min. 220 microns coating
- ✓ Paint Color: White (Ral 9010)

13 3RD PARTY APPROVAL

- ✓ Tank inspected and stamped by European Approval Agency
- ✓ Technical Documents will be submitted on product delivery time.
- ✓ All Certifications will be provided to customer upon project completion.

14 DOCUMENTS TO BE DELIVERED TO CUSTOMER:

15.1. Certificates of Product

15.2. Technical Documents and Certificates

- ✓ Declaration of Conformity
- ✓ Technical Properties
- ✓ Schematic Drawing of Product

15.3. Quality Plan

15.4. Material Certificates

- ✓ Material – Equipment List and Certificates
- ✓ P&I Diagram

15.5. Welding Procedures, Welder List and Certificates

- ✓ Certified Welder List
- ✓ Weld Map
- ✓ Welder's Qualification Certificates

15.6. Manufacturing Control Reports

- ✓ Cutting Plan for Body and Heads
- ✓ Welding Arrangement and Welder Id
- ✓ Dimensional Control Report For Heads of Tank
- ✓ Mechanical and Bending Property Report of Welding Test Plate

15.7. Non Destructive Test Reports

- ✓ Radiographic Test Arrangement Chart
- ✓ Reports of Radiographic Test
- ✓ Certificates of RT Personnel
- ✓ Penetrant Test Arrangement Chart
- ✓ Penetrant Test Reports
- ✓ Certificate of PT Personnel
- ✓ Visual Examination Report
- ✓ Certificate of VT Personnel

15.8. Test and Control Report

- ✓ Tank Dimension Control Report
- ✓ Mechanical Cleaning Report
- ✓ Tank Cleaning Report
- ✓ Pressure Test Report
- ✓ Annular Space Tightness Test Report
- ✓ Helium Tightness Test Report
- ✓ Moisture Control Report
- ✓ Vacuum Test Report
- ✓ Safety Valves Set Pressure Check Report
- ✓ Tank and Accessories Final Leak Test Report
- ✓ PBU Vaporize Pressure Test Report
- ✓ Grounding Test Report
- ✓ Paint Control Report
- ✓ The PUB consist out of 48m

15.9. Other Documents

- ✓ Copy of Name Plates
- ✓ Tank Calibration Chart