



CYLINDRICAL LIN/LOX/LAR TANKER ON RIGID UNIT CAP. 8,5m3 PERLITE INSULATED – PS = 5 bar – ADR COMPL. – π MARKED – WITH HYDROPUMP LOX OPTIMIZED



TANK DETAILS

Max. allowable working pressure	5 bar g (plus 1 bar for external vacuum)
Water capacity	8.450 lts
Construction code	ADR2019 / EN 13530-2
Design temperature	-196°C ÷ +50°C
Test pressure	7,8 bar g
Internal diameter	1.756 mm
Inner tank shell length	2.800 mm
Total length (jacket included)	4.200 mm
Tank material	AISI 304 (1.4301)

NDTs:

RX	100% full penetration welding
PT	100% for welds where RX is not possible



The tank will be equipped with:

- no. 1 baffle welded to shell (according to ADR)
- no. 1 continuous saddle per each side

Insulation:

double wall tank, insulation under vacuum with perlite.

Max. allowable pressure in the hollow space: - 0,05 mbar (measured at cold state)
- 0,1 mbar (measured at warm state)

Outer jacket in carbon steel S235JR+AR

TRANSFER EQUIPMENT

As per details in attached P.&I.D. Globe valve brand Herose, differential pressure gauge WIKA, pressure relief valves General Instruments.

Liquid transfer through lateral vaporizer or pump.

Cryogenic pump is either a:

HYDRAULIC PUMP SOLUTION

Cryogenic Centrifugal Pump Vanzetti type HGM185 consisting of :

Cold end with impeller diam. 185 mm

2 x PT100 for leakage detection

Hydraulic motor 15 kW directly coupled to pump shaft

ELECTRICAL PUMP SOLUTION

Cryogenic Centrifugal Pump Cryostar GBSD 155 consisting of :

Cold end with impeller diam. 155 mm

2 x PT100 for leakage detection

Electric motor 11 kW with control panel and 15 mts cable

Machinery data:

Fluid : LIN (0.81 kg/l)

Flowrate : 400 ÷ 650 lit. / min

ELECTRICAL PLANT

The unit will be equipped with all the lights and signal in accordance with the international traffic regulation, ADR and EEC directive. Complete control panel for pump control and (eventually, please refer to option # 2) meter display.

ACCESSORIES

2 x 6 kg. dry chemical fire extinguishers ABC type c.w. PVC holders. An earthing rubber covered strap and automatic reel for conductive discharge of electrostatic charges. Supply and fit, 2 brake locks with chains and brackets. Aluminium EEC compliant rear bumper



CERTIFICATES / DOCUMENTATION

- 1 - Approval of T-PED notified body for calculation of tank design
- 2 - Approval of T-PED notified body for tank material
- 3 - X-ray certificates approved by T-PED notified body
- 4 - Hydraulic test certificate approved by T-PED notified body
- 5 - Complete test-pack containing material test certificates, third party inspection reports, ultrasonic scan reports, MPI test reports for pressure vessel fittings, manufacturers catalogues, drawings etc.
- 6 - Manual complete with technical and sales information, including part list for all equipments

PAINTING (EXTERNAL JACKET)

- External sandblasting SA 2" ½
 - Primer: zinc phosphate with 40 micron dry film thickness (dft)
 - Final coatings: White colour (RAL 9010) 2 coats of polyurethanic paint.
- NO CUSTOMER LOGO OR SPECIAL EXTERNAL PAINTING IS INCLUDED.

HYDRAULIC SYSTEM (if applicable)

PTO installed pump (PTO originally installed by truck manufacturer on our technical indication), oil cooler / reservoir 13 kW, fittings and complete system for LIN pump handling.

TRUCK

NOT INCLUDED in the scope of supply.

The truck will be Eurocargo ML180E28 wheelbase 3.690mm with daycab supplied to our premises in Italy at customer cost.

Nevertheless, truck selection shall be agreed with our technical department and following minimum options must be included:

- PTO predisposition (only if hydraulic solution is chosen)
- ADR type AT (as per ADR Chapter 9)



