

lapesa

CRYOGENIC TANK

Tank for storing liquified gases under pressure at cryogenic temperatures for air gases (**N₂**, **Ar**, **O₂** and **CO₂**).

Tank consists of two concentric containers made of austenitic stainless steel (inside) and carbon steel (outside), with strong thermal insulation between them.

Horizontal and vertical tanks with capacities from 5 m³ to 300 m³.

DESIGN

Working pressure: **from 5 to 30 bar**. For other pressure options please consult.

Minimum permissible temperature: **-196°C**.

Homologation according to the European Pressure Equipment Directive 2014/68/EU and harmonized standards **EN13458** or **EN13445**.

THERMAL INSULATION

The degree of thermal insulation of the tank and its efficiency are critical aspects for minimizing product losses and allowing long-term storage of liquefied gases at low temperatures.

In the **lapesa** tanks, this is achieved by filling the space between the two tanks with a specific material with high insulating power and a high degree of vacuum in the chamber, including an absorbent material for greater vacuum stability.

EXTERNAL FINISHING

The external surface is shotblasted and protected by two coats of paint: a high-performance anti-corrosion primer and a reflective white polyurethane enamel finish coat.

EQUIPMENT

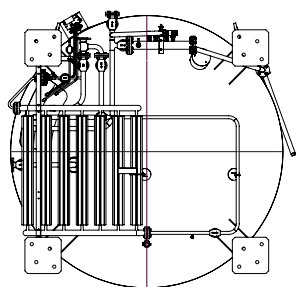
Pipes made of austenitic **stainless steel**. Equipped with shut-off valves and pressure and level indicators.

PRESSURE REGULATION

Equipped with a pressure build up system (PBU) outside the tank, which compensates for the pressure drop caused by the extraction of liquid or gas.

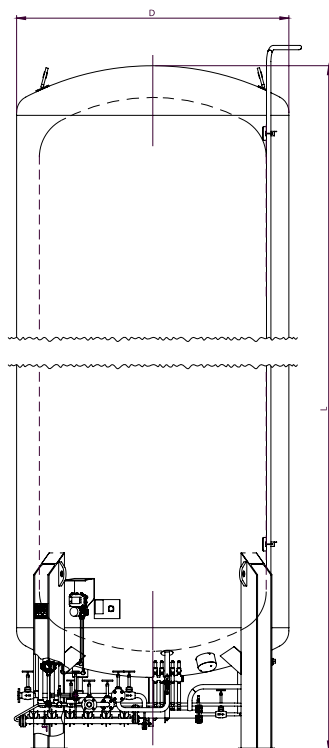


lapesa



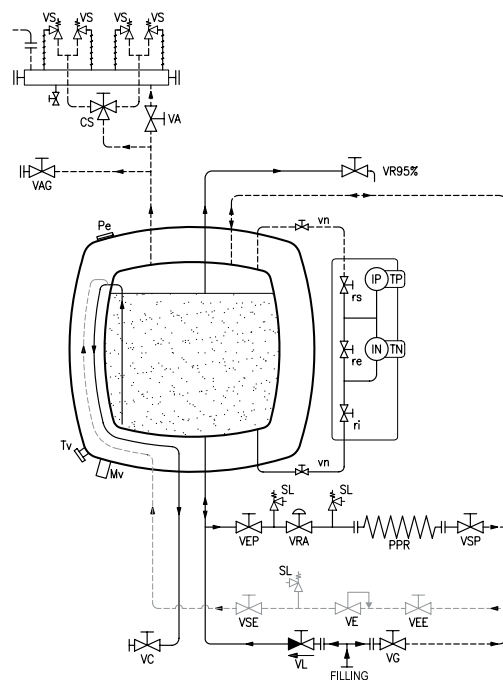
INNER TANK MADE OF AUSTENITIC
STAINLESS STEEL

Vertical model represented, for series D2200 and D3000



SCHEMATIC DIAGRAM

VG	Gas phase filling valve
VL	Liquid phase filling valve
VC	Consumption valve
VR	Overflow valve
PPR	Pressure Build up Unit (PBU)
VEP	Input valve PBU
VSP	Output valve PBU
VRA	Pressure regulator
F	Filter
VAG	Auxiliary valve – Gas phase
IN	Level
IP	Manometer
vn	Level gate valve
re	By-pass valve
ri	Bottom level valve
rs	Top level valve
TP	Pressure transmitter (according to model)
TN	Level transmitter (according to model)
CS	3-way valve (safety)
VS	Safety valve
SL	Line safety valve
VA	Pressure relief valve
Pe	Casing safety device
Tv	Vacuum connection
Mv	Vacuum gauge device



MODELS AND MAIN FEATURES

MODELS	LC5V	LC20V-22	LC40V	LC60V	LC80V	LC106V	LC120V	LC130V	LC195V	LC240V	LC307V
Volume (m ³)	4,9	19,9	39,9	59,8	79,9	105,5	118,9	130,6	195	240	307
Outer diameter D (mm)	2.200	2.200	3.000	3.000	3.500	3.500	3.900	3.900	4.200	4.200	4.200
Total height L (mm)	3.830	10.130	10.174	14.174	13.348	16.938	15.216	16.516	19.580	23.580	29.580
Tank empty weight (kg)	3	7,3	13,4	18,4	20,7	25,9	30,8	32,9	47	55,7	68,7

*Weight with reference to 9 bar model

lapesa

lapesa.com



Lapesa Grupo Empresarial, S.L.

Pol. Industrial Malpica, Calle A, Parc. 1-A
50016 - ZARAGOZA - ESPAÑA

Tel. 0034 976465180 / Fax 0034 976574393

e-mail: lapesa@lapesa.es * www.lapesa.com

