



# CTH HELIUM SERIES

## *Container for transport of liquid Helium*

The CTH is a horizontal container mounted on skid, used for transport and storage of liquid helium.

The CTH container has a stainless steel inner vessel (1.4306) and painting carbon steel outer part.

The inner vessel is solidly fixed into the outer vessel by support system.

There are the thermal insulated shields cooling by gas helium, recovered from the vessel.

The insulation system efficiently maintains the vacuum in the interspace for several years.

The longitudinal and circulars inner capacity welds will be 100% radiographed.

The tank operating and control devices are placed in front, in a cabinet which efficiently protects all the devices.

This container may be used for road transport.

The inner and outer vessels are calculated according to European norm EN13530.

The CTH is conform to :

- European transportable regulation 2010/35 UE
- European Agreement concerning the International Carriage of Dangerous Goods by Road chapter 6.8.



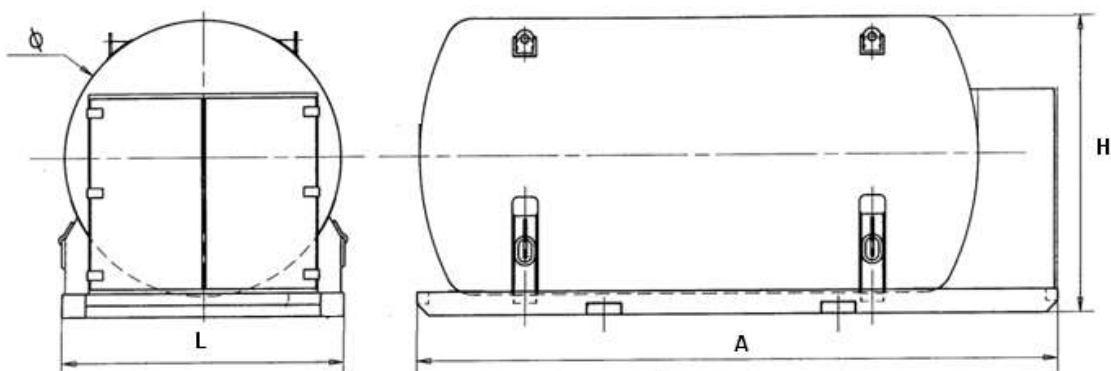
CTH container on a frame



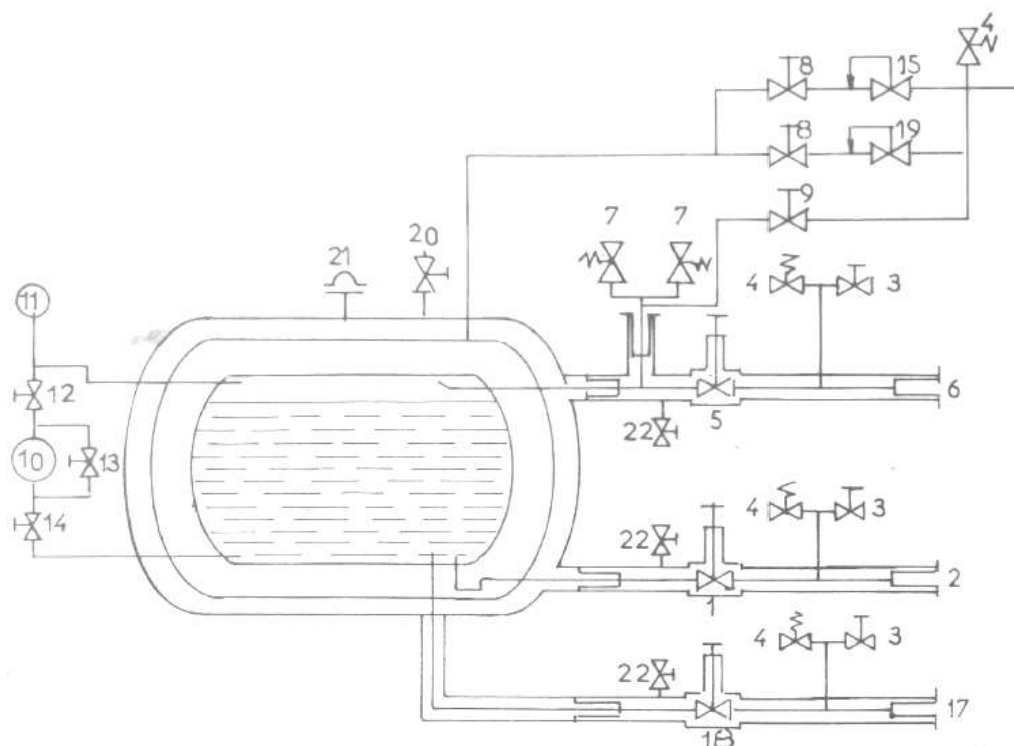
CTH container on a skid

### TECHNICAL SPECIFICATION

SPECIFICATIONS		CTH 4000 HLR	CTH 6000 HLR
A - Length (mm)	Skid std	3650	4650
	Frame/skid 20'	5900	5900
L - Width (mm)	Skid std	2000	2000
	Frame/skid 20'	2352	2352
H - Height (mm)	Skid std & 20'	2000	2000
	Frame 20'	2393	2393
Ø - External diameter (mm)		1950	1950
Total capacity (l)		4200	6080
Useful capacity (l)		3780	5470
Empty weight (kg)		2525	3000
LHe full weight(kg)		3050	3700
Maximum working pressure (bar)		2,9	2,9
Normal evaporation rate (%/d)		0,8	0,8



## FLOW DIAGRAM



- 1 – Super insulated filling and withdrawal valve
- 2 – Bayonet coupling  $\text{\O} 1''1/4$
- 3 – Line drain valves
- 4 – Line safety valves
- 5 - Super insulated vent valve
- 6 – Bayonet coupling  $\text{\O} 2''$  CRYENCO
- 7 – Safety valves
- 8 – Shield circuit valve
- 9 – Vent or pressure builds up valve
- 10 - Differential pressure level gauge
- 11 - Vacuum pressure gauge
- 12 – Gaseous phase valve
- 13 – Equalizing valve
- 14 – Liquid phase valve
- 15 – Back pressure regulating valve set at  $100\text{g/cm}^2$
- 16 – Line pump out port
- 17 – Bayonet coupling  $\text{\O} 1/2''$
- 18 – Super insulated withdrawal valve
- 19 – Back pressure regulating valve set at  $100\text{g/cm}^2$
- 20 – Vacuum rupture disc
- 21 – Pump out port