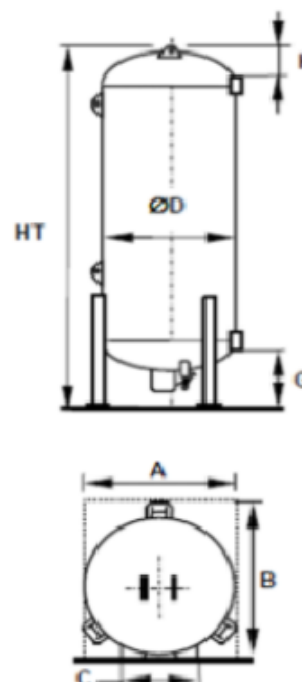
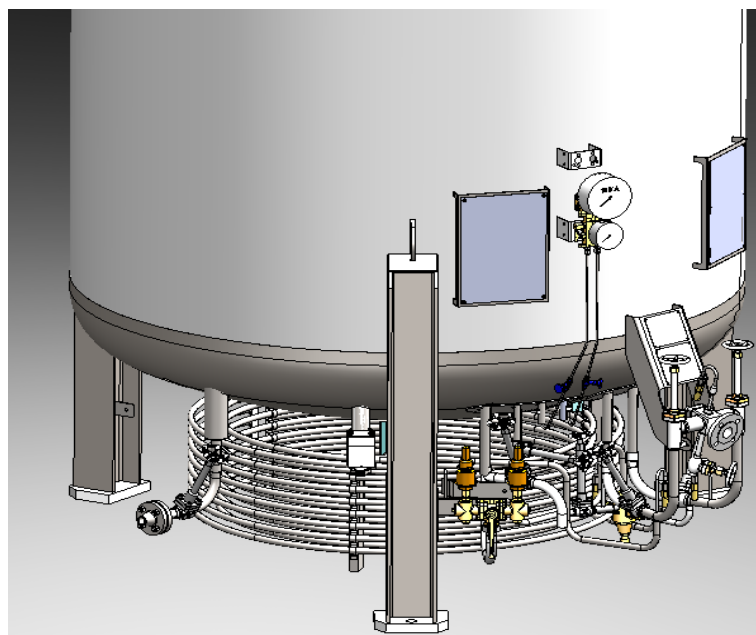


CRYOLOR ASIA PACIFIC introduces the latest generation vacuum insulated cryogenic tank, the **Céline 3**, for Liquid Oxygen for " **LIQUID MEDICAL OXYGEN** " service. Available in a range of sizes with a Maximum Allowable Working Pressure of **250 psig** (≈ 17 bar), **Céline 3** is designed in accordance with **ASME Section VIII Division 1 with 'U' stamp**. Moreover, the support legs used in the Céline 3 range are calculated to resist high winds and earthquakes (UBC code)

- **The widest range of standard options:** Introduced by CRYOLOR, our innovative modular design using prefabricated piping modules, allows the basic model to be customized to satisfy virtually all possible technical requirements.
- **A maximum use of Stainless steel:** Only Céline 3 uses as much stainless in its construction to guarantee the lowest life cycle costs - valves, interconnecting piping, pressure raising coil and all welded connections are stainless steel.
- **Components selected for their operational reliability:** Mono-bloc pressure building economizer - regulator, safety system with dual relief valves and burst discs as standard, stainless steel valves.
- **Reduced overall operational costs:** Optimized pipework layout with fewer connections minimize potential leaks and facilitate operation & servicing, filling assembly isolation valves, proven painting techniques guarantee years of carefree operation

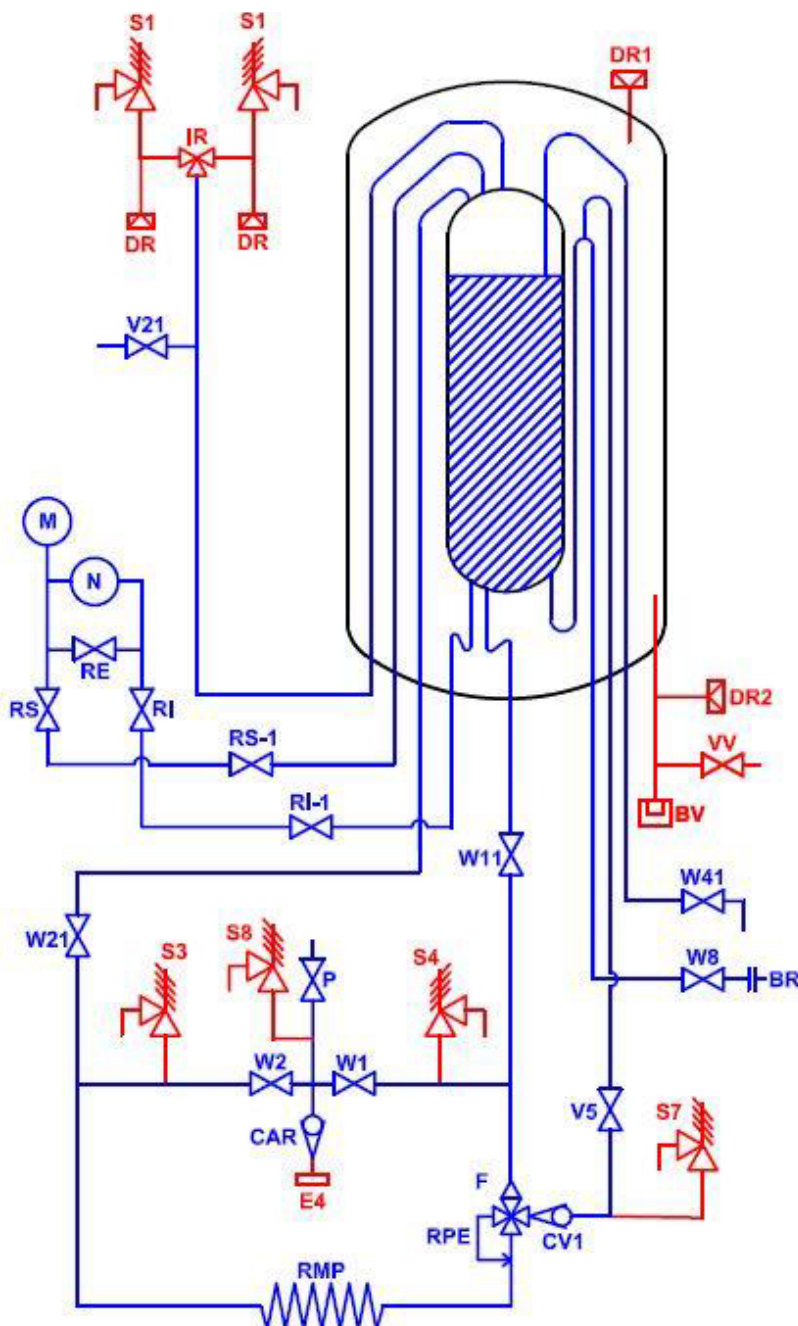


TYPE	CA 6 (1.5 KUSG)		CA 11 (3 KUSG)		CA 14 (4 KUSG)		CA 19 (5 KUSG)	
Gross capacity (liters / USG) *	6150	1625	10540	2784	14910	3939	19290	5096
Net capacity (liters / USG) *	5843	1544	10013	2645	14165	3742	18326	4841
Boil off Rate O2 (%)	0.28		0.26		0.24		0.23	
Empty weight (kg / lbs)	4200	9259	5600	12346	7250	15984	8650	19070
Weight full Oxygen (kg / lbs) - LOX	10867	23957	17025	37533	23412	51615	29560	65169
Continuous Flow rate for 8 Hours at 8 bar (Nm3/h) - LOX	2000		2000		2000		2000	
Ø Diameter (mm / feet)	2200 / 7.2							
HT height (mm / feet)	4200	13.8	5200	17.1	7660	25.1	8600	28.2
H (mm / feet)	520 / 1.7							
G (mm / feet)	1055 / 3.5							
A (mm / feet)	2300 / 7.5							
B (mm / feet)	2500 / 8.2							
C (mm / feet)	1245 / 4.1							

* Manufacturing tolerance : $\pm 4\%$ Note: Trycock level is 95%.

LIQUID MEDICAL OXYGEN STORAGE TANK FLOW DIAGRAM:-

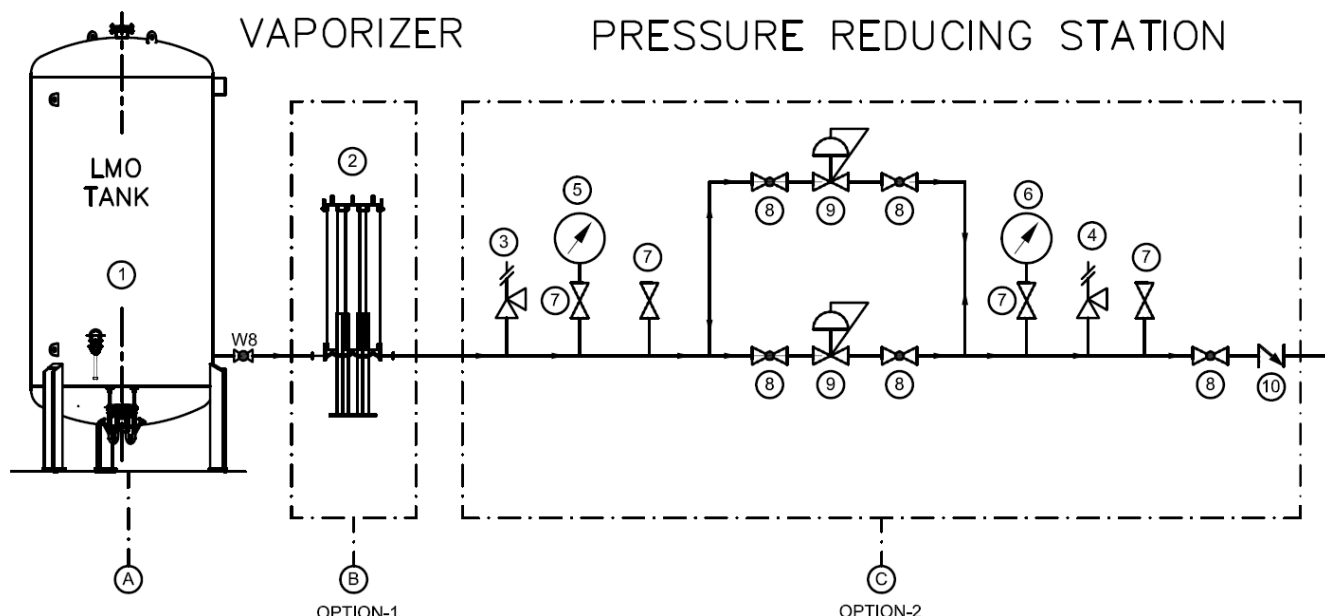
REF.	DESCRIPTION	SIZE
W1, W11	Bottom Filling Valves	DN 25
W2, W21	Top Filling Valves	
S3-S8	Line Safety Valve	1/4"
E4	Filling Connection	DN 40
CAR	Filling check valve	-
P	Purge valve	DN 15
S1	Inner Vessel Safety Valve	1/2"
DR	Inner Vessel Protection Device	1/2"
DR1, DR2	Outer Vessel Protection Device	-
IR	3-Way Valve	DN 20
M	Pressure Indicator	-
N	Level Indicator	
RI	Level Gauge Manifold, Liquid	
RE	Level Gauge Manifold, Equalizer	
RS	Level Gauge Manifold, Gas	
W41	Full trycock Valve	DN 15
BV	Vacuum Connection	-
W8 + BR	Withdrawal Valve + Connection	DN 25
RPE & F	Pressure Regulator / Economizer with Filter	DN 15
CV1	Check Valve	
RMP	Pressure Building Coil	-
RS-1, RI-1	Isolation valve	-
V5	Isolation valve	DN 15
V21	Vent Valve	DN 25
VV	Vacuum probe isolation valve	-



Note : All operating valves are “Bestobell or any other equivalent” make.

Elements important for safety

LIQUID MEDICAL OXYGEN STORAGE TANK + VAPORIZER + PRS FLOW DIAGRAM:-



Equipment Ref.	Tag. No	Description	Specification / Size
A	1	Cryogenic Storage tank -LMO tank (Standard Product)	CA06 / CA11 / CA14 / CA19
B	2	Atmospheric Vaporizer (Customized Product)	200 or 400 or 600 Nm ³ /Hr (MAWP : 40 barg)
C	-	Pressure Reducing System / Station (Customized Product)	
	3	Safety relief valve	Set Pressure 20 bar ; Size : 1/2 " x 1" (DN 15 x DN25)
	4	Safety relief valve	Set Pressure 6 bar ; Size : 1/2 " x 1" (DN 15 x DN25)
	5	Pressure gauge	Range: 0- 20 bar ; Size : 1/2 " (DN 15)
	6	Pressure gauge	Range: 0- 10 bar ; Size : 1/2 " (DN 15)
	7	Ball valve	Size : 1/2 " (DN 15)
	8	Ball valve	Size : 1 " (DN 25)
	9	Pressure Regulator	Flow rate : 250 Nm ³ /Hr ; Size : 1 " (DN 25)
	10	Non-Return Valve	Size : 1 " (DN 25)

Note:

- This technical specification is purely an indication, It can't be considered as a contractual document.
- This technical specification is subject to change without prior intimation

Vertical Cryogenic Storage Tank (LIQUID MEDICAL OXYGEN)

Cryogenic Storage tank -LMO tank (Standard Product)



Atmospheric Vaporizer
(Customized Product)



Pressure Regulating system
(Customized Product)

