

Cryogenic Tanks

- ✧ The cryogenic tanks are composed of S30408 stainless steel inner container, Q345R (or Q245R) low-alloy structural steel outer cylinder, inner and outer cylinder support structure, and vacuum insulation sandwich structure. They are used to store LN₂, LO₂, LAr, and LCO₂.
- ✧ LN₂, LO₂, and LAr cryogenic tanks are divided into vertical and horizontal structural types, with vertical storage tanks being the primary type.
- ✧ Vacuum powder insulation is used.
- ✧ Designed and manufactured in accordance with national standards GB150 "Pressure Vessels," GB18442 "Cryogenic Insulated Pressure Vessels," and "Safety Technical Supervision Regulations for Fixed Pressure Vessels." The exported products have been designed and manufactured according to ASME or GB standards.
- ✧ WINGO cryogenic storage tank has reasonable structures, good insulation performance, long-lasting stability, safety and reliability, and easy maintenance.

● Technical Specification of Cryogenic Tanks (LO₂, LN₂, LAr, LCO₂)

1	Effective volume(m ³)	LN ₂ /LO ₂ /LAr Storage Tanks										LCO ₂ Storage Tanks										
		5	10	15	20	30	50	100	150	200	250	5	10	15	20	30	50	100	150	200		
2	Working pressure(Mpa)	0.2/0.8/1.6/2.2/3.2/3.5										2.2										
3	Filling rate (%)	95										95										
4	Adiabatic System	Vacuum powder/High vacuum multilayer winding insulation							Vacuum powder insulation			Vacuum powder insulation										
5	Support structure	Steel pipe support					Steel pipe support/ Sling construction					Steel pipe support					Steel pipe support/ Sling construction					
6	Inner, outer vessel material	Q30408, Q345R/Q245R										16MnDr, Q345R/Q245R										
7	Inner vessel process	National standard/strain						National standard				National standard										
8	Design Code	GB150/GB18442 (ASME for overseas)										GB150/GB18442 (ASME for overseas)										
9	Vacuum factory standard (Pa)	1					3			5			1				3			5		
10	Basic Configuration	Root valve, level gauge, pressure gauge, explosion-proof device, Vacuum valve, vacuum silicon tube										Root valve, level gauge, pressure gauge, explosion-proof device, Vacuum valve, vacuum silicon tube										
11	Paint	Jotun/PPG										Jotun/PPG										

● Technical Specification of Cryogenic Tanks (LNG)

1	Effective volume(m³)	20	30	50	60	100	150	200	250	300
		18	27	45	54	90	135	180	225	270
2	Working pressure (Mpa)	0.6/0.7/0.8/1.2								
3	Filling rate (%)	90								
4	Adiabatic System	Vacuum powder/High vacuum Multi-layer winding insulation						Vacuum powder		
5	Support structure	Steel pipe support					Steel pipe support/ Sling construction			
6	Inner outer vessel material	Q30408 Q345R								
7	Inner vessel process	National standard/Strain						National standard		
8	Design Code	GB150/GB18442 (ASME for overseas)								
9	Vacuum factory standard (Pa)	1				3		5		
10	Basic Configuration	Root valve, level gauge, pressure gauge, explosion-proof device, Vacuum valve, vacuum silicon tube								
11	Paint	Jotun/PPG								

