

OUR PRODUCT RANGE

Cryogenic Storage Tanks for Atmospheric Gases

Cryogenic Storage Tanks for CO2 & N2O

Cryogenic Storage Tanks for LNG

Thermosiphon Tanks

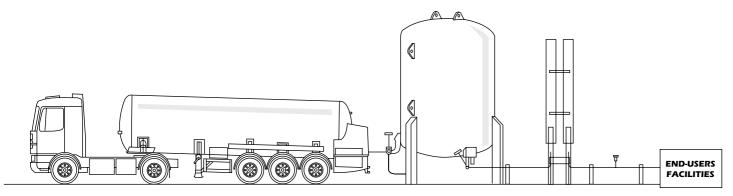
Cryogenic Semi-Trailers

ISO Containers

Rigid Tankers

Atmospheric Vaporisers

Associated Services



CERTIFIED ISO 9001 SINCE 1991





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RVTTHERMOSIPHON TANK



OPTIMAL CYLINDER FILLING EFFICIENCY





THE NEW GENERATION RVT THERMOSIPHON VESSEL

The RVT was developed in collaboration with the leading high-pressure cryogenic pump manufacturers, specifically for cylinder filling systems for liquid Nitrogen, Oxygen and Argon.

The New Generation RVT Thermosiphon vessel is the most reliable solution for reducing operating costs related to product losses and pump maintenance.



RVT with triple thermosiphon option and separate liquid offtake line

CRYOLOR EXPERTISE

As a pioneer in the field of thermosiphon vessels, Cryolor has acquired significant expertise and nurtured it in order to perfect the design of the RVT.

The proof of the RVT's success is that other manufacturers attempt to imitate its design.

HIGH OPERATING RELIABILITY

Components have been selected based on their reliability and improved performance. The extensive use of high-grade stainless to stainless welded piping and valves prevents the risk of leakage, eliminates the risks of pollution while making the equipment highly versatile and facilitating maintenance.

CUSTOM-BUILT:A WIDER RANGE OF STANDARD OPTIONS

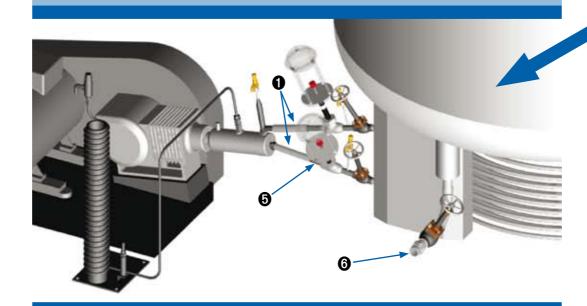
Designed and manufactured using standard, pre-assembled modules, the RVT's innovative, modular piping system offers numerous options to be added in order to adapt to your specific requirements.

RVT

ADVANTAGES

SUPERIOR PERFORMANCE & REDUCED PRODUCT LOSSES

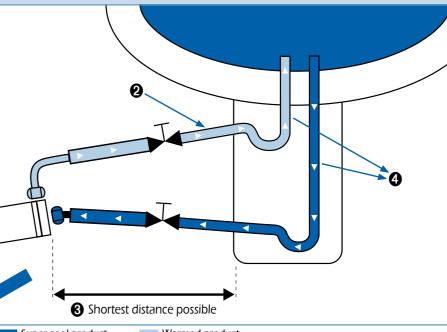
The design of the RVT generates a natural, thermo-dynamic circulation of the liquid between the tank and the pump, allowing the product to remain in a liquid state inside the pump, thereby significantly improving productivity. RVT tanks virtually eliminate product losses related to venting and pressure increase in the tank, thanks to an instantaneous start-up and a priming phase that is 3 times quicker than with a standard tank.



SPECIALLY DESIGNED PIPING FOR OPTIMAL PUMPING EFFICIENCY

Compatible with the most powerful pumps in the market (1000 Nm3/h), piping diameters have been calculated to allow minimal pressure drop and maximum flow.

- **1** The angles of the pump suction and product return are specially designed with a constant slope in order to guarantee optimal performance of the thermosiphon effect.
- 2 Liquid warmed by the pump head is recycled to the liquid phase, thereby cooling it and minimising pressure rise in the tank.
- **3** Designed to allow the pump to be installed as close as possible to the tank to shorten the distance of exposed lines.
- 4 Vacuum insulation of the pumping lines up to the connection prevents heat exchange and gas build-up in the lines.
- **1** The "pod" configuration allows actuated shut-off valves to be mounted between the tank and the pump, while maintaining a constant slope and the shortest connection distance possible.
- **6** A liquid withdrawal line separate from the thermosiphon "pod", allows the RVT to be used for liquid applications.



Super cool product

Warmed product

SIMPLIFIED MAINTENANCE

- Easier accessibility: the simplified piping system is ergonomically designed with fewer connections for ease-of-access.
- Spare parts easily available in stock from our in-house warehouse.

OPTIMAL SAFETY

RVT tanks are equipped complete with high a performance safety system as standard including double relief valves and bursting disks to protect the inner vessel, and 2 outer vessel burst discs. The support legs are calculated for Eurocode on wind and earthquake-resistance

LONGER LIFE CYCLE

The stable, super-cooled liquid prevents pump cavitation and thereby lowers servicing frequency while significantly increasing the life-cycle of the pump.

The tried and tested design - all welded stainless steel construction, insulation system and paint techniques - guarantee a longer, trouble-free life cycle with lower operational costs. The RVT is the only tank on the market to use as much stainless steel in its standard design (including stainless valves, interconnecting piping, & PR coil).



Typical thermosiphon installation with a high-pressure pump and actuated shut off valves

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