VTC series of cryogenic tanks are designed in accordance with the requirements for safe, easy and economical operation. Many of the features have been incorporated in close collaboration with leading industrial gas companies.

VTC series tanks are vertical, stationary, pressure vessels with perlite insulation for long term storage of cryogenic liquefied gases like CO₂, N₂O under pressure.

VTC series are available in capacities from 4,000 to 67,000 liters with pressures of 25 bar.

- In accordance with EN 13458 and conforming to directive 2014/68/EU
- Fine grain / low temperature carbon steel inner vessel
- 4 legs design
- Easy lifting and low cost erection using a single crane
- Bolted bonnet globe valves with stainless steel bodies
- High performance PBU with optional electrical heater as PBU
- Easily accessible relief valves with outlets directed away from the operating area
- With durable environmentally friendly coating for industrial standards

Chart Vacuum Technology®
Providing the best insulation system to protect your valuable gases from harsh ambient conditions results in lower pressure rise and lower losses, yielding better gas utilization. Chart Vacuum Technology® is at the core of why Chart is recognized around the world as the premier supplier of cryogenic equipment.
## Specifications

### BASIC DIMENSIONS

<table>
<thead>
<tr>
<th>Type</th>
<th>VTC4</th>
<th>VTC7</th>
<th>VTC10</th>
<th>VTC12</th>
<th>VTC17</th>
<th>VTC22</th>
<th>VTC27</th>
<th>VTC28</th>
<th>VTC33</th>
<th>VTC43</th>
<th>VTC36</th>
<th>VTC52</th>
<th>VTC60</th>
<th>VTC67</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net capacity (95% filling)*</td>
<td>Liters</td>
<td>3.910</td>
<td>6.910</td>
<td>9.910</td>
<td>11.050</td>
<td>15.780</td>
<td>20.520</td>
<td>25.240</td>
<td>21.770</td>
<td>31.340</td>
<td>41.080</td>
<td>34.320</td>
<td>49.120</td>
<td>56.460</td>
</tr>
<tr>
<td>Daily evaporation rate LCO2 / kg/h</td>
<td>%/d</td>
<td>0.18</td>
<td>0.94</td>
<td>0.34</td>
<td>0.12</td>
<td>0.12</td>
<td>0.68</td>
<td>0.88</td>
<td>0.08</td>
<td>0.08</td>
<td>0.07</td>
<td>0.06</td>
<td>0.05</td>
<td>0.05</td>
</tr>
</tbody>
</table>

### Notes:
1) Filling 95% (equilibrium state at 1,013 bar).
2) Filling 95% (equilibrium state at 10 bar).
3) Based on pressure EN12213 (100 kPa and 15°C ambient temperature).
4) Stated withdrawal rates are with the standard flat fin PBU vaporizer at tank pressure 15 barg and 10°C.
5) Optionally in case of higher withdrawals of CO2, electric vaporizer needed to be ordered, rate is for 4 kW.
6) Tanks with extended legs (for filling station) are approx. 190 mm higher.

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### Optional arrangement with electric heater

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### Nomenclature

- **C1**: Fill connection
- **C2**: Gas return connection
- **GR**: Gas return valve
- **LI**: Level indicator
- **PBU**: Pressure building vaporizer
- **PI**: Pressure indicator
- **RG1**: Pressure building regulator
- **S1**: Safety valves, inner vessel
- **S2**: Vacuum safety valve
- **S3**: Thermal relief valve, PB circuit
- **S4**: Thermal relief valve
- **V1**: Bottom fill valve
- **V3**: Isolation valve, bottom filling
- **V4**: Valve, PB outlet
- **V5**: Valve, vapor vent, gas outlet
- **V6**: Valve, trycock
- **V9**: Valve, liquid outlet
- **V12**: Vacuum pump down
- **V14**: Valve, safety relief section
- **V50**: Valve, LI vapor phase
- **V51**: Valve, LI liquid phase
- **V52**: Valve, LI equalization

* standard model – not all options shown