

Lox Storage Tank

Classification

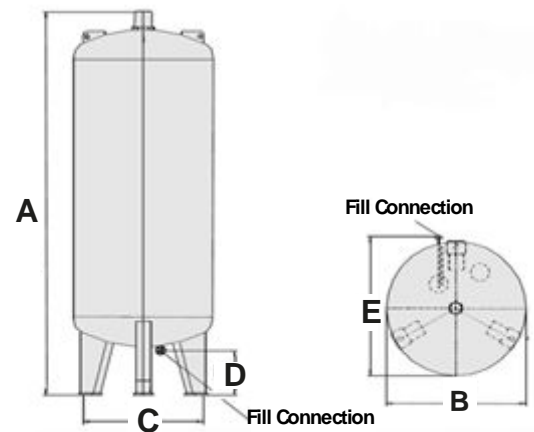
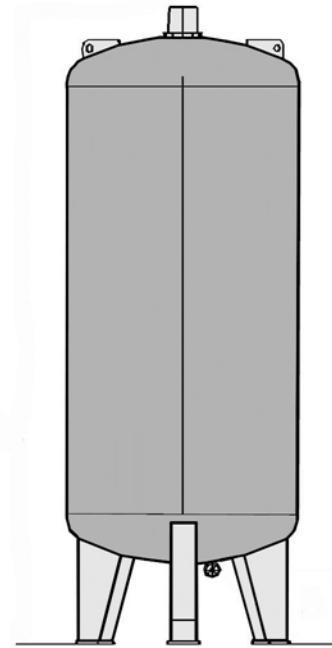
- LOX tanks are stationary, vacuum-insulated pressure vessels and consist of an inner and an outer pressure vessel.
- The inner vessel, designed for the storage of low-temperature, liquefied oxygen is manufactured out of cold-stretched material (stainless steel 1.4311 or 1.4301).
- The outer vessel is manufactured out of carbon steel.
- The space between the inner and outer vessel is filled with perlite, a grained insulation material and is evacuated up to a pressure of below 50 microns in a warm state (20°C). In addition, a molecular sieve ensures, by means of absorption, the improvement and long-term stability of the vacuum during the operation of the tank.
- An automatic regulation system helps maintain the working pressure and minimizes losses in case of lower withdrawal rates (economizer function).
- The density of the welding seams is subjected to a leak test with helium, which secures long-term durability of the vacuum.
- Paint finish
 - Sandblasting: Sa 2 1/2, ISO 8501-1:1998
 - Primer: Hempadur UNIQ 47741
 - Top coat: Hempaxane Classic 55000

Services

- Oxygen

Dimensions

Refer to Table overleaf for dimension information.



| Model | | SCS | 2200 | 3300 | 5000 | 6100 | 11000 | 13400 | 17000 | 20000 | 28000 | 32000 | 37000 | 41000 | 50000 | 60000 | 73000 |
|--|-----------------|--------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|
| Gross capacity⁽¹⁾ | | Litre | 2150 | 3300 | 4900 | 6100 | 11000 | 13300 | 17000 | 20000 | 28000 | 32300 | 36600 | 41000 | 50000 | 61000 | 73000 |
| Net capacity (95%)⁽¹⁾ | | Litre | 2045 | 3135 | 4655 | 5795 | 10450 | 12635 | 16150 | 19000 | 26600 | 30690 | 34770 | 38950 | 47500 | 57950 | 69350 |
| Daily evaporation rate | | % | 0.48 | 0.45 | 0.38 | 0.32 | 0.26 | 0.23 | 0.23 | 0.21 | 0.18 | 0.17 | 0.15 | 0.14 | 0.13 | 0.13 | 0.12 |
| Pressure build capacity at N2 in Nm³/h/ 8h | | 12 bar | 260 | 260 | 260 | 260 | 530 | 800 | 530 | 530 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| | | 8 bar | 400 | 400 | 400 | 400 | 820 | 1240 | 820 | 820 | 1240 | 1240 | 1240 | 1240 | 1240 | 1240 | 1240 |
| | | 2 bar | 1400 | 1400 | 1400 | 1400 | 2900 | 4400 | 2900 | 2900 | 4400 | 4400 | 4400 | 4400 | 4400 | 4400 | 4400 |
| Total height A | | mm | 3550 | 4850 | 6530 | 7400 | 6350 | 6000 | 8900 | 10050 | 10240 | 11940 | 12770 | 14150 | 11990 | 13990 | 16400 |
| Diameter B | | mm | 1600 | 1600 | 1600 | 1600 | 2200 | 2500 | 2200 | 2200 | 2500 | 2500 | 2500 | 2500 | 3000 | 3000 | 3000 |
| Foot hole circle C | | mm | 1500 | 1500 | 1500 | 1500 | 2000 | 2300 | 2000 | 2000 | 2300 | 2300 | 2300 | 2300 | 2800 | 2800 | 2800 ⁽³⁾ |
| Fill connection E | | mm | 1800 | 1800 | 1800 | 1800 | 2400 | 2700 | 2400 | 2400 | 2700 | 2700 | 2700 | 2700 | 3200 | 3200 | 3200 |
| Fill flange height D⁽²⁾ | | mm | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| Weight of empty tank | 18.5 bar | kg | 2250 | 3000 | 3950 | 4500 | 7150 | 9000 | 10150 | 11500 | 15100 | 16900 | 18700 | 23500 | 25800 | 30900 | 37000 |
| | 22 bar | kg | 2300 | 3100 | 4100 | 4700 | 7700 | 9500 | 11000 | 12600 | 16100 | 17900 | 19900 | 24900 | 27400 | 32800 | 38540 |
| | 37 bar | kg | 2650 | 3550 | 4800 | 5500 | 9200 | 11700 | 13100 | 15000 | 20000 | 22300 | 24800 | 30200 | 32300 | 38330 | 44930 |

(1) Geometric volumes can deviate as consequence of the cold stretch process.
 (2) Height of loading timbers to be considered: height of accessories to be added.
 (3) SCS 73000 - fitted with 4 legs.

Data subject to changes without prior notice

