

Liquid CO₂

Storage Tanks



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The CO₂ storage tanks comprise:

- Liquid level indicator (differential pressure type) with safety switch against overfilling
- Load cells (option, for horizontal tanks)
- Double-mounted safety relief valve with change-over valve
- Necessary valves and fittings
- Manhole for inspection

Connections for:

- CO₂ plant, liquid and gas
- Truck filling station
- Cylinder filling station
- CO₂ evaporator
- Blow-off and drain

Union can provide three type of insulation for our CO₂ storage tanks;

Pre-insulated prior to shipment with the following insulation:

- 120 mm polyurethane (150 mm for 110 m³)
- 1 mm aluminium cladding

Pre-fabricated insulation materials delivered separately for installation on site:

- 150 mm polystyrene
- vapour barrier
- 20 mm mineral wool
- 1 mm aluminium cladding

Vacuum insulated cryogenic (only available as vertical design):

- Insulation: Fine grain perlite + vacuum
- Vacuum value: min. 5×10^{-2} mbar(a)

Technical data:

Design pressure: 20 bar(g) (25 bar(g) for vacuum insulated type)
 Design temperature: -40/+40 °C
 Seismic zone: UBC 2 (other zones available on request)
 Design code: PED 97/23/EC (other approvals available on request)

Net capacity	Volume
20 tons	21.3 m ³
29 tons	30.6 m ³
48 tons	51 m ³
76 tons	80 m ³
103 tons	110 m ³

Other sizes available on request