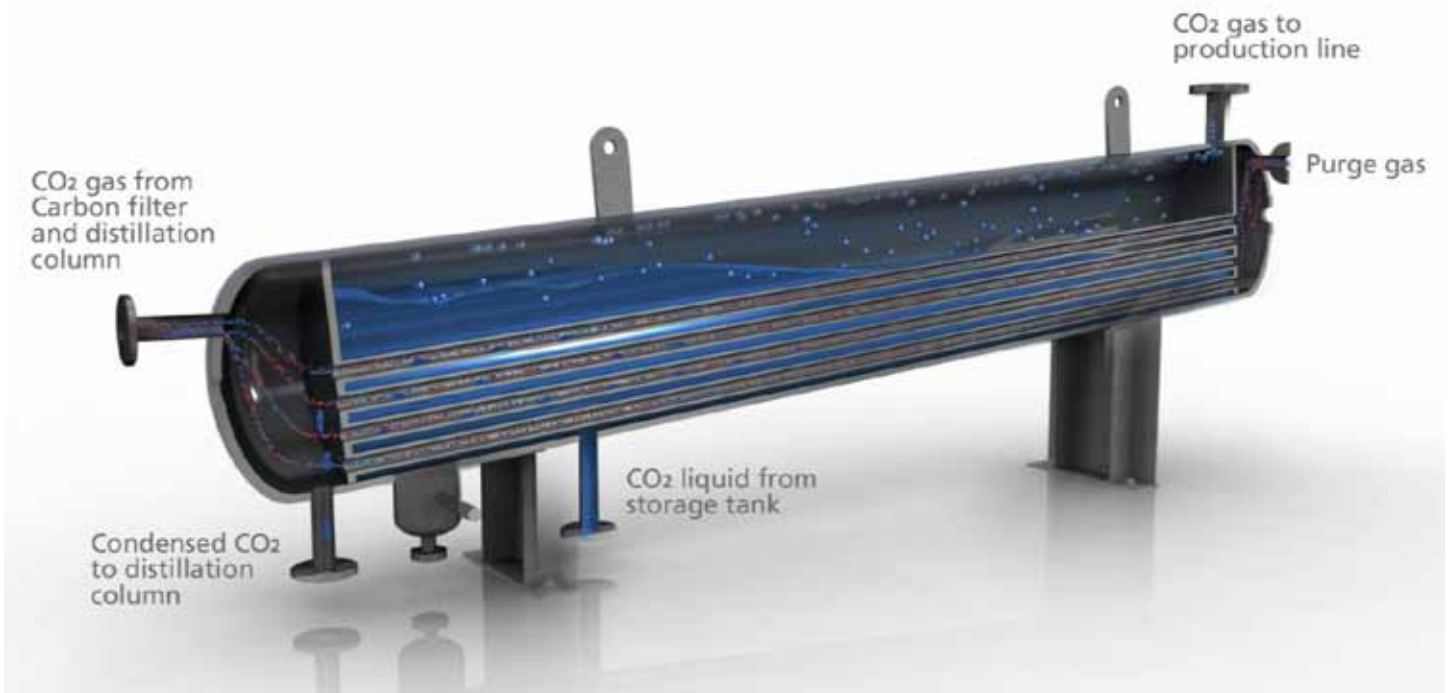


CO₂ condenser

ReCon



ReCon – Recuperative CO₂ condenser

The cooling energy from CO₂ evaporation for consumption can be utilised to liquefy the CO₂ produced by the plant and thereby introduce significant reduction of the energy consumption compared with a traditional recovery plant.

If the amount of CO₂ consumed at any time is sufficient to support the liquefaction capacity, the refrigeration plant can even be shut down for some periods. In this case, the consumption pattern of the CO₂ consumer should be investigated carefully as the recovery plant will not be able to operate if the balance between recovery and consumption is not present.

Features:

- Can be retro-fitted into the existing CO₂ plant
- Fully automatic

Scope of supply:

- CO₂ condenser/evaporator, type shell-and-tube
- Pressure control station for CO₂ consumption line
- Frequency controller for the refrigeration compressor
- Control system and integration into existing PLC/OP system

ReCon benefits

- “Green” footprint as it uses CO₂ as refrigerant
- 55 kW* savings on a 1000 kg/h liquefaction unit (58% reduction of full load power consumption)
- Reduced payback time (ROI)

* Based on R717 -32°C/+41°C operating conditions for ref. compressors, CO₂ production and consumption fully balanced