Large volumes at low operating costs.

Currently CO₂ recovery plants provide the most efficient process for the manufacture of ultra-pure, food compatible carbon dioxide for the beverage and food industry, provided that CO₂ crude gas is available in sufficient volumes and is of adequate quality.
**CO₂ Recovery plants**

The most economical method to produce high-purity carbon dioxide for beverage and food industries provided CO₂-rude gas in sufficient quantity and quality is available.

CRYOTEC-CO₂-recovery plants are mainly designed for purification and liquefaction of CO₂ from fermentation processes in breweries and distilleries and from dry ice production processes. The CO₂-recovery-plants are for automatic operation and require a minimum of operation expenditures only.

**Characteristics:**
- Compact installation
- Quality and functional check in CRYOTEC workshops
- Very short erection/commissioning time due to ready piped and wired plant skids
- Application of trusted and well-proven equipment
- Efficient plant operation
- High product quality
- Competitive solution due to standardization

**CO₂-Product Data**

- Liquefaction capacity: 150-10,000 kg/h
- CO₂-purity >99.9 % by vol.
- Food grad CO₂ in acc. with EIGA standard and with ISBT

**High plant safety**

High reliability due to high plant safety and longterm experience in process design, plant engineering and construction

**High economic efficiency**

- Low energy consumption
- Low cost for maintenance and plant operation
- Low Labour input

![Image of CO₂ Recovery plants](image)

**Main Equipment of the plant**

- Foam separator
- 3-stage gas washer
- CO₂ - ballon gasholder
- CO₂ - compressor, oil free
- CO₂ - precooling system
- CO₂ - purification battery
- CO₂ - drying battery
- CO₂ - stripper
- CO₂ - condenser with refrigeration unit
- Control cabinet with PLC Simatic S7
- Option: CO₂ - storage tank with transfer pump

**CO₂ - Recovery from**

- Fermentation processes in breweries/distilleries
- - from dry ice production processes
- - from natural source
- - from industrial/fuel gases

**Application of carbon dioxide**

- Welding and inert gases
- Beverage industry
- Food industry
- Pharma and medicine
- Industrial applications
- Dry ice
- Fire extinguishing equipment

**Availability of spare parts 10 years**

**Power consumption**

**Performance stability**

**Plant model COPRA 1000** is a standard plant for:

- Purification and liquefaction of 1000 kg/h CO₂ and especially designed for recovery of CO₂ from contaminated CO₂-rude gas, coming from fermentation processes, e.g. alcohol distillation.