CRYOTEC Anlagenbau GmbH is a specialist for cryogenic and technical gases such as LIN, LOX, GOX, LN, medical oxygen, Ar, He, CO₂, LNG and CNG.

CO₂ Technologies & Applications
Our portfolio for the chemical, power and food industry

Dealing with Large Volumes and Low Operation Costs
CO₂ recovery, purification and/or liquefaction plants provide the most efficient way for availability of carbon dioxide for usage in breweries, chemical plants or dry ice production.
CO₂ Purification and / or Recovery

The most economical method producing high-purity carbon dioxide

Carbon Dioxide Sources

- Separation from industrial / fuel gases
- Separation from combustion gases of power plants, hydrogen production, synthetic gas production
- Upgrade and efficiency enhancement in industry
- Impurities for associated gas for „Enhanced-Oil Recovery” applications in oil and gas exploration
- From natural sources

Drying / Purification

- Industrial and chemical processes (combustion processes, hydrogen production / refining or synthetic gas production)
- Amine based processes
- H₂SO₄ washing
- From dry ice production process
- From fermentation process in breweries / distilleries
- Bio gas upgrade for production of Biomethane (CO₂ removal)
- CO₂ for methanation process for synthetic natural gas production (SNG)

CO₂ Drier and Purification Units

- Natural CO₂ sources
- From fermentation processes (breweries and distilleries)
- Activated carbon
- H₂SO₄

Characteristics of our Plants

- Compact installation
- Quality and functional check in CRYOTEC workshops
- Very short erection/commissioning time due to prefabricated units
- Application of well-proven equipment
- Efficient plant operation
- High product quality
- Competitive solution due to standardization

High Economic Efficiency

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

High Plant Safety

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

CO₂ Liquefaction

- Dry ice production (recovery and re-liquefaction of gaseous CO₂ to generate a more efficient dry ice production process)

Carbon Dioxide Applications

Food & Beverage Industry

- as soda for beverages
- for packaging of food under protective gas atmosphere
- for greenhouses, used as fertilizer for enhancement of production
- food and pharma grade quality acc. to European Industrial Gases Association (EIGA) standard or Coca-Cola standard

Other Applications

- for pneumatic conveying systems
- as extracting agent for essential oils
- as refrigerant agent
- and potable water technology, sea water desalination as solvent of minerals
- as shielding gas for welding
- for fire protection systems

YOU WOULD LIKE TO LEARN MORE ABOUT OUR TECHNOLOGIES AND SERVICES?
Contact us! We are looking forward to talking to you.

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IDEAS INSIDE