

CCUS Redefining CO₂ Production

Distillery | Brewery | Diesel | Flue Gas
Natural Gas | CO₂ Revert

Freeztech Innovations

+91 98422 39293 | +91 96777 30846

www.freeztech.org | www.venkateswaragas.in

info@freeztech.org | rama@svcg.in



We are a global professional organization specializing in CO₂ production plant setup, recovery, specialty gases, and manufacturing special machines, including Dry Ice Machineries.

- With over 25 years of expertise in CO₂ Plant & Recovery, using our proprietary Carbon Capturing Technology, we offer tailored solutions for breweries/ distilleries. Our comprehensive process includes Raw CO₂ recovery, scrubbing, liquefaction customized CO₂ production plant requirements.

Captured CO₂ purity: >99.9% Vol

About Us

Established in 2010, **Freeztech Innovations**, a part of the SVCG Group, takes pride in being a premier hub for CCUS Technologies, and Carbon Sequestration.

Here at Freeztech Innovations, we are dedicated to revolutionizing CO₂ production and recovery solutions, transcending traditional boundaries to offer innovative services tailored for a wide range of industries. Our commitment extends beyond mere adaptation; we strive to redefine the landscape of carbon capture, utilization, and storage (CCUS), ensuring a sustainable and environmentally conscious future. As a forward-thinking company, we recognize the urgent need to address climate change

and mitigate greenhouse gas emissions. Through our comprehensive CCUS initiatives, we aim to minimize environmental impact while maximizing economic benefits for our clients. Our solutions not only reduce carbon footprints but also unlock new opportunities for resource optimization and circular economy practices.

At Freeztech Innovations, we are more than just a provider of CO₂ recovery services; we are catalysts for change, leading the way towards a cleaner, greener future. Join us as we redefine CO₂ production, recovery, and utilization, paving the path for a sustainable tomorrow and beyond.

Join the Fight Against Climate Change

As the world grapples with the urgent need to combat climate change, industries like power generation, chemicals, steel production, breweries, distilleries, and coal power plants are under increasing pressure to curb their carbon footprint. Carbon capture emerges as a crucial solution to achieve emission reduction targets.

What is Carbon Capture?

Carbon capture is a process of trapping carbon dioxide emissions from sources like power plants or industrial facilities, preventing them from entering the atmosphere. It involves capturing CO₂, transporting it, and usually storing it underground to mitigate climate change by reducing greenhouse gas emissions and their impact on the environment.

Through post-combustion capture (PCC), specialized plants use solvents to chemically absorb CO₂ from these gases. The captured CO₂ can then be utilized in various ways, from enhancing oil recovery to serving as a feedstock for commodity production or even underground storage as a carbon abatement measure.

Innovative Solutions for a Greener Future

At Freeztech Innovations, we are committed to driving innovation in carbon capture technologies. Our high-performance gas treatment solutions offer industries like power plants, oil refineries, cement manufacturing, breweries, distilleries, and coal power plants the means to significantly reduce their greenhouse gas emissions. Join us in the fight against climate change. Together, we can make a difference.

**Towards a Greener Future:
Our Commitment to "Net Zero" Emissions**

Core Competencies of Freeztech Innovations

Engineering & Commissioning

- CO₂ Recovery Plants for Distilleries, Breweries
- CO₂ Production Plants From Stack Gas/Flue Gas
- CO₂ Production from Diesel Generators
- Adsorption Plants - MEA
- Cryogenic Plants
- Carbon Capture and Utilization Plants

Other Services

- Feasibility Studies
- Profitability Analyses
- Technical Design
- Front-end Engineering
- Procurement of Licenses
- Complex Logistics Handling

Plant Services

- Revamps and Plant Modifications
- Spare Parts Supply
- Operational Support, Troubleshooting, and Immediate Repairs
- Long-term Service Contracts
- Expert Reviews for Plants, Operations, and Spare Part Inventory
- Operator Training

At Freeztech Innovations, we excel in plant engineering, commissioning, and a comprehensive range of plant services. From CO₂ recovery and production to adsorption and cryogenic plants, we ensure operational excellence and efficiency. Additionally, our expert services cover revamps, spare parts supply, operator training, and more. We are your trusted partner for sustainable solutions.

Trust Our Expertise: Freeztech Innovations

CO2 Revert Recovery System

Process Overview:

The Dry Ice Block Machine utilizes a closed-loop system with the CO2 Revert System.

The CO2 Revert Recovery System begins by collecting the excess vent CO2 gas during the dry ice production process. This gas, which is traditionally released or vented, is captured for recycling.

Collection of CO2 Gas: Captures traditionally vented CO2 gas generated during dry ice production.

Compression: Utilizes a specialized 2-stage compressor for efficient gas compression.

Cooling: Transforms compressed CO2 gas into a liquid state through a refrigeration loop.

Storage in Liquid CO2 Tank: Stores re-liquefied CO2 in tank for reuse in the dry ice production. (Quote on need basis)

Integration with Dry Ice Block Making Machine: Seamlessly integrates with desired capacity dry ice block making machine for synchronized operation.

PLC-Based Control: Ensures automated and precise control over the entire process for optimal resource utilization.

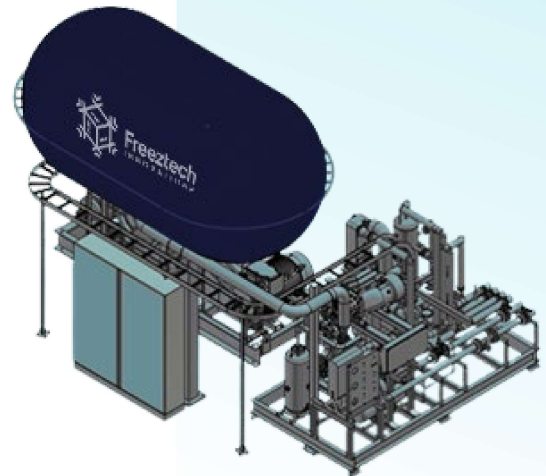
Safety Features: Advanced sensors and safety measures guarantee a secure operational environment.

Maintenance and Support: Designed for ease of maintenance with ongoing technical support and periodic check-ups.

Installation Assistance: Our technical team provides comprehensive support for seamless integration.

Training Programs: Operator training programs ensure optimal system functionality.

Technical Support: Ongoing technical support and periodic system check-ups are provided.



Advantages of CO2 Revert Recovery Systems:

Cost Reduction: Drastically reduces dry ice production costs, potentially up to 50%.

Automatic (PLC) Operation: Ensures seamless and efficient operation through automated control.

Compact and Efficient Design: Features a heavy-duty, compact structure for optimal efficiency.

Packaged, Prewired, and Pre-Piped: Facilitates timely installation with a ready-to-install design.



Unlock Profitable Sustainability with Freeztech

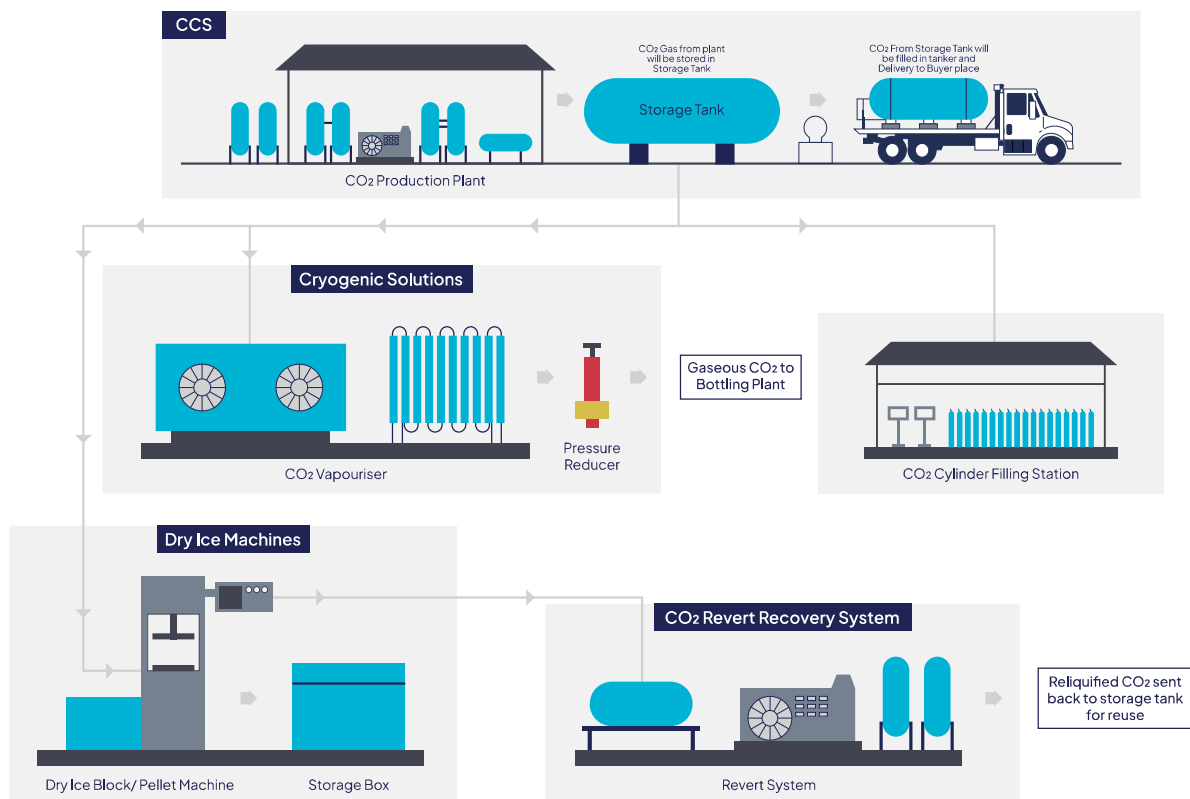
Freeztech Complete solution

CO₂ Production Plant:

Cutting-edge CO₂ generation equipment offers customizable solutions for diverse production needs. Incorporating advanced technology ensures efficiency and quality output, supported by expert guidance for seamless setup and operation.

CO₂ Storage Tank:

Puff/Vaccum Insulated SS 304 construction ensures durability and corrosion resistance. Vaccum insulation maintains CO₂ integrity and minimizes loss.



CO₂ Revert Recovery:

Recovery: Efficiently capture and recycle CO₂ emissions, minimizing waste and environmental impact. Enhance sustainability and reduce operating costs.

Stripper Column and Dryers:

Effectively remove moisture from CO₂ streams, enhancing purity and quality. Ensure optimal performance and longevity of equipment.

Comprehensive Support:

- From CO₂ production or recovery plant setup to ongoing maintenance.
- Tailored solutions to meet specific requirements and industry standards.

Boost Potential: Our Versatile Accessories



OUR CLIENTELE



Our Factories at

Coimbatore | Perambalur | Cochin | Davanagere | Bagalkote

Our Group of Companies

Sri Venkateswara Carbonic Gases Pvt. Ltd. | Rasi Engineering Works | Swathi Air Products
Super Gas Co. | Vencar Speciality Gases & Equipment Pvt. Ltd

 3-E, Chokkampudur Road, Coimbatore, Tamil Nadu, India - 641001

 +91 98422 39293 | +91 96777 30846

 sales@freeztech.org | info@freeztech.org | rama@svcg.in

For Queries:

