

WASTE TO ENERGY



Biogas Purification & Bottling Plant Manufacturer

"Delivering Innovation for
Cleaner, Safer & Sustainable
Industries."



AIRSHUDDHI
—ENGINEERS—
PURITY OF THOUGHTS



www.airshuddhi.com

About **Airshuddhi Engineers**

Airshuddhi Engineers is one of the leading company focused on transforming organic waste into Green Energy along with manufacturing and designing high quality Biogas Purification & Bottling Plant. With years of continuous & strenuous efforts in research & development, the company holds a pioneer position in designing and manufacturing of Bio Gas generation Plant Bio Gas Purification & Bottling Plant, Membrane , H₂s Scrubber, Air Dryers and Pressure Vessels.



***Engineering Cleaner Air,
Empowering Greener
Tomorrow.***



Managing Director's Profile

Surendra Singh Deora
B.Tech E&TC

Niraj Kumar Singh
B.E. Mechanical

Prajesh Patel
M.Sc. Statistics

“At Airshuddhi Engineers, our vision is to create a sustainable future through innovative renewable energy solutions. We believe that transforming organic waste into clean Green Energy is not only an environmental responsibility but also a step towards energy independence for our nation.

With a strong commitment to quality, technology, and continuous innovation, we strive to deliver reliable and efficient Bio Energy solutions that contribute to a cleaner and greener tomorrow.”

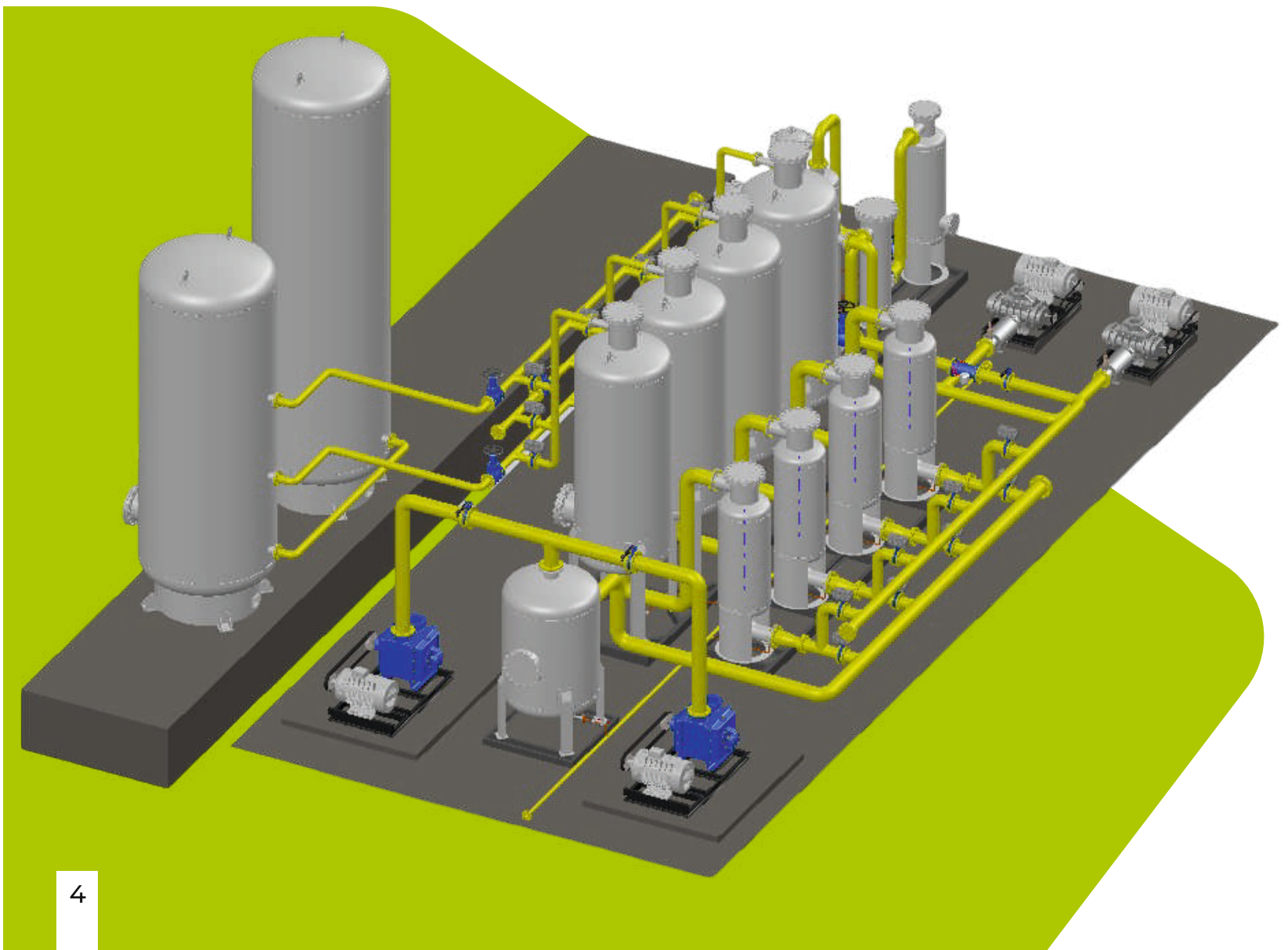


Biogas Purification by: VPSA Technology



Airshuddhi Engineers offers advanced Biogas Purification Systems based on VPSA (Vacuum Pressure Swing Adsorption) Technology, designed for high-purity Bio CBG production with enhanced efficiency and lower energy consumption. Our VPSA systems efficiently remove CO₂, H₂S, moisture, and other impurities to deliver clean and sustainable green fuel for industrial and automotive applications.

With advanced engineering, reliable performance, and cost-effective operation, Airshuddhi VPSA Technology ensures superior gas quality and optimized energy efficiency.

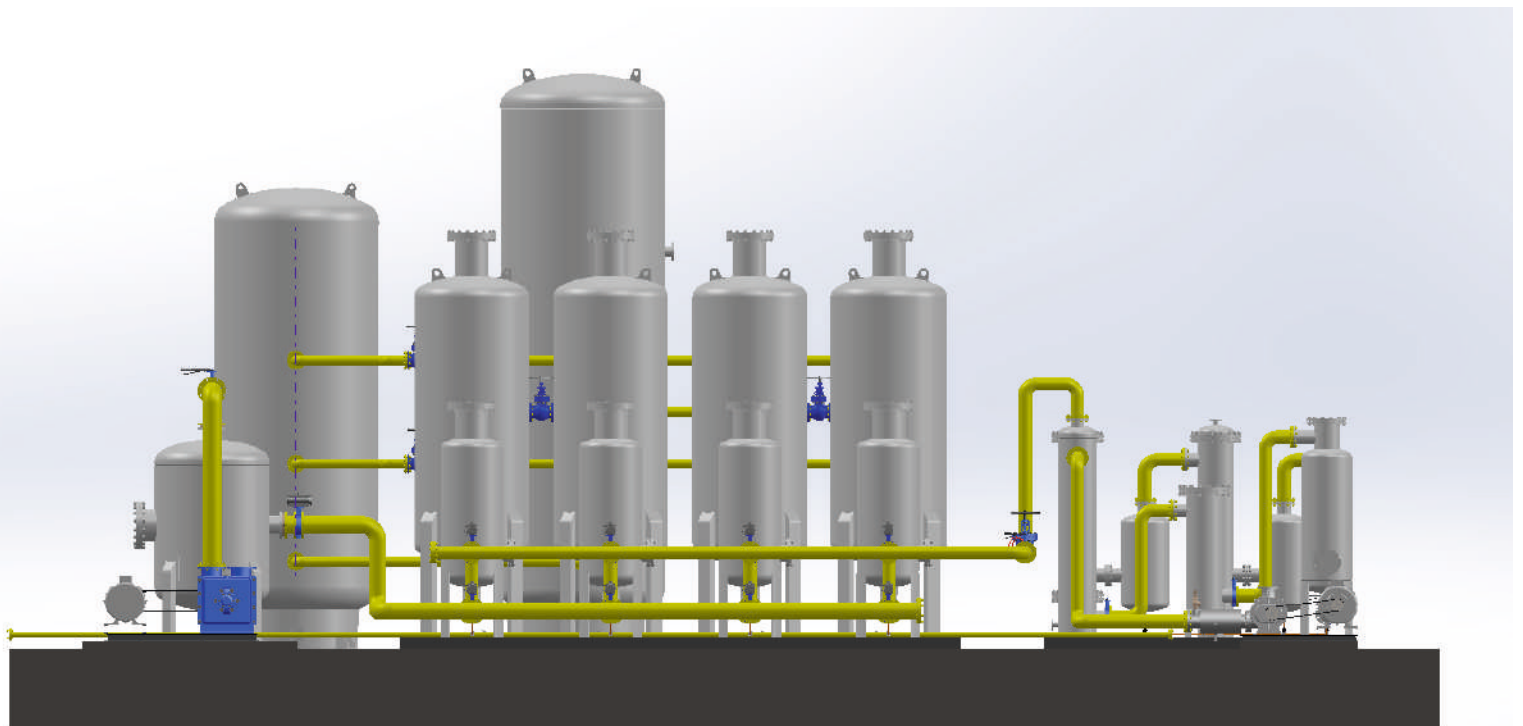




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Advantages of VPSA Technology

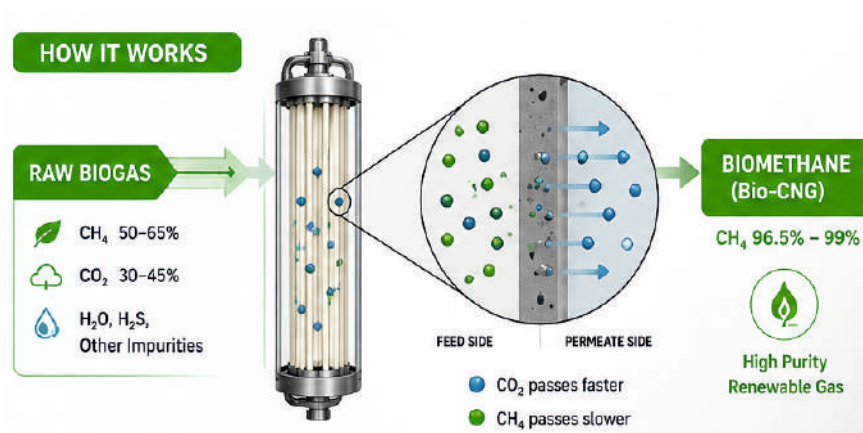
- Lower power consumption compared to conventional systems
- High methane recovery and purity
- Compact and space-saving design
- Fully automatic and easy operation
- Reduced operational and maintenance cost
- Suitable for continuous large-scale operations
- Efficient removal of CO₂, H₂S, and moisture
- Reliable and energy-efficient green fuel production



Membrane Biogas Separation Technology



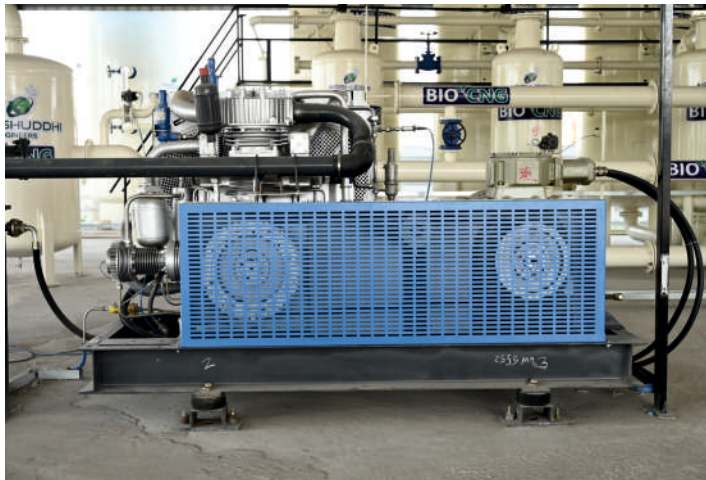
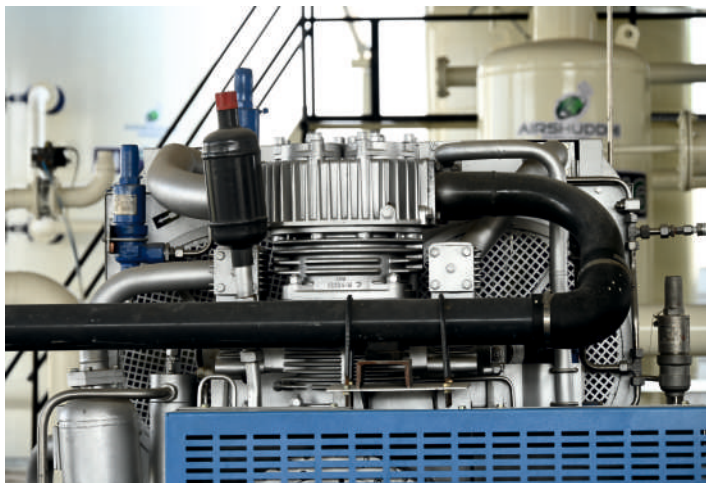
The process works on the principle of selective gas permeation, where CO₂ molecules pass through the membrane faster than methane, ensuring maximum methane recovery and superior gas quality suitable for automotive fuel, industrial applications, and pipeline injection. Engineered for low operational cost, energy efficiency, compact design, and continuous performance, Airshuddhi Engineers' membrane upgrading systems provide a sustainable and eco-friendly solution for modern Bio-CNG plants.



CNG Booster Compressor

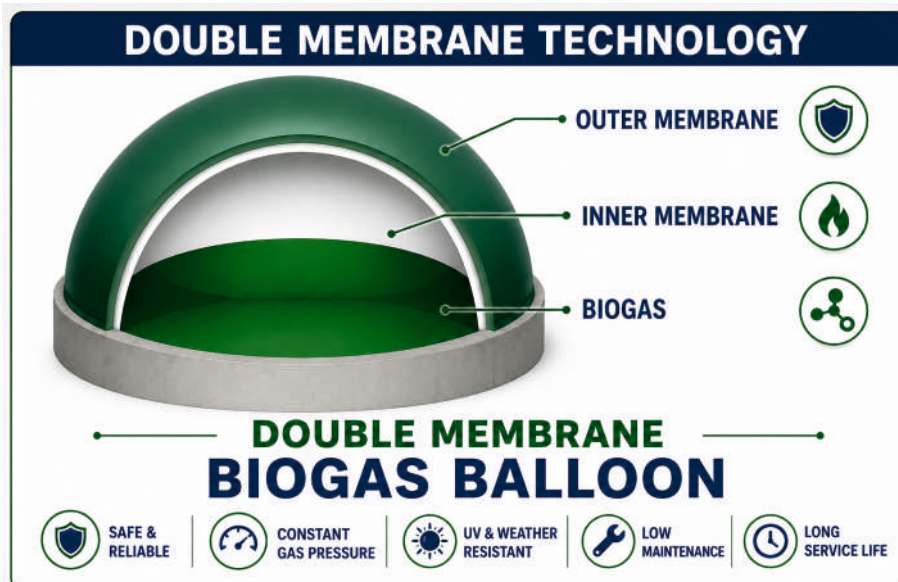


At Airshuddhi Engineers, our CNG Booster Compressors are designed to increase the pressure of CNG/Bio-CNG for efficient storage, cylinder filling, transportation, and dispensing applications. Built for high efficiency, safety, and continuous performance, they ensure reliable gas transfer with low energy consumption for modern clean energy projects.



Double Membrane Biogas Balloon

At Airshuddhi Engineers, our Double Membrane Biogas Balloons are designed for safe and efficient biogas storage. Built with high-quality UV-resistant and weatherproof materials, the system ensures stable gas pressure, leak-proof performance, low maintenance, and reliable operation for modern Bio-CNG and biogas plants.



H₂S Scrubber System For Biogas



- Efficient removal of harmful Hydrogen Sulfide (H₂S) from raw biogas
- Ensures cleaner, safer, and corrosion-free gas for Bio-CNG applications
- Protects engines, compressors, pipelines, and equipment from damage
- Improves biogas quality and overall plant performance
- Available in Biological, Chemical, and Dry Media based systems
- High purification efficiency with low maintenance operation
- Robust, reliable, and energy-efficient design by Airshuddhi Engineers



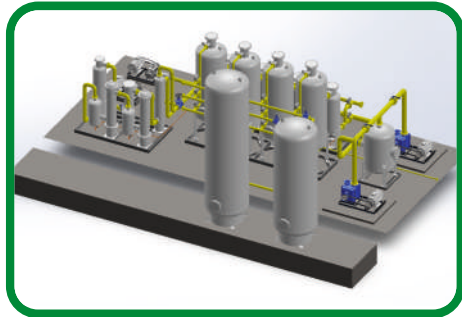
————— Advanced Scrubbing for Cleaner Bio-CNG. —————





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Our Other Products & Services



PSA Technology



Biogas Dryer



PSA Nitrogen Gas Plant



PSA/VPSA Oxygen Gas Plant



Oxygen Gas Analyzer



Oxygen Gas Sensor



We take AMC for any OEM make Gas Generator plant / Air Dryers. The types of AMC should be both type comprehensive and Non-Comprehensive type (based on the condition of your plant)

After Sales Service & Maintenance

- PPM Oxygen Analyzer / Percent Oxygen Analyzer
- PLC & HMI
- Thermocouple & RTD
- Temperature Gauge
- Pressure Gauge
- CMS, ZMS, Activated Alumina & many more...

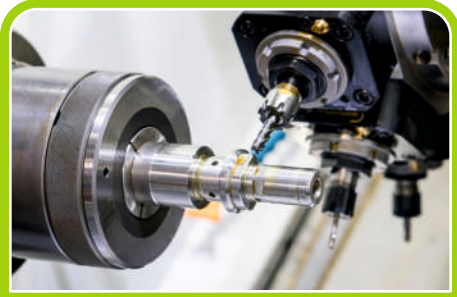


Spare & Parts

Industries We Serve



AIRSHUDDHI
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Metal Fabrication



Oil & Gas



Pharmaceutical



Chemical



FUEL



Plastic



Power Generation



Food & Beverage



Healthcare

Our Certification



“Committed to Quality in Every Product & Service.”

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