

PSA - Medical Oxygen Plant Manufacturer



ABOUT US

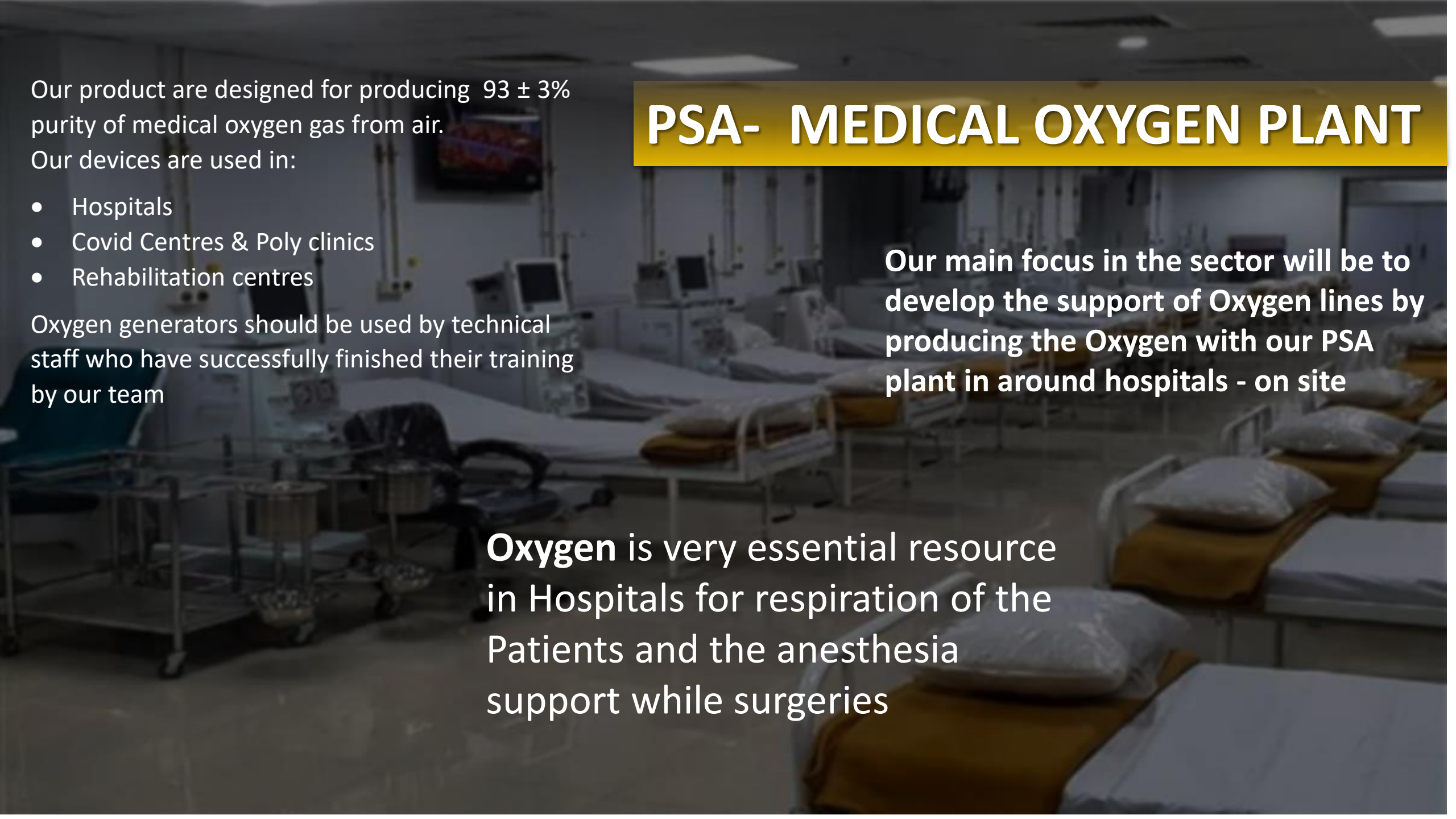
- For more than two decades now, SVCG- Freeztech, a household name in Dry Ice Machineries manufacturing capability at three of its state-of-the-art global scale facilities, prominently located at vantage points, close to our customers, delivering prompt and cost effective services 24x7 and 365 days in a year.
- The Company commands expertise in setting-up Carbon Dioxide Plant, Dry Ice Plant, Ethylene Oxide Sterilization Plant, Ripening Plant and such similar plants for its customers on Turnkey basis as well as on lump sum contract basis and Built in Operation plants

OUR Company

- The Company with its over 25 years expertise accomplished both forward and backward integration of its businesses, be it manufacturing of machines or gas plants. The Company's engineering division manufacturers and exports PSA Medical Oxygen Generators, Dry Ice machines, Dry ice Pelletizer machines, Dry Ice Blasting machines, Sterilization chambers, Ripening chambers, Super Critical Extractors and also manufactures customer's specified machines and requirements
- FREEZTECH builds customized PSA Medical Oxygen Generators terminals at customers' sites across the World to installs most sophisticated and globally rated apparatus, equipment's and accessories to ensure uninterrupted Medical Oxygen gas supplies at its clients/Hospitals' production facilities

OUR GOAL

- **Vision:**
- To make the Freeztech brand a global brand to make our firm remember ed first in the sector
- **Mission:**
- Our main motto is to create innovative designs with less power consume in the global sense by meeting all the national and international legal requirements
- We are taking the priorities of the sector into consideration and being respectful to the environment and people and giving the first priority for the expectations of customers, and also to produce innovative technological



Our product are designed for producing $93 \pm 3\%$ purity of medical oxygen gas from air.

Our devices are used in:

- Hospitals
- Covid Centres & Poly clinics
- Rehabilitation centres

Oxygen generators should be used by technical staff who have successfully finished their training by our team

PSA- MEDICAL OXYGEN PLANT

Our main focus in the sector will be to develop the support of Oxygen lines by producing the Oxygen with our PSA plant in around hospitals - on site

Oxygen is very essential resource in Hospitals for respiration of the Patients and the anesthesia support while surgeries

PSA - Pressure Swing Adsorption Technology

Pressure Swing Adsorption Technology (PSA) technology is used with specially developed adsorbents Called zeolites to separate oxygen from nitrogen to be able to use pure oxygen in many applications.

First, air is compressed up to 10 bars with the help of compressors, then air is dried out to remove the Moisture in the air. Filtration takes place thereafter to filter out the remaining particles, aerosol and oil which is in the pressurized air stream. Carbon Tower ensures long term oil free oxygen delivery.

PSA unit consists two tanks filled with zeolites. Each column undergoes cyclic sequence of pressurization Generation, equalization and exhaust cycles for continues flow of high purity oxygen.

PSA Advantages

- Reduction of oxygen cylinder cost
- Safe low- Pressure oxygen usage instead of explosive high pressure cylinders & cryogenic containers/ Tanks
- Elimination of logistical and administrative operations
- Elimination of risk factors while handing cylinders and man powers
- Ready to use high technology solutions



PSA Tower

Key Features of Oxyflow

- Medical Oxygen from 93% to 95% (93±3%)
- Fully Automatic 24/7
- Real time trends of process parameters
- Visual recommended services maintenance reminders
- Algorithm against electricity Cuts – off (Purity does not drop after electricity cuts - off
- Smart Algorithm (Generator automatically adjusts its purity regarding oxygen flow
- Highest packing density of zeolites (specifically designed filling station)
- Uniform distribution design to maximum zeolite life
- Specifically designed Starting and Stopping points to protect purity from dropping
- Humid protection system (Humid air cannot enter the zeolite tanks)
- Medical grade oxygen filtration
- High efficiency molecular sieve+
- Real time monitoring
- Remotely manageable via Ethernet
- Recording capabilities and data logging
- Multi-level secured access for supervisory control
- Top quality SMC valves and flow meter
- Medical device CE
- 10.1-inch-wide touch panel
- User friendly interface
- Multi language



PSA PLANT SPECIFICATIONS				
Model	LPM	Cu. M / Hr	Equivalent	Air Compressor power
			D type- Cyls./day	Power KW
FT 50	50	3	10	5
FT 85	85	5.1	17	7.5
FT 150	150	9	31	11
FT 200	200	12	41	15
FT 250	250	15	51	22
FT 360	360	21.6	74	30
FT 480	480	28.8	99	37
FT 600	600	36	123	45
FT 1000	1000	60	206	75

Our certifications



Our units:

- ❖ Dharanee Sugars- Kallakurichi
- ❖ Dharanee Sugars- Rajapalayam
- ❖ Nadhi Biotech- Kothakotta
- ❖ Karthick Sugars- Bagalkot
- ❖ SVCG-Peelamedu (Sales office)

Our Group of Companies

- ❖ Sree Swarnalakshmi Enterprises
- ❖ Swathi Air Products
- ❖ Thirumala Gases
- ❖ Super Gas Co
- ❖ VN Industrial Estate
- ❖ Southern Gases
- ❖ Sri Venkateswara Carbonic Gases Pvt. Ltd
- ❖ AGEM south India Pvt. Ltd
- ❖ AGEM Venkateswara Pvt. Ltd

Manufactured By


Freeztech Innovations

No: 1. Govindanaicken Palayam,
Athipalayam Po
Coimbatore- 641 110, Tamil Nadu, India


PSA Branches and Services

- | | |
|-------------|------------|
| • Chennai | • Bagalkot |
| • Bangalore | • Mumbai |
| • Hyderabad | • Baroda |

Centralized customer care

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- ❖ Sree Shathya Shubha hospital, Dindugal
- ❖ MGM hospital, Chennai
- ❖ MV diabetes hospital, Chennai
- ❖ Apollo group of Hospital
- ❖ PSG hospitals, Coimbatore
- ❖ GKNM hospital. Coimbatore
- ❖ Aware Global Hospital, Hyderabad
- ❖ Rahman Hospital, Assam
- ❖ Rex Ortho Hospital, Tamil Nadu
- ❖ Sri Ramakrishna Hospital, Tamil Nadu
- ❖ Vamsam Fertility hospitals, Tamil Nadu

- ❖ Honda Motorcycle & Scooters India Ltd
- ❖ Lakshmi Machine Works Ltd
- ❖ ZF wind power
- ❖ ZF Rane Engine
- ❖ Suzlon Energy
- ❖ Integral Coach Factory- ICF
- ❖ Cochin Shipyard Ltd
- ❖ BEML
- ❖ Coastal Energy
- ❖ TNEB
- ❖ TATA power