Committed To Quality
AIR-N-GAS

ISO 13485 : 2016 Medical Devices Quality Management

ISO 9001:2015 CERTIFIED COMPANY

CE

AIR-N-GAS PROCESS TECHNOLOGIES

MEDICAL OXYGEN GENERATOR

WHY PSA MEDICAL OXYGEN GENERATOR??

- ★ **EASY** TO INSTALL
- ★ **LOW & EASY** MAINTENANCE
- ★ ON SITE OXYGEN PRODUCTION AT **SUSTAINABLE COST**
- ★ **NO MORE EXPLOSION** OR FIRE HAZARDS
- ★ **OXYGEN QUALITY** COMPLIANT WITH THE PHARMACOPOEIA
- ★ FULLY **AUTOMATIC** OPERATION
- ★ CAN FULFIL **EMERGENCY** REQUIREMENT
- ★ **NO SPECIAL ATTENTION** REQUIRED TO OPERATE
- ★ **HIGH AVAILABILITY** & DESIGN FOR LONG LIFETIME
- ★ **SAFE DELIVERY** OF OXYGEN GAS

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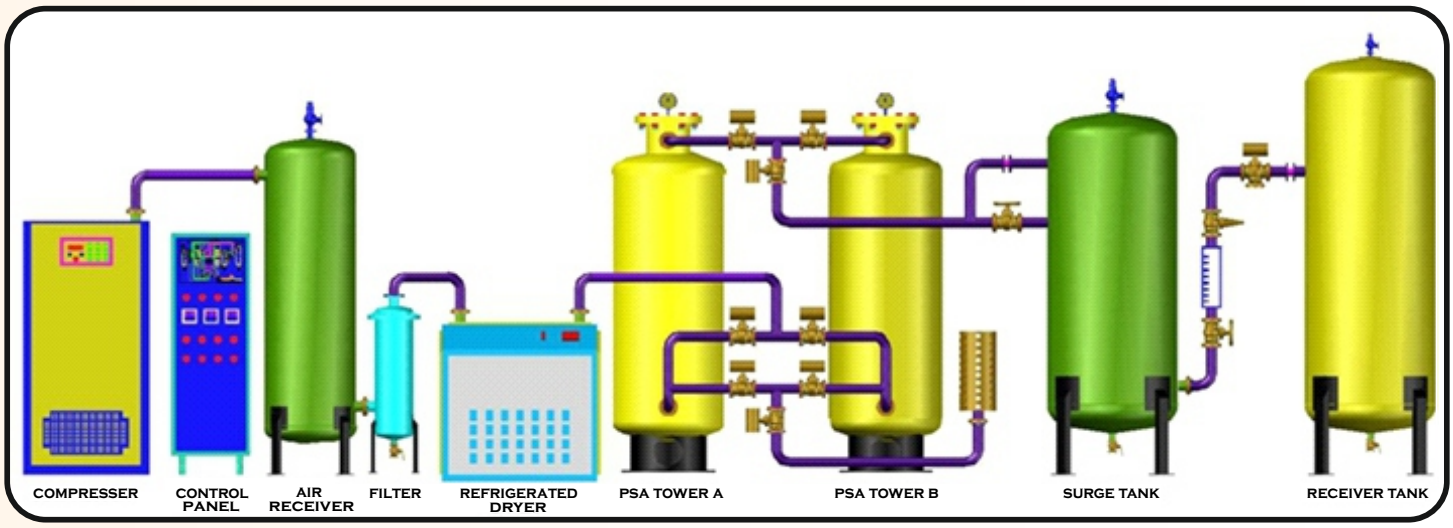
WORKING PRINCIPLE OF MEDICAL OXYGEN PLANT



The compressed air is passed through a Twin Tower PSA module interconnected with automatic change over valves. After passing through this bed of Activated Alumina air gets dried. Supply of dry compressed air from this layer of desiccant (activated alumina) will be continuous without any interruption. Dried compressed air will now come in contact with bed of Zeolite Molecular sieves (ZMS).Molecules of nitrogen, moisture & other unwanted gases are adsorbed on surface of Z.M.S and oxygen which is not adsorbed by Z.M.S comes out of adsorption tower. The two towers of PSA modules are inter-connected with automatic changeover valves. The outgoing pure gas is sent to a surge vessel where the minimum gas pressure will be maintained with the help of back pressure Regulator. The product gas will be sent to the consumer point through a pressure reducing valves at required pressure.

MODEL	EQUIVALENT		CAPACITY		AIR REQUIREMENT	APPLICATION			SPACE REQU.
	CYL./DAY	LIQUID LTR/DAY	NM3/HR.	LPM	FAD(CFM)	NO. OF BED	I.C.U/I.C.C.U/ S.I.C.U/O.T	VENTI.	L X B X H (IN FEET)
ANGOP-5	5 - 18	150	5	84	47	30	10	2	5 X 3 X 6
ANGOP-7.5	18 - 28	225	7.5	125	68	50	16	3	6 X 4 X 5
ANGOP-10	29 - 36	300	10	167	90	80	20	4	6 X 4 X 6
ANGOP-12.5	37 - 46	375	12.5	210	112	100	30	5	7 X 5 X 6
ANGOP-15	47 - 55	450	15	250	133	125	36	6	7 X 5 X 7
ANGOP-20	56 - 75	600	20	334	176	150	50	15	8 X 6 X 7
ANGOP-25	76 - 90	750	25	415	218	200	60	15	8 X 6 X 7
ANGOP-30	91 - 110	900	30	500	260	250	70	20	8.5 X 6 X 7
ANGOP-40	111 - 150	1200	40	665	345	300	100	30	13 X 6 X 8
ANGOP-50	151 - 185	1500	50	833	429	400	120	40	14 X 6 X 8

MEDICAL OXYGEN (As per US Pharmacopeia)

OXYGEN 93 PERCENT

USP requirements: Oxygen 93 Percent USP -- Preserve in cylinders or in a low pressure collecting tank. Containers used for Oxygen 93 Percent must not be treated with any toxic, sleep-including or narcosis-producing compounds, and must not be treated with any compound that will be irritating to the respiratory tract when the Oxygen 93 percent is used. It is Oxygen produced from air by the molecular sieve process, Where it is piped directly from the collecting tank to the point of use, label each outlet "Oxygen 93 Percent" Contains not less than 90.0% and not more than 96.0%, by volume of oxygen, the remainder consisting mostly of argon and nitrogen. Meets the requirements for identification, Odor-Carbon dioxide (not more than 0.03%), and Carbon monoxide (not more than 0.001%).

Ref. USP DI 2007

MEDICAL OXYGEN STANDARDS

Parameters		ISO 10083	United States USP XXII Oxygen 93%	European Pharmacopeia Oxygen 93%	Indian Pharmacopeia Oxygen 93%	Air-N-Gas
Oxygen	O_2	> 90%	90% - 96%	90% - 96%	90% - 96%	Oxygen 93% ±3 Premium 95% ± 1
Carbon monoxide	CO	< 5 ppm	< 0.001%	< 5 ppm	< 5 ppm	< 2 ppm (0.0002%)
Carbon dioxide	Co_2	< 300 ppm	< 0.03%	< 300 ppm	< 300 ppm	< 150 ppm (0.015%)
Sulphur dioxide	So_2	–	–	< 1 ppm	0 ppm	0 ppm
Nitrogen oxides	Nox	–	–	< 2 ppm	0 ppm	0 ppm
Water	H_2O	< 67 ppm	–	< 67 ppm (-50°C)	< 67 ppm (-50°C)	< 3 ppm (-75°C / -107°F)
Oil	–	< 0.1 mg/m^3	< 0.1 mg/m^3	< 0.1 mg/m^3	< 0.1 mg/m^3	< 0.063 mg/m^3

MEDICAL OXYGEN GENERATOR SIZE ESTIMATOR

By referring below table you can calculate Generator capacity as per your requirement by your own.

No.	Description	Required gas flow
1.	For general beds	0.75 - 1 LPM
2.	For ventilator beds	10 - 12 LPM
3.	For I.C.U. beds	03 - 04 LPM

Where, 1 LPM = 0.06 Nm^3/hr.

COMPANY PROFILE

AIR-N-GAS PROCESS TECHNOLOGIES WAS ESTABLISHED IN THE YEAR 2007, WITH AN AIM TO BOOST THE TECHNICAL ADVANCES IN THE FIELD OF ADSORPTION BASED GAS SEPARATION SYSTEMS, AIR FILTERS AND AIR DRYERS. IN THIS SHORT SPAN OF TIME, WE HAVE EARNED OURSELVES A NICHE IN THE AIR DRYERS INDUSTRY AND HAVE ESTABLISHED A GREAT RAPPORT AMONGST THE LEADING MANUFACTURERS, EXPORTERS, TRADERS AND SUPPLIERS.SUPPORTED BY A GROUP OF EFFICIENT TECHNOCRATS, WE ARE HEADED BY MR.SHAILESH VERMA (B.TECH-MECH DMM), WHO HAS ACCUMULATED A RICH EXPERIENCE OF MORE THAN 27 YEARS IN THE RESPECTIVE FIELD.

SOME OUR MAJOR CLIENTS

OUR CERTIFICATIONS

ISO 13485 : 2016

CE CERTIFICATION

ISO 9001 : 2015

D & B RATING

OUR OTHER PRODUCTS

PSA N2 PLANT

AMM. CRACKER

HEATLESS DRYER

HOC DRYER

SFNPL DRYER

REFRIGERATED DRYER

BIO GAS DRYER

AIR - N - GAS PROCESS TECHNOLOGIES

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