

PSA

Medical O₂ Generator

OXYLIFE
Trade Mark



OXYLIFE

About Us

Bahbouh OxyLife for the production of medical Oxygen Generators by PSA Technology :
Bahbouh OxyLife Factory is one of the earliest factories in the Middle East and Arab countries (Since 2006) according to PSA system, based on the finest international specifications and provisions, it is the first local Arab Middle East company that manufactures this type of stations with technical properties, whose quality exceeds the best European and American products, and with accurate scientific calculations of the nature of climate and the region as well as other changes related to each separate locations, in order to be designed according to the final capacity and volume of the required stations, and to reach the optimum economical use .

OxyLife trade mark which obtains ISO international quality certificates 9001 in 2008 and sticks on the conformity of product according to the international standards relative to this type of products, such as 2006/10083 ISO & CD5/057/MAY2004DIN & HTM 2022 .

for more information about our Company & technology please visit our Website :

www.oxyLifesyria.com

www.bahbouh.com

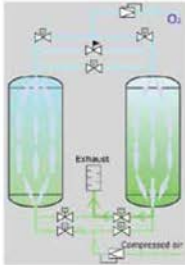


OXYLIFE Oxygen Generator PSA

What does PSA for O₂ technology mean?

"PSA" is the abbreviation of pressure Swing Adsorption, which take us to technology of separating the air components (78%.N₂, 21.8% O₂, 0, 1 other gases), and then to use one of this component in deferent failed of usage.

So, these operations do this separation by using physical natural material called ZIOLAYT and across Molecular sieve System, which adsorbs the unneeded air component (under specified pressure) then to spray it to the air space, and the rest to be pressured to suitable tank to use it then.



There for, by using this technology we get the O₂ gas for medical usage, in value concentration not less than 93%, so the rest gas which is not important and damages, that according to the following highest international standards: that spicly quality of midecal O₂ .

Parameters	ISO 10083	USA - USP XXII	EURO Pharmacopeia	OXYLIFE BM XX
O ₂	> 90%	90% - 96%	90% - 96%	93±2%
CO	< 5 ppm	< 0.001 %	< 5 ppm	< 3 ppm
CO ₂	< 300 ppm	< 0.03 %	< 300 ppm	< 200 ppm
SO ₂	-	-	< 1 ppm	1 ppm
NO _x	-	-	< 2 ppm	1 ppm
H ₂ O	< 67 ppm	-	< 67 ppm	< 3 ppm
OIL	< 0.1mg/m ³	< 0.1mg/m ³	< 0.1mg/m ³	< 0.09mg/m ³

So, to specify the station of generating medical O₂ by PSA technology that contains:

1. Electrical Screw Compressors.
2. Air dryer and filters.
3. Air pressure tank.
4. Molecular sieve tanks (PSA Tanks)
5. Needed Gas tank.
6. Control panel.
7. Valves & connecting instrument.
8. Medical filter (optional).
9. Filling Station (optional) for filling opportunity .



OXYLIFE Oxygen Generator PSA

PSA technology usage:

1. Hospitals
2. Sewage water treatment plant
3. Ship, Vessel and shipyard
4. Glass plants
5. Filling & packaging plants
6. Pharmaceutical plants.
7. Medical, Food, industrial library.



And many other failed, so we can say that any establishment needs O₂ gas in his industry can replace the old way of supplying gases by normal cylinders or liquid gas to this PSA technology, which has become the first choice of supplying the needed gases which have the following advantages:

1. Ready for use at any time, if the electricity power available.
2. No existing of expiry the raw material part of the normal maintenance for filters & Oil.



3. Small space needed.
4. Availability of commerce usage, with filling machine attached.
5. Saving up to 65% of using normal way as cylinder gases and liquid gas.*
6. Secure & safety & environment friendly.
7. Availability of use the same generator to other business as Air medical.
8. Easy of transportation & building & replaced even after long using.
9. The independently of supplying.
10. Getting of exact & fixed concentration of the needed gas.

* Recording to elect. cylinder & liquid O₂ cost at end user area .

General information about our Product			
Inlet pressure Requirement	Concentrator	8 bar	
Power Supply	Concentrator	240/110V	HZ 50/60
	Concentrator	400 V	50 HZ
Outlet Pressure	Concentrator	4 – 5 bar	
Purity	93% ±2 of Medical Oxygen		
Dew point	> = 3 C°		
Operating conditions	Temperature	Min	- 5 C°
		Max	45 C°
Special conditions	Dry & Ventilated Room		

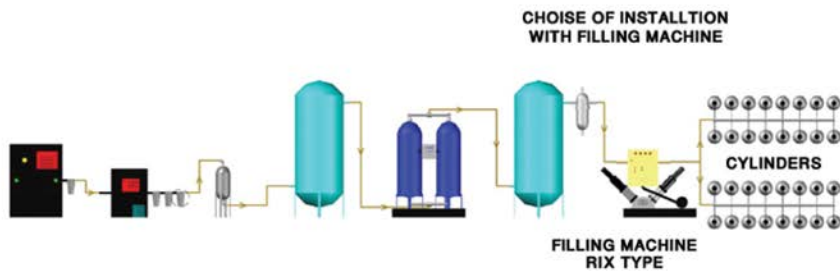
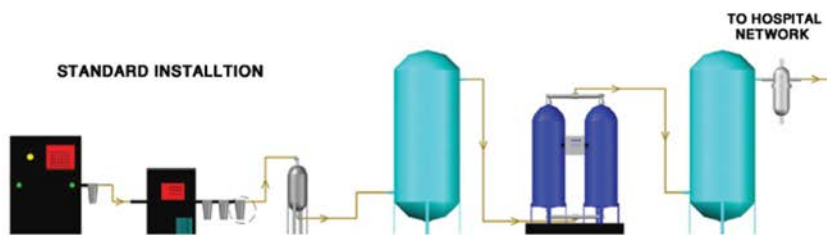
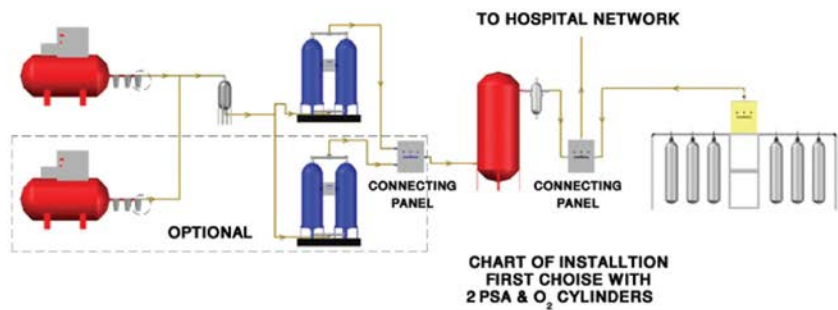
Other OPTIONAL provided by OXYLIFE BM-XX PSA :

- Filling Station Compressor 200 bar
- Medical Filter Upgrade
- Co , Co2 & humidity meters
- Control by advanced system control (ASClife)
- Ability of getting Air medical from same PSA

OXYLIFE TYPES & Specification of GENERATION STATIONS

Series	Capacity (purity 93% ±2%) L / min	Compressed Air needed at 10 bar L / min	Space Required
			W×L×H (m)
BM – 20	50	1000	1.85×2.5× 2.5
BM – 36	100	1200	1.5× 3× 2.5
BM – 45	125	1600	1.5×3× 2.5
BM – 65	175	2300	1.5×4× 2.75
BM – 90	250	3000	1.5×4× 2.75
BM – 108	300	4000	1.5×5× 2.75
BM – 145	400	5100	1.5×5× 2.75
BM – XX	As Request	XX	XX

Ways of installations:



ASClife Advanced Control Panel :

ASClife is our distinguished touch screen panel that control PSA OXYLIFE generator in very smart and simple control with ability to show and control the following :

- 1 : Pressure at O2 tank,PSA tanks,N2O tank(showing & Control).
- 2 : Oxygen flow that produced by the PSA (showing & control).
- 3 : Temperature , purity , operating hours , dew point , CO PPM , CO2 PPM....(showing that meters also as diagram schedule).
- 4 : Ability to operate and control more than one PSA at the same control.
- 5 : Ability of control timing of operating process.
- 6 : ability of operate the auto activation & washing facility while needed
- 7 : Save all operating data and faults that accrue on internal memory that can be transferred by USP , memory card, eathernet Data are shown on EXCEL program.
- 8 : sound and light alarm , also send notes of fault and maintenance needs to any chosen mobile no.
- 9 : Read all kind of faults that may stopped operating the PSA (regulators , valves..).
- 10 : USP available.
- 11 : Touch screen 7 INCH.



Sterile filter

- Sterile filter for 100% sterilized compressed air
- For the production of sterilized air a pre-filter with efficiency of 0,01 μ m is necessary
- Installed sterile filters can be sterilized by saturated steam: 15 minutes at 142 °C
- Filter housing made of stainless steel 1.4301

PSA options



Containerized complete oxygen plant:

OXYLIFE offer to provide the complete oxygen plant (with filling machine as option) in specifically container for outdoor use that does not need any electrical or building construction from the end user (such as yard , roof , far space....) to be ready for operation in one hour after unloading in specified place , also with ability to complete removing in one hour . Standard dimension is 3mX6m or 3mX12m when adding booster machine for filling cylinder.



MAINlife Connecting Panel :

Is our distinguished device that control multi PSA generators in same time , also can export & export data from any ACSlife – s panel . So no need to add extra sensors to each PSA control system such as :

- 1 – Flow Meter.
- 2 – O₂ purity sensors.
- 3 – Co & Co2 analyzers .



After sales services with special contract by OXYLIFE

Our special contract for after sales service is guarantees our provided machine to be operating for 10 years of date of operating. That contains checking visit one time in a month and in 36 hours from time of informing our team for checking needing.

OXYLIFE technicians team are very skilled and specialized in maintenance of wide range instrument that belong to medical usage beside PSA machines and its air compressors.

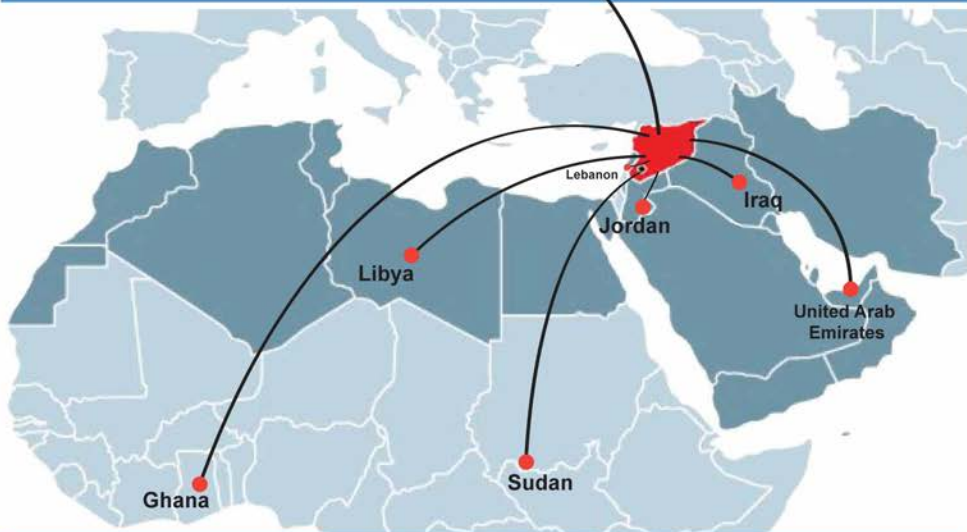


OXYLIFE
Medical Gas System



أوكسيليف
النظمة الغازات الطبية

OXYLIFE



Contact us :

• Head Office :

Damascus - Appaseen
P.O.Box : 8307 _ SYRIA
Tel : +963 11 4428753 - 5451431
Fax : +963 11 4428756 - 5451434
Email : tarek@bahbouh.com
www.oxyllife-med.com

• Region Office :

Dubai - Melinum Tower - 21th Floor
Tel : 00971 4388 8866
m.dubi @oxylifesyria.com

Oxyllife System is a part of BAHBOUH Group