



OXYSWING

MODULAR PSA OXYGEN GENERATOR



OXY-PLUS
TECHNOLOGIES

- *Medical oxygen up to 95%*
- *Patented PSA process*
- *Evolutive capacity*

MODULAR PSA OXYGEN GENERATOR OXYSWING



OXYPLUS Technologies is a world-class leader and pioneer company in the design and manufacture of PSA medical oxygen generators.

Part of French group NOVAIR - medical gas specialist since 1977 - Oxyplus offers a wide range of oxygen generators, all designed in compliance with the most demanding medical standards and providing a safe and continuous oxygen supply to all types of hospitals and clinics.

Located near Paris in France, the company is operating in over 100 countries through a wide network of authorized local distributors.

Patented Modular PSA Technology

OXYSWING® modular PSA generators implement a unique and patented Pressure Swing Adsorption technology. Unlike twin-tower standard systems, OXYSWING® generators feature multiple modules of molecular sieve, each implementing an optimized patented PSA process.

Modular PSA unique features:

- **Unlimited flexibility:** production capacity can be easily adjusted directly on site by simple module additions without any skilled personnel
- **Compact dimensions** for installations even in small spaces of your production facility
- **Easy fleet management:** all OXYSWING® models feature the same components, allowing a limited spare parts management and easy maintenance
- **Non-corrosive materials** such as aluminum and stainless steel, for all process components

For healthcare facilities looking for a safe and autonomous supply of medical oxygen, OXYPLUS introduces OXYSWING, medical oxygen generator delivering a continuous flow of medical oxygen 93% produced on-site.

7" HMI for real time purity monitoring and automatic & unattended operation

Allows the monitoring / remote control of the main process parameters and displays status messages such as gas purity and flow rate, totalized gas flow, total functioning hours and maintenance alerts.



HMI Siemens® SIMATIC Series with colour touchscreen

Ergonomic design, for a minimum footprint

Molecular sieve modules allowing on-site easy capacity extension and featuring the patented FlatFlow® technology

The capacity of each OXYSWING® Modular PSA oxygen generator can easily be extended by simply adding modules to the generator



Detail of modular PSA aluminum banks, based on single modules concept.



Compact and user friendly solution, OXYSWING offers a flexible oxygen supply compliant with the most demanding standards.

Standard Components

- Feed Air Filters
- PSA Adsorber Module(s) in anodised Aluminium
- Process Valves, Regulators and Piping compatible for Medical Oxygen
- Exhaust Silencers
- Control panel with HMI Siemens® for fully automatic operation
- Onboard Oxygen Analyser with Zirconium Oxide Sensor
- Onboard Oxygen Discharge Pressure Transmitter
- System for Automatic Venting of Off-Spec Oxygen
- Set of Oxygen Bacterial Filters

Options

- Electronic Product Flow Meter with Flow Totaliser
- Air and Oxygen Dew Point Analyzer
- Feed Air Pressure and Temperature Transmitter
- Oxygen Temperature Transmitter
- Central Supervision System for OXYSWING® installations to ISO 7396-1
- Status and Process Parameters Data Logging Pen Recorder
- Paramagnetic Oxygen Analyzer

Auxiliary equipment

- Feed Air Unit
- High pressure cylinder filling systems
- Pharmagas medical gas quality monitor
- Medgas Flow medical gas flowmeter
- Medgas bank manifold for back up supply

Certified Medical Oxygen

- Our oxygen generators are CE marked as Medical Devices, according to the European Directive MDD 93/42/EEC, and are certified as class IIb Medical Devices.
- Quality of produced oxygen is compliant with the Monograph Oxygen 93% of both European Pharmacopeia and United States Pharmacopeia.
- NOVAIR is organized according to a quality management system certified ISO 9001 and ISO 13485 for the design and manufacture of medical gas systems.

First class components

Your OXYSWING® generator should work, always. That is why we are using first class components like stainless steel process piping, medical oxygen compatible valves and regulators, as well as heavy duty PLC.

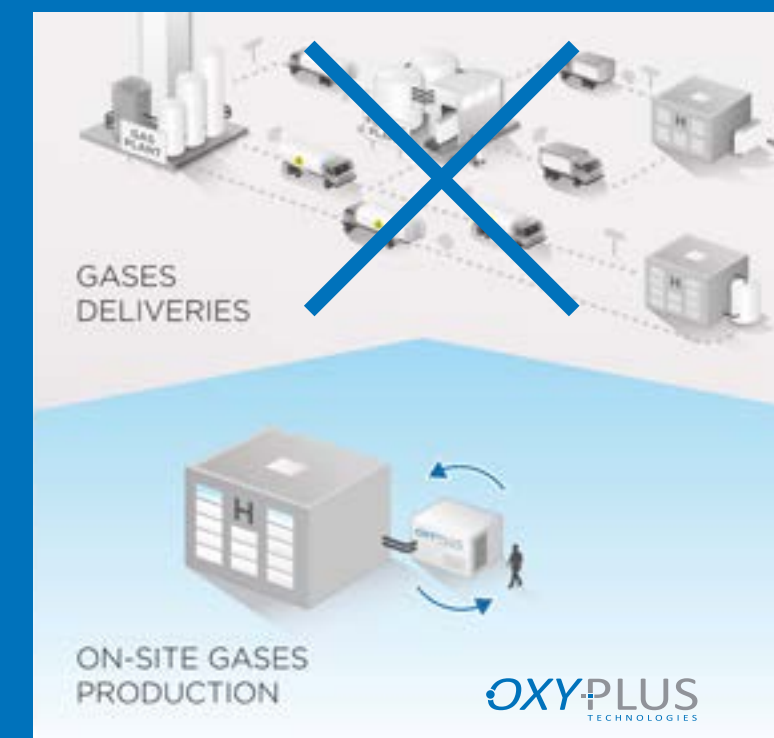
FlatFlow® technology

Allowing a uniform distribution of gas flow over the entire molecular sieve; this patented technology makes it possible to develop a compact, highly efficient and truly flexible PSA generator for the production of oxygen.

Why produce Oxygen on-site?

Benefits:

- Oxygen available 24/7: continuous production
- Proven savings
- Guaranteed purity: continuous analysis
- Full safety
- No more logistic constraints
- Instant production on-demand: no more supply chain failure
- Eco-friendly solution: zero delivery & zero emission of pollutants





OXYSWING® Oxygen production flow

Oxyswing®	PSA Modules	Oxygen 95% Production	
		Nm3/h	SCFH
OS-8	1	2.5	95
OS-16	2	5	190
OS-24	3	7.6	289
OS-32	4	10	380
OS-40	5	12.5	475
OS-48	6	14.8	562
OS-64*	4 + 4	20	760
OS-80*	5 + 5	25	950
OS-96*	6 + 6	29.6	1125
OS-120*	5 + 5 + 5	37.5	1425
OS-144*	6 + 6 + 6	44.4	1687

* Composed of one master and one or two slave units

Feed Air Pressure = 7,0 bar(g) / 100 psig

Oxygen Discharge Pressure = 6,0 bar(g) : 87 psig

Oxygen Dew Point = -60°C / -76 F at atmospheric pressure

Dual Banks

For larger capacities, OXYSWING® generators can be completed with a Dual Bank., which consists in a second PSA oxygen generator without any PLC and power supply. The Dual Bank gets its power and control signals from the OXYSWING® PSA oxygen generator through a single cable connection (master/slave principle).

One OXYSWING® PSA oxygen generator can control up to three Dual Banks in parallel.



Dual Bank configuration

OXYSWING® dimensions (mm) - Master units

Oxyswing® Mod.	L	W	H	Weight (kg)
OS-8	892	540	1750	303
OS-16	1095	540	1750	458
OS-24	1363	540	1750	613
OS-32	1631	540	1750	768
OS-40	1900	540	1750	923
OS-48	2162	540	1750	1078



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