



OXYSWING

MODULAR PSA OXYGEN GENERATOR



- Patented PSA Process
- High Efficiency
- Compact & Flexible
- Electrically Approved

For industries looking for a safe and autonomous supply of oxygen, NOVAIR introduces OXYSWING, the oxygen generator delivering a continuous flow of oxygen produced on-site.

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

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

Ergonomic design, for a minimum footprint

Meets CSA standards and approved for use across Canada

Siemens PLC Controller



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



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

Options

- Electronic Product Flow Meter with Flow Totaliser
- Air and Oxygen Dew Point Analyzer
- Feed Air Pressure and Temperature Transmitter
- Oxygen Temperature Transmitter
- Status and Process Parameters Data Logging Pen Recorder
- Paramagnetic Oxygen Analyzer
- Onboard Oxygen Analyser with Zirconium Oxide Sensor
- System for Automatic Venting of Off-Spec Oxygen
- Set of Oxygen Bacterial Filters

High quality oxygen analyser with zirconium oxide measuring cell that does not expire and does not require any replacement or calibration.



Instrumentation inputs and outputs



NOXERIOR
Next Generation Gas Solutions

GRUPE
NOVAIR



Standard Components

- Feed Air Filters
- PSA Adsorber Modules in anodised Aluminium
- Exhaust Silencers
- Control panel with HMI Siemens® for fully automatic operation
- Onboard Oxygen Discharge Pressure Transmitter

OXYSWING Modular PSA oxygen generators can easily be upgraded at any time by simply adding modules. The smallest Master unit OS-8 can accommodate up to 5 additional modules creating the largest capacity model OS - 48. There are a total of 6 model sizes available and the modules may also be removed to reduce capacity as required.



Example illustration shows an OS-8 Master model unit which includes one module and by adding 5 additional modules it creates an OS-48 Master model unit.

A Side Bank can also be added, consisting of a second PSA oxygen generator, without any PLC and power supply. The add on Side Bank gets its power and control signals from the Master unit through a single cable connection.

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

Single Side Bank - 100% increase in capacity



Double Side Bank - 200% increase in capacity



Triple Side Bank - 300% increase in capacity



First class components

Your OXYSWING® generator must always perform and that is why we utilize first class components like stainless steel process piping, valves and regulators, as well as a 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.

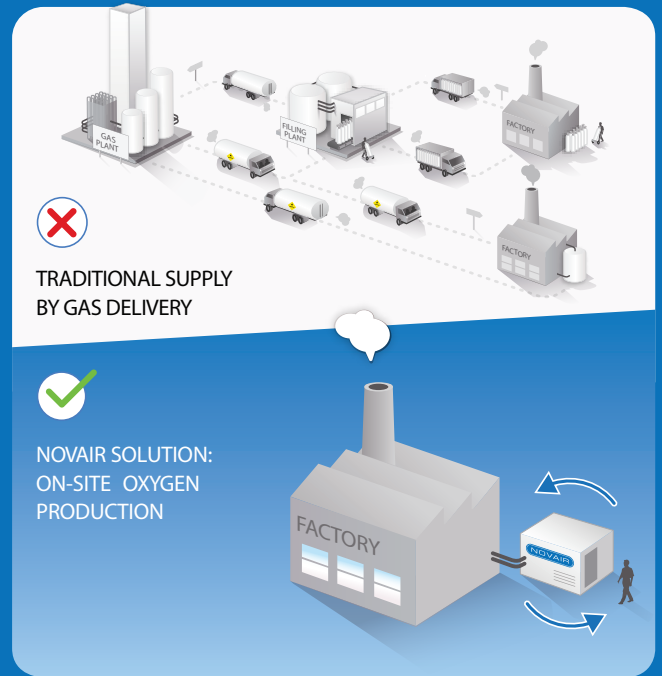
Certified quality

A reliable, safe and stable oxygen production are essential features of OXYSWING® generators. They comply with the European Pressure Equipment Directive 2014/68 EU. For food applications, we can provide food grade certificates upon request.

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



Patented Modular PSA Technology

OXYSWING® modular PSA generators implement a unique 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 without any skilled personnel
- Compact dimensions for installations even in small spaces of your production facility
- Application of non-corrosive materials such as aluminum and stainless steel, for all process components
- Easy fleet management: all OXYSWING® models feature the same components, allowing a limited spare part management and easy maintenance

OXYSWING® Oxygen Production Flow - 95% Purity

| Oxyswing® | PSA Modules | Peak Flow | | |
|-----------|-------------|--------------------|----------------------|---------------------|
| | | m ³ /hr | ft ³ /min | ft ³ /hr |
| OS-8 | 1 | 2.6 | 1.6 | 96 |
| OS-16 | 2 | 5.3 | 3.3 | 198 |
| OS-24 | 3 | 7.9 | 5.0 | 300 |
| OS-32 | 4 | 10.4 | 6.6 | 396 |
| OS-40 | 5 | 13.1 | 8.3 | 498 |
| OS-48 | 6 | 15.5 | 9.8 | 588 |

* It is possible to combine generators, master and side bank(s) to produce multiple capacities.

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

| Oxyswing® | Dimensions [mm] | | | Weight [kg] |
|-----------|-----------------|-----|-------|-------------|
| | L | W | H | |
| OS-8 | 892 | 540 | 1,750 | 305 |
| OS-16 | 1,095 | 540 | 1,750 | 460 |
| OS-24 | 1,363 | 540 | 1,750 | 615 |
| OS-32 | 1,631 | 540 | 1,750 | 770 |
| OS-40 | 1,900 | 540 | 1,750 | 925 |
| OS-48 | 2,162 | 540 | 1,750 | 1,080 |

| Oxyswing® | Dimensions [Inches] | | | Weight [lbs] |
|-----------|---------------------|----|----|--------------|
| | L | W | H | |
| OS-8 | 35 | 21 | 69 | 672 |
| OS-16 | 43 | 21 | 69 | 1,014 |
| OS-24 | 54 | 21 | 69 | 1,356 |
| OS-32 | 64 | 21 | 69 | 1,698 |
| OS-40 | 75 | 21 | 69 | 2,039 |
| OS-48 | 85 | 21 | 69 | 2,381 |