



## Description

**OXYGEN** - A line of robust, reliable and modular Oxygen generators, based on Pressure Swing Adsorption (PSA) technology using state-of-the-art Zeolite Molecular Sieves adsorbents.

SYSADVANCE generators produce high purity Oxygen from compressed air, allowing continuous availability at a very competitive cost, compared to alternative supply with cylinders or cryogenic tank.

**OXYGEN** eliminates all disadvantages associated to purchase and operation costs of high-pressure cylinder systems or cryogenic tanks, enabling a permanent source of Oxygen, with minimum energy consumption and maintenance requirements.

**OXYGEN** is designed to be easily installed in any indoor facility, requiring only a compressed air line and a power connection.

With purities up to 95% of O<sub>2</sub>, **OXYGEN** can be connected to an external buffer allowing a backup or a delay of production/consumption according to the needs of each application.

The modular philosophy of SYSADVANCE **OXYGEN** generators allows the installation of multiple parallel units.

## Optionals

- » Dedicated Air Compressor
- » Pressure Booster for pressures up to 210 bar
- » Food Pack filter kit
- » Remote GSM-GPRS Monitoring
- » Oxygen Monitor

## Advantages

- » Safe delivery and Independency from external gas suppliers and from fluctuation of the oxygen market price.
- » Suppression of logistic operations like handling of cylinders or liquid Oxygen and supplier management.
- » Modular, flexible and low maintenance units.
- » Don't waste more money with Oxygen!

## Applications

Oxygen in gas state is used in a wide range of industries and applications.

### Applications

Hospitals
Laboratories
Oxyfuel Technology
Welding, Brazing and Steel Cutting
Fish Farming
Ozone
Wastewater Treatment

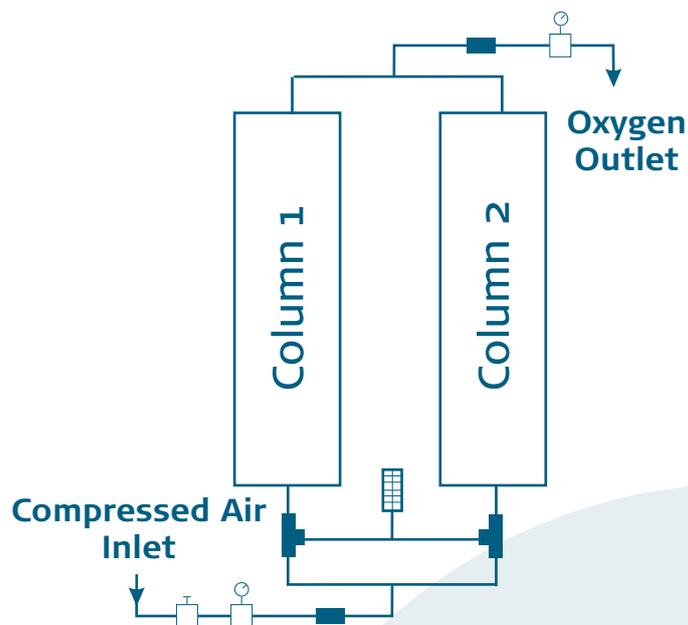
### Main Technical Specifications

Oxygen Purity	Up to 95%
Oxygen Pressure	Up to 210 bar
Minimum Air Pressure	5 bar
Maximum Particle Content	0.01 µm
Electrical Consumption	150 W



## PSA Technology

Oxygen generators incorporate sets of columns filled with Zeolite. Under pressure these columns retain all compounds present in air (Nitrogen, Carbon Dioxide and Water), which tie to the molecular sieve during the building of pressure, with the exception of the Oxygen. This process is known as PSA (Pressure Swing Adsorption).

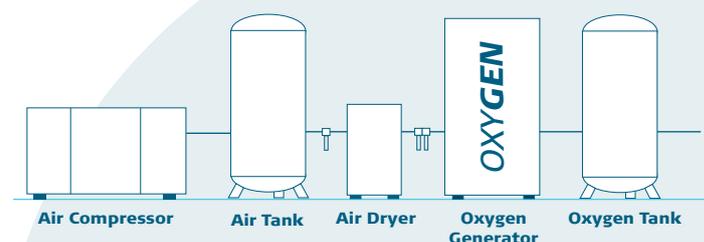


A modular system allows synchronized operation of several parallel units, in order to ensure a constant flow at the required purity.

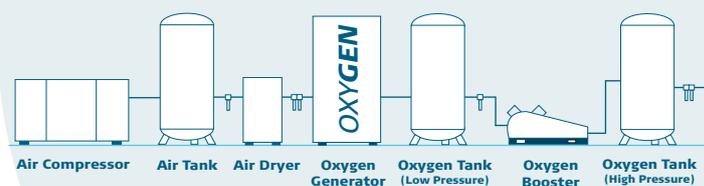
## Standard Installations

The installation is designed according to the customer needs; however, the standard installations are shown below:

### Low Pressure Diagram



### High Pressure Diagram



## Performances

Model	N <sub>2</sub> Flow (Nm <sup>3</sup> /h)	
	90 %	95%
OXYGEN 5	0.5	0.4
OXYGEN 35	3.6	2.7
OXYGEN 70	7.2	5.4
OXYGEN 90	9.6	7.2
OXYGEN 110	11.2	8.4
OXYGEN 300	30	22.5
OXYGEN 450	45	34