

# OXYGEN GENERATORS Standard series



## The premium performance

Oxywise Oxygen generators produce high quality oxygen from compressed air by Pressure Swing Adsorption (PSA) method. Our generators represent reliable and cost effective alternative.

|                           |                |
|---------------------------|----------------|
| Oxygen purity:            | 90% to 95%     |
| Outlet pressure (oxygen): | 4 barG (6barG) |
| Oxygen dew point:         | -50°C          |
| Operating cost:           | 1.1kW/m3       |

Make your choice from the extensive selection of standard solutions or ask us to design a custom-made oxygen generator to match your needs. The prices are very feasible.

## Standard series range

| Model | Capacity at 93% O <sub>2</sub> [Nm <sup>3</sup> /h] | Capacity at 93% O <sub>2</sub> [Sm <sup>3</sup> /h] | Air consumption [Nm <sup>3</sup> /min ] | Air consumption [m <sup>3</sup> /min FAD] |
|-------|-----------------------------------------------------|-----------------------------------------------------|-----------------------------------------|-------------------------------------------|
| O1    | 0.4                                                 | 0.4                                                 | 0.70                                    | 0.10                                      |
| O2    | 1.0                                                 | 1.1                                                 | 0.19                                    | 0.21                                      |
| O4    | 2.2                                                 | 2.4                                                 | 0.41                                    | 0.45                                      |
| O6    | 2.7                                                 | 2.9                                                 | 0.55                                    | 0.60                                      |
| O9    | 3.7                                                 | 4.0                                                 | 0.73                                    | 0.80                                      |
| O12   | 5.3                                                 | 5.8                                                 | 1.06                                    | 1.15                                      |
| O15   | 7.2                                                 | 7.8                                                 | 1.38                                    | 1.50                                      |

### Notes:

- Performance data is based on 7 barG inlet pressure and 20°C to 30°C ambient temperature
- Flow stated in Normal cubic meter (Nm3) is with reference conditions, Temperature: 0°C, Pressure: 1.013 barA
- Flow stated in Standard cubic meter (Sm3) with reference conditions, Temperature: 15°C, Pressure: 0.981 barA
- Air consumption stated in m3/min FAD is considered for altitude up to 300m a.s.l.

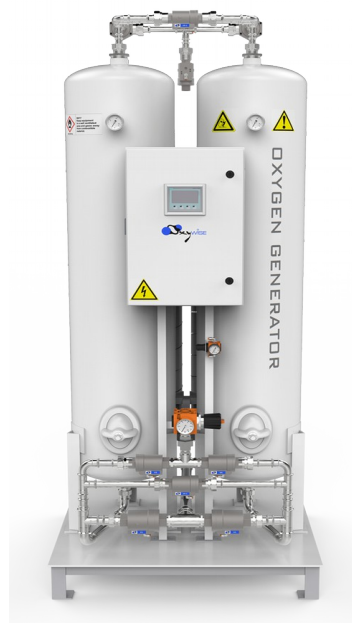
## Capacity correction factors for different purity requirements

| Purity            | 90.00% | 93.00% | 95.00% |
|-------------------|--------|--------|--------|
| Correction factor | 1.07   | 1.0    | 0.9    |

For higher capacities see our SEP series data-sheet.

## Various concepts

The complete unit can be delivered on the common skid or installed in the container.



### Benefits:

- Flexibility
- Cost-effectiveness
- Safety
- Easy operation
- Reliability

### Standard Features:

- Designed for dynamic pressure loading
- Stainless steel piping
- Colored touch screen control
- Built in purity analyzer for constant monitoring
- Data-logging via USB interface

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A full installation comprises a compressor, refrigeration dryer, filters, air tank, generator and oxygen buffer tank.



## Scope of supply:

1. Air compressor
2. Cyclone filter with automatic drain
3. Refrigeration dryer
4. Prefilter, particle filter
5. Air tank
6. Oxygen generator
7. Oxygen buffer tank
8. Dust filter

## The PSA process

Oxygen Generator consist of two columns filled with molecular sieve (Zeolite). Pre-treated compressed air enters the active column and follows up through the Zeolite. Nitrogen and some other gases are being trapped while the oxygen is allowed to flow through. When the active column is saturated, the air flow is directed to second column. The first column depressurizes allowing nitrogen to be purged out to the atmosphere and completely regenerates. In order to secure steady flow two columns are used, one is active while the other is inactive. At the end of cycle they switch roles.

## Typical applications

Cutting/Brazing/ Soldering  
Fish farming  
Glass industry  
Gold leaching

Health-care  
Ozone  
Veterinary  
Water treatment

## Technical Data

|                                   |             |                          |
|-----------------------------------|-------------|--------------------------|
| <b>Ambient temperature range:</b> |             | 5°C - 50°C               |
| <b>Oxygen outlet pressure:</b>    |             | 4barG (6barG)            |
| <b>Oxygen dew point:</b>          |             | -50°C                    |
| <b>Air inlet pressure:</b>        |             | 7.5barG(10barG)          |
| <b>Inlet air quality:</b>         | <b>ISO:</b> | 8573.1:2010 class 1.4.1. |
| <b>Pressure dew point:</b>        |             | 3°C                      |
| <b>Filtration grade:</b>          |             | 0.01 micron              |
| <b>Power supply:</b>              |             | 240-110 V / 50-60 Hz     |



Pressure up to 200barG can be reached with a high pressure compressor. System can be integrated with filling ramp for bottle filling if required.

PED 97/23/EC  
ISO 9001 : 2008  
ISO 13485 : 2003