

OXYGEN GENERATORS

SEP series



The premium performance

The unique SEP design provides steady high flow rates of oxygen with minimum footprint requirement. Together with molecular sieve protection from moisture substantially lower the service costs, extends the lifetime and provides savings by avoiding the molecular sieve replacement.

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.

SEP series range

Model	Capacity at 93% O ₂ [Nm ³ /h]	Capacity at 93% O ₂ [Sm ³ /h]	Air consumption [Nm ³ /min]	Air consumption [m ³ /min FAD]
O20	8.7	9.5	1.7	1.8
O20+	9.8	10.7	1.8	2.0
O27	12.5	13.6	2.3	2.5
O27+	13.3	14.5	2.5	2.7
O35	16.0	17.4	2.9	3.2
O35+	17.4	18.9	3.2	3.5
O50	20.0	21.8	3.7	4.0
O50+	22.5	24.5	4.1	4.5
O65	27.5	29.9	5.0	5.5
O65+	32.0	34.8	5.9	6.4
O80	35.0	38.1	6.4	7.0
O80+	39.5	43.0	7.2	7.9
O100	45.0	49.0	8.3	9.0
O100+	49.0	53.4	9.0	9.8
O125	55.0	59.9	10.1	11.0
O125+	60.0	65.3	11.0	12.0
O150	68.0	74.1	12.5	13.6
O150+	74.5	81.1	13.7	14.9
O80T	79.0	86.0	14.5	15.8
O100T	98.0	106.7	18.0	19.6
O125T	119.0	129.6	21.8	23.8
O150T	149.0	162.3	27.3	29.8

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



- KEY Benefits:**
- Zeolite anti-crush design
 - No channeling effect
 - Minimized footprint
 - Mol sieve protection
 - Siemens based control system

- 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	Health-care
Fish farming	Ozone
Glass industry	Veterinary
Gold leaching	Water treatment

Technical Data

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



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

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