

Hydroxy oxygen generators

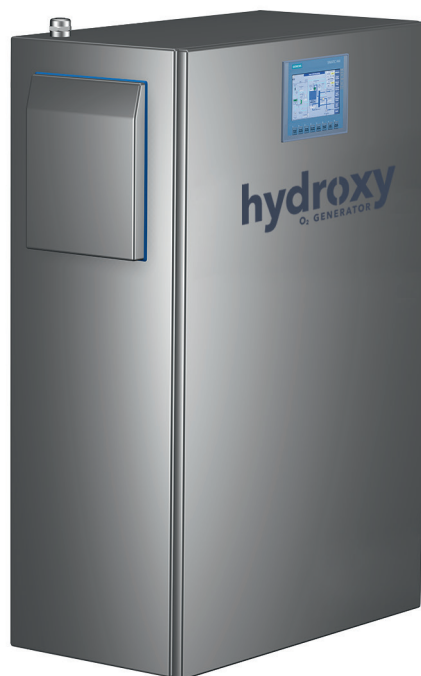
Oxygen generators generate technical oxygen up to a purity level of 95 percent from air through a process of concentration. In the area of water treatment, the concentration of dissolved oxygen of up to 50 mg/l or more in water can be attained by using oxygen instead of air.

Our systems made solely with high-quality components are optimally attuned to one another and ensure highly efficient and reliable oxygen production.

Areas of application

Oxygen is used for different applications in water treatment:

- As a feed gas for ozone generation
- For oxygen enrichment for reduced waters
- For the oxidation of iron, manganese and ammonium
- For oxygen enrichment in aquaculture, e.g. RAS systems etc.



Hydroxy oxygen generator in stainless steel housing

System setup

A Hydroxy oxygen generator consists of the following components:

- Stainless steel control cabinet housing for wall mounting
- Compressed air connection with pressure reducer for external compressed air supply
- PSA unit oxygen generator with solenoid valves and connection lines
- Oxygen tank and pressure reducer with display for defined outlet pressure
- Flow indicator with adjustment valve for manual regulation of the oxygen quantity
- Control panel and fully automatic Siemens control system

Hydroxy devices feature fully automatic operation and are started via an external request signal. High-quality components ensure reliable continuous operation. A well-laid-out and uncluttered design with optimised arrangement of all components enables easy operation and maintenance. Installation of the factory-tested and preset Hydroxy oxygen generators is easy thanks to the well-thought-out plug-and-play concept.

Performance data

		Hydroxy 4	Hydroxy 8
Oxygen quantity	[Nm ³ /h]	0.4	0.8
Oxygen purity	[%]	Over 90	Over 90
Oxygen pressure, max.	[bar (o)]	2.5	2.5
Compressed air requirement*	[m ³ /h]	7.0	14.0
Air input pressure, max.**	[bar (o)]	3.5	3.5
Req. compressed air quality as per ISO 8573		2:4:1	2:4:1
Dimensions, H x W x D	[mm]	700 x 500 x 250	900 x 600 x 300
Weight	[kg]	35	50
Voltage supply	[V/Hz]	230/50	230/50
Power consumption	[W]	56	62
Noise emission, approx.	[dB]	58	58
Oxygen tank	[l]	2 (internal)	2 (internal)
External compressed air connection		D12 connector	D12 connector
Oxygen connection		D12 connector	D12 connector

* Volume flow/delivery rate of the compressed air supply provided by the customer at the required air input pressure based on reference conditions in accordance with ISO 1217 (1 bar, 20 °C, 0% humidity)

** 1 bar over the desired oxygen output pressure, min. 2.8 bar (o)

Hydroxy oxygen generators are designed for compressed air supplied by the customer. Upon request, Hydro-Elektrik can offer project-specific compressed air supply systems that reliably provide the required quantity and quality of compressed air.

Hydroxy 8 accessories

The following accessories are optionally available and can be integrated into the control cabinet:

- Oxygen filter as a sterile filter with a fineness of 0.01 µm
- Electronic oxygen quantity measurement and control with 4-20 mA signal and adjustable setpoint specification