

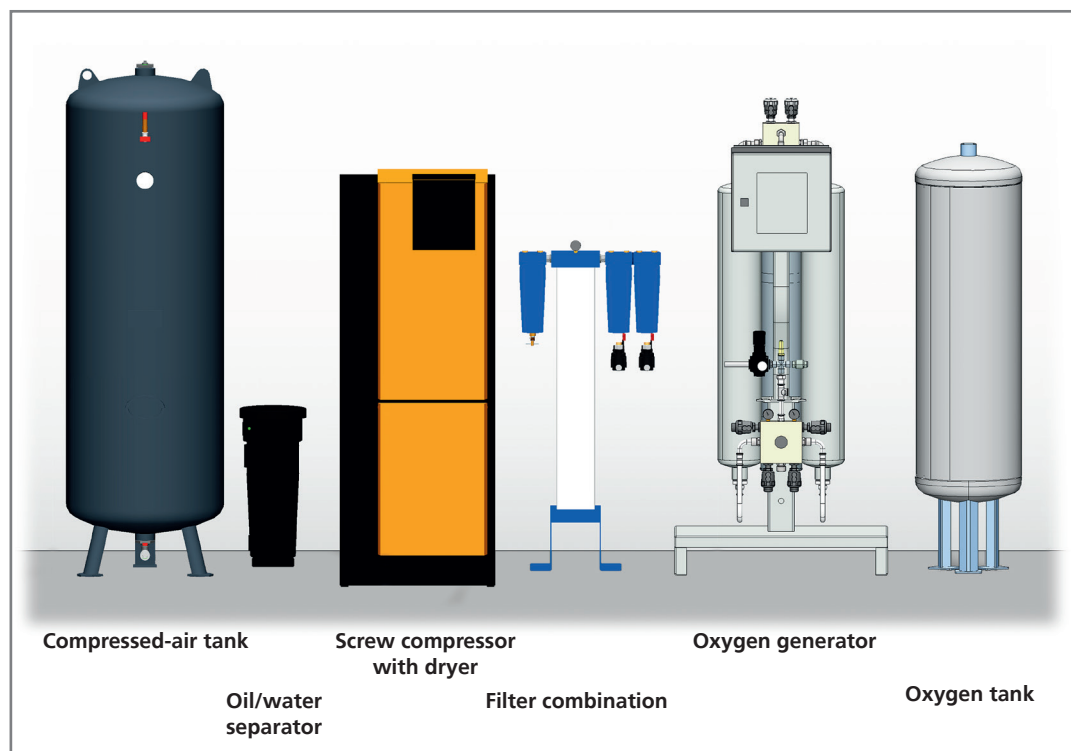
Hydroxymat type oxygen generators

Oxygen generators generate technical oxygen from the air by increasing the concentration up to a purity level of 95%. In the area of water treatment 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 that are made solely with high-quality components are attuned optimally to each other and ensure highly efficient and reliable oxygen production.

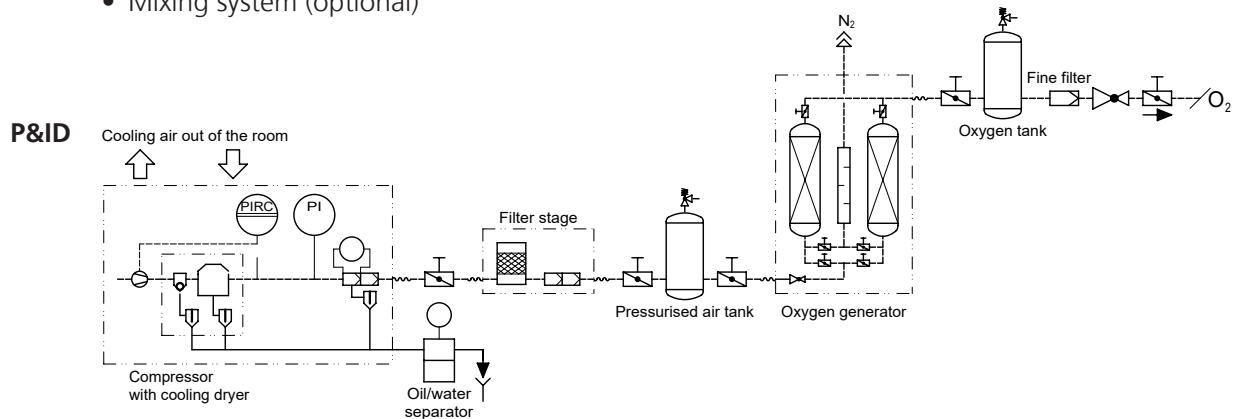
Areas of application Oxygen is used for different applications in water treatment:

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



Significant components of an oxygen production system (one line).

- System setup** An oxygen generator line consists of the following elements:
- Compressor system 7.5 bar and refrigeration dryer
 - Compressed-air tank
 - Air filter combination made of fine filter and activated carbon filter
 - Oxygen generator, oxygen tank and oxygen filter
 - Distributor and controller unit for dosing (optional)
 - Mixing system (optional)



The systems operate fully automatically. **In many cases two or more independent lines or units are operated in parallel.** This results in higher efficiency and safety through corresponding redundancies. The installation height above sea level has to be taken into consideration when selecting the compressor size.

Performance data of some selected lines

Hydroxymat	O ₂ quantity [Nm ³ /h]*	Volumes O ₂ tank [l]	Power consumption [kW]	O ₂ pressure [bar]
Type 10	0.6	150	2.5	4
Type 15	1.1	150	2.5	4
Type 25	2.3	150	5.8	4
Type 35	3.5	270	5.8	4
Type 55	5.2	270	7.8	4
Type 85	8.5	270	11.3	4
Type 135	13.8	1000	15.8	4
Type 165	16.8	2000	19.3	4

The table above only shows orientation values. It requires a lot of experience to configure an oxygen production system optimally for efficient operation. In order to configure and draw up offers, we require the installation height, the lowest and highest ambient temperature, the required operating pressure, the minimum and maximum oxygen quantity required, the minimum and maximum operating hours as well as specification of the voltage supply.

Continuously operating oxygen concentration measurement is optionally possible. We also supply the required devices to monitor the ambient air for increased oxygen content and for gas mixing into water.

We would be pleased to determine your optimal configuration for your intended use in the area water technology applications.