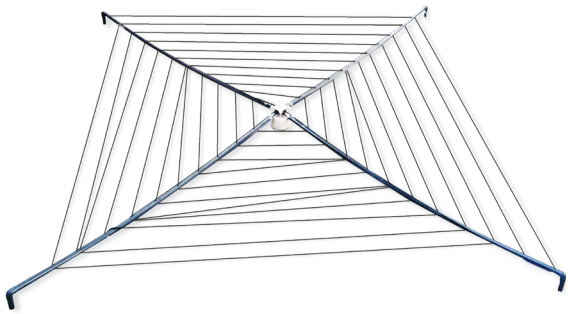
KEEPEX

Seabed Remediation System

for preventing and restoring anaerobic seabed conditions in aquaculture sites.



Systems adaptable to site conditions and operational requirements.

Technical Data

Nominal flow rate	180 - 220 lpm*
Operating range	1 - 9 bar (15 - 130 psi)
Bubble size	(90 - 250) µm
Diffuser surface area	4 m x 4 m

** Standard equipment | GOX gaseous oxygen (15°C, 1 atm).*

» Oxygenation and distribution of oxygen-rich water through adjustable pulses according to site conditions and strategy.

» Automatic operation with no on-site personnel required.

» Compatible with production cycle, allowing simultaneous operation during grow-out.

» Passive system, no conventional energy required.

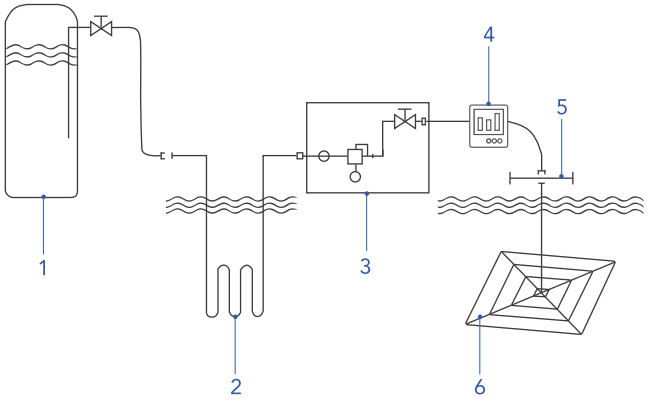
» Remote monitoring of dissolved oxygen at the seabed.

» No resuspension generated.

» System authorized under Resolution Ex. No. 1141-2022.

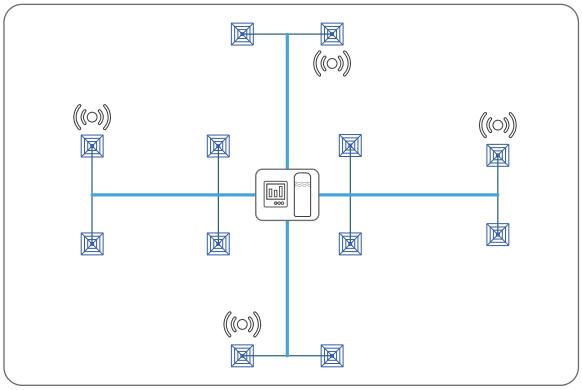
System diagram of seabed oxygenation

1 Liquid oxygen (LOX)
2 Submerged vaporizer
3 Pressure regulation
4 Flow control and automation
5 Distribution network
6 Seabed diffuser

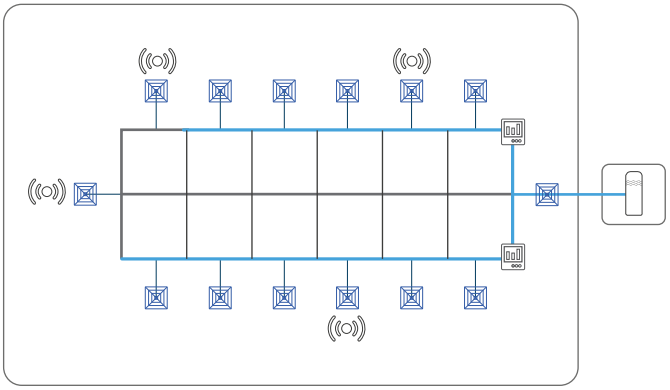


Installation diagrams

Liquid oxygen (LOX)
Dissolved oxygen sensor
Oxygen manifold
Seabed diffuser
Flow control and automation



Installation diagram on platform



Installation diagram during grow-out cycle

Conversion factors for pure oxygen

	WEIGHT		GAS		LIQUID*	
	kg	lb	m^3 (15°C. 1 atm)	scf (70°F, 1 atm)	l (1atm)	Gal (1atm)
1 kg	1	2,2046	0,7386	26,631	0,8764	0,2315
1 lb	0,4536	1	0,3350	12,079	0,3975	0,105
1m^3	1,354	2,985	1	36,06	1,1867	0,3135
1 scf	0,0375	0,08279	0,02773	1	0,03291	0,008695
1 l	1,141	2,5155	0,8427	30,384	1	0,2642
1 gal	4,319	9,522	3,1899	115,02	3,7854	1

14.7 psi = 10 mwc = 1 bar = 1 atm | 1m^3 GOX = 1.354 kg | GOX = Gaseous oxygen | *Boiling temperature