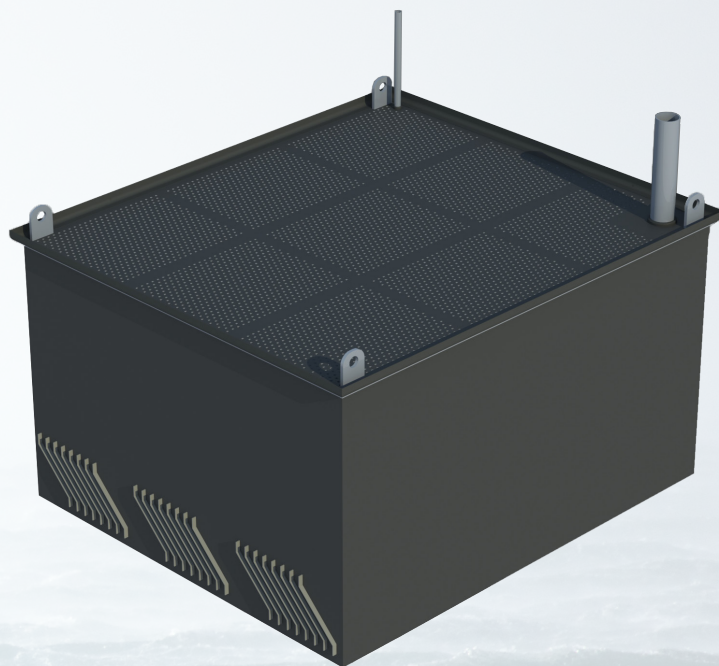




Medium head oxygenator (MHO)



Models

- 2 types
- Custom sizes upon request

Assets

- Head loss down to 0.2 m
- Up to 100% O₂ utilisation efficiency
- N₂ stripping < 100% N-saturation
- Outlet DO up to 350% (29 mg/l)
- Can be used in corrosive environments
- Also suitable for existing farming systems



Medium head oxygenator (MHO)

ACE developed the medium head oxygenator (MHO) as a new tool for oxygen enrichment of water. Oxygen is added by a combination of gas exchange, replacing gas molecules in the water with oxygen molecules, and by addition of oxygen through static pressure. On top of that, the MHO has a beneficial side effect, removing CO₂ and N₂, thereby preventing problems with gas bubble disease. Gas bubble disease is an increasing problem as system get deeper. MHOs can be used in fresh and salt water, as well as warm and cold water.



HDPE MHOs one at every fish tank



HDPE rectangular MHO for concrete pit and HDPE cylindrical stand-alone MHO

Technical specifications	Cylindrical			Units
	MHO C1	MHO C2	MHO C3	
Waterflow max	250	425	900	m ³ /h
Diameter	1200	1600	2300	mm
Height	4000	4000	4000	mm
Inlet size	250	315	400	mm
Outlet size	250	315	400	mm
	Rectangular			
	MHO R1	MHO R2	MHO R3	
Waterflow max	425	850	1700	m ³ /h
Length	1000	2000	2000	mm
Width	2000	2000	4000	mm
Height	1300	1300	1300	mm

Custom sizes are available upon request. MHO are made of non-corrosive polymers and do not have moving parts.

Efficiency

The major advantage of the MHO versus traditional oxygen cones is the fact that high effluent oxygen concentrations can be achieved with minimum head loss, high efficiency and low maintenance. Effluent oxygen concentrations can reach up to 29 mg/L, with oxygen utilization efficiencies up to 100%. Head loss through the MHO can be as low as 200 mm. As a result of the extremely low head loss, recirculation system processes can be designed with only one pump step, strongly reducing both investment and energy consumption.