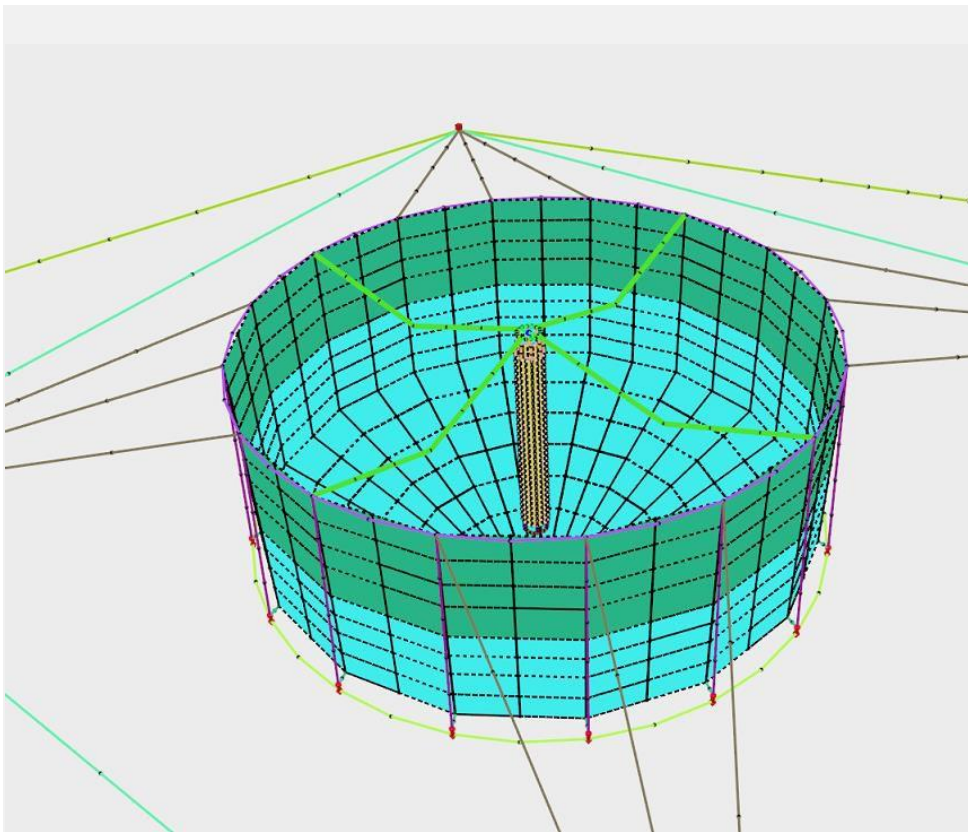
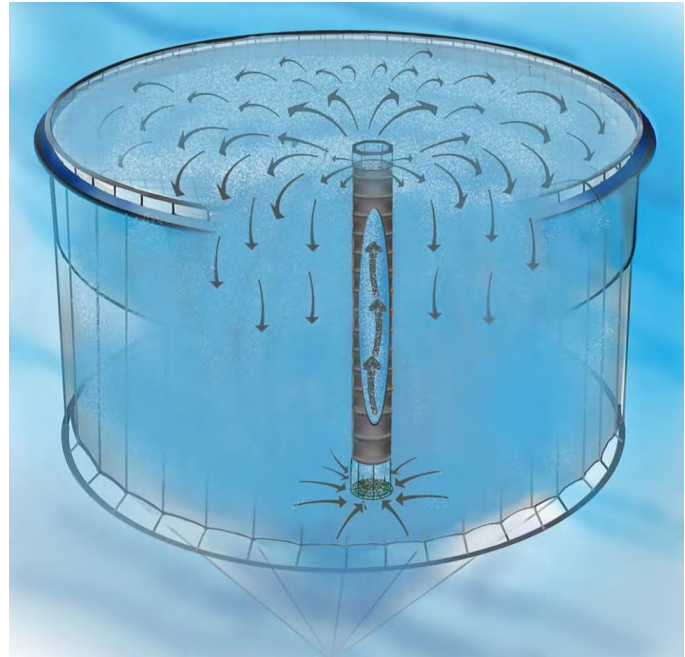


Turbolift

The Turbolift is a water-lifting device designed to create efficient water circulation in net pens equipped with lice skirts. By using air bubbles, the Turbolift effectively raises large volumes of oxygen-rich deep water through the device to the surface of the net pen. The Turbolift contributes to a healthy net pen environment in aquaculture facilities using lice skirts, promoting fish health and improved profitability. With effective water exchange in the net pens, the Turbolift ensures sufficient oxygen levels, allowing the fish farmer to keep the lice skirt in place.



«The Turbolift is placed toward the center of the net pen to supply fresh seawater to the entire net pen volume.»

The global analysis of the Turbolift has been conducted in accordance with NS-9415:2021. The analysis was performed in AquaSim by Aquastructures.



Turbolift

By using compressed air, the Turbolift raises large volumes of oxygen-rich deep water to the surface. Lifting water with air is highly energy-efficient. By channeling water through a column, the Turbolift ensures more efficient lifting compared to competing solutions and guarantees that the water brought to the surface is fresh deep water. The length of the Turbolift can be customized as needed, and the diffuser typically extends below the edge of the lice skirt.

Efficient Water Exchange

A diffuser in open water (left) primarily moves water horizontally and outward. The Turbolift provides efficient movement from the depths, upward, and vertically. This results in better water exchange in the space behind the lice skirt, reduced mixing, and more energy-efficient transport. With more efficient transport of deep water, a "flushing" of the water volume behind the lice skirt is achieved.



The bubbles reduce the density of the water, which is lifted and largely distributed at the surface before being pushed downward. This results in water exchange in the volume behind the lice skirt.

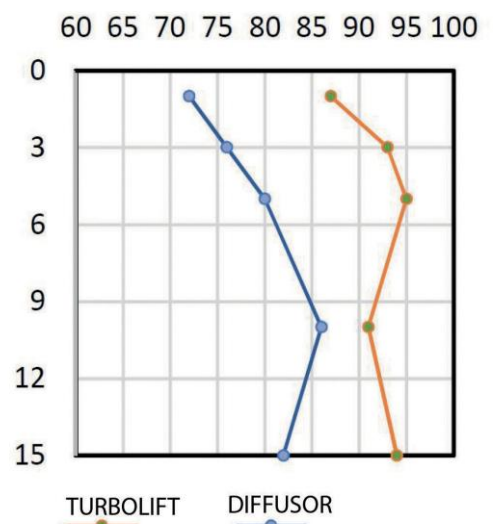
Zsolt Volent, Senior Researcher, SINTEF Ocean



Technical data for Turbolift

Type	Turbolift
Dimensions	Ø2m x 16,5m
Weight	Ca. 800 kg
Air requirement	300-900 L/min
Power	0,5-0.6 kW pr 1000 m3 vann
Totaleffect	3,5 kW
Water lifted	Opp til 6500 m³/t
Cloth material	PVC
Float	PE
Diffuser hose	EPDM
Diffuser ring	PE, Concrete
Certification:	CE

Oxygen Saturation in % at 5 Meters from the Diffuser Center



Package Solution – Compressor and Lice Skirt

The Turbolift can be delivered in combination with an bubble system. The bubblesystems contain one or more compressors and can adjust the air requirement for each individual location.



Compressed Air

- The Turbolift can be delivered with a compressor solution.
- Available in the form of a 10-foot container / installed in a technical room.
- Meets the needs of an entire facility.
- Collaboration with compressed air supplier Norluft.
- Over 20 years of experience with compressed air and oxygen.



Lice Skirt

- Can be customized in length and lead weight for sinking.
- Own production line in Lithuania.
- Long experience.
- Good production capacity.
- Return.

