ZeeLung* Module

FACT SHEET

WATER TECHNOLOGIES

VEOLIA

Description and Use

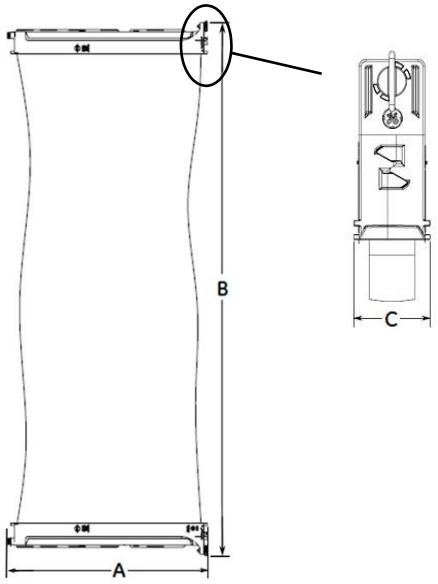
Veolia's ZeeLung is a next generation biofilm product that enables a suite of wastewater process intensification technologies.

ZeeLung uses a gas transfer membrane and constructed with unique properties to enhance biofilm attachment and product reliability with a reinforced core.

The ZeeLung module delivers oxygen without the use of bubbles to bacteria that are supported on the media surface.

Low-pressure air is supplied to the top of the ZeeLung module. Air travels down the ZeeLung cord through a series of dense-wall gas transfer membranes, and molecular oxygen diffuses through the membrane, where it is consumed by bacteria that have attached into a biofilm on the outside of the ZeeLung cord.

In the ZeeLung process, the bacteria in the biofilm use the oxygen to remove nutrients and organics from wastewater. The technology delivers oxygen at four-times greater efficiency than conventional bubble aeration, resulting in significantly lower energy consumption for biological treatment.



Dimensions

Product	Depth, A mm (in)	Height, B mm (in)	Width, C mm (in)
45	844 (33)	2,198 (87)	52 (2)

Operating Specifications

Product	max temperature ˚C (˚F)	Max Process Air Pressure kPa (psi)
45	40 (104)	83 (12)

Properties & Weight

Product	Nominal Surface Area m^2 (ft^2)	Media Diameter mm (in)	Maximum Shipping Weight kg (lb)
45	45 (485)	1.1 (0.04)	19 (42)

[1]Including packaging for an individual module