

#### Water Technologies & Solutions

fact sheet



# ZeeWeed\* immersed ultrafiltration

# model ZW1000-TT for tertiary treament

#### description and use

As a pioneer of membrane technology, SUEZ leverages decades of research, development, and operational experience in developing one of the most advanced submerged ultrafiltration technology in the market, the ZeeWeed 1000 system. These systems are proven to consistently outperform conventional filtration technology while meeting or exceeding regulatory requirements, regardless of source water quality.

#### typical applications

Versatile and reliable, the ZeeWeed 1000-TT (Figure 1) is ideally suited for use in water reuse applications. Compared to granular filter media, ZeeWeed membranes produce superior water quality and are virtually unaffected by variable raw water quality – all at a cost comparable to conventional filtration technology.

### general properties

- 0.02 µm nominal pore diameter for optimal removal of particulates, bacteria and viruses
- PVDF hollow fiber membrane provides high mechanical strength and chemical resistance
- outside-in filtration provides uniform flow distribution and high solids tolerance



Figure 1: ZeeWeed 1000 Tertiary Treatment module

#### storage and handling

Modules may be stored in the original factory packaging for up to one year prior to installation. Modules must be stored between 5°C and 35°C (41°F to 95°F). Do not expose the membrane module to direct sunlight (UV light). The module housing and other plastic components may degrade with extended UV exposure.

# product specifications

Specification	Measurement
Model	ZeeWeed 1000-TT
Nominal membrane surface area	46.5 m² (500 ft²)
Shipping weight <sup>1</sup>	23 kg (50 lb)
Typical lifting weight <sup>2</sup>	21-27 kg (46-60 lb)
Membrane material	PVDF
Nominal pore size	0.02 micron
Nominal fiber diameter	OD: 0.8 mm, ID: 0.47 mm
Flow path	Outside-in
Housing material	ABS, PPE/PP0

¹Packaged

<sup>&</sup>lt;sup>2</sup>Will vary with solids accumulation

Module Dimensions (Figure 2)			
Height (A)	Length (B)	Width (C)	
685 mm	691 mm	107 mm	
(27.0 in)	(27.2 in)	(4.2 in)	

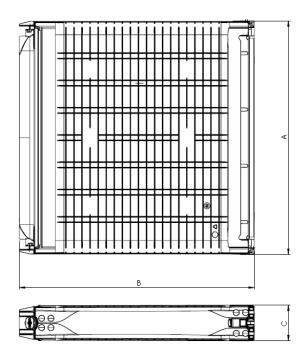


Figure 2: ZW1000-TT Module Dimensions

## operating parameters

Parameters	Item Description	Measurement
Performance	Flow range	55 – 110 m³/day (10-20 gpm)
Operating conditions	TMP range	0-90 kPa (0-13 psi)
	Max temperature	40°C (104°F)
	Operating pH	5.0-10.0
	Max air scour flow	5 dm³/hr (3 dcfm) / stack
Cleaning	Cleaning pH range	2.0-12.0
	Max chlorine concentration per cleaning <sup>3</sup>	1,000 mg/L (as Cl <sub>2</sub> )

NOTE: Higher concentrations are possible depending on feedwater and pH.

