

FILTRALITE®

# Filtralite® Clean



**WASTE WATER**

**Filtering the water for tomorrow**





A vertical photograph on the left side of the page shows water cascading over a dam. The water is white and foamy as it falls, creating a sense of movement and power. The background is a solid dark blue color.

# Our purpose

Whether you live in Cairo, Chicago, or Copenhagen, there is an increasing influx of people moving to the big cities. Demographic changes and urbanization across the globe puts a strain on cities and their capacity to produce basic necessities such as wastewater treatment.

As water flows through the filter bed, the unique porosity of Filtralite® Clean filter media offers optimum conditions to retain and adsorb more contaminants than conventional filter media can. The increased contact area allows larger volumes of water to be filtered through the same amount of media, decreasing operating costs.

As cities are gearing for the future, Filtralite® Clean filter media is an innovative and premium filtering product tailored to meet tomorrow's needs.





# What is Filtralite® Clean filter media?

Designed for wastewater treatment plants, Filtralite® Clean is a filter media suitable for both biological treatment and tertiary filtration.

**Filtralite® products can be used:**

- For biofilm growth support in aerobic (nitrification and organic matter) and anoxic (denitrification) biological reactors
- In single and dual media tertiary/polishing filters



### What are the advantages of Filtralite® Clean in biological reactors?

In biological aerated filters, biomass attaches to the Filtralite® media, which also works well as a mechanical filter for suspended solids. Filtralite® Clean offers:

- great specific area for biofilm growth combined with high void ratio
- high number of macropores
- an efficient process on a volumetric basis
- lighter density than traditional media
- high resistance to abrasion

### Filtralite® Clean performance in numbers

A **25-year lifespan** for Filtralite® Clean media in biological filters<sup>1</sup>

In tertiary filtration, **time between backwashes** can be increased by about **25 %**<sup>2</sup>

Existing Filtralite® filters operate **around 15 m/h -20 m/h for tertiary filtration**

Our project references:  
<sup>1</sup> VEAS, Oslo, NO <sup>2</sup> Kåppala, Sweden

### What are the advantages of Filtralite® Clean in tertiary filtration?

Compared to traditional filter media, Filtralite® has much higher porosity, which gives:

- lower initial head loss
- slower head loss build up
- higher particle storage capacity
- lower backwash rates
- lower operational costs





## Filtralite® Clean products for biological treatment

ROUND/CRUSHED MATERIAL	GRAIN SIZE	PARTICLE DENSITY
Round material	4-8 mm	1.400-1.600 kg/m <sup>3</sup>
	3-6 mm	
Crushed material	2,5-5 mm	

## Filtralite® Clean products for tertiary filtration

ROUND/CRUSHED MATERIAL	GRAIN SIZE	PARTICLE DENSITY
Crushed material	2,5-4 mm	1.100-1.300 kg/m <sup>3</sup>
	1,5-2,5 mm	1.400-1.600 kg/m <sup>3</sup>



## More about Filtralite® ...

Filtralite® filter media is made by heating specialized clay to around 1200° C. The heating creates highly porous ceramic media which is then crushed and sieved to specific sizes.

Dry particle densities range from 500 to 1.600 kg/m<sup>3</sup> and aggregate sizes range from 0.5 to 20 mm, and can be “tailor-made” for specific applications.

In addition to its low density and high porosity, Filtralite® offers high abrasion and impact resistance.

**Filtralite develops and manufactures quality filter media for a variety of water treatment applications:**

- **Filtralite® Pure** for drinking water solutions, both for physical filtration and biological treatment
- **Filtralite® Clean** for wastewater treatment, both for biological process and tertiary filtration
- **Filtralite® Nature** for onsite water remediation

# FILTRALITE®

Contact information

[www.filtralite.com](http://www.filtralite.com)

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