

# EPL Co., Ltd.

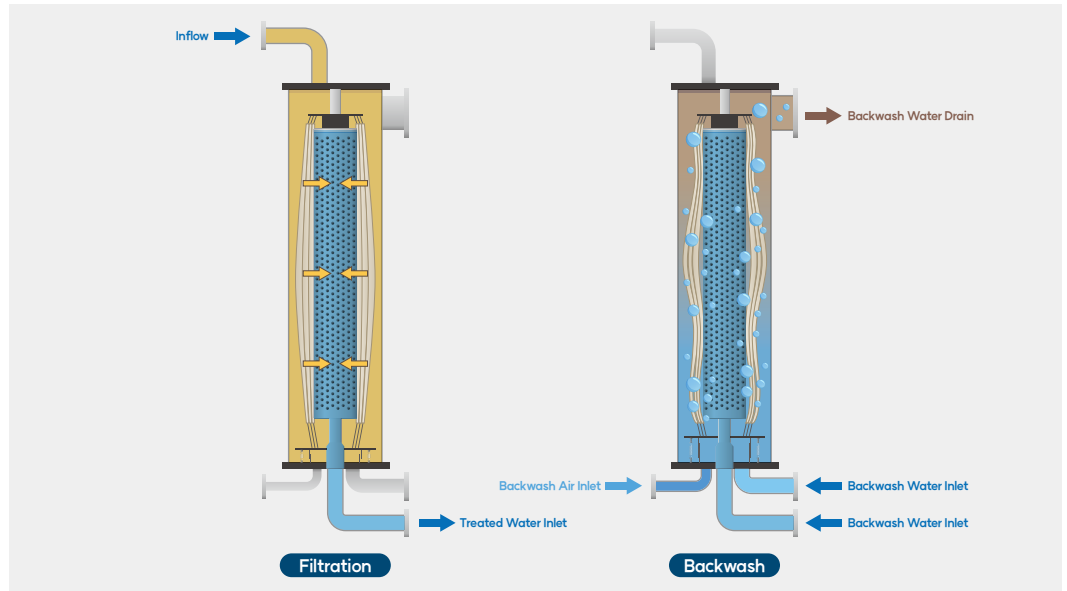


## Fiber Filtration & Functional Filtration



# Spring Fiber Filter

## Introduction



This filter removes particulate contaminants from water through fiber filter media. The spring maximizes the filter's efficiency by compressing the fiber filter media during filtration and by relaxing during backwashing.

## Features

- Minimization of the installation area by less than 1/5 of the sand filter
- Excellent treated water quality due to the application of the fiber filter media according to guaranteed water quality
- No need for the additional external device to relax & compress the fiber filter media
- Simple structure which easily assembles and operates
- Long-term use of the spring by the design for the prevention of elasticity degradation

## Application

Turbidity treatment for drinking water

Removal of Total Phosphorus and/or Suspended Solids in sewage & wastewater treatment plant

Packaged Water Treatment Plant

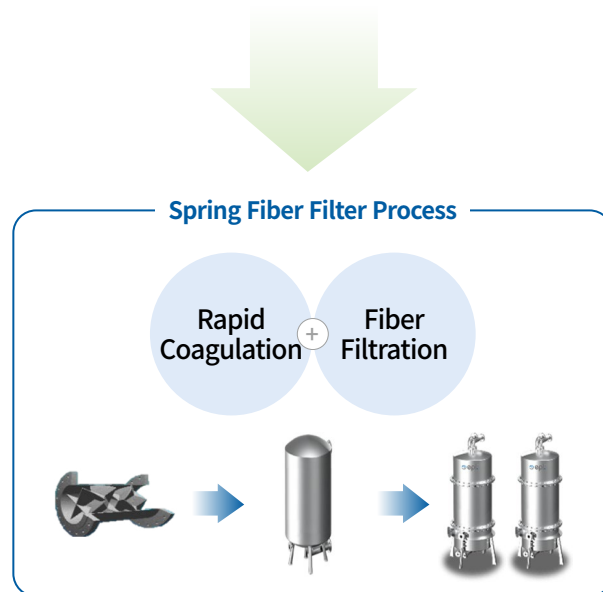
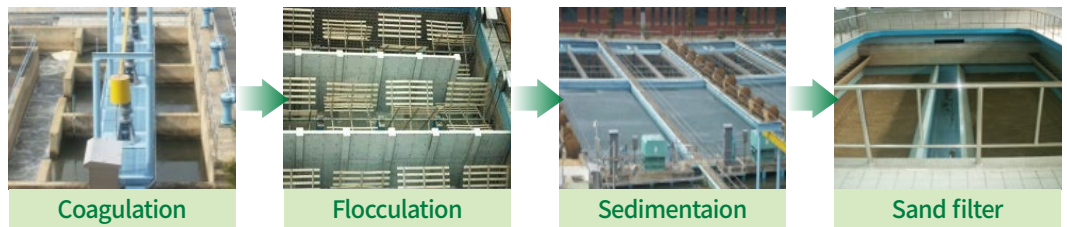
Pretreatment of membrane filtration such as RO, UF, etc.

## Performance

Parameter	Raw water	Treated water	
		No Coagulant	Coagulant
Turbidity	5-15 NTU	2-8 NTU	0.1-0.3 NTU
	≤ 100 NTU	5-20 NTU	0.5-1.5 NTU
SS	10-20 mg/L	3-5 mg/L	0.5-2 mg/L
BOD	7-12 mg/L	5-8 mg/L	3-6 mg/L
T-P	1.5-2 mg/L	1.5-2 mg/L	0.1-0.5 mg/L

\* The above water quality may vary depending on site conditions, water characteristics, etc.

## Fiber Filtration Method



## Reference

Location	Capacity
Philippines OO Water Treatment Plant	15,000m <sup>3</sup> /day, 25,000m <sup>3</sup> /day
OO Food Factory Industrial Water Treatment Plant	1,200m <sup>3</sup> /day
Busan OO Leachate Treatment Plant	800m <sup>3</sup> /day
Uiryong Floor Fountain Filtration System	60m <sup>3</sup> /day



# Functional Filter

## Introduction



Our functional filter can be applied to the suitable functional media in the type of pollutants such as SS, Color, Odor, Fe, Mn, As, etc.

## Features

- Application of the suitable functional media according to the type of pollutants
- Easy installation and maintenance
- Stable water quality by using special eco-friendly filter media and adsorbents (Made in Germany)
- Economical design by classification of allowable pressure (2.5, 4, 6, 8, and 10 bar)
- Strong to acid & alkali

## Specification

### ▪ SIDE MOUNT DEEP BED FILTERS

Q (m <sup>3</sup> /hr)	Dimension (mm)	Bed depth (mm)	Weight ( kg )
6~12	Ø772 x 1918H	1200	66
8~18	Ø923 x 2113H	1200	172
13~26	Ø1100 x 2115H	1200	181
17~34	Ø1229 x 2088H	1200	223
23~46	Ø1442 x 2158H	1200	275
30~60	Ø1644 x 2130H	1200	352
38~76	Ø1839 x 2105H	1200	377
47~94	Ø2042 x 2243H	1200	590

\* There are various specifications of filters other than the above.

### ▪ MICRON HORIZONTAL FILTERS

Q (m <sup>3</sup> /hr)	Dimension (mm)	Bed depth (mm)	Weight ( kg )
50~75	Ø1620 x 2327L	500	170
75~113	Ø1620 x 3312L	500	270
100~150	Ø1620 x 4301L	500	410
100~150	Ø2190 x 3026L	1200	590
110~165	Ø2190 x 3330L	1200	879
130~195	Ø2190 x 3890L	1200	1110
160~240	Ø2190 x 4640L	1200	1450
200~300	Ø2190 x 5650L	1200	2110

\* There are various specifications of filters other than the above.



## Application

Application	Pollutant	Media
Agricultural Water	Turbidity, Fe, Mn	Katalox light / Zeosorb Crystolite
Ground Water	Fe, Mn, As, F	Titansorb / Ferrolox Catalytic carbon Katalox light
industrial Water	Turbidity, Fe, Mn	Katalox light / Zeosorb Crystolite
Potable Water	Fe, Mn, COD	Katalox light / Zeosorb Crystolite Catalytic carbon
Wastewater Treatment	SS, TOC, Color, Heavy metal	Katalox light / Zeosorb Crystolite Catalytic carbon

## Reference

Location	Capacity
OO Food Factory Wastewater Treatment Plant	1,200m <sup>3</sup> /day
Busan OO Golf course	240m <sup>3</sup> /day
Busan OO University Artificial Lake	70m <sup>3</sup> /day

OO Food Factory Industrial Water Treatment Plant



Busan OO Golf course





# Eco-friendly Filter Media

## Functional Filter Media



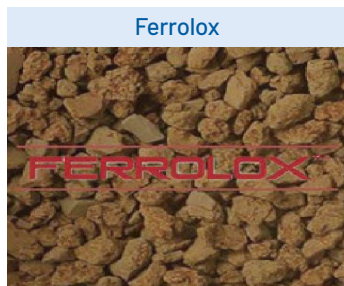
- High MnO<sub>2</sub> coating(10%) zeolite
- Iron & Manganese removal



- Feroxyhyte coated GAC (coconut carbon)
- TOC, COD, Phenol, PFOA, PFOS



- Granulated feroxyhyte 99%
- Microfiltration media
- SDI, Turbidity, NH<sub>3</sub>-N



- Granulated Ferric Hydroxide
- T-P, As, Heavy Metals

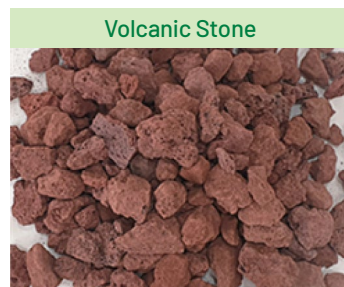
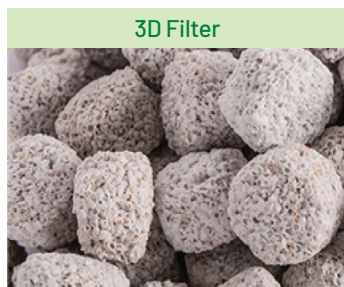


- Granulated Titanium dioxide
- As(III&V), Heavy Metals, Uranium



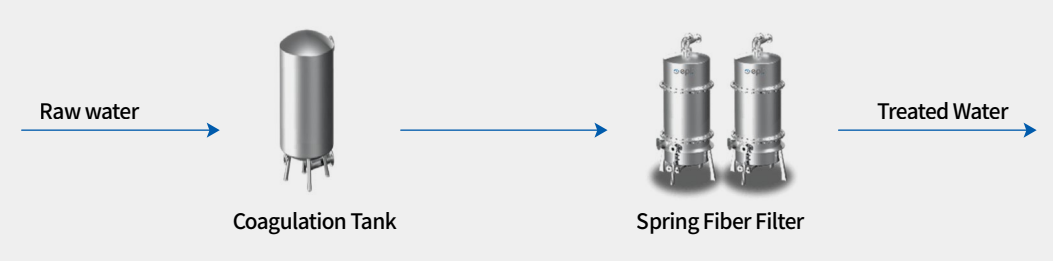
- Granulated Zeolite
- Turbidity, NH<sub>3</sub>-N

## Biofilter Media

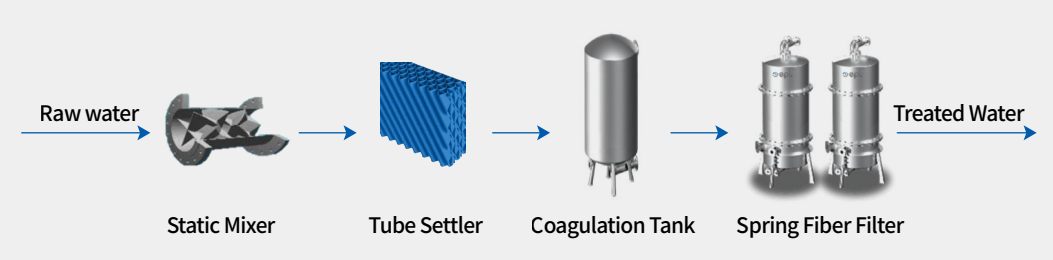


# Water Treatment Diagram

## Low Turbidity



## High Turbidity



## High Turbidity & Other Pollutant

