

AQUACLEAN

River & Lake Water Treatment

**Sustainable solution for surface
water purification**



About Us

Beacons is a leading company that designs, develops and supplies solutions to customer for the water treatment market.

Beacons has been manufacturing equipment for diverse sectors such as semiconductor, pharmaceutical, food & beverage, drinking water station for urban village and industry.

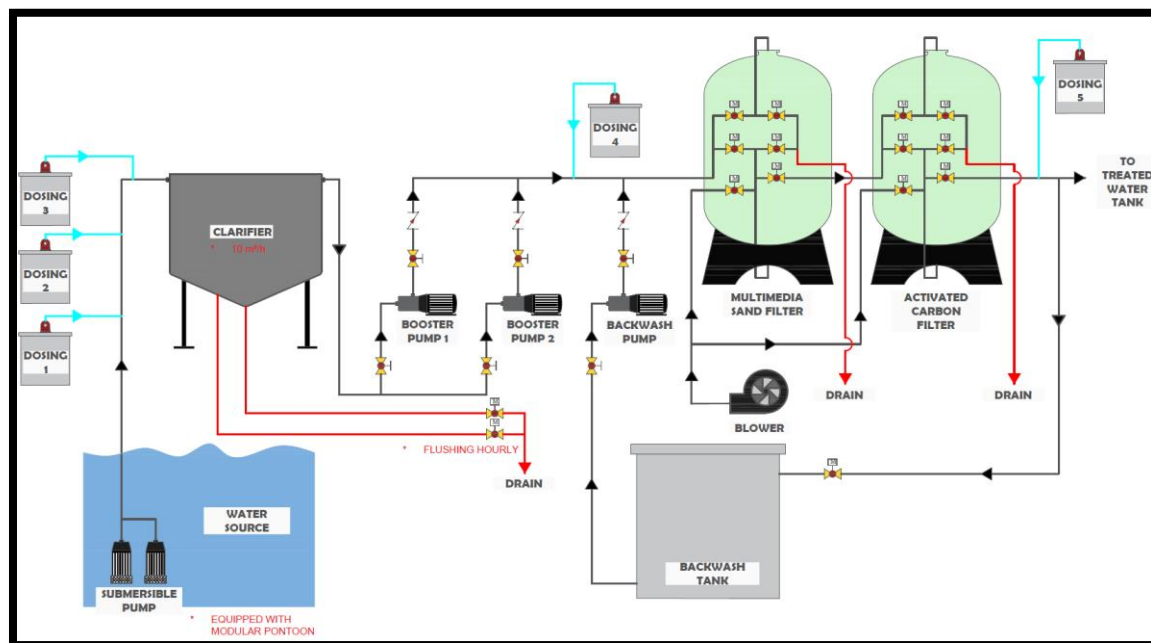
Our company designs and manufactures a wide range of plants for Reverse Osmosis, seawater desalination and potable water treatment for human consumption.

We understand our customers, thus we are awarded about how important is to support them wherever they are. For this reason, we also focus on strengthening our after sales services on being able to send spare parts the country.

The Beacons after sales service is ready to reply and provide service to our customers with the most efficient and quick way to solve their inquiries :

- Spare Parts
- Technical Support
- Commissioning and Start-Up
- Training

AQUACLEAN is designed to work efficiently and economically to produce high quality fresh Water from surface, river, lake and pond water.



Water treatment steps

Coagulation

During coagulation, chemicals with a positive charge are added to the water. The positive charge neutralizes the negative charge of dirt and other dissolved particles in the water. When this occurs, the particles bind with the chemicals to form slightly larger particles.

Flocculation

Flocculation is the gentle mixing of the water to form larger, heavier particles called flocs.

Sedimentation

Sedimentation is one of the steps water treatment plants use to separate out solids from the water. During sedimentation, flocs settle to the bottom of the clarifier because they are heavier than water.

Filtration

Once the flocs have settled to the bottom of the water, the clear water on top is filtered to separate additional solids from the water.

Disinfection

After the water has been filtered, water treatment plants may add chemical disinfectants to kill any remaining parasites, bacteria, or viruses..

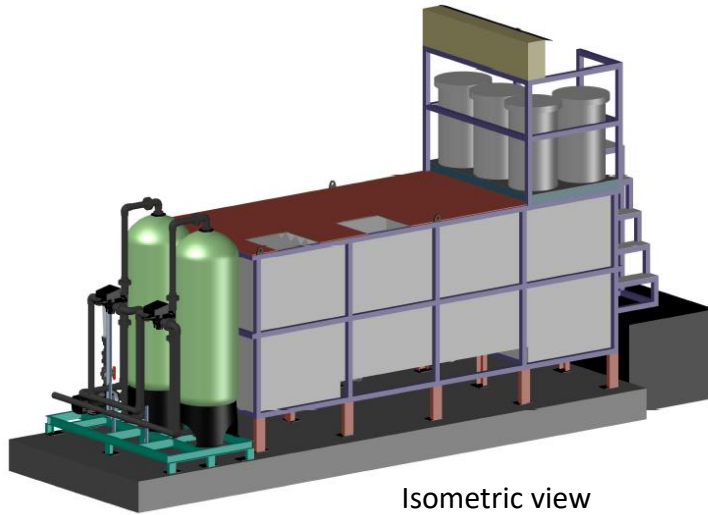
AQUACLEAN

Technical Specification

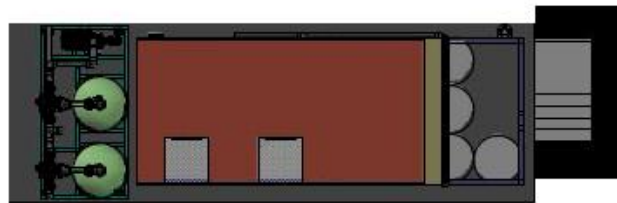
PARAMETERS	UNITS	PT05	PT10	PT20	PT40
FEED WATER FLOW RATE	m³/h	5	10	20	40
MEDIA FILTER		1865 x 2unit	2472 x 2 unit	3672 x 2 unit	6370 x 2unit
CLARIFIER		BECLA-05	BECLA-10	BECLA-20	BECLA-40
PROJECTED EFFECTIVE AREA	m²	10	20	40	80
TYPICAL SLUDGE FLOW RATE (<10%)	m³/h	0.05 - 0.5	0.1 - 1	0.2 - 2	0.4 - 4
TREATED WATER RECOVERY RATE	%	90 – 98 (VARIES ACCORDING TO FEED QUALITY)			
TREATED WATER TURBIDITY	NTU	1 – 15 (VARIES ACCORDING TO FEED QUALITY)			
MIXER	-	o	o	✓	✓
ELECTRICAL REQUIREMENT	-	AC 380 ~ 450 V, 3-PHASE, 50/60 Hz			
LAMELLA PLATE MATERIAL	-	PP/PVC *SUS304, SUS316 as optional			
BODY MATERIAL	-	MILD STEEL *SUS304, SUS316 as optional			
INNER COATING		TAR COATING *FRP COATING ,EPOXY COATING			
DIMENSION (CLARIFIER ONLY)	m (L x W x H)	1.5 x 2.2 x 2.85	3 x 2.2 x 2.85	6 x 2.2 x 2.85	12 x 2.2 x 2.85

Standard treatment process	Optional equipment & devices
▪ Coagulation ▪ Flocculation ▪ Clarifier ▪ Media filtration ▪ Chemical disinfection ▪ Booster pump ▪ Backwash pump ▪ Air blower ▪ Flow meter ▪ Pressure gauge ▪ Pressure switch	○ Generator ○ Pontoon ○ Submersible pump ○ Sludge pump ○ Turbidity meter ○ pH meter ○ stair ○ Water storage tank ○ UF System / RO System

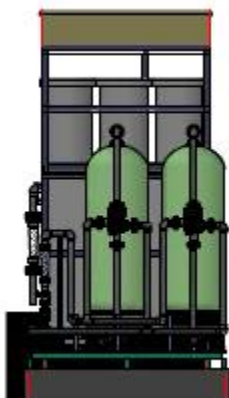
AQUACLEAN Standard system drawing



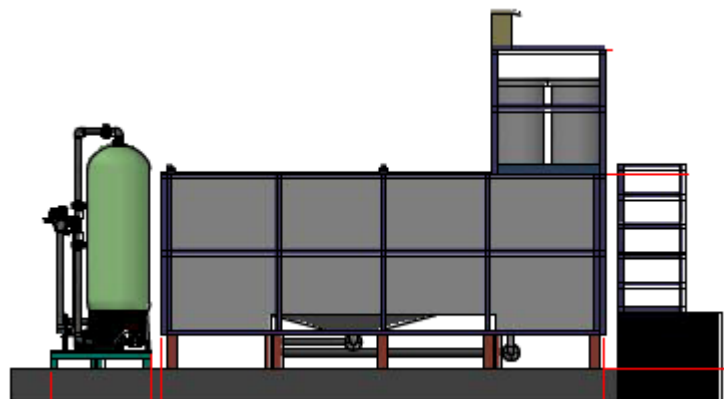
Isometric view



Top view



Front view



Side view

Photo references

