

DISC FILTER

Microfiltration Tertiary Treatments

DESCRIPTION

The filter EQUIP DISC is a machine designed for the microfiltration of wastewater, used in the final phase of their treatment. It is a machine designed to obtain high separation efficiency, using meshes realized of stainless steel 316L, with a filtering aperture of 20 µm.

BENEFITS:

- Meshes are not crossed by suspended solids during washing
- The suspended solids do not accumulate inside the meshes
- Maintenance is simple and wear is limited.
- Meshes are highly resistant

OPERATION:

The water flow proceeds from the inside towards the outside, during this passage the suspended solids are blocked inside the filter allowing the containment tank to remain always clean. The machine is equipped with a washing system with nozzles that is activated each time the water level inside the containment tank reaches the preset level. In the standard version the water level is adjusted using the bar level indicators.

On request we can be provided ultrasonic level indicator with one or two levels and a backwash system with double cartridge filter for easier maintenance.



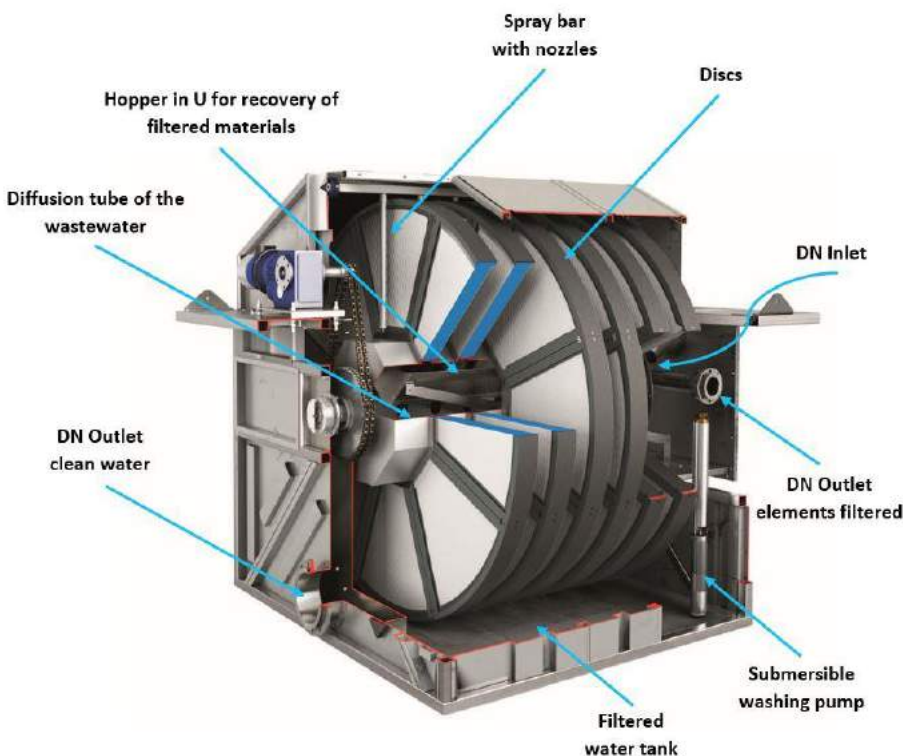
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The water that enters through the appropriate feeding flange continues on its way inside a tube placed in the center of the machine and from there reaches the filtration sectors of the disc filter.

During the filtration the discs are not in operation as long as the amount of solids held from the meshes causes a clogging of the same and the consequent raising of the water level inside the tank. At this point is activated the rotation of the discs and the washing system placed in their upper part, than working in countercurrent, allows a perfect cleaning of the meshes.

The retained solids from the meshes are pressed from the backwash water flow inside a specific channel located inside the central tube, and then slide towards the discharge flange of the solids. The water used by the washing system is picked up, by means of a high prevalence submersible pump or by an external centrifugal pump, which can be placed vertically or horizontally at the discretion of the project.



Thus using filtered water is not necessary any connection with the mains water. In order to safeguard from clogging, is installed a further filter. The water level inside the containment tank is regulated by a barrier that regulates the level of load and that allows to maintain the discs immersed to a value equal to 60% of the filtering area. Filtered water, after the barrier regulation system, passes through the outlet flange.

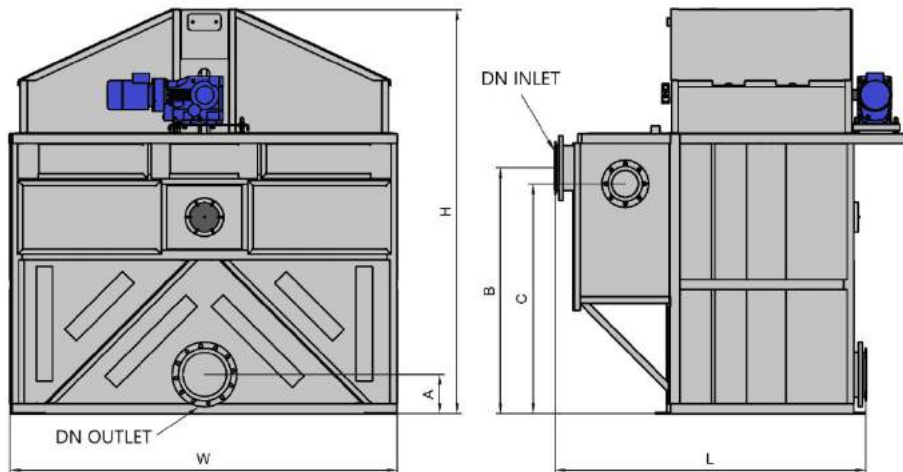
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MATERIAL OF CONSTRUCTION OF MAIN COMPONENTS:

- Containing tank (optional): Stainless steel 304 or 316L
- Structure of the disc filter: Stainless steel 304 or 316L
- Filtration mesh: Stainless steel 316L
- Outside structure of the discs: Polyethylene

The standard version includes the supply of an electrical control panel wired, a bar level sensor, a submersible pump for backwashing and a by-pass system, in case of block of the machine.



Number of discs	Height mm	Width mm	Length mm	Diameter discs	Filtration area m ²	Washing water flowrate at 6 bar l/s	Power Discs motor	Power Pump motor
4	2470	2350	2390	2200	21	1.9	0,75	2,2
6	2470	2350	2870	2200	31,5	2,9	1,1	4
8	2470	2350	3350	2200	42	3,9	1,1	5,5
10	2470	2350	3830	2200	52,5	4,9	1,5	7,5
12	2470	2350	4310	2200	63	5,9	1,5	7,5
14	2470	2350	4790	2200	73,5	6,9	1,5	7,5
16	2470	2350	5270	2200	84	7,9	2,2	11,5
18	2470	2350	5750	2200	94,5	8,9	2,2	11,5
20	2470	2350	6230	2200	105	9,9	3	11,5