



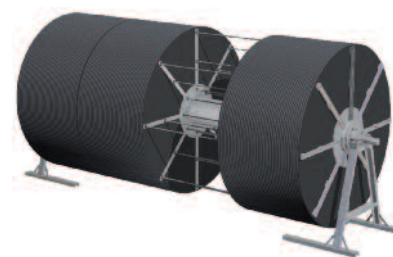
R&O



BIOLOGICAL DISCS FOR WASTEWATER TREATMENT

■ Ideal in cases of:

- Strong variations of seasonal pollution load or hydraulic head
- Steep mountainous terrain
- Limited construction space ($< 0.1 \text{ m}^2/\text{R.E.}$)



OPERATING PRINCIPLE

- The Biodiscs consist of a set of discs made of composite material, mounted and solidly attached to a shaft.
- The shaft is slowly rotated by a planetary gear motor designed to operate 24 hours a day, with a speed of between 1 and 5 rpm, depending on the characteristics of the effluent to be treated.
- The Biodiscs are partly submerged in the effluent to be treated. With its rotary movement, the discs alternate between contact with the wastewater (from which the microorganisms absorb their organic nutrients) and the oxygen in the ambient air (the other element necessary for the process), leading to the growth of a biological film that covers the entire surface of the discs.

BENEFITS

- ✓ Bacterial flora operational within a period of 5 to 15 days, without seeding
- ✓ Insensitive to sudden hydraulic and/or organic load variations
- ✓ Very low power consumption (approx. 0.25 kWh/kg of BOD_5 treated)
- ✓ Supply oxygen without aeration or any diffusion system
- ✓ Silent
- ✓ No odour pollution, no vibration, no projection of aerosols (no bacteriological risk), no foam
- ✓ No insect or rodent nuisance (as with other processes)
- ✓ No consumption of mains water (no cleaning, no watering)
- ✓ Extremely simple maintenance, no need for qualified personnel. The maintenance/servicing time is considerably reduced when compared to a reed bed.
- ✓ High mechanical resistance steel shaft (30% better than stainless steel). The shaft and its frame are never in contact with the effluent to be treated.
- ✓ With its low footprint, easy integration in small premises or in a small area

