Rotating Biological Contactor

Stable Performance
Constant quality treatment providing phosphorus removal and disinfection options for sensitive environments.

Low Energy
Energy expenses are controlled and well below that of alternate solutions.

Aesthetic
The design of the treatment system discretely adapts to the environment of your site.

Reliable
Unique patented media and rotating mechanism that ensure the durability of the shaft and the auto-cleaning of the media.

Flexible
Modular design that adapts easily to the flow increase or decrease.

Simple
Design, installation and maintenance simplicity that generates time, space and labor savings.
**Stable performance at low energy cost**

The Rotating Biological Contactor Rotofix® is an aerobic biological treatment system that uses semi-submerged fixed cultures without the use of traditional blowers. Its modular and innovative design provides the benefit of reliability, durability and low energy and operating costs. Rotofix® consists of a unique patented tubular PVC medium with multiple internal blades. The numerous media channels are radially arranged around a patented horizontal stainless steel shaft guaranteeing durability of the system and auto-cleaning of the media.

**A simple operating principle**

Through its continuous, slow and controlled rotation movement, our Rotating Biological Contactor recreates the principle of a waterfall. Wastewater is captured in the Rotofix® tank by the media and then falls back into a cascade in that same tank generating oxygen.

The aeration generated by this system promotes the degradation of pollutants through a significant oxygen input. A biofilm, consisting of bacteria feeding on carbonated material existing in the wastewater, forms on the entire surface of the media when the rotor turns in the water. The biomass continuously reproduces itself where it has run off the media blades.

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**Primary treatment**

It is usually made of a septic tank equipped with one or more pre-filters and offering a hydraulic retention time (HRT) of 36 hours at an average daily flow. A grease trap (GT) must be installed upstream from the septic tank for certain projects, like, for example, those relating to food preparation.

**Equalization tank**

It offers a 12 hour HRT for commercial applications and an 8 hour HRT for community applications.

**Rotofix® Rotating Biological Contactor**

It is an aerobic biological treatment system that uses semi-submerged fixed cultures. Rotofix® operates in at least two stages, design characteristics allowing to reach the desired treatment performance. Each stage is made up of one pre-assembled rotor inside a small basin.

**Clarifier**

It allows for the settling and the automatic recovery of biological sludge and scum formed during the purification process.

**Sludge storage tank**

This biological sludge storage tank is non-aerated and allows for the return of supernatant fluid to begin the secondary treatment (in the equalization tank).

**Tertiary treatment unit**

(option)

Our Rotofix® system offers the possibility to add a disinfection unit through a UV lamp and/or phosphorus removal using a chemical addition.
Are your projects:
• Aiming at a community or commercial development within an environmentally sensitive area?
• Including land development optimization?
• Requiring the replacement of a conventional wastewater treatment system?

So, you need a solution that:
• Offers a stable treatment performance
• Ensures energy expenses control
• Optimizes the available land space
• Generates important work and operation savings

**Rotofix**

**A very reliable and easy to operate wastewater treatment system, that harmonizes with the existing environment**

Treatment Performance

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD&lt;sub&gt;5&lt;/sub&gt; (biochemical oxygen demand)</td>
<td>&lt; 20 mg/L</td>
</tr>
<tr>
<td>TSS (total suspended solids)</td>
<td>&lt; 20 mg/L</td>
</tr>
<tr>
<td>PT*</td>
<td>&lt; 1 mg/L</td>
</tr>
<tr>
<td>Disinfection**</td>
<td>&lt; 200 CFU/100 mL</td>
</tr>
</tbody>
</table>

*With addition of a phosphorus removal unit
**With addition of a disinfection unit. Value obtained after reactivation
The strength of Premier Tech Aqua

Since 1923, Premier Tech has been building its know-how and reputation on the diversity and technological expertise of its 2 000 team members located all around the world. As one of Premier Tech's business units for over 20 years, Premier Tech Aqua (PTA) has become an international leader in the field of onsite and decentralized wastewater treatment technologies for the residential, commercial, community, and industrial sectors. With over 45 000 installations, each coupled with a rigorous inspection, maintenance and documented follow-up program performed by a large network of partners, PTA is undoubtedly one of the leaders in its industry. Active in North America, Europe and Asia, PTA is proud of the quality, performance, and reliability of its solution offering.

- Over 45 000 Ecoflo® installations
- Over 100 000 peripheral products sold
- Over 900 project referrals in commercial, communal, institutional, municipal and industrial applications
- Documented system traceability, inspection, maintenance, and follow-up
- More than 2 500 partners
- Team of 25 experts entirely dedicated to IR&D
- Presence in North America, Europe and Asia
- Treatment performance surpassing regulatory requirements

ALL THAT YOU NEED!
The toolbox for wastewater professionals

ptzone.premiertechaquacom