LARGE CAPACITY AND MINIMAL MAINTENANCE FOR HEAVY LOADS

The Recirculating PolyGeyser® (RCPG) uses the same filtration technology as our traditional PolyGeyser® but has been optimized for multiple pass recirculation for improved solids capturing and superior biological filtration.

The RCPG features an internal recirculation basin that is powered by an energy efficient airlift that not only physically recirculates waste streams but also re-oxygenates filtered waters allowing for a high degree of biological filtration.

These units use our patented sludge handling technology to capture, condense, and discharge sludge pneumatically and with no moving parts making these units one of the most energy and water efficient filters on the market.

FILTER BENEFITS

- Stand-alone treatment for small flows
- Designed for consolidation
- Small on-site footprint – the recirculation tank is built into the unit
- Energy efficient recirculation and oxygen transfer with internal airlifts
- Enhanced nitrification and organic (BOD) removal with multiple passes
- Normally operates with pneumatic sludge removal with no electronics
- No moving parts or electronics to break
- EN media provides superior BOD, TSS, and ammonia removal
- Can be configured for BTEX or Nitrate removal aerobically or anaerobically
- Ideal for remote groundwater remediation sites
- Backwashes with a linear air pump
- One year warranty, USA made
RCPG Performance

The RCPG is a breakthrough in filter technology. With the capability of handling high organic loadings with no fear of biofouling, this unit is perfectly engineered to provide both high BOD and Ammonia removal rates while maintaining its fine solids capturing abilities. To avoid nitrification inhibition due to overloading of organics, the RCPG employs its auto-pneumatic backwashing to harvest excess heterotrophic bacteria growth leaving the underlying nitrifying bacteria intact. The RCPG also has the ability to harvest and discharge captured solids and excess bacteria before organics can be re-expressed thereby decreasing the oxygen demand and optimizing treatment efficiency.

The RCPG is offered in three sizes: the RCPG 10, our pilot scale unit; RCPG 100, our midrange unit; and the RCPG 250, our modular large scale unit. All three of the RCPG models have the capability to be run in series or parallel to meet any treatment goal.

<table>
<thead>
<tr>
<th>Model</th>
<th>Ammonia Conversion Rates (kg/day)</th>
<th>CBOD₅ Conversion Rates* (kg/day)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Effluent Concentration (mg/l)</td>
<td>Effluent Concentration (mg/l)</td>
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<tr>
<td>RCPG 10</td>
<td>&gt;1  0.3</td>
<td>5  0.3</td>
</tr>
<tr>
<td>RCPG 100</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>RCPG 250</td>
<td>7.1</td>
<td>7.1</td>
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</tbody>
</table>

* Note: CBOD₅ conversion rates are dependent upon desired effluent quality

SERIES OF THREE RCPG 250s