**BIOTRICKLING FILTERS**

Biorem’s biotrickling filters are designed for the removal of high level H$_2$S and other water soluble odorous gases from air streams. Utilizing our high performance inorganic permanent media, we are able to offer a cost effective and efficient process in achieving greater than 99% removal.

**Applications**

High H$_2$S

Wastewater treatment plants

Head works

Grit removal, bar screens

Pumping stations

Pulp & paper, Biogas generation and landfill applications

Roughing filter

Ammonia (NH$_3$) removal

Methanol, MEK, Acetates, Formaldehyde

Industrial Applications for VOC removal

**Media**

Biorem’s synthetic, extreme lightweight medias are ideal for the use in biotrickling filters. Their fluid characteristics allow the material to take the shape of the vessel, minimizing unwanted voids and allowing uniform distribution throughout the system. Excellent mechanical and chemical properties provide good system stability and long work life. The hydrophilic nature of the medias allow for greater water holding capacity which support microbial growth and in turn provides superior elimination properties. Cost reductions are achieved due to the lightweight design which reduces shipping and handling costs.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
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<tbody>
<tr>
<td>Small Footprint</td>
<td>Reduced footprint due to vertical design and lower EBRT due to efficiency of the synthetic media</td>
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<tr>
<td>Low Life Cycle Costs</td>
<td>The ultra efficient design and synthetic media gives our biotrickling filters the lowest life cycle and operation costs</td>
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<tr>
<td>Energy Savings</td>
<td>The unit is designed with the media to have a low pressure drop which in turn means a lowers static pressure drop across the unit, ultimately saving money</td>
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<tr>
<td>Environmentally Friendly</td>
<td>No harmful or costly chemicals are used</td>
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