Introduction

Global demand for fish is rising rapidly and – with it – the need for fish farming. Inland aquaculture offers a number of environmental benefits, helping to conserve dwindling natural fish stocks and protect marine ecosystems through the reconditioning of contaminated water. High stocking densities in intensive fish farms present a number of challenges, however, including the need to increase the oxygen supply into the water.

As a trusted, long-standing partner of many aquaculture companies, we have developed a number of innovative oxygenation solutions such as our SOLVOX CD oxygen diffuser. This maintains an optimum environment for fish at all times by stabilising oxygenation levels directly in the tank. It is also an ideal backup option to meet peak demands and ensure security of supply in emergencies.

Description

SOLVOX CD is a flexible, efficient ceramic diffuser that dissolves oxygen directly in the fish tank. Designed specifically for pure oxygen, SOLVOX CD produces micro-bubbles at pressures of 1.5 to 3.0 barg. The base plate, with a robust aluminium frame and chromium-plated brass connectors, features ultra-fine ceramic pores. The flat design of the ceramic tile ensures the bubbles are evenly distributed across the entire surface. This homogenous distribution and the micro size of the bubbles maximise oxygenation efficiency, outperforming membrane diffusers and/or perforated hoses.

Applications

SOLVOX CD can help increase production capacity in fish farms or provide a reliable backup option for emergency or peak needs. During fish transport, it supports higher stocking densities and helps avoid fish stress. It is also suited to special fish holding and quarantine applications.

Benefits

→ Simple and flexible oxygenation solution
→ High efficiency due to micro-bubbles
→ Increased capacity
→ Reduced fish stress and mortality during transport
→ Security of oxygen supply during emergency cases
→ Easy to install and operate
→ Robust design
→ No power source required for operation
Installation and operation

SOLVOX CD can be installed quickly and easily. Once the diffuser has been connected to the oxygen supply hose, it is placed in a horizontal or slightly sloping position at the bottom of the fish tank. The lower the position of the diffuser, the greater the overall efficiency. Once the diffuser is in the water, the supply pressure should be set to a value between 1.5 and 3.0 barg and the oxygen flow to the desired rate.

SOLVOX CD should be cleaned on a regular basis to maintain optimum efficiency, although the ideal maintenance intervals will depend on the quality of the water. Disinfection can be applied when using SOLVOX CD subsequently in different sections of a fish farm.

Technical data

<table>
<thead>
<tr>
<th>Overall size (L x W)</th>
<th>670 x 80 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone surface (L x W)</td>
<td>610 x 63 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>Maximum working pressure</td>
<td>3.0 barg</td>
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<tr>
<td>Dosing capacity</td>
<td>approx. 1 kg oxygen per hour</td>
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<tr>
<td>Hose connection</td>
<td>6 mm hose socket</td>
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</tbody>
</table>

More information

Would you like to know more about our SOLVOX CD ceramic diffuser and other gas application technologies for aquaculture? Our experts are at your service. Just contact your local Linde representative or visit our website at www.linde-gas.com.