## **Oxygen-Enrichment**

# LOXY®



LINN Germany has been manufacturing oxygen enrichment systems for 20 years. The design brief for the latest development was to produce a robust and reliable system with a high oxygen transfer efficiency. In addition, the new floating device was to be as light, convenient, easily-serviced and quickly-deployable as possible.

The development trials were a success, and LOXY<sup>®</sup> was born – the latest state-ofthe-art oxygen enrichment system from LINN!

This new enrichment system contains a novel rotary mixing mechanism within the plastic body. This is driven by an electric motor located above the water surface. This mixer propels the water outwards in the contained system, due to its rotation. The resulting fast-flowing water generates a vacuum, and pure oxygen is drawn in and entrained through a tube in the mixer, and is distributed in very fine bubbles within the water.

With the help of this new invention, LOXY<sup>®</sup> achieves a very good level of oxygen enrichment with low energy consumption.

Previous systems worked with 'bottlenecks' (for example, the venturi nozzle disadvantage: a relatively high water pressure is required) or with wheels or brush wheels (disadvantage: a lot of energy is required to move the water) Compared to these systems, LOXY<sup>®</sup> has the advantage that, due to the rotary mixer, only a very small portion of the water needs to be accelerated; no water pressure is required. A fluidised bed that low-

LOXY<sup>®</sup> – motor cover easy removable without tools



## **ADVANTAGES:**

- Low energy consumption very efficient
- Pioneering technology
- Safe operation
- Maintenance-free
- Lightweight and compact
- Clog-free
- Great value for the money



LOXY<sup>®</sup> – bottom side

ers energy consumption and leads to excellent oxygen enrichment is created on the surface of the novel rotary mixer.

The main plastic body of **LOXY**<sup>®</sup> is shaped such that water is sucked up from below and exits through an opening on the side. Therefore, short-circuiting cannot occur. The main body is enclosed by two floats. All of the plastic parts are made of polyethylene and are extremely robust.

This elegantly simple LINN development does away with submersible motors, belt drives and external bearing blocks. **LOXY**<sup>®</sup> uses a durable, energy-saving

electric motor (according to the latest IE3 standard) with a stainless steel shaft on which the rotary mixer is directly mounted. The drive is thus completely maintenance-free! The electric motor is located in a protective housing on the body base and can be removed easily and quickly. **LOXY**<sup>®</sup> does not need any screens to protect the fish or exclude leaves, so clogging within the system is impossible!

**LOXY**<sup>®</sup> is supplied assembled, ready for use and with a 20 m cable and a motor protection plug.



LOXY<sup>®</sup> – lightweight and compact – easy to install!

### Technical

Motor rating	kW	0.37	0.55
Power take-up	W	540	650
Voltage	V	230/400	230/400
Motor	rpm	1400	1400
0 <sub>2</sub> enrichment	l/min	16	25
max.	m³/h	1.0	1.5
Dimensions	cm	114 x 94 x 80	
Weight	kg	45	