



A.G.A. AQUA 1

Wind Powered Aeration and Mixing Unit

Improves the quality of impounded water especially in Ponds – Lakes – Reservoirs



Without sufficient oxygen the natural life cycle or ecosystem in impounded waters will result in problems. Toxic gasses are released, aquatic wildlife becomes stressed, fish mortality increases and water can become foul.

The A.G.A. Aqua 1 is the solution. The low cost method of increasing the dissolved oxygen in water.

Whatever the intended use, good water quality is only achieved through good management.

Without deep circulation a body of water can thermally stratify depleting the dissolved oxygen content in the water. Even shallow waters are affected and the bottom mud (the hydra-soil) can become oxygen deficient resulting in anaerobic bacterial activity, this causes toxic gases to be released.

The lack of oxygen stops many life forms from biologically breaking down waste products in the water. This results in toxins failing to be absorbed naturally through the aquatic life cycle of the pond.

Deep circulation is the solution provided by the Aqua 1. This wind powered mixer greatly increases the natural aeration process, significantly increasing the oxygen transfer rate, by bringing oxygen depleted water from the deep, to the surface, to absorb atmospheric oxygen.

Within a very short time the bottom dissolved oxygen levels will be completely restored, helping to keep the water clear and healthy.

Water body management for:

- Fishing lakes
- Agricultural holding ponds
- Golf courses
- Decorative ponds
- Industrial holding ponds
- Irrigation Reservoirs
- Balancing ponds
- Discharge water polishing – and, as a component of:
 - *Water treatment and waste water treatment systems*

Good quality water:

- Minimises fish mortality
- Stops algal blooms including blue/green algae
- Prevents toxic build-up
- Avoids deleterious gasses
- Eradicates odours
- Eliminates surface scum
- Reduces sludge accumulation
- Is aesthetically more pleasant
- within its surroundings

The A.G.A. Group offers a complete package:

- Testing – Feasibility – Costing
- Delivery
- Installation
- Commissioning
- Accessories (anchors, cables etc.)

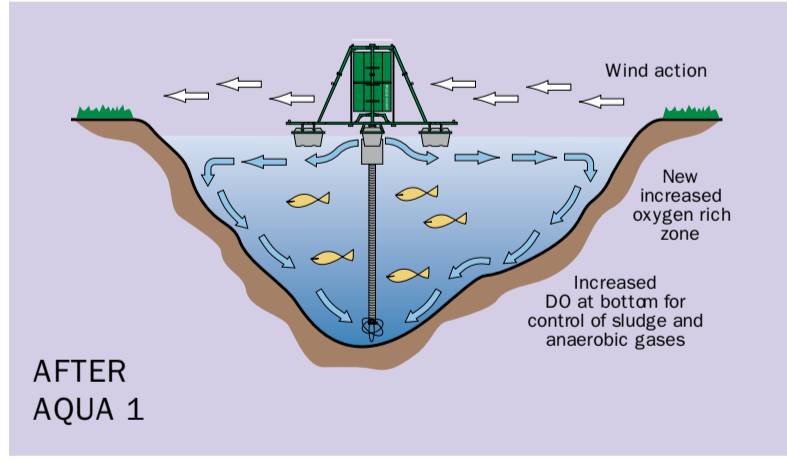
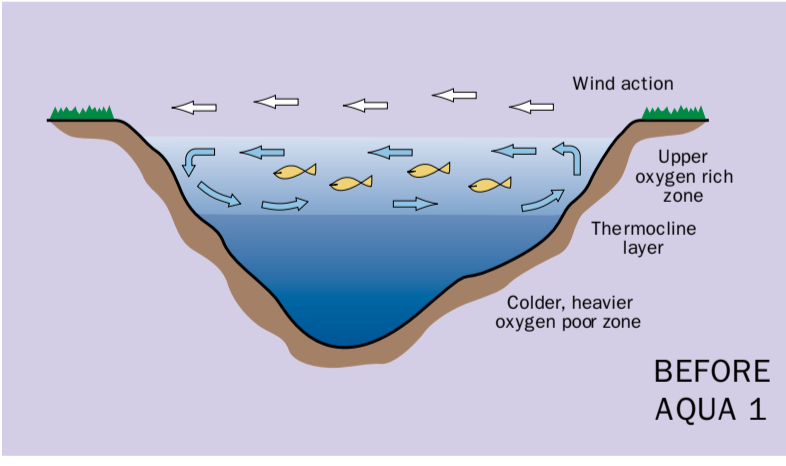
Aqua 1 operation:

- Unit works in light winds (from 5 mph).
- It needs no power.
- It works to almost any practical depth.
- One unit can condition up to 2ha. of water.
- Chemicals are not required.
- Operation is free from noise or nuisance.
- Only a minimal annual maintenance check is advised.

The A.G.A Group

AQUA 1 wind-powered aerator/mixer.

The environmentally friendly way to overcome problems associated with poor water quality. The unit requires no additional energy source, incurs no running costs and is virtually maintenance free.



Stratification

In the warmer months the surface water warms up faster than at the lower depths, and a thermocline develops (the area of significant temperature change). This prevents the normal migration of oxygen from the surface to the deeper water.

If the problem persists, a sudden fall in temperature makes the surface water denser, causing it to drop to the bottom. Oxygen starved water rises to the top and with it the toxins that can cause fish mortality and odours.

Oxygen depletion can be caused by the accumulation of excess organics from run-off – fish waste – dead vegetation – food remains from the feeding of ducks and other fowl – plus other pollution sources. An Aqua 1 wind-powered aerator/mixer will maintain a biological and sustainable balance for the natural ecology to keep water clear.

For over 25 years our group has had the most successful record of working with, and for, clients throughout the UK. The A.G.A. Group has close associations with the Environment Agency, Local Authorities, British Airport Authority, Main Contractors, Fishing clubs and associations and private clients

For more information or a quotation please contact us. On confirmation of your order we will arrange delivery and call on site to install and commission each unit.

