

## Pond, lake and lagoon product

Reaman and Canadianpond have worked together developing the NZ market after Canadianpond success in providing solutions for water quality issues and deicing projects for marinas, lakes and ponds since 2003 in USA, Europe, Asia, Canada, Alberta, Quebec, Saskatchewan, Manitoba, British Columbia, New Brunswick, Nova Scotia and New Foundland.

We can now offer innovative aeration systems for a wide range of applications. We provide cost effective and designed solutions to ensure our customers get the right systems, lower capital outlay and reduce cost maintenance.

### Bubble Tubing® fine bubble linear diffuser



Bubble Tubing® is proprietary linear aeration diffuser tubing designed and made in Canada. It is a highly efficient air diffuser for aeration, deicing and also as air bubble curtain application.

It produces numerous fine air bubbles (inferior to 1mm coming out of the diffuser). These fine bubbles (also called micro bubbles) which rise slowly from the floor of a wastewater treatment plant or the bottom of waterways and canals, ponds, lakes or lagoons, provide substantial and efficient mass transfer of oxygen to the water. The combination of this oxygen with the food source, sewage or sediment, allows the bacteria to produce enzymes which help to break down the waste or the sediment made out of accumulated organic matter.

The fine bubbles are critical for achieving exacting results whether oxygenating a waste water treatment plant, using aeration for liquid mixing, deicing and even air bubble curtain applications. Not only bubbles transfer oxygen, they move and mix, clarify, de-stratify and essentially decontaminate water by oxidation.

Made of highly resistant yet flexible PVC, this tubing is non-kinking and holds no memory when deployed. Compressed air enters the tubing creating an inner pressure. Precision perforations along both sides of the entire length of tubing allow compressed air to release through the perforations. This creates efficient micro-bubbles that prevent clogging and fouling (typically found in porous diffusers), along the entire length of the tubing. The released air from the holes forms a bubble curtain of uniform and evenly dispersed fine bubbles. It optimizes oxygen transfer and lifts water which aids in complete circulation throughout the water column.

Bubble Tubing® functions without moving parts or electricity in the water, it increases performance efficiency while significantly reducing electrical and maintenance costs in comparison to other aeration systems. For deicing purposes, the bubbles leaving the Bubble Tubing® also bring dense, heavier, warmer water from the depths to the surface, inhibiting ice formation.

### **Applications for Bubble Tubing®**

Canadianpond Bubble Tubing® has been used for over a decade in a wide array of applications by various industries, government, along with the private sector. Bubble Tubing® is used, by all levels of government (federal, provincial and municipal), manufacturing and processing plants, mining, port authorities, aquaculture, agriculture, waterways and canals, parks and recreation, engineering, landscaping and reclamation firms, marine construction, universities and research facilities, ponds and lakes to name a few. Bubble Tubing® is now found on every continent on the planet.

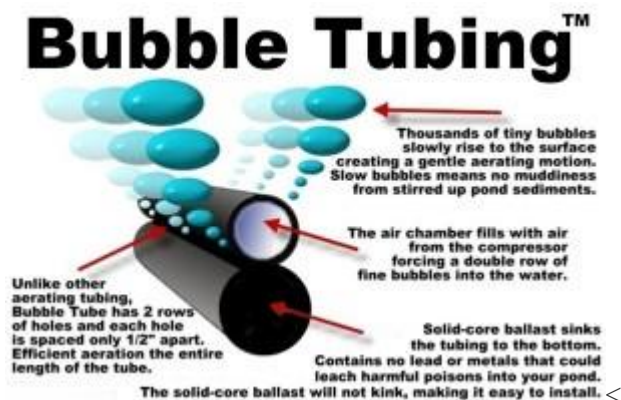
#### **Applications include (but are not limited to the following):**

- Aeration sewage lagoons, wastewater treatment process plants, leachate ponds...
- Earthen ponds, dugouts, lakes, ...
- Waterways and channels
- Storm water retention ponds
- Septic systems
- Aquaculture
- Deicing docks, power plant water intake, marina slips, shoreline and/or water retention structures, industrial ship docking, ocean freight & maritime transport, pumping operations and nuclear power generating plants.
- Efficient Bottom-to-Top Water Circulation and Mixing for water treatment, deicing, and other applications.
- Pathogen Reduction, the bubbles lift deeper waters to the surface for UV exposure.
- Underwater Air Bubble Curtains for:
  - Protecting fish and marine mammals from underwater blasting and pile driving noise.
  - Protecting marine mammals from offshore oil platforms and wind power farm construction and continuous operation vibrations and noises (machinery and engine noise).
  - Containing oil spills within a given area.

- Controlling movement of marine life, plants and debris. A bubble barrier can control the movement of marine life and floating debris and control the migration of jellyfish, fish, seagrass, debris, sediments etc.
- Water Quality improvement, including Clarity, Algae and H<sub>2</sub>S Hydrogen Sulphide Odour Suppression



## Features of Bubble Tubing®



- Bubble Tubing® is flexible, it holds no memory and will not kink, is easy to install and is safe for the environment (does not contain lead).
- Made exclusively in Canada to our exact specifications, impressive 5 year warranty.
- High oxygen transfer rate. Full evaluation of the oxygen transfer capabilities by independent firm available.
- Applications range from farm ponds to the largest industrial projects.
- Suitable for fresh and salt water applications, from shallow to deep waters.
- Inner pressure prevents clogging, tubing is very low maintenance, anti-fouling.
- No moving parts or electricity in the water.

- Highly resistant PVC (chemicals, salinity, temperature).
- Weighted and non-weighted formats available.
- Tubing can be purchased with all the necessary hardware, ready to be installed

For more information please email us on [info@reaman.co.nz](mailto:info@reaman.co.nz) or call us on 64 6 8433155.