

CASE STUDY



Pumping Marine Life and Algae

Karasawa Fine Ltd / Taiyo International, Japan



Smithsonian Institution installed Discflo Disc Pumps in 1993.

The Challenge

Need a pump that can pump or recirculate algae water without harming marine life

The Discflo Solution

Discflo's unique laminar flow and non-impingement pumping is ideal for this delicate task

Discflo has been given an exciting new opportunity to be an integral part of the fight against damaging algal bloom. New technology has been developed and patented by Dr Yukihiko Karasawa of Karasawa Fine Ltd and marketed by Taiyo International of Japan that will make use of Disc pumps non-impingement, laminar flow pumping to protect native aquatic life.

Coastal regions worldwide and virtually every state in the US have experienced devastating effects of algae bloom. Some blooms produce toxins and are so dense they discolor huge areas of water. Others are not visible but still threaten human and marine life, causing illness and death in humans from toxins in contaminated seafood, and mass kills of fish, marine mammals and seabirds.

Although algae bloom is a natural phenomena that has occurred for centuries, there is evidence that they are increasing in frequency and size. According to the National Science and Technology Council, mitigation of the harmful effects of algal bloom costs millions of dollars every year in the US alone.

Methods of control include chemicals, flocculant, and bio agents. All of them create problems. Dr Karasawa's new technology kills off bloom without chemicals, bio-agents, or flocculant. The technology uses a nozzle for solid/liquid multiphase flow. It will be introduced and the theory explained at a drinking water and environment technology show in Japan, November 12, 2001. Representatives of Taiyo arrived at Discflo headquarters in El Cajon in summer 2000 for initial testing.

Discflo has a long and successful history in applications where threats to aquatic life is a concern. Disc pumps are used in research projects at scientific institutions and universities, including the Smithsonian Institution in Washington and Ohio State University's Olentangy River Wetland Research Park.

Call Discflo now to find out how our pumps can solve your problems.

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INTELLIGENT. SUSTAINABLE. SOLUTIONS