

ADVERTISEMENT

[MAGAZINE](#) [ABOUT](#) [ADVERTISING](#) [CONTACTS](#) [WHITE PAPER LIBRARY](#) [LOG IN / SIGN UP](#)

## Pulp & Paper

[CHANGE CATEGORY](#)
[NEWS](#) [FEATURES](#) [BLOG](#) [WEBINARS](#) [EVENTS](#) [PUBLICATIONS](#)
[HOME](#) » [PULP & PAPER](#) » [FEATURES](#) » [MAPAL GREEN ENERGY FILTRATION SOLUTION](#)

# Mapal Green Energy filtration solution

20 January 2015 | Filtration + Separation

In pulp and paper mills, waste water treatment can take on several forms, from filtering through to biological treatment process. For biological treatment to be effective, the waste water needs to be effectively aerated.

Many UK mills will use mechanical surface aeration techniques in order to supply the required oxygen for bacteria to achieve an aerobic biological treatment, especially where an activated sludge process is involved. However, mechanical surface aerators are typically expensive to operate and maintain, old, prone to breakdown, due to the number of moving parts and have considerable energy consumption, all of which adds up to relatively high operating costs.

### Domestic and Industrial

Mapal Green Energy's Floating Fine Bubble Aeration technology (FFBA), is currently used by Anglian Water with further deals signed with Thames Water and United Utilities for systems to go live before the end of the year, where Mapal GE's equipment will be used to treat domestic and industrial wastewater in lagoons and reactors.

The same technology has also been deployed in South Africa in the pulp and paper sector and again in factory farming installations in Israel, where the challenges of treating aggressive and hazardous liquids echo many of the issues faced in the pulp and paper industry.

A solution, floating fine bubble aeration approaches the challenge of wastewater oxygenation by marrying the strengths of mechanical surface aeration technology, easy to install and accessible for maintenance, with the efficiency which is derived from sub surface fine bubble aeration systems. With no moving parts generating friction and driving high energy consumption, a benefit for users of Mapal Green Energy's floating fine bubble aeration system is its reduced energy bill.

Tests around the world have shown that in some cases, compared with mechanical surface aeration, a plant's energy consumption can be reduced by up to 70% using the Mapal system, with savings of 50% regularly achieved.

### Simple maintenance

Mapal's UK sales manager Andy Carling said: "By substituting a surface mounted propeller for a system



Mapal Green Energy's Floating Fine Bubble Aeration technology (FFBA) is used to treat domestic and industrial wastewater in lagoons and reactors.

## Features

Pulp & Paper

ADVERTISEMENT

## You might also like...

NEWS

### Mann+Hummel issues second green bond

The green bond has a volume of €150 million.

29 October 2019

NEWS

### GWE biogas balloon shows sustainability benefits

Waste at the plant is converted to biogas by a green anaerobic digestion process.

26 April 2019

FEATURE

of blowers and fine bubble diffusers, not only is energy consumption reduced, but installation and maintenance is dramatically simplified. The system does not require a tank to be drained, nor does it need to be attached to a concrete floor. Aerators are automatically adjustable to water depth and because they float, are always level, thus delivering an even flow of oxygen within the reactor.”

Mapal's units are made from robust stainless steel, so have a long life and as a modular system, the installation can be added to or taken away from quickly and easily. A technology which is creating waves amongst the UK's water utilities could change wastewater treatment in selected sectors of the pulp and paper industry too.

ADVERTISEMENT

Share this feature

### **Forward osmosis in textile wastewater treatment**

The economic feasibility of using the forward osmosis process in textile wastewater treatment was analysed.

**21 November 2018** | Research

---

ADVERTISEMENT

---

## Most viewed in pulp & paper...

PUBLICATION

### **Filtration Industry Analyst**

**8 September 2017**

---

FEATURE

### **Veolia helps pulp mill manage chemical recovery**

A mill in Asia is using a chloride removal system to optimise the recovery process as hardwood cellulose is transformed into pulp for textile fibres.

**21 April 2020**

---

FEATURE

### **Wood pulp and paper: Water reuse drives Chinese paper mill**

One of the largest wood pulp and paper mills in the world has water conservation at the heart of its operations. Extensive filtration and separation techni

**10 June 2013** | Filtration+Separation

---

FEATURE