

# REFERENCE



# LVMH, GLENMORANGIE DISTILLERY (UK) AnMBR LE™, WASTEWATER TREATMENT & ENERGY RECOVERY

#### Client

The Glenmorangie Distillery, owned by Paris based Louis Vuitton Malletier Holdings (LVMH), have completed construction of a new waste to energy AD plant at their whisky distillation exemplar site in Tain, Scotland.

The distillery currently produces approx 4-5 million litres per annum (MLA) of whisky spirit and operates all year on a 24 hour, seven day a week basis.

This AD waste to energy project is considered a flagship development for the LVMH Group and the UK distillery industry.

### **Project requirements**

Wastewater treatment to cater for current and future production demand, providing low cost energy to heat the stills and meet both compliance and group sustainability targets.

Treated biogas from the plant is burnt in a biogas boiler and gases produced from the treatment process are scrubbed to minimise potential odour sources.

Treated effluent from the new plant continues to be discharged to the Dornoch Firth under licence.

PLANT PERFORMANCE	
Peak volume for AnMBR™ Treatment	467 m³/day
Design COD Load	14,527 kg/day
Average Total COD Removal	≥ 95%
Biogas Generation	8,000 Nm³/day
Steam Generation	2,500 Kg/h (F + A)

## FREUDENBERG FILTRATION TECHNOLOGIES



#### Aquabio Solution

Turnkey M&E solution:

- Inlet works, screening, balance and divert tanks, anaerobic bioreactor tank working in conjunction with low energy AnMBR LE™ biomass separation membranes. Biogas energy management system complete with biogas boiler.
- Totally automated, with remote access for plant monitoring.

#### BENEFITS FOR THE CUSTOMER

Energy recovery from waste - cost savings

Low energy consumption, flexible operation and energy management)

Displacement of heavy fuel oil on site (c20%)

Flexible operation to compliment client's production demands

Enhanced brand reputation, improved public relations and the commitment to their worldwide sustainability agenda



# 5 COMPELLING FACTS THAT SHOW HOW YOU BENEFIT FROM AQUABIO

The provision of clean water is one of the greatest challenges that our society has to manage in the future. Innovative technologies are in demand. Aquabio provides them already. We develop persuasive solutions, to make industrial processes more economical, preserve resources and protect our environment. Whether you are considering a new build or upgrading an existing plant we are able to offer you the optimum technical package. Central to the success is our process led approach to all aspects of water and wastewater treatment. This ensures that the most appropriate technology is identified for each unique application.



#### **Aquabio and Freudenberg Filtration Technologies**

Aquabio is part of Freudenberg Filtration Technologies. As a global technology leader in air and liquid filtration, Freudenberg Filtration Technologies works closely together with its customers to develop high-performance, energy-efficient filtration solutions. The company offers a comprehensive package of wastewater solutions, including consulting, development, construction and operation of complete filtration systems using cutting-edge Aquabio technology. Freudenberg's customized solutions make industrial processes more economic, conserve resources, protect people and the environment and thus contribute to improving quality of life.

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