

## MBR: THE WASTE WATER TREATMENT OF CHOICE IN WINERIES

**Membrane bioreactors (MBR), the best available technology to treat wastewaters from the winery sector.**

In the last decade MBR technology has become the best waste water treatment technology to treat the effluents from the winery sector. This article summarizes the 6 main advantages that MBR technology provides to wineries to meet their environmental requirements.

**MBRable®** ultrafiltration membrane cassettes manufactured by Europe Membrane have been successfully implemented in several MBR plants located in wineries with different size and characteristics.



The advantages that our technology offers to the sector are explained below:

### 1. **Guarantee to meet effluent quality requirements during peak season (vintage period)**

The worst moment to suffer problems in the wastewater treatment plant is during the vintage period. This is the period with a higher risk of not meeting the discharge requirements as it is the period with highest wastewater daily volume to be treated along with highest organic load. An MBR system provides reliability and confidence to meet the effluent quality limits as it produces ultra-filtrated water. Furthermore, thanks to the high quality of the treated effluent obtained with this technology it can be used for irrigation of nearby crops.

### 2. **Adaptability to seasonal periods**

One of the most important characteristics of most wineries is the strong seasonal variability in the waste waters. This sector needs a wastewater treatment process that is capable of a fast adaptation in front of fast changing conditions in volume and load as a result of the start of the vintage period that avoids not meeting the effluent quality limits in such a moment. MBR guarantees that there will be no wash out of solids and biomass responsible of the biological degradation of the organic pollution, that allows an extremely fast growth of the biomass needed to efficiently treat the sudden raise of the organic load entering the waste water treatment plant..

### 3. Complete automation

MBR allows for a high degree of automation and does not need highly qualified operators to run successfully the process. This is an important advantage for wineries specially during the peak season.

### 4. Minimum footprint

Frequently, wineries have hardly room to hold the wastewater treatment facilities. MBR is, by far, the less room demanding technology. The size of a biological reactor may be around three times smaller in an MBR than in a conventional biological treatment plant.

### 5. Low operation & maintenance costs

The operation and maintenance costs are kept low thanks to the high level of automation of the processes by means of our system MBRable Pack that avoids the need of highly qualified operators to supervise the performance of the plant and optimise the chemical consumption and operating point of the equipment. Monitoring and operations of the plant can be done with a remote control.

### 6. Proximity and support

MBRable is a cost effective proven technology that has been developed in Spain with the manufacturing facilities placed in Valencia. From our headquarters we provide technical support to our customers and partners.

#### MBRable® Cassettes:

- Proven product with innovations from our experience in MBR operation.
- High quality effluent guaranteed (pore size 0,02µm)
- Low cost of membrane replacement

#### MBRable® Train:

- Maintenance and operation costs minimisation
- Easy operation & maintenance



If you want to know some of our references in the winery sector [visit our website](#), or contact us to get more information

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