DimWater Engineering
Environmentally Sustainable Solutions

# WasteWater treatment plants

## Urban and Industrial wastewater treatment to produce usable water

The aim of the treatments is the production of clean and/or reusable waster from a wastewater, as well as, the obtention of a valorized solids (sludge). Depending on the characteristics of the water to be treated and their location, **DimWater Engineering design the best solution for each case, selecting the most appropiate wastewater treatment in each application.**

### 1. Membrane Biological Reactor

Technology designed by DimWater Engineering: Our best solution to wastewater

**DimWater Engineering** design urban and industrial wastewater treatments for the removal of pollutants by biological reactors, reaching sludge separation by membranes.

- Constant and excellent water quality.
- High flow and low fouling in membranes.
- Low control and maintenance required.
- Flow and pollutant loading flexibility.
- Easy installation, with minimum civil work required.
- Reduction of investment cost by reducing civil works required.

View suction area

BRM module

Membranes inside the tank

### Upgrading existent facilities to DimWater MBR, we fulfill increase the capacity by three times.

By implementing our immersed flat membranes modules, it is managed to triplicate the capacity of the existing treatment facilities. MBR increase the treatment capacity without any requirement of space.

### Projects are designed based on your needs The best solutions is proposed in each case.

We are able to supply projects already defined or we design new projects depending on the flow and existing pollutants loads, always adapting the best possible solution.

## Advantages of DimWater Engineering MBR modules:

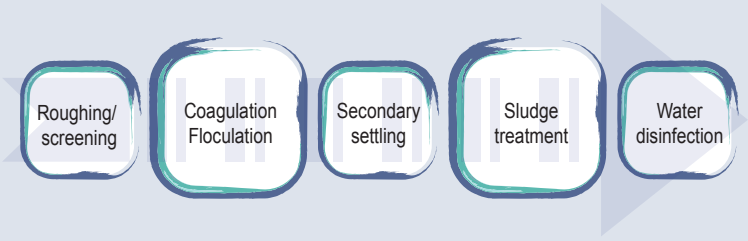
- *High sludge concentration, up to 14 g/L.*
- *High removal of BOD5, COD SS, etc...*
- *Excellent quality of the effluent, suitable to be reuse.*
- *Due to the high rate of MLSS, the size of the biological reactor is reduced.*
- *Supports high points loads withoud affecting the effluent quality.*
- *Required space and maintenance cost reduction.*
- *High modularity of the membrane system.*
- *Flowrate treatments from 3 m3/d.*
- *Depuration units isntalled inside shippment containers*
- *Compact units prefabricated for easy installation.*
- *Low cost for erection at location.*
- *Minimum civil works required.*

## 2. Physico-chemical treatments

Tecnology for wastewater clarification ans sludge settling

DimWater Engineering design and implements wastewater **clarification and sludge settling,** for flows up to 300 m3/h, with fully automated operation.

**Operation:** *Removal of all possible contaminants from wastewater by physical separation (roughing bards, mesh filters, beds filters, etc. ) and chemicals processes (coagulants and flocculants to aid precipitation and settling of suspended solids and any other colloidal dissolved solids of small size).*




*Pumping is performed by special pumps up to 80 mm of pipe diameters. Sludge filtration is carried out by press filter.*

**Aimed for industrial wastewaters, which contains inorganics materials or impossible to be treated biologically.**