

Leachate treatment with DFCT/DT Modules

Novel system for the purification of contaminated water

DimWater Engineering has created special modules to treat leachate and purify contaminated water, based on the premise of the use of open channel modules for such treatment. **Landfill leachates are one of the most polluted and complicated to treat waters that we can find**, due to its high saline component and high organic load.

Advantages and benefits

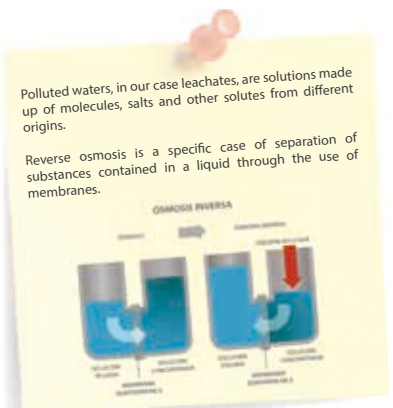
- **Easy maintenance** since it does not require periodic analytical controls.
- **Quick installation and start-up**
- Our systems allow to **treat leachates of low, medium and high load, retaining all the salts and contaminants**, leaving the water suitable for other uses.
- **It prevents rapid fouling** and reduces the risk of membrane clogging and constant washing cycles.
- **Longer life** of the membrane module.
- **Saves time, energy and water** between washing and washing.
- Mobile units for **easy transport and assembly**.



The latest generation modules of DimWater Engineering are designed for application in the field of contaminated water, giving special attention to landfill leachates for their special characteristics.

Its design has been a task of many years of research since conventional membrane technologies, due to their configuration, prevented the use of the reverse osmosis technique with such a charged liquid.

Its flow dynamics reduce fouling on the membrane and makes it extremely easy to clean.





Proven effectiveness and superior to any other process

Easy installation and modulation capacity!

DFCT Modules

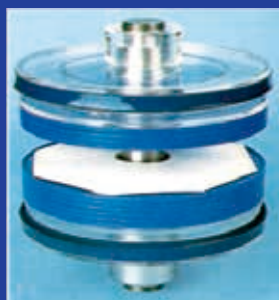
- The membrane module of **DFCT is an element Improved spiral mounted in vertical position.** It is designed specifically to handle water difficult to treat, or leached.
- This module uses the basic concept of spiral membrane but with a significant improvement in the height flow, **since open channels have been incorporated into 45 degrees that allow a higher filtering quality.**
- **The improvements made to the technology of the DFCT modules are combined in:**
 - The material of the central tube has a **high resistance to high pressures and high temperatures.**
 - The spacer supply is composed by a double channel open.
 - Inclusion of the **anti-telescopic device (ATD)** of mechanical lock to keep the anti-telescopic device safe.
 - The entrance and exit of hydraulic flanges (**POM**) that they allow the proper distribution of the flow.

DFCT Module Views



DT Modules

- **The membrane module DT consists of a pressure pipe and hydraulic disks.** The octagonal membrane is located between two discs and is supported by the cushions.
- The membrane cushions are formed by two individual membranes sealed by an ultrasonic weld and are separated by a woolen fabric (the spacer).
- The individual channels are joined together by openings in the disks arranged in an annular pattern, so that the feed water flows radially through the membrane cushions, alternately from the inside to the outside and vice versa.
- This allows to realize compact modules and, save space in the treatment plants.
- **The maintenance of this module is easy** since after the release of the tension rod it is possible to extract the hydraulic disks and the membrane cushions.



Interior of the DT module



Hydraulic disc DT