

MEMBRAIN INTRODUCTION

MemBrain is a research, engineering and technological company that focuses mainly on research and innovation activities in the field of membrane processes. The main processes are Electrodialysis for desalination and concentration of different kind of liquids, Electrodeionization for production of ultrapure water and Diffusion Dialysis for recycling of used acids. In the field of gas membrane separation, we focus on biogas processing and bioCNG production.



For our customers, we offer design and verification of technical solution in laboratory and pilot scales. We provide comprehensive services from analytics to engineering design. In cooperation with our parent company MEGA (www.mega.cz) we supply industrial technology.

List of possible applications

- Whey demineralization (sweet, acid)
- Production of lactose and mother liquor as by-products
- Demineralization of WPC and WPI
- Desalination of lactulose
- Purification of organic acids
- Demineralization of protein hydrolysates (e.g. mucosa)
- Waste acid recycling (Diffusion Dialysis)
- RALEX® Art – Antifreeze Reuse Technology (regeneration of antifreeze fluids from cars and buses and regeneration of heat exchange fluids from heating systems – HVAC)
- Separation and recycling of API
- Purification of wastewater from Ion exchange regeneration
- Desalination of saccharides, oligosaccharides, polysaccharides and amides solutions
- Production of inorganic and organic acids and bases from wastewater using bipolar membranes (EDBM)
- Desalination and recycling of mixed wastewater
- Waste-free management (ZLD) – concentration step before evaporation in the waste-free (ZLD) system
- Production of ultrapure water

Our technologies

ED/R – electrodialysis
EDI – electrodeionization
EDBM – bipolar electrodialysis
DD – diffusion dialysis
MF – microfiltration
UF – ultrafiltration
NF – nanofiltration
RO – reverse osmosis
bioCNG – biomethane separation