



ENVIRONMENTAL CONCEPTS EXCHANGE ASSOCIATION

ECEXA

Water and wastewater technology

The ECEXA partner is an Austrian-based manufacturer of water treatment plants and supplier of equipment parts (i.e. pumps). We have over 40 years of experience in **water technologies from wastewater treatment to potable water production** and have delivered plant solutions for hotels, island resorts, hospitals, municipalities or industries on coastal areas as well as in mountain regions. We provide state-of-the-art technology and high-quality products and supply solutions tailored to the specific needs of our clients. Our reference plants and successfully-operating and trouble-free equipment can be found in countries such as the Maldives, Croatia, New-Caledonia, Oman, the Philippines, Austria and many others.

Main branches of technology:

Decentralized Wastewater Treatment Plants

Fully automatic operation even with fluctuating influent loads

Our plants meet the highest demands, are completely encased and produce no odors or noise. They may either be operated autonomously or using a report system which will monitor the plant's operation at any time. We deliver our system plants with hygienically-closed white polyethylene tanks for the treatment of wastewater up to a capacity of 5,000 PE. The treatment degree may be even increased by a tertiary treatment step in order to produce process water for irrigation or other purposes. In case sizes from 5,000 PE to 50,000 PE are required, we are offering **VOPROM – SBR plants designed with concrete tanks**. The main goal of this alternative design is to create a higher local productivity by enabling local companies to take over the construction works, meaning that only patented electromechanical parts and the control device are delivered by ECEXA partner.



Assistance package:

We offer an assistance package for both alternatives in the form of a training phase at the beginning, including visitations of existing plants. Following a successful project award, our clients will be extensively supported by our technicians. In addition to that there is a back-up package, with our employees remaining at your disposal for readjustments and after-sales service (including remote maintenance and support of the plant via internet connection).



ECEXA Microfiltration



Primary treatment for coastal areas

This closed filtration plant has been especially developed for municipal wastewater treatment plants in coastal areas. The filter plants can also be used as single or multiple units for primary sewage treatment which can then be expanded to include a secondary biological treatment phase at a later time. The filtration plants can be used in industrial applications for the separation of solids and liquids as well as in combination with digesters for the purpose of converting organic sludge into energy.

Potable Water Production Plants

Using reverse osmosis technology for desalination

The unique characteristic of our desalination plants in comparison with competitors on the market is the fact that we are able to provide prefabricated (containerized) plants with a maximal permeates production capacity of 1,500 m³/d for each 40' container. We are offering these preassembled plants up to a capacity of 15,000 m³/d per unit, with guaranteed energy consumption values of 1.7 to 2.3 kWh/m³ without reducing the highest permeate quality.

ECEXA RFU Microfiltration

Perfect purification for high pollutant loads

Our ECEXA RFU filters are an efficient treatment solution for polluted water conditions such as ponds, rivers, sea, lakes as well as industrial recycling water. By making use of ultrasonic frequency, high purification rates may be achieved compared to conventional primary step devices. Our specially designed filter units may treat polluted water with up to 2,000 ppm TSS, high TOC, BOD, COD and SS concentrations and SDI values. Featuring high temperature resistance (1 to 100°C), no pH limitation (1-14), excellent mechanical strength (up to 20 bars) as well as a turbidity tolerance of up to 700 NTU, our ECEXA RFU filter is a reliable and easy-to-operate application. No regular chemical cleaning, replacement of mechanical moving parts and no special maintenance services are required which results in low operation costs, low footprint requirements (e.g. 1000 m³/d, FP approx. 1.5m²) and time savings for the client.

