







Environmental Concepts Exchange Association e.V.



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### Content



- Advantages
- ▶ Product Overview
- Project Development
- Examples of Installations
- Costs
- Objectives

### INNOVATION - Made in Austria

Modular and Dynamic Water Treatment Technologies





### About E.C.E.X.A.



- ▶ Almost **50 years of experience**, more than **400 installations** and satisfied investors characterizes us as a quality- and customer-oriented company.
- ▶ Our team consisting of senior process Engineers, industrial process programmers, technical drawers, certified project managers and mounters, with the accurate objective to bring ideas and designs from paper to full satisfaction working water treatment plants for you.
- ▶ Flexibility, high-performance, and high potential for innovation also characterize us for standard or custom tailored water treatment solutions.
- Our multilingual execution teams carry out assembly and supervising tasks in a determined qualityoriented manner and are specifically trained for international projects.





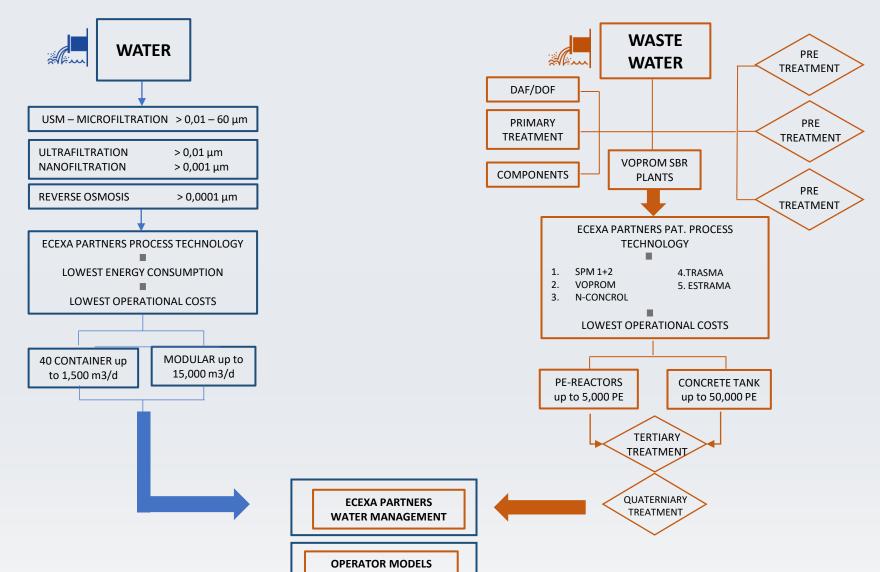


ECEXA – a team dedicated to water processes, technologies & infrastructures



### **Product Overview**



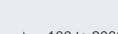




### Solutions and Applications



#### DAF/DOF FLOTATION





→ APPLICATIONS:

- Various pre-treatment processes
- Wastewater & Drinking water process
- Fine suspended solids recovery
- Including oxidation & disinfection
- Classical DAF or with Ozone (DOF)

### **ECO MEMBRANE FILTRATION**



#### → APPLICATIONS:

- 250 to 1.500m<sup>3</sup>/d per skid unit
- Plant designs up to 30.000m<sup>3</sup>/d
- Process and drinking water systems
- Modular & adaptive design
- Automatic supervision

### RSF & RCF **FILTRATION**



#### → APPLICATIONS:

- 50 to 1000 m<sup>3</sup>/d per unit
- Easy evolutive and extendable
- Continuous & automatic operation
- Many filtration media for : TSS, P.,
- Fe., Zn., Al., Cr., Co., Ni. Removal.
- Including Flocculation & Coagulation

### **ECEXA PARTNER EVAPORATION**



### APPLICATIONS: 10 to 100 m<sup>3</sup>/h

- Modular, evolutive and extendable
- Adaptable to a large type of water
- Very low ire-investments
- Virtually no maintenance
- High energy efficiency heat losses <2kWh/m<sup>3</sup>



### **Product Overview**



#### DF DISC FILTERS

### → APPLICATIONS:



- μFiltration 50 to 5000 m³/d
- For all our WTP and WWT Plants
- Access to ECEXA partner remote support
- Continuous & automatic operation
- Easy maintenance and spare
- availability



#### → APPLICATIONS:

- O2 & O3 production process units
- Modular, evolutive and extendable
- Direct onsite production (no more
- logistics management for chemicals)
- Large scale: Ar., Fe., Zn., complete
- pathogen removal & safe water





#### → APPLICATIONS:

- ▶ 800 to 8000m³/d per unit
- Various pre-treatment processes
- Microfiltration for advanced perf.
- Suspended solids recovery for Reuse
- Large scale deployment
- Clean coast project

#### **CWWTP NANOFLO & OZONATION**



#### → APPLICATIONS:

- 500 to 60.000m<sup>3</sup>/d
- Water reuse and zero Discharge
- Adaptive design
- Various industrial applications
- Chemical industries, Oil & Gas,
- Construction, ...



### **Product Overview**



#### VOPROMPE SBR



#### → APPLICATIONS:

- ▶ 50 to 1000 m³/d and up to 5000 PE
- Modular, evolutive and extendable
- Adaptable to any situation
- Designed for long lifetime > 50years
- ▶ Biology and Sludge management
- Rainwater Management

### → APPLICATIONS:



**VOPROM CR &** 

- 300 to 4000 m³/d and up to 20.000 PE
- Modular, evolutive and extendable
- Adaptable to any situation
- Designed for long lifetime > 50years
- Biology and Sludge management
- Rainwater Management

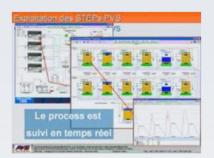
#### SED SLUDGE DEWATERING



#### → APPLICATIONS:

- ▶ Up to 100 m³/h
- Modular, evolutive and extendable
- Adaptable to a large type of sludges
- Sludge and Waste management
- Lowest possible operating costs
- Operator friendly

### PROCESS PROGRAMMING & REMOTE SUPPORT



#### → APPLICATIONS:

- ▶ For all our WTP and WWT Plants
- Access to ECEXA partner remote support
- Realtime support and management
- Online process management
- Many languages available (EN, DE, FR,
- ▶ SRB-HR, ES & More to come!



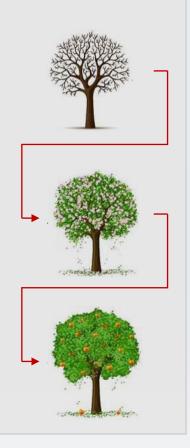
### Project Development



- ❖ PHASE 1 Shared the definition of the requirements, priority objectives and methods in order to achieve them
  - Objectives and expected benefits
    - Social, Economical & Infrastructural growth and needs
    - Municipal & industrial modernization
    - Accordance with rules of law
    - Assessment to the stakeholders
  - Availabilities and infrastructural needs
    - Taking into account local challenges
    - Definition of the required treatment performances
    - Execution priorities
  - Execution and operation capabilities
    - Sustainability of the project
    - Definition of the involved execution partners and teams
    - Capacity to operate and finance the running costs
- ❖ PHASE 2 Conception & realization

Project management – from studies to the fulfillment

our availability for answering to all your requirements



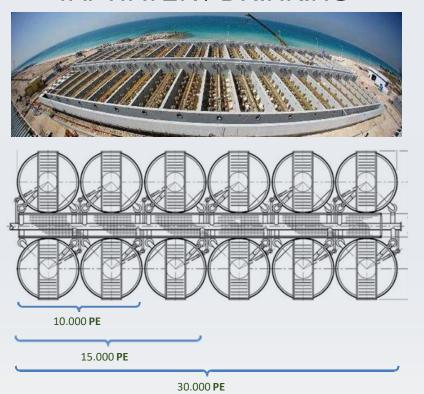


### References

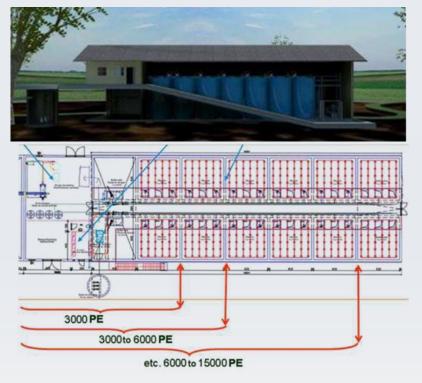
## ECEXA partner standardised processes and treatment plants our outstanding design and construction form



Example for TAPWATER / DRINKING



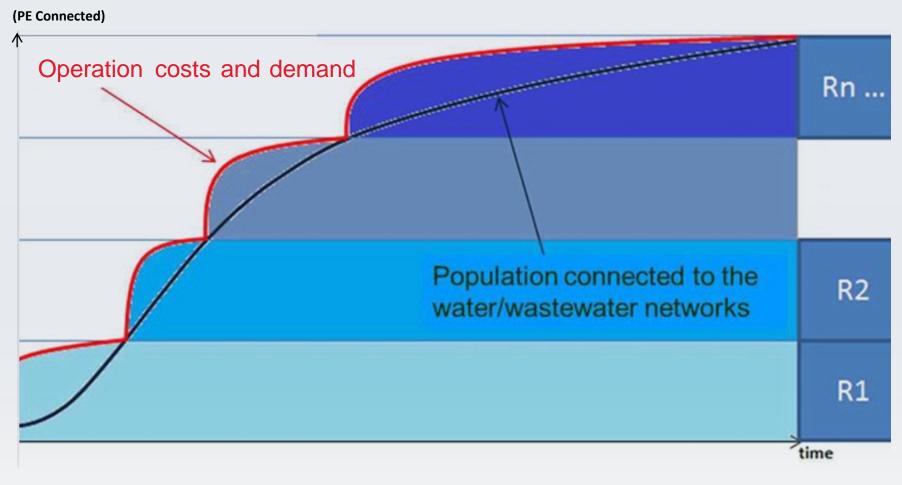
### Example for WASTEWATER





### Flexible and adapted operating costs







### Objectives are to reduce



The impact on the environment

By offering an efficient purifying process throughout the year Protected from external influences, neither emit odors or noise Easily integrating into the landscape.

The financial impact

The objective of our solutions is to integrate high-end technologies only when they make a real reduction in operating costs.

→ The human impact

Reduced operating time via a complete automation system, complex tasks are supported by automation, so that human operating errors are avoided

Facilities offering full control and autonomy to the owner and operator





### **ECEXA Water & Waste Water Technologies**

- Fully biological water treatment for potable water, industrial water, wastewater
- Water and sewage sludge treatment plants also for small communities)
- Micro-drinking water treatment plants
- Drinking water treatment of river, surface, well water,
- Mobile Water purification
- Water well service, well construction, regeneration
- Air filtration in container
- Irrigation concepts Chad, water loss analysis, optimization of water supply system, pipeline calculation
- Solar well project Africa









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