CEYKA®
the water company
www.ceyka.com.tr

PLANTS

THE WATER COMPANY

CEYKA is one of the leading international well-known companies in the sector with its professional staff who has 20-years experience in the water treatment and environmental technologies.

Paralell to atendence of our professional staff, our companies developments goes on with intention to qualified products and services. our company provide services to drinking- ultilization water , sea water and waste water treatment, process water and pure water generation, manufacture of products, design and engineering, undertaking, import-export, consulting, installation and technical service with success.

CEYKA is come into prominence with the choice of right treatment technologies, their design and accurate projects stand out as important factors in water treatment systems. With our high quality and economic engineering solutions, design, feasibility studies, installation and turnkey projects which we offer to our customers with high qualification.

CEYKA is the leading company in production, projecting, sales of water and wastewater treatment facilities and particularly in after sales technical support services.

SERVICES

Reduction of fresh water source and pollution of existing fresh water source are biggest problem we come across nowadays. Our company use developing technologies with surface water, well water, sea water for required parameters of utilization and drinking water and become solution partner to our costumes.our company have large content of rendering service, from Domestic-scale applications to large industrial facilities, from the standard treatment techniques to advanced treatment technologies.

- PROJECTING - ENGINEERING
- FABRICATION AND EQUIPMENT SUPPLY
- ASSEMBLY
- COMMISSIONING
- TECHNICAL SERVICE
- CONSUMABLE MATERIALS AND SPARE PARTS SUPPLY
- TRAINING
- CONSULTANCY
- RESEARCH AND DEVELOPMENT

PROJECT AND PRODUCTION

Ceyka designs its projects according to data retrieved by design software and then carries out production in its plants. It is one of rarest companies who own a production plant consisted in the organization. All our systems processed through our production is tested and controlled, then offered to our customers. The precision shown by our professional staff during the process from project design to customer delivery enhances our quality further.

TURNKEY SERVICE

Depending on the demands of our customers, turnkey systems including after production delivery, assembly and commissioning works can be offered.
In addition, supervision services during the assembly and commissioning phases can also be provided.

TECHNICAL SERVICE

Ceyka over emphasizes on the after assembly and sales technical service which is unoccupied area of water treatment sector. By our technical team each of who are professionals on relevant subjects, assembly, commissioning and training services are provided. They are aimed at providing reliable and total service by supporting customers at every phases.

GLOBAL SERVICE

Ceyka can provide the systems produced by using world-recognized quality equipments to all around the world.

RESEARCH AND DEVELOPMENT

All step of the projects have been prepared by professional staff who follow latest devolopments and researches about the water treatment technologies in order to grant more qualified technical services and conclude your problems faster.

QUALITY CERTIFICATES

ISO 9001, ISO 14001, ISO 10002, OHSAS 18000

PRODUCTS:

- REVERSE OSMOSIS SYSTEMS
- MEMBRANE AND MEMBRANE VESSEL
- CHEMICALS
- SEA WATER REVERSE OSMOSIS SYSTEMS
- DEMINERALIZATION SYSTEM
- FILTRATION SYSTEMS
- WASTEWATER TREATMENT SYSTEMS
- PACKAGE TREATMENT SYSTEMS
- DOMESTIC WASTEWATER TREATMENT SYSTEMS
- INDUSTRIAL WASTEWATER TREATMENT SYSTEMS
- ULTRAFILTRATION SYSTEMS
- MEMBRANE BIOREACTOR SYSTEMS
- RIVER WATER TREATMENT PLANTS (WCU)

CEYKA MEMBRANE TECHNOLOGIES

OSMOSIS

Semi-permeable membranes used in the reserve osmosis unites are the polymer layers sequenced in the asymmetrical density. Those have a very dense and thin barrier layer and supported with largely porous layers.

The properties of membranes that are used vary according to inflowing water quality and desired outflowing water quality Membranes at 4” or 8” diameters are used according to desired flow rate.

BW (Brackish Water) membranes are for waters of which TDS values are below 1500 mg/L

SW (Sea Water) membranes are for waters of which TDS values are higher.

ECORO REVERSE OSMOSIS SYSTEMS

APPLICATION AREAS

- Industrial process water preparation
- Transforming hard water into soft water
- Processed potable water generation
- Boiler feed water preparation
- IX-DI system feed water generation
- Dairy, food and beverage

ECORO REVERSE OSMOSIS SYSTEMS

Reverse osmosis is membrane filtration process removing all undesired minerals from water, used for distilled water and potable water supply. These systems run cross-flow manner. It is not a filtration process in known meaning. Because, the pores allowing the passage of water through membrane are very small. (pore diameter is around 2.000.000 of 1 mm). Through such a small pore, only water molecules and some very small inorganic molecules can pass. Other molecules are exhausted from system at concentrate water phase.

ECORO SEA WATER REVERSE OSMOSIS SYSTEMS

Especially in the recent years, due to effect of global warming, fresh water amounts in the world have gradually been decreasing. Fresh water derivation from sea water by means of reverse osmosis method gains importance.

ECORO High Capacity Sea Water Reverse Osmosis Systems are used in

- Hotels
- Municipalities
- Building Estates
- Various Industries

ECORO Low Capacity Sea Water Reverse Osmosis Systems are used in

- Yachts
- Ro-Ro ships
- Military ships
- Fishing boats

Sea water treatment systems are used in the treatment of waters up to TDS 50.000. It is possible to project models processing the consumption capacities starting from 1 m3/day to very high in one single body.

In the design of systems, full chemical analysis of water and design of pretreatment system is very significant. System is directed completely from a control panel. As an option, models can be equipped with automatic membrane washing system. Membrane external containers can be offered as PVC and stainless steel.

FILTRAN ULTRAFILTRATION SYSTEMS

Application Areas of CEYKA Ultrafiltration Systems

- For Waters requiring sensitive filtration
- Pre-treatment before reverse osmosis
- Open closed water circuits
- Industrial solid liquid segregation distillation processes
- Water output purified from microorganisms

It is one of the membrane filtration methods. It is a seperation process which does not exceed a certain size and run with pressure. Ultrafiltration has typically pore size varies between 10 and 1000 Angstrom and molecules between 300 and 500.000 Dalton holding capability. In contrast to treatment methods such as nanofiltration and reverse osmosis, without causing any change in the chemical structure of water, it makes improvement in all physical properties of water at maximum level.

Thanks to ultrafiltration technology, suspended solid materials in the water, blurriness, color pigments up to the 99% and, above all, entire bacteria and viruses possibly present in the waters are removed. With this feature, it provides significant advantages in purification of spring water or potable waters.

FILTRAN FILTRATION SYSTEMS

Filtran are designed for enhanced water quality filtration for the removal of organic and inorganic suspended solids down to 5 microns. Multi-Media filters may be used as a stand-alone system or in conjunction with or as a pretreatment for other filtration technologies. The Multi-Media filtration systems utilize a vertical side shell depth of 120 cm with accompanied reverse stacked medias for progressive filtration through the filtration system. All Filtran industrial media filters utilize our simple backwash system for ease of operation and consistent water quality.

Filtran filtration systems are shipped as a complete, finished, assembled and packaged unit. Each system is skid mounted with tanks, valves, manifolds, controller, tubing, electrical solenoids and removable underdrain assembled and ready for water source and power hookup.

Performance levels can be modified to remove suspended solids of a given size range consistent with desired application objectives.

- Automatic Self-Cleaning Filters
- Sand Filters
- Multimedia Filters
- Activated Karbon Filters
- Anthracite Filters
- Iron-Manganese Removal Filters
- Arsenic Removal Filters

INDUSTRIAL WASTEWATER TREATMENT SYSTEMS

Industrial wastewaters are the wastes due to factory production and having different properties to each factory. First step in design is to generate the process and contamination profile. Afterwards, by conducting treatability studies, the most suited system must be designed according to wastewater properties. Industrial wastewater treatment facilities are the systems in which one or both of the chemical treatment and biological treatment units are applied depending on the process.

WASTEWATER TREATMENT SYSTEMS

Wastewater treatment system is the physical and biological operations in order to remove the contaminants before feeding wastewater due to domestic utilizations to the receiving environment. As a result of these operations, wastewater is brought to a level that can be discharged into receiving environment.

WASTEWATER TREATMENT SYSTEM DESIGN CRITERIA

Some parameters that should be known in the design of wastewater treatment facilities, waste water flow rate or population and discharge standards.

CLASSIFICATION OF WASTEWATER TREATMENT FACILITIES

- Domestic Wastewater Treatment Systems
- Industrial Wastewater Treatment Systems

For wastewaters due to domestic utilization, low capacity domestic wastewaters (N < 1000 people) is made up of in package type, higher capacity domestic wastewaters in reinforced concrete type.
In general, industrial treatment systems are fabricated in reinforced concrete type, package type and also by using PE tanks depending on the design principles.

ECOPAK DOMESTIC WASTEWATER TREATMENT SYSTEMS

At home and in business sites, wastewaters due to utilization areas such as kitchen, WC, shower, bath, etc. In the regions where sewerage grid is not installed, domestic wastewaters must be treated before discharging into receiving environment.
Domestic wastewaters are treated biologically. Organic substance which is the source of contamination in the wastewaters are removed from water by microorganisms proliferated in the treatment facility. Food substance and oxygen are the fundamental elements needed by microorganisms in order for their survival. Bacteria use organic substance in the wastewater as food substance. The necessary oxygen is fed with blower into the wastewater.
Our company provides full range service from domestic wastewater treatment due to settlements at every scale from hotels, towns to cities; consultancy to turnkey facility construction.

PACKAGE PLANTS

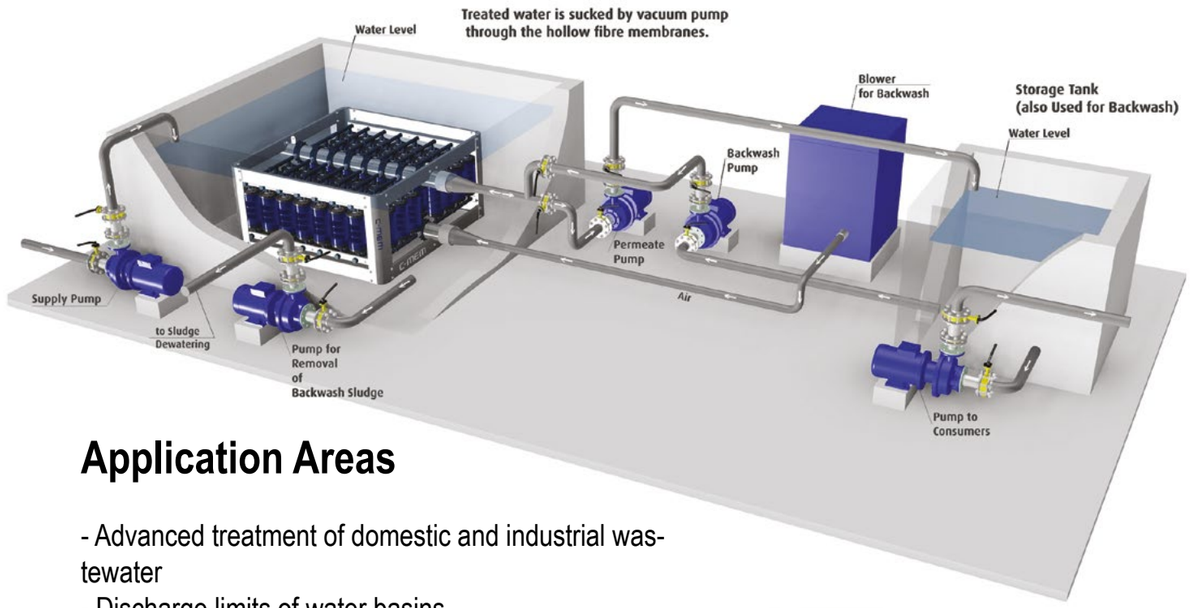
Package plants are made up of epoxy dyed sheet materials at varying dimensions as to capacity. Compact units that is easy to handle and assemble.

MEMBRANE BIOREACTOR SYSTEM

MBR processes are combination of biological reactor with a membrane process in order to maintain the biomass.
- protection of biomass in the biological reactor
- Mechanical disinfection

Advantages

- Effluent with quality high hygiene standards
- High potential biomass concentration (10-25 g MLSS / L)
- The reactor has low volume and surface area
- Reduced sludge production
- More economical than other treatment systems



Application Areas

- Advanced treatment of domestic and industrial wastewater
- Discharge limits of water basins
- Treatment of water containing high pollution
- Obtain irrigation water from wastewater and recycling projects
- Conventional methods for inadequate settlement area
- When wastewater treatment plan inadequates because of increased capacity
- Waste water recycling processes, which has high water consumption

PILOT PLANTS

- Pilot membrane system for food, beverages, dairy products chemicals
- Reverse Osmosis
- The nanofiltration
- Ultrafiltration
- Microfiltration
- Ceramic and Polymeric Membranes

CEYKA KIMYA SANAYI VE DIS TIC. LTD. STI.

ADRES: Ferhatpasa Mh.Karadeniz Cad.
No : 47 34888 / ATAŞEHİR-ISTANBUL / TURKIYE
TEL : 0090 216 660 04 10 PBX
FAX : 0090 216 660 04 71
WEB : www.ceyka.com.tr
www.ceykakimya.com
www.aktif-karbon.com
www.ters-ozmoz.com
www.antiskalant.com

CEYKA® the water company

www.ceyka.com.tr