ARTEMİS
ARITIM

www.artemisaritim.com

About Us

Artemis Arıtım, which has been operating in environmental protection since 1998, has carried out several successful projects with its engineers and academic advisors who have international knowledge and experience.

The increasing demolition and pollution of natural resources due to the population growth and technological advancement increase the need of treatment facilities day by day. Concordantly, the selection of correct treatment technologies and the correct project design gain importance in terms of treatment efficiency, investment and operating costs. At this point, Artemis Arıtım shall provide the most appropriate options for you in solving your problems.

ARTEMİS ARITIM offers the most true and fastest services for our customers in technical support, analysis and consultancy, in addition to the project, production, construction issues.

We enable the processes of getting permit and license to be carried out in the healthiest way starting from the beginning by offering an efficient professional consultancy service which is necessary for Environment Permit process, with our wide engineering staff.

Our Mission

To act with environmental liability and to make contribution to the sustainability of the companies by offering secure, permanent, effective and true solutions,

Our Vision

To be a solution partner which can provide the most rational solutions for customers with the wide range of products and services in Environment Sector.

Our Values

Transparency; We always behave honestly, ethically and clearly to our customers, employees and stakeholders.

Reliability; We perform our duties and promises fully, on time and as planned.

Innovativeness; We accord with the developing technology and changing conditions rapidly and follow and apply the innovations.

Adding Value; We analyze the needs of our customers and offer service according to their expectations.

Respect; We behave careful, regardful and prudently to our employees, customers, stakeholders and environment.

Wastewater Treatment Facilities

The wastewater treatment system designs are created to be efficient, economic and long-lived, by expert engineers considering particularly the qualified management principle. The problems of our customers are checked at sources and business oriented solutions are generated. Wastewater treatment systems are divided into two: domestic and industrial. Before both wastewater sources are discharged, the receiving environment should certainly be brought in compliance with the discharging standards. This necessity is strictly followed both by Municipalities and the provincial directorates of Ministry of Environment and Urbanization and they apply severe punishments to companies following required warnings.

After the samples are collected from the wastewaters of your business and these samples are analyzed in our laboratories in accordance with the procedures defined in the regulations, the preparations are started in order to construct the most economic and efficient Wastewater Treatment Plant and it is delivered as being ready for use after the construction is completed. The process following the delivery, before the treatment plant is operated is also necessary. Only a well-operated treatment plant can reach the required efficiency. The efficient operation of treatment facilities are enabled with our effective operating and consultancy services.

Treatability Activities for Wastewater Treat. Fac.

There are certain design criteria that should be handled carefully before the wastewater treatment facilities are realized. Wastewater flow rate, wastewater features, sectorial parameters, discharge standards, etc. are some of these criteria. Before projecting the wastewater treatment facilities, our company handles the all design criteria individually, definitely performs the jar test and then the designing phase is started in the light of the data obtained as a result of these procedures.

Process Designs of Wastewater Treat. Fac.

The most efficient and novel solutions are created through the activities of our project department by developing special designs based on needs. Design of wastewater treatment facilities is performed based on data collected and obtained as a result of laboratory procedures. During this process, the project design necessary for the process design and the construction or manufacture of the facility is carried out by taking into consideration the location and position of the facility and customer requests in addition to all those design data. Besides, before purchasing, our customers may view their facility with all details in the digital environment before the assembly of the facility.

Our company is capable of drawing up the project approval file belonging to the businesses listed in Appendix 1 and Appendix 2 within in the scope of the "Wastewater Treatment / Deep-Sea Discharge Facility Project Approval Circular".

Industrial Wastewater Treatment Facilities

The wastewaters that the industrial enterprises release to the receiving environment after using should be treated with certain procedures before they are discharged. Artemis Arıtım designs and builds wastewater treatment facilities that provide wastewater treatment in compliance with the values determined in relevant regulations. Industrial wastewater treatment facilities may be ferroconcrete and package facilities according to the flow rates. The treatment techniques used in industrial wastewater treatment are physical, chemical, biological and advanced treatment methods.

Domestic Wastewater Treatment Facilities

The wastewater treatment facilities that are built for treating the wastewaters generate from the kitchens, bathrooms and toilets of the holiday villages, hotels, motels, summer estates and factories that are built in places without sewer systems are called domestic wastewater treatment facilities. Industrial wastewater treatment facilities may be ferroconcrete and package facilities according to the flow rates. Physical and biological methods are frequently used in domestic wastewater treatment.

Package Treatment Facilities

We can categorize these treatment facilities also according to their sizes and mounting ways. The compact systems that are in measures which provide the transportation conditions and that are operationalized after being completed in the factory and delivered to the mounting site with all units and equipment ready are called Package Treatment. Package treatments are used both in water and wastewater treatment facilities. There may be physical, chemical and biological package treatments according to the process type.

Domestic Wastewater Treatment Facilities

Domestic package treatment is a wastewater treatment facility for portable and qualified domestic (wash basin and toilet based) wastewater released from housings or industrial organizations. Domestic package treatment facilities are biological treatment systems due to the nature of domestic wastewater. Physical treatment units such as a grill or sieve, a pre-sedimentation unit, if possible, and a grease trap, if the oil/grease amount of the waste water is high, must be utilized before the biological treatment. The wastewater coming from the physical treatment units is passed through the biological treatment unit and then is subjected to disinfection. It then is subjected to advanced treatment depending on the purpose of use if it will be used again after disinfection.

Betterment of Treatment Facilities

The treatment facilities that do not meet the needs and that are insufficient or faulty constructed are re-handled, undergone feasibility and designing processes and subjected to betterment and revision procedures, hence they are made efficient by us. The operation of the treatment facilities is as significant as their construction. The treatment facilities that are not operated in good conditions will not serve the purpose of environmental protection. Therefore, our Company offers services also for well-operation of treatment facilities and solving the existing problems.

Operation of Treatment Facilities

Well-operating the treatment plant and performing the maintenance and controlling procedures regularly and effectively are vital for efficiency. Thus, it is a true approach that the treatment facilities to be operated by experienced and qualified technical teams in most instances. For that reason, Artemis Arıtım takes over and undertakes the whole plant or its necessary sections.

Wastewater Recycling Facilities

In our time, the water resources are being decreased rapidly. In addition, the growing population and industrial developments increase the water use. This stirs up the resource consumption and also increases the water use costs. In the following years, recycling will gain importance in terms of simplification of water use and reduction of costs, in addition to the ecological approach. The recycling facilities that are simplified and become accessible with the reduced costs according to the technological developments are successfully conducted by our company.

Advanced Wastewater Treatment Facilities

The wastewaters are treated with different methods and technologies according to their types and the types of the receiving environments. In certain instances, use of methods such as nitrogen phosphorus removal facilities, filtration, adsorption, UF nano-filtration, membrane, reverse osmosis is required in addition to the conventional methods. In certain circumstances that requires both ensuring the exit water standards and recycling, our company implements the advanced treatment methods successfully.

Water Treatment Plants

Clean water is the water of surface or ground resources that we utilize as drinking or potable water. It should be subjected to a treatment procedure for being used as Drinking and Potable water. Clean water can be treated in various treatment stages according to the intended use. Advanced treatment methods may also be taken into account.

Artemis Arıtım acts in according to the demands of its customers and works with them in order to construct the best, most economical and most efficient system. Several water resources in our country are subjected to different treatment stages due to the desired water quality, as they are not in compliance with the general conditions of use for Drinking. Our company designs treatment systems that meet your needs and creates turn-key solutions for the customers.

Water Softening Systems

These are the systems that enable the removal of Calcium and Magnesium ions, which cause hardness in water, from water by using Strong Cation Resin. Hard water generates limestone in units such as heated devices, hot water installations, stream boilers in which high temperature water is used, and causes blockage in lines, and, thus, causes energy consumption and loss of heat transfer. The units may be single or tandem and full-automatic valve groups are used in these systems. The units can be controlled as being time or flow rate adjusted.

Filtration Systems (Sand, Activated Carbon Filters)

Full-automatic multimedia and Activated Carbon Filters are the filtration systems that are used for removing the particles, residues, suspended solid contents, iron, manganese existing in water and for removal procedures of Chlorine, Organic Substances, Taste, Odor. These are the systems generally used in process water and drinking water treatment.

Full-automatic valve groups are used in the systems. The systems consisted of sand, gravel, anthracite, activated carbon minerals enable to obtain water filtered under 10-20 micron level. The filtration materials are selected according to the analysis values of raw water. Particular minerals are used for Iron and Manganese removal.

Reverse Osmosis Systems

Reverse Osmosis technology operates in accordance with the principle of semipermeable membranes dispersing the dissolved solids from the water. All salts and organic substances, micro pollution, pesticides, pyrogen, viruses, bacteria, heavy metals such as arsenic, and nitrate are physically degraded from water without using chemicals.

The membrane technology is frequently used for precise proces-ses that require high-quality water, it is also used in drinking water production. In addition, in the recent years it is started to be used in recycling the wastewater.

Ultraviolet, Ozonation Chlorination Units

Ultraviolet device is used to sterilize the water. It is effective in killing the microorganisms such as bacteria, viruses, funguses and molds in water. Sterilization with ultraviolet rays is the only fast and effective disinfection method that does not have adverse effects, since it does not require the use of chemicals. Ultraviolet rays are specific systems that are produced in type of fluorescent inside a housing made of quartz glass and filled with mercury vapor.

Ultraviolet Sterilization Systems provide sterilization by using specific ray tubes that radiate high doses of Ultraviolet rays and killing the bacteria, viruses, funguses and molds in water. They are made of stainless steel in order to prevent the direct contact of the ultraviolet rays to the eyes and the skin and to provide the compatibility with the food norms. Specific quartz housing which conveys the ultraviolet rays in maximum rate is used to insulate the inner ray tubes of the ultraviolet device.

Deionization Units (Pure Water Systems)

The procedure of removing the cations and anions with ion exchange principle for purifying water is called deionization. The amount of ions is reduced to very low levels by means of Deionization System and the the purification procedure is performed. This procedure is carried out with the ion exchangers within the system and including resin. The unit where the cations are removed is called cation exchanger, and the unit where the anions are removed is called anion exchanger. The OH- and H+ ions that are transferred to water at the end of ion exchange, combine and constitute the water molecule. The water which is cleaned from the cations and anions in the outlet structure of the system is highly purified. The resins which take the ionic charges in the water, reach saturation point after some time and become unable to produce water in desired quality. The refreshment of wasting resins (being cleaned from the exposed ions) is provided with rege-neration procedure. The system refreshes itself with caustic and aside dosing during the regeneration.

Particular sectors that need deionized water are as follows:

• Hospital • Laboratory • Chemistry • Accumulator Production • Printing • Electronics • Cosmetics • Food • Medication

Seawater Desalination Plants

Seawater desalination has become a treatment system which has gained speed in recent years. Reverse osmosis system is used in also seawater desalination. Hence, both economical and quality drinking and potable water supply is provided for facilities. This system consists of compression equipment, filters, measuring and controlling instruments and membrane. The system design varies due to the analysis values of the collected sample. In recent years, the volume of available waterin the world is decreasing day by day, particularly with the influences of global warming. Thus, seawater desalination with reverse osmosis method gains more significance every passing day.

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