



AVEKA

AVEKA EVRE TEKNOLOJİLERİ LTD.ŐTİ.



AVEKA



ABOUT US

World's natural resources have been polluting due to large discharge of wastewater. Unfortunately, extraordinary purification ability of nature is inadequate in the face of big amount of wastes. Environmental pollution has gone from being a local problem. It harms both human health and wildlife. Garbage thrown into the sea, the smell rising from creeks, the soil pollution... There are what we faced everyday and anywhere. That is why companies must focus on clean production, sustainable development, social responsibility, energy efficiency and develop new environmental strategies.

We can create value for factories, municipalities, hotels and other businesses that using water during production and discharge this wastewater after production activities. We evaluate all criteria to customize the system and find the best solution. It depends on environmental legislation, regulations, purpose of treatment, energy optimization etc. to find the best solution. We bring you together with experienced professionals and advanced technologies to supply Products and Services below:

- Turn-key Treatment Plant
- Industrial Wastewater Treatment
- Domestic Wastewater Treatment
- Wastewater Reuse
- Equipment
- Sludge Dewatering and Filtration
- Energy Optimization
- Plant Overhaul
- Design
- Consulting and Training

We create value for every business that using water during production and discharge wastewater after this production activities. We evaluate a lot of criteria, for example environmental legislation, regulations, purpose of treatment, energy efficiency etc. to find the best solution. Therefore, we customize the system to offer you the best solution.

Mission: Protect natural resources by using energy-efficient, current and sustainable technologies for domestic and industrial wastewater treatment and water reuse.

Vision: Growing in a responsible manner by developing innovative projects and always be the first choice of customer.

Quality policy:

Meet customer's demand and add value by offering new, sustainable and green Technologies.





SERVICES

Turn Key WWTP
Industrial Wastewater Treatment
Municipal Wastewater Treatment
Wastewater Reuse
Equipment Manufacturing
Sludge Dewatering&Filtration
Energy Optimization



PRODUCTS

FLOW CONTROL EQUIPMENTS

Penstock
Stoplog
Telescopic Valve

FILTERS

WILDCAT MMF and AC Filters
Automatic Filter

BOTTOM AND SURFACE SCRAPERS

Peripheral Bridge Scraper
Linear Chain Scraper

FILTER PRESS

Manual / Semiautomatic / Full Automatic Filter
Press

Membrane / Heating Filter Press

ACREENS AND SIEVES

Basket Screen
Linear Bar Screen
Arc Screen
Discostrainer
Static Sieve
Perforated Screen
Plastic Conveyor Screen
Drum Screen
Screen Press

MIXER

Rapid / Slow Mixer
Static Mixer

AERATION EQUIPMENTS

Aerators
Jet Mixer
Blower and Diffusers

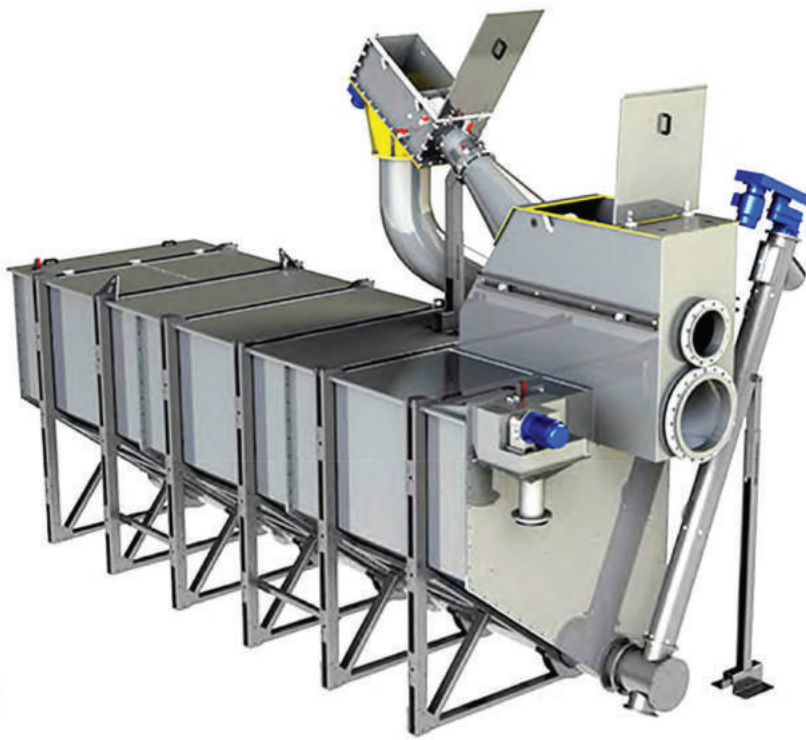
TREATMENT SYSTEMS

AVEKON Compact Preliminary Treatment
CARETTA Biological Treatment System
DOLPHIN Chemical Treatment System
SEACALF Oil Trap and Lamella Setting
GRIZZLY Chemical Preparation System

MODEPO Modular Depot Systems

ADVANCED TREATMENT SYSTEMS

Oxidation - Reduction Process,
Ion Exchange Process,
Adsorption,
MBR Systems,
Biological Nitrogen Phosphorus Removal



AVEKON COMPACT PRE-TREATMENT SYSTEM

AVEKON Pretreatment System is the compact treatment system including all essential stages for physical treatment such as screens, settling tank with bottom and surface scraper and waste disposal units. Because of that there is no chemical consumption. AVEKON Compact Pretreatment System is designed to treat wastewater with different characters and various capacities. The remaining wastes is automatically removed, so the yield of process is high and place requirement is less from manual systems. Separated wastes can be easily transported, compacted and disposed; because of shaftless structure of auger that prevents jam and clogging.

Aeration and oil scraper can optionally be added in case of oil and grease in the wastewater Features of the system are:

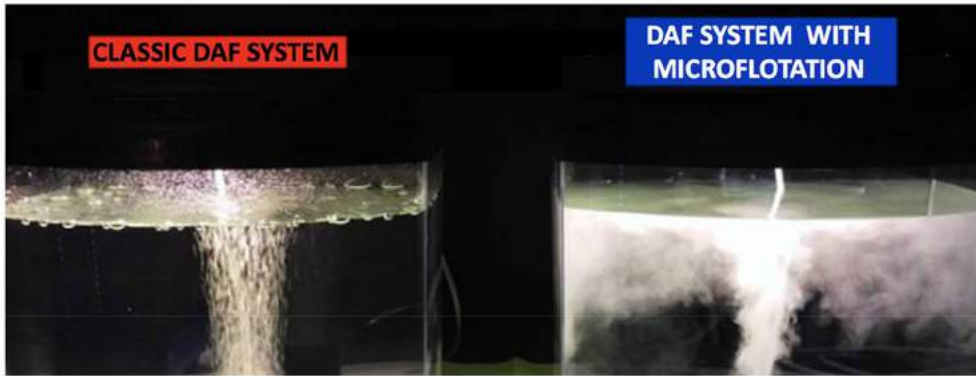
- Easy installation
- Compact design
- Classification of waste
- TSS, COD Oil and Grease Removal
- Low energy cost
- High efficiency

CAPACITY(m3/h)	LENGHT							
	4m	5m	6m	7m	8m	9m	10m	11m
800mm	47	58	72	83	94	108	122	133
1200mm		126	153	180	209	238	266	295
1400mm				252	285	325	360	400

Applications:

- Hotels and Resorts
- Sewage Treatment Plants
- Treatment Plants belonging to mixed industries placed in Industrial Zones
- Several Factories: Paper, Pharmaceutical, Textile, Denim Washing, Soft Drinks, Metal Coating, Plastic Recycling, Food, Dairy Products, Canned Food, Chemicals, Paint Production



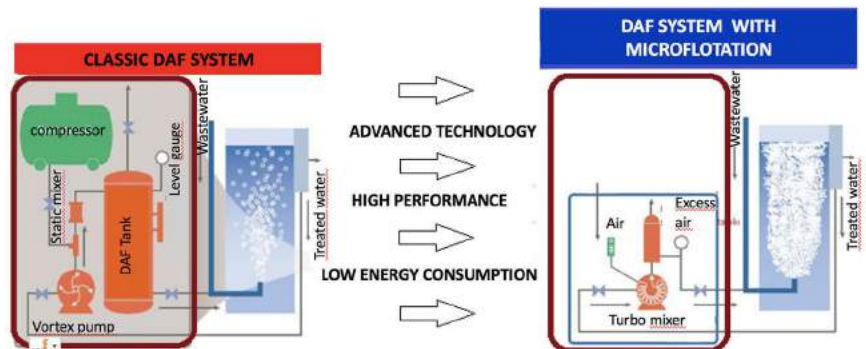


DAF SYSTEMS AND MICROFLOTATION

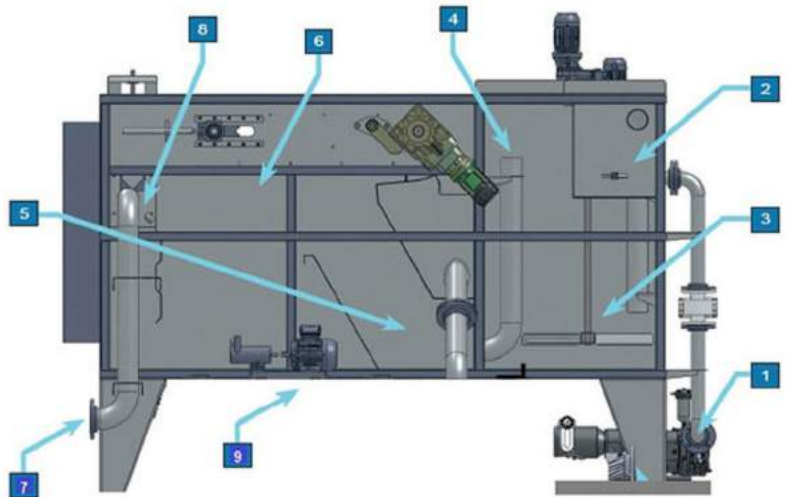
These compact systems are commonly used in wastewater comes from dairy, food, slaughterhouses, chemistry, pulp and paper industries. Oils and other low density materials are separated from water with high removal efficiency.

Our compact systems capacity is ranged from 1m³/h to 200 m³/h:

- SEAL 20: 1-3 m³/h
- SEAL 25: 4-7m³/h
- SEAL 32: 8-15m³/h
- SEAL 40: 16-24m³/h
- SEAL 50 S1: 25-40m³/h
- SEAL 50 S2: 41-60m³/h
- SEAL 50 S3: 61-75m³/h
- SEAL 65 : 76-100 m³/h
- SEAL 80 : 100-210 m³/h



- 1-Inlet pump
- 2-Rapid mix with coagulant(if needed)
- 3-Mixer
- 4-Interconnecting pipe
- 5-Settling zone
- 6-Flotation zone
- 7-Treated water discharge
- 8-Treated water tank
- 9-Turbo generator



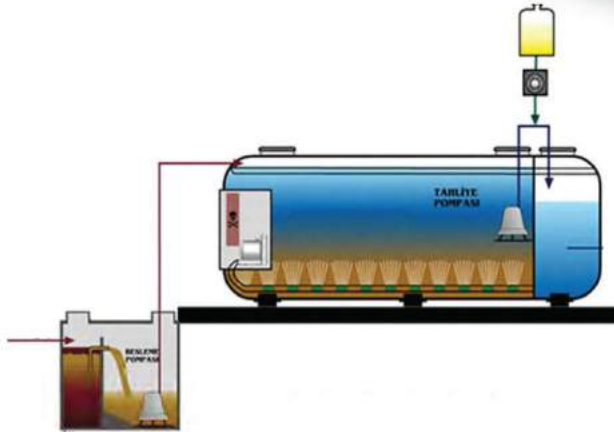
ADVANTAGES

The system generate microbubbles that dispers like smoke into water and supply large area for gas transfer. However oil removal efficiency is high as 80-90%.

Piping and setup is simple than classic DAF systems. There is less piping and equipment needed.

Operation is easy.

Low energy consumption.



CARETTA, ACTIVATED SLUDGE SYSTEM

CARETTA Biological Treatment Series are used to treat biodegradable domestic and industrial wastewater. Whereby the organic materials are broken down by microorganisms in biological reactor and converted to carbon dioxide water and by-products. The water treatment process that occurs in nature is accelerated and creating a model for CARETTA Biological Treatment Series.

Many of critical parameters like SS (suspended solids), COD (chemical oxygen demand), nitrogen, phosphorus removal is provided at the high treatment efficiency by controlling salinity, oxygen, pH and temperature in wastewater.

Applications:

- Sewage Treatment Plants
- Treatment Plants belonging to mixed industries placed in Industrial Zones
- Hotels and Resorts
- Several Factories: Paper, Pharmaceutical, Textile, Denim Washing, Soft Drinks, Plastic Recycling, Food, Milk and Milk Products, Slaughterhouse, Meat Processing Plants
- Others

	CARETTA-50	CARETTA-100	CARETTA-200	CARETTA-300	CARETTA-400	CARETTA-500	CARETTA-600
EQ.PERSON (Number)	50	100	200	300	400	500	600
CAPACITY (m3/day)	10	20	40	60	80	100	120
ORGANIC LOAD (kg BOI5/day)	3	6	12	18	24	30	36
DIMENTIONS (m)	D:1,9 L:3,4	D:1,9 L:5,7	D:1,9 L:10,4	D:2,4 L:9,8	D:2,4 L:12,8	W:2,4 L:10,9 H:3	W:2,4 L:12,9 H:3
INSTALLED POWER (KW)	6,67	6,67	7,07	15,77	15,77	16,57	16,57



DOLPHIN COMPACT SYSTEM

DOLPHIN Chemical Package Treatment Series is an affordable solution for businesses which wastewater flow is between 1-30m³ /day. The system occupies little space and operation is easy. It has optimum chemical consumption with automatic dosing due to measured pH, temperature, redox potential data. Ready to install structure allows disassemble and re-installation to different locations.

DOLPHIN Compact System is consist of chemical precipitation, chemical dosing, automation and sludge dewatering unit. Especially metal ions, SS (suspended solids), COD (chemical oxygen demand) parameters are removed. If needed Neutralization, Removal of cyanide and chromium reduction unit can be added.

	CAPACITY (for 3 cycle/day)	DIMENTIONS			Energy Consumption
		Width	Lenght	Height	
DOLPHIN-1	3 m ³ /day	260cm	290cm	350cm	0,68 KWh
DOLPHIN-2	6 m ³ /day	285cm	325cm	350cm	0,79 KWh
DOLPHIN-3	9 m ³ /day	330cm	395cm	350cm	1,16 KWh
DOLPHIN-5	15 m ³ /day	350cm	410cm	350cm	1,44 KWh
DOLPHIN-10	30 m ³ /day	450cm	500cm	350cm	3,17 KWh



FILTER PRESS

Filter Presses are one of the first equipment used for sludge dewatering and filtration. It works by the accumulation of the solid phase in the spaces between the plates and by separating the liquid phase by filtration. Optionally there are many models available such as manual, semiautomatic and full automatic operation modules.

Filter Presses provide the solid matter ratio reaching 30-35% that is highest dewatering efficiency compared to the equivalent Technologies. It has widespread use due to low investment and operating costs and easy operation.

Other products:

Filter Press Plates

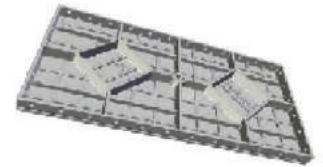
Filter Press Cloth

Application:

The sludge formed in the **WASTEWATER TREATMENT PLANTS** are dewatered with filter press. Meanwhile, sewage sludge storage, transportation and disposal easier and the costs resulting from these transactions are reduced. Released hydrated lime formed in the **ASYLENE PRODUCTION PLANTS** is dewatered in the filter press. Thus, wastes are safely stored and transported to the final storage area. **READY MIX CONCRETE PLANTS** use high amount of water for car and floor washing. Recovery of these wastes is possible by filtration. Filter press is preferred due to its high dewatering efficiency and easy operation in filtration. Another advantage of the filter press is recovery of aggregate and cement in the filter press cakes. Thus, transportation and storage costs are also decreasing. The facilities become clean and green. Water is dewatered and reused after filter press filtration in **COAL MINES**.

Filter press is used for filtration in the production of various chemical compounds (sodium sulphate, zinc sulphate, copper sulphate, zinc oxide etc.) in **CHEMICAL INDUSTRY**. Filter press is used in the filtration of **VEGETABLE OIL** and **BIODIESEL**. Filter press is used to dewater dough to give shape easier in **CERAMIC PRODUCTION**. It is used in the filtration of coating baths in **METAL PLATING** plants. It is used for filtration of plaster water and recovery of precious metal from castor oil in **JEWELRY**.

Apart from these, many dewatering and filtration applications are available.



MODEPO-MODULAR DEPOTS

Our long-term experience, has led us to realize an important issue for the industry: **LIQUID STORAGE**. Modepo is consists of a combination of polypropylene modules sized 50x100cm. Installation is completed in four steps:

1. Modules are joined with bolts
2. Junction lines are welded to prevent sealing
3. Supporting walls with stretchings
4. Piping and equipment erection

Advantages:

- Modular and decorative look
- Installation is easy and fast
- Conforms food regulation
- Hygienic, no moss and rust
- Long life
- Chemical corrosion resistant
- No maintenance required
- whether can be disassembled and reassembled
- Transportation costs are low
- Economical

MODEPO Storage Applications:

- Swimming pool balance tank (chlorine resistant)
- Salt water storage
- Water depots (Migration report available)
- Chemical storage
- Fire water
- Cooling water
- Coating and acid baths
- Wastewater and water treatment plants
- Irrigation water
- Storage for other uses





CHEMICALS AND WATER RECOVERY SYSTEM

Nowadays at the global applications, of water is preferred to treatment and discharge of waste water. There are various methods for recovery of wastewater, chemicals and raw materials that occurs in business. Nowadays, we need not only to reduce water usage or clean it; but also reuse treated water for irrigation, washing etc. Even zero discharge can be provided. Both social responsibility and productivity stands out with "Sustainable water management" approach

Purified water can be use in,

- Production
- Cleaning
- Garden irrigation and so on. reusable purposes.

ADVANCED TREATMENT SYSTEMS

When further treatment is necessary?

Although "Advanced Treatment" is one of the rising terms today, it is based on a very old history. Volatile organic carbon, metal ions, nutrients, taste, smell parameters are fixed with advanced treatment methods.

What are the Advanced Treatment Methods?

Some of the methods used in advanced treatment:

- Oxidation - Reduction Process,
- Ion Exchange Process,
- Adsorption,
- MBR Systems,
- Biological Nitrogen Phosphorus Removal



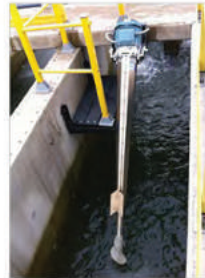
SLUDGE DEWATERING

As well as being a legal requirement sludge dewatering also provides several benefits to companies:

- Greatly reduces transport costs of sludge to the final disposal site
- Dewatered sludge is processing easier.
- Increases the energy content of the sludge before incineration.
- Reduces the amount of pre-pore material for composting
- excess moisture must be taken for odor control
- Storage leachate is reduced in the area.

OTHER EQUIPMENTS







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