AVEKA

“The best technology is sustainable technology.”

Water is the most fundamental resource of life.

Globally, accessible freshwater resources are steadily declining due to intensive industrial activities and increasing consumption. Polluted water reserves threaten not only present ecosystems but also the fundamental rights of future generations. Meanwhile, nature’s self-regeneration capacity remains insufficient in the face of excessive wastewater discharge.

Today, clean production, circular economy principles, and sustainability are no longer optional concepts – they have become strategic responsibilities for modern industry.

We are an engineering and contracting company committed to understanding the true value of water and maintaining the balance between industry and nature. Through the solutions we develop in industrial wastewater treatment and water reuse, we contribute to industrial growth while safeguarding natural resources.

With our extensive sector experience and strong engineering foundation, we deliver user-specific projects that minimize environmental impact and provide innovative, efficient, and compact systems tailored to each facility’s needs.

We are fully aware of our responsibility to the environment.
Since our establishment, we have been serving as a trusted solution partner to industry by designing and implementing fully compliant, sustainable, and high-performance treatment systems.
Through our reliability and strong technical expertise, we aim to be the first choice of our clients in every project we undertake.

Mission

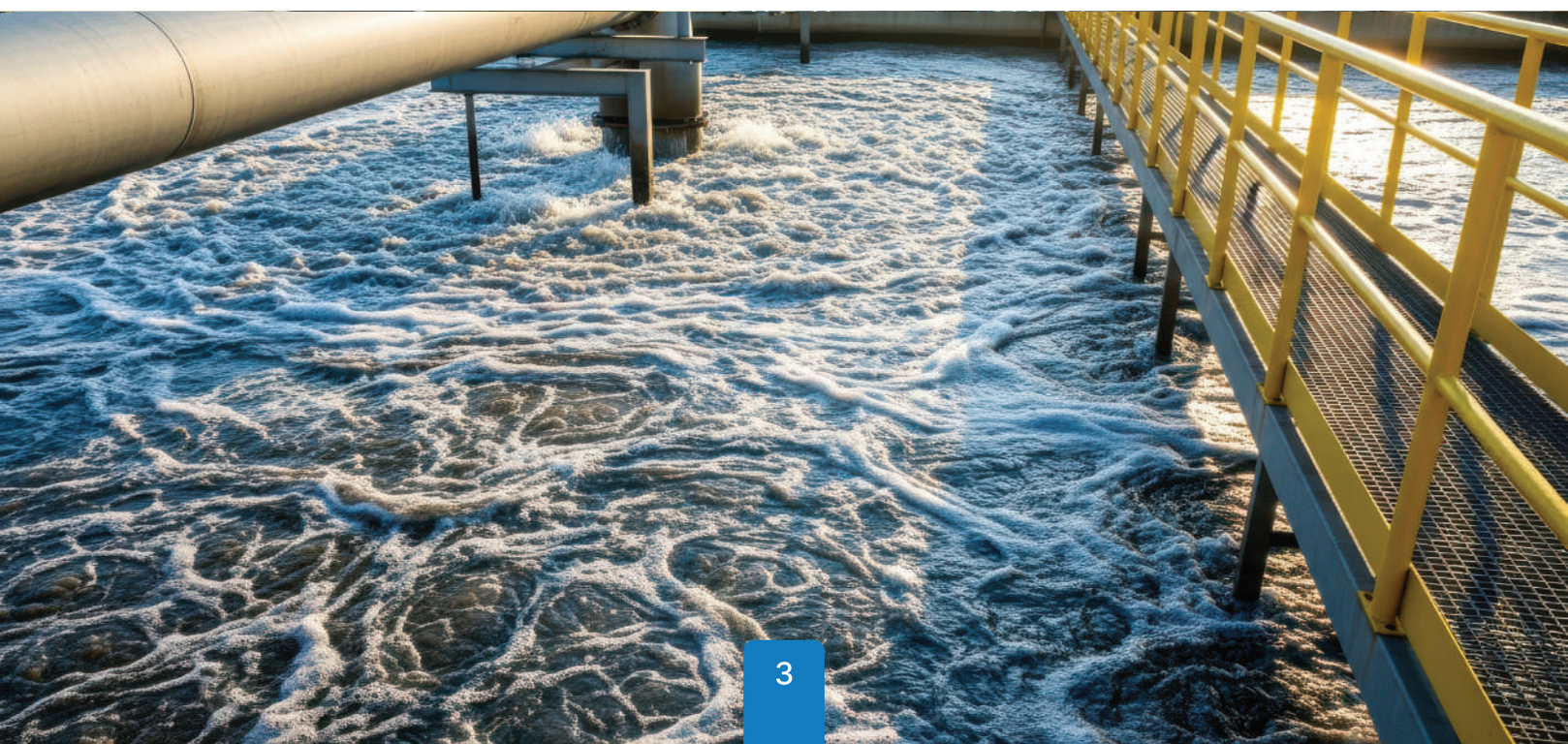
To protect natural resources by treating and enabling the reuse of domestic and industrial wastewater through the application of energy-efficient, up-to-date, and sustainable technologies.

Vision

To continue growing through the innovative projects we deliver and to remain the first choice of our customers at all times.

Our Core Values

Efficiency and effectiveness in resource utilization
Integrity and reliability
Strong sense of social responsibility
Innovative and solution-oriented approach
Customer focus
Respect for nature and future generations



PRODUCT INDEX

The performance of wastewater treatment plants depends on the harmonious integration of various equipment and processes operating together efficiently.
Achieving the required effluent quality standards, ensuring optimal system performance, accurately controlling chemical dosing, and selecting energy-efficient equipment are all critical factors in successful plant operation.

Our Scope of Work

Turnkey Wastewater Treatment and Water Reuse Plant Construction
Plant Capacity Expansion and Modernization
Sludge Dewatering and Drying Systems
Engineering and Contracting Services
Equipment Supply

ZERO LIQUID DISCHARGE, ZLD

Increasing water stress, tightening discharge regulations, and rising operational costs are driving industries toward high-recovery, closed-loop water systems. Zero Liquid Discharge (ZLD) is not merely an environmental solution, it is an advanced engineering strategy for process optimization and resource efficiency.

KEY PERFORMANCE INDICATOR

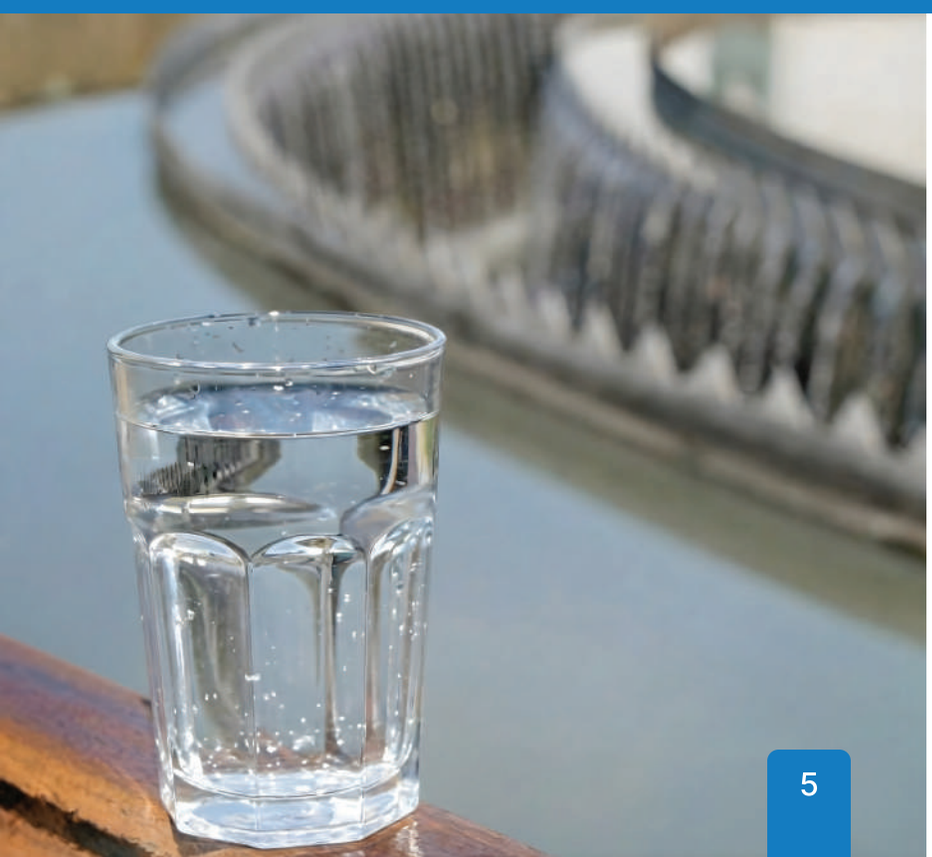
Water Recovery Rate
- 90–99% total system recovery

Discharge Performance
- Zero Liquid
- Controlled solid phase via crystallization and dewatering
- Minimized regulatory and compliance risk

Recovered Water Quality
- Tailored water quality based on process requirements

Energy & Operational Efficiency
- Optimized specific energy consumption
- Integrated heat recovery strategies
- High-efficiency evaporator design
- Reduced chemical consumption through advanced pre-treatment

Concentrate Management
- Volume minimization of RO reject streams
- High-solids-tolerant evaporation systems
- Scaling and fouling control strategies
- Optimized sludge and crystallized salt handling



Recover
Recycle
Reuse

WATER CIRCULARITY: PROCESS SECURITY & RESILIENCE

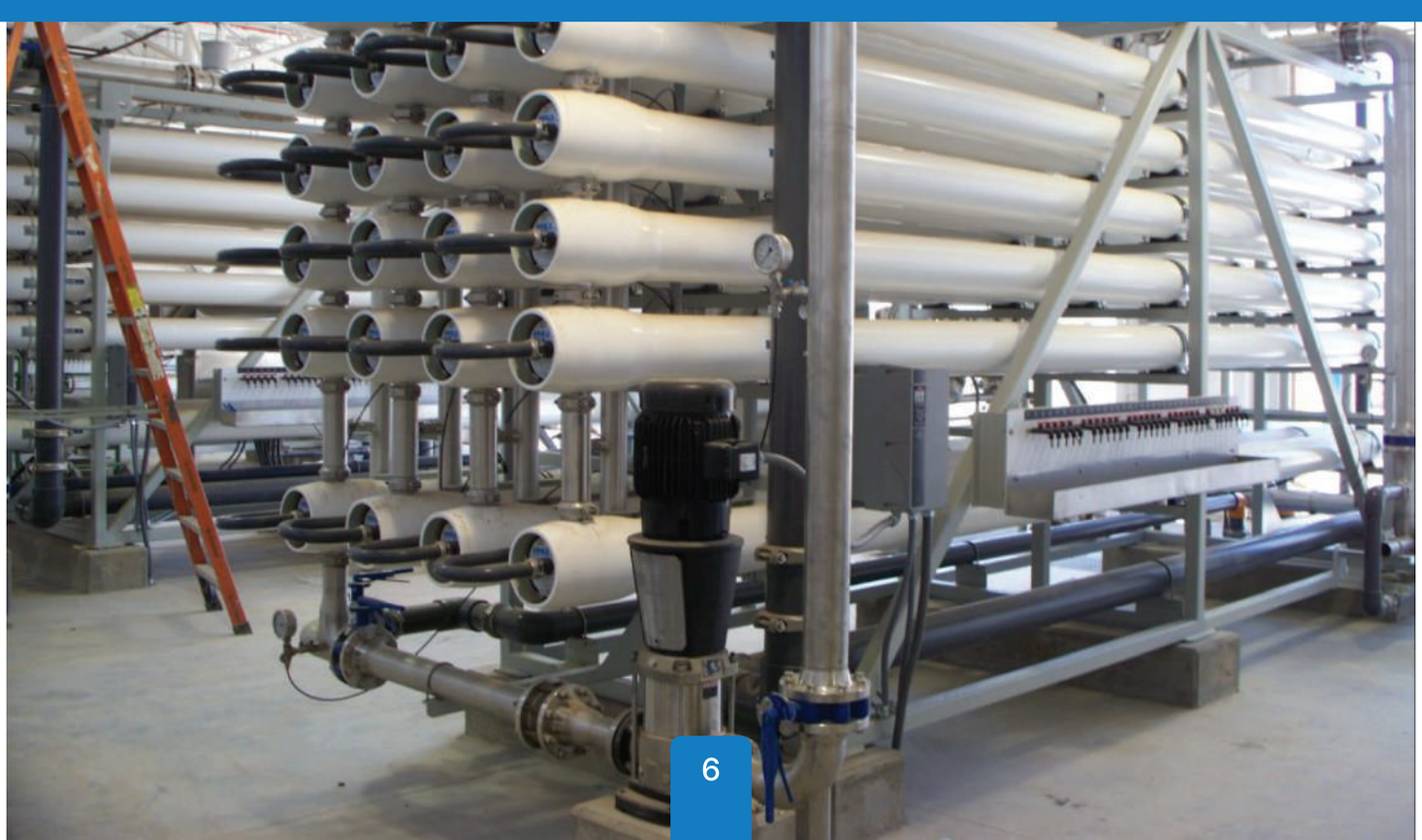
Water circularity is not only a sustainability objective it is an operational risk management strategy. High-recovery systems transform wastewater from a liability into a strategic production resource.

- Reduced freshwater dependency
- Secured production continuity in water-stressed regions
- Elimination of discharge penalty risks
- Improved ESG and sustainability performance metrics
- Long-term CAPEX / OPEX optimization

THE AVEKA ENGINEERING APPROACH

A successful ZLD implementation is not about selecting standalone equipment, it is about integrated process engineering. Comprehensive water balance and mass balance analyses are critical at the design stage. Systems must be engineered not only for current loads but also for future capacity expansion and process variability.Our ZLD solutions are built on:

- Process-specific customized design
- Energy-efficient equipment selection
- Advanced concentrate minimization strategies
- Extended membrane lifetime optimization
- Data-driven operational cost control
- Automation and SCADA integration
- Real-time performance monitoring



MEMBRANE BIOREACTOR, MBR

Membrane Bioreactor (MBR) technology plays a central role in enabling circular water management in domestic and industrial applications.By combining advanced biological treatment with membrane filtration, MBR systems transform wastewater into a high-quality reusable resource. This allows industries to:

- Reduce freshwater consumption,
- Minimize discharge quantity and
- Close the water loop within their operations.

With its compact design, high treatment efficiency, and consistent effluent quality, MBR supports the transition from linear water use to a **circular, resource-efficient production model.**

Process Performance Data

Up to 90-95% COD removal

99% Bacteria Removal

99% BOD removal

99% TSS removal

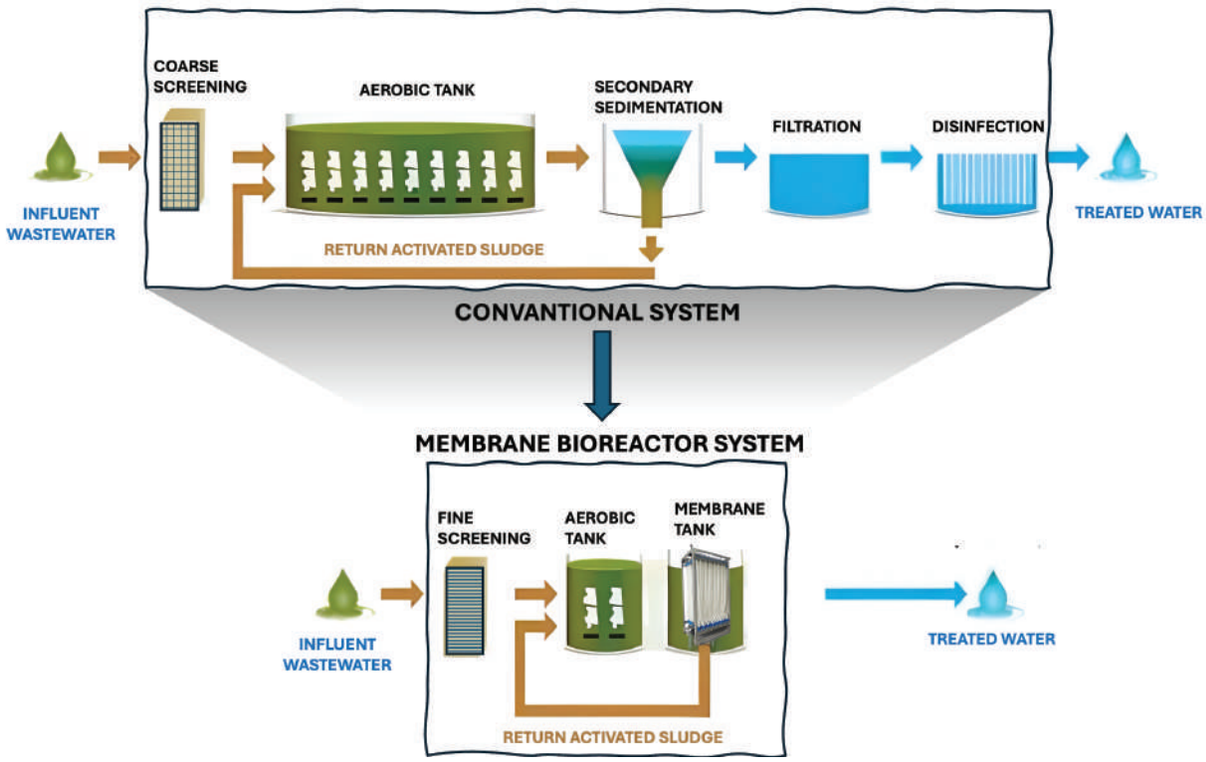
Industry Applications

- Various Industrial Wastewater
- Pulp & Paper Industry
- Metal Processing
- Food & Beverage
- Textile Industry
- Industrial Zone
- Hospitals
- Hotels

Key Advantages

- Superior Effluent Quality
- Operational Stability
- Compact Design
- Reduced OPEX
- Fouling Management
- Stabil Sludge Production
- Simplified Process Design

MBR systems combines advanced biological treatment with membrane filtration



MBR eliminates the need for secondary clarifiers, reducing system complexity and maintenance requirements.

WASTEWATER EVAPORATION SYSTEM

System capacity and design are customized based on wastewater characteristics and specific process requirements. Not suitable for use with flammable waste streams.

The Wastewater Evaporation System operates on the principle of controlled evaporation by heating wastewater to vaporize its water content. Following the process, a concentrated solid residue with significantly reduced volume remains.
This approach enables substantial volume reduction of industrial wastewater, particularly those with high pollutant concentrations, allowing disposal and management challenges to be addressed directly at the source.

Operating Principle

Wastewater is fed into an evaporation boiler equipped with internal coils and heated under vacuum conditions by a burner system.
Even at relatively low temperatures, water vapor is generated and continuously extracted from the chamber by an industrial fan.
After the evaporation process, the concentrated residue remaining in the boiler is periodically removed and disposed of in compliance with applicable environmental regulations.

Technical Advantages

- Up to 80–95% reduction in waste volume
- Fully removable lid, conical bottom design for easy cleaning
- Energy-efficient operation under vacuum at low temperatures
- Production of condensate water suitable for reuse
- Automatic control system for safe operation
- Requires gas exhaust and vapor stack
- No chemical consumption
- Low energy consumption (1.9 kW)
- Capacity: up to 10 m³/day
- Operates on natural gas
- Thermal insulation provided
- On/off operational capability
- CE certified

Application Areas

Metal plating and surface treatment facilities
Production processes generating hazardous wastewater
Paint and coating plants
Textile industry
RO concentrate waste streams

Certificate

No. ICR Polska/M6012619

CE

Name and address of certificate owner: AVEKA ÇEVRE TEKNOLOJİLERİ LTD. ŞTİ. ZEYNOCKALP MAH. SÜLEYMAN DEMİREL BULV. MALL OF İSTANBUL ORS APT. NO.7 E/136 BAŞAKŞEHİR, İSTANBUL, TURKEY

Name and address of manufacturer: AVEKA ÇEVRE TEKNOLOJİLERİ LTD. ŞTİ. ZEYNOCKALP MAH. SÜLEYMAN DEMİREL BULV. MALL OF İSTANBUL ORS APT. NO.7 E/136 BAŞAKŞEHİR, İSTANBUL, TURKEY

Product name: WASTEWATER VAPORIZATION SYSTEM
Trade mark: AVEKA
Product types: HEAT-210

This certificate confirms that the product meets the requirements of the following standards and within limits of its standards gives presumption of conformity with essential requirements of Directive 2006/42/EC

EN ISO 12100:2010 — EN 349:1993+A1:2008
EN ISO 13857:2008 — EN ISO 14120:2015
EN 60204-1:2006+AC:2010 — EN 746-2:2010

The certification process has been carried out in accordance with the program PC-P-07-07.
Evaluation has been carried out in accordance with test reports made by TestPlus Teknik Kontrol ve Belgelendirme Tic. Ltd. Şti. Laboratory.

No. of test report: TPT-19-0624/01
Issue date: 02.10.2019
Expiration date: 01.10.2024

The mutual obligations and rights of the certification are regulated by the contract No. ICR Polska/2019-0205

This certificate applies to products having the same attributes (parameters), intended use, that have been evaluated and meet the requirements of the aforementioned standards.

Director: Rafał Kalinowski

Warsaw, 02. 10. 2019

ICR Polska Co. Ltd.
ul. Plac Przymierza 6, 03-944 Warszawa
www.icrpolska.com, e-mail: icrpolska@icrpl.com

International Certification Registrar

SEAL Series Microflotation DAF System

The SEAL Series Microflotation DAF System is a new generation dissolved air flotation system developed for high-efficiency oil and grease removal in industrial applications. The system delivers high treatment efficiency by generating denser and ultra-fine air bubbles within the wastewater.

Compact Design

Unlike conventional systems that require extensive equipment and complex piping, the microflotation DAF system produces microbubbles solely by means of the DAF pump. With its compact and innovative design, the SEAL Series is an ideal solution for both new installations and the integration into existing wastewater treatment plants.

Turn-Key Solution

The system is delivered as a complete turnkey package, including a DAF pump, flotation tank, oil skimmer, balancing tank, and an integrated control panel. Equipped with advanced online analyzers, the system enables continuous monitoring of process parameters and automatically adjusts chemical dosing to maintain optimum treatment performance.

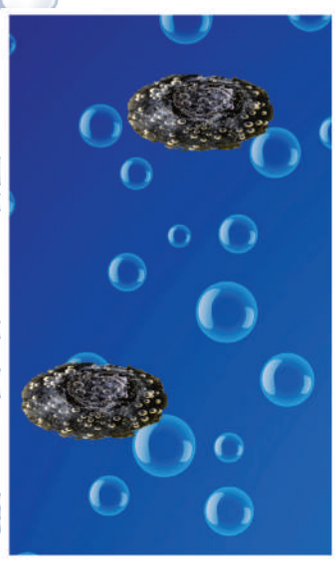
High-Tech & Powerful

The Microflotation DAF Pump is a high-performance unit designed to generate ultra-fine air bubbles. Thanks to its unique design, the air-water mixture forms a cloud-like, homogeneous structure, maximizing flotation

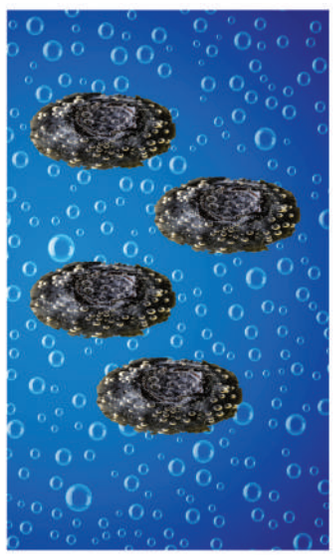
Project Specific System

The treatment process is customized according to industry-specific needs. To maximize the removal efficiency of emulsified oils, an optional chemical dosing system can be seamlessly integrated into the process. A high-performance flocculation unit

Model	Capacity
MF DAF 20	1-3 m^3/h
MF DAF 25	4-7 m^3/h
MF DAF 32	8-15 m^3/h
MF DAF 40	16-24 m^3/h
MF DAF 50 S1	25-40 m^3/h
MF DAF 50 S2	41-60 m^3/h
MF DAF 50 S3	61-75 m^3/h
MF DAF 65	76-100 m^3/h
MF DAF 80	100-200 m^3/h



Conventional DAF
(coarse air bubbles)



Microflotation DAF
(ultra-fine microbubbles)

Key Benefits

- Manufactured from stainless steel, polypropylene, or epoxy-coated carbon steel
- Average 40% less chemical consumption
- Compact footprint and low noise level
- Up to 90% oil & grease removal
- 50% lower energy consumption
- High density sludge formation
- Fully automatic operation
- Ultra-fine microbubbles

Wastewater Treatment Applications

- Effluent Treatment for Vehicle Washing
- Membrane Systems Pre-treatment
- Fibre Recovery in Pulp & Paper Mills
- Fish, Meat & Livestock Processing
- Snack Food Production
- Pharmaceuticals
- Breweries
- Bakeries
- Textiles
- Dairies

Technical Advantages

- Generates ultra-fine bubbles, up to 10 times smaller than conventional DAF
- Increased air-water surface area, resulting in superior flotation performance
- Extended wastewater-air contact time for more effective separation
- Enhanced attachment to oil droplets and suspended solids

DOLPHIN SERIES CHEMICAL TREATMENT SYSTEM

Compact, Energy-Efficient Wastewater Solutions for Industrial Applications

Aveka Environmental Technologies Co. is an engineering and contracting company operating in the field of industrial wastewater treatment and water recovery. With extensive experience, we provide sustainable and compact systems that minimize operating costs and environmental impact.

The Dolphin Series offers a high-performance chemical treatment system engineered to deliver stable, efficient, and sustainable wastewater treatment for industrial applications. Its compact structure allows seamless integration into both new and existing facilities.

Model	Flowrate	Daily Flow	Required Area for Assembling			Installed Power
			Width	Lenght	Height	
DOLPHIN-5	5 m^3/h	120 m /day	420 cm	640 cm	350 cm	4,20 Kw
DOLPHIN-10	10 m^3/h	240 m /day	420 cm	770 cm	350 cm	4,20 Kw
DOLPHIN-15	15 m^3/h	360 m /day	520 cm	770 cm	350 cm	4,67 Kw
DOLPHIN-20	20 m^3/h	480 m /day	520 cm	710 cm	350 cm	4,79 Kw
DOLPHIN-30	30 m^3/h	720 m /day	520 cm	900 cm	350 cm	4,97 Kw
DOLPHIN-50	50 m^3/h	1200 m /day	620 cm	1040 cm	350 cm	6,81 Kw
DOLPHIN-75	75 m^3/h	1800 m /day	620 cm	1300 cm	350 cm	12,38 Kw
DOLPHIN-100	100 m^3/h	2400 m /day	620 cm	1470 cm	350 cm	15,28 Kw

Drum Screen

Fully automatic fine screen removes solid particles sized up to 300 micron available in multiple mesh sizes to suit different wastewater characteristics. In the first stage of treatment process, ensures smooth operation of downstream and protect following equipments against abbracion and accumulation.

Flocculator and Chemical Dosing Unit

Utilizes static mixers for energy-free chemical reaction. There is no moving parts and minimal maintenance. Automatically adjusts chemical dosing based on real-time analyzer data for consistent and optimized performance.optimizing consumption and ensuring operational ease.

Lamella Settling Tank

The integrated lamella plates significantly increase the surface area, enabling faster and more efficient sedimentation. This high-efficiency design ensures stable operation, reduced space requirements, and consistently reliable treatment performance. The sludge naturally settles to the bottom, while clean, clarified water smoothly sluiced from the top.

Sludge Processing

Thickening and polymer conditioning followed by high-efficiency filter press dewatering to minimize sludge volume, reduce transport and disposal cost.

Main Control Panel

The system is managed through an HMI screen with data logging capabilities. Operators can easily adjust parameters, while a remote-access module enables quick service support and data retrieval.

Benefits

- High-efficiency chemical treatment, ensuring stable discharge quality
- Optimized chemical dosing based on real-time analyzer feedback
- Accelerated sedimentation with lamella plate technology
- Compact footprint suitable for limited space installation
- Low maintenance requirement and long service life
- Energy-efficient static mixing with no moving parts
- Easy installation and quick commissioning
- User-friendly HMI operation panel
- Customized design

Industry Applications

Food § Beverage
Home Appliances
Plastic Recycling
Pharmaceutical
Automotive
Chemicals
Textile

DOLPHIN MINI TREATMENT SYSTEM

The DOLPHIN Mini Series is a fully automatic, compact chemical wastewater treatment system designed for facilities generating low volumes of wastewater.Mounted on a skid frame, the system ensures easy transportation and quick installation.

Operating Principle

The system operates on a batch treatment principle. The treatment cycle is repeated until the entire wastewater volume is fully treated.Chemical dosing is proportionally controlled and integrated with analyzers, ensuring precise process management and optimized chemical consumption. As a result of the treatment process, chemical sludge generated is dewatered using a filter press, making it suitable for proper disposal.

Process Scope

The system is designed as standard for the removal of the following parameters:

- Heavy metals
- COD (Chemical Oxygen Demand)
- TSS (Total Suspended Solids)

Depending on project requirements, the following units can be optionally integrated:

- Neutralization unit
- Cyanide removal unit
- Chromium (Cr^{6+}) reduction unit

Key Advantages

The system is designed as standard for the removal of the following parameters:

- Customizable design for industrial wastewater treatment
- High removal efficiency for COD, TSS, and metals
- Easy installation and commissioning
- Automatic and safe operation
- Compact design

MODEL	CAPACITY (for 3 cycle/day)	Required Assembling Area			Energy Consumption
		Width	Lenght	Height	
DOLPHIN MINI-1	3 $m^3$3/day	260cm	260cm	350cm	0,68 KW-SA
DOLPHIN MINI-2	6 $m^3$3/day	285cm	285cm	350cm	0,79 KW-SA
DOLPHIN MINI-3	9 $m^3$3/day	330cm	330cm	350cm	1,16 KW-SA
DOLPHIN MINI-5	15 $m^3$3/day	350cm	350cm	350cm	1,44 KW-SA
DOLPHIN MINI-10	30 $m^3$3/day	450cm	450cm	350cm	3,17 KW-SA

AVEKON COMPACT PRE-TREATMENT SYSTEM

The AVEKON Compact Pre-Treatment System is a compact unit designed based on physical treatment processes. It primarily targets the removal of TSS, sand, pCOD, oil and grease.Due to its chemical-free operation, the system applies physical separation methods based on screening, sedimentation, and flotation principles. This approach ensures process stability while minimizing operational costs.

The AVEKON system is engineered to accommodate different flow rates and wastewater characteristics and is available in various capacity options according to project requirements. Its modular and compact design enables efficient performance even in space-limited installations. Waste retained at the inlet screen is automatically removed from the system. A screw mechanism located at the sedimentation bottom ensures reliable scraping and conveying during operation. Collected waste is easily separated and directed to appropriate disposal processes.

In cases of high oil content in wastewater, an optional aeration unit and surface oil skimmer can be integrated into the system. This enhances oil and grease removal efficiency and reduces the load on downstream treatment processes.

Model	Capacity	Width	Lenght	Total Height
AVEKON-40	20-40 m³3 /h	110 cm	200 cm	360 cm
AVEKON-80	40-80 m³3 /h	110 cm	400 cm	360 cm
AVEKON-120	90-120 m³3 /h	140 cm	400 cm	390 cm
AVEKON-200	120-200 m³3 /h	140 cm	600 cm	390 cm
AVEKON-280	200-280 m³3 /h	140 cm	800 cm	390 cm
AVEKON-400	280-400 m³3 /h	190 cm	800cm	420 cm
AVEKON-500	400-500 m³3 /h	190 cm	1000 cm	420 cm
AVEKON-600	500-600 m³3 /h	190 cm	1200cm	420 cm

Technical Advantages

- Simultaneous reduction of TSS, oil & grease, and pCOD load
- Efficient separation and classification of waste
- Easy operation with low maintenance requirements
- Compact and modular design
- Fast and simple installation
- High separation efficiency
- Low energy consumption

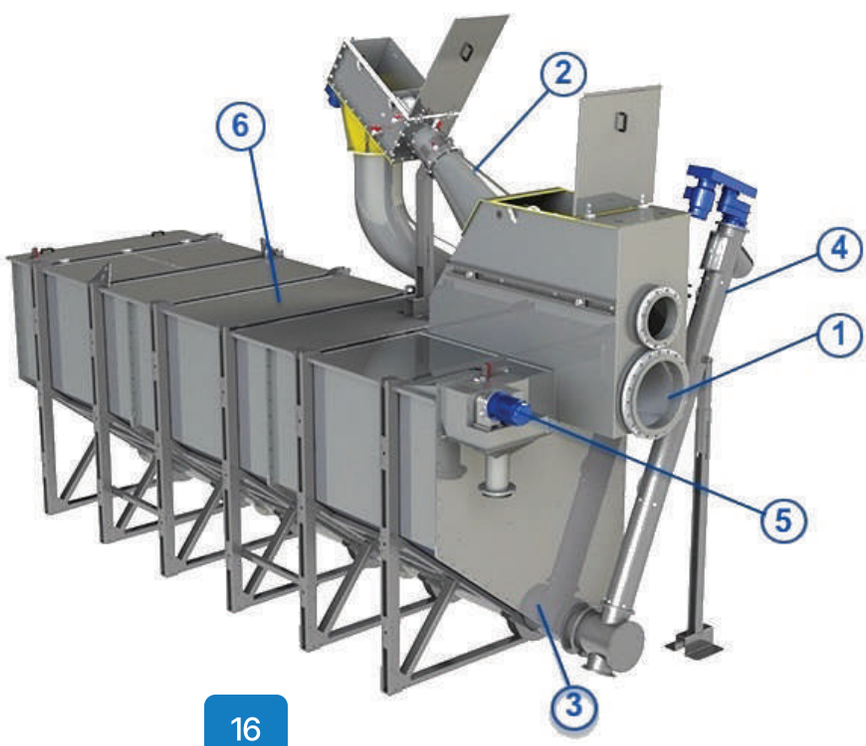
Application Areas

- Municipal and Organized Industrial Zone (OIZ) Wastewater Treatment Plants
- Domestic Wastewater Treatment Plants
- Hotels and Resorts
- Industrial Facilities

Components

1. **Inlet**
2. **Fine Screen**
3. **Bottom Scraper**
4. **Waste Screw Conveyor**
5. **Oil Skimmer (Optional)**
6. **Sedimentation Tank**
7. **Blower (Optional)**

WATCH VIDEO



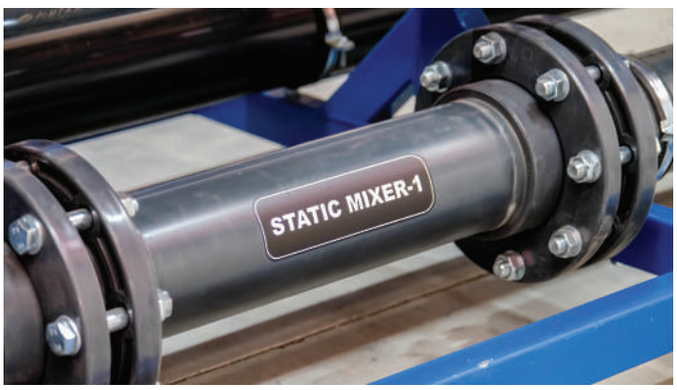
STATIC MIXER AND FLOCCULATOR

A static mixer is a non-moving, power-free mixing device designed to ensure homogeneous blending of chemicals dosed into wastewater.Without the need for mechanical drive systems, it utilizes the flow energy of the fluid itself to achieve highly efficient mixing.Specially designed internal mixing elements (impact plates) continuously change the flow direction, creating turbulence within the mixer body. This ensures rapid and effective homogenization of chemicals with wastewater over a short distance.

The result is continuous, balanced mixing with minimal energy consumption.

Static mixers can operate reliably under various flow rates and with liquids of different densities and viscosities. They are dimensioned according to application requirements and process needs. Material selection is carefully determined based on chemical resistance and corrosion conditions to ensure long service life and safe operation.

Flocculators are compact systems designed to ensure controlled and efficient chemical reactions in wastewater treatment processes.Flocculator is equipped with multiple chemical dosing inlets and analyzer connection points, allowing precise and flexible process control.Static mixers positioned downstream of each chemical dosing point ensure complete and homogeneous mixing of chemicals with wastewater. As a result, floc formation occurs faster and more efficiently.Thanks to their skid-mounted compact structure, flocculators can be easily integrated at any point along transfer lines. Their modular design enables fast and practical integration into existing systems.



Flocculator systems provide high efficiency, ease of control, and reliable operation in chemical treatment processes.

Technical Advantages

- Homogeneous mixing supported by static mixers
- Process control via analyzer connections
- Compact, skid-mounted integrated design
- Low operating and maintenance costs
- Multiple chemical dosing capability
- Easy installation on transfer lines
- Flexible and modular structure
- Power-free operation

CARETTA BIOLOGICAL PACKAGE TREATMENT

The CARETTA Biological Package Treatment Series is designed for the treatment of biodegradable domestic and industrial wastewater.Biological treatment system is based on the natural biological degradation processes occurring in nature. While natural purification may take days, the CARETTA biological package system achieves high-efficiency treatment within hours by providing optimal pH, temperature, nutrient balance, and oxygen conditions.

The CARETTA Biological Package Treatment System is delivered as a ready-to-operate unit, including an aeration tank equipped with discharge pump, blower, diffusers, chlorination dosing system, control panel, control room, and lift pump installation.

The system effectively removes the following parameters:

- TSS (Total Suspended Solids)
- COD (Chemical Oxygen Demand)
- Nitrogen
- Phosphorus

Application Areas

Domestic wastewater in construction sites
Domestic wastewater in industrial facilities
Low-strength industrial wastewater
Domestic wastewater
Hotels and resorts

	Equivalent Person	Capacity m^3/day	Organic Load Kg BOD5/day	Installed Power Kw	Dimentions m
Caretta-50	50	10	3	6,67	D:1,9 L:3,4
Caretta-100	100	20	6	6,67	D:1,9 L:5,7
Caretta-200	200	40	12	7,07	D:1,9 L:5,7
Caretta-300	300	60	18	15,77	D:2,4 L:9,8
Caretta-400	400	80	24	15,77	D:2,4 L:12,8
Caretta-500	500	100	30	16,77	W:2,4 L:10,5 H:2,8
Caretta-600	600	120	36	16,77	W:2,4 L:12,5 H:2,8

MICRO SCREENS

Micro screens are fine screening systems designed for installation at the inlet of wastewater treatment plants. Wastewater collected in the equalization tank is pumped to the micro screen unit, where efficient solid-liquid separation takes place.

Depending on the selected mesh opening size, particles finer than 250 microns can be effectively removed from the wastewater. These may include textile fibers from dyeing processes, pumice residues from denim washing, plastic flakes from recycling operations, fruit peels and grape pomace from food processing, fish scales, poultry feathers, and similar fine solids.

The separated materials are not merely waste; depending on the process, they may also represent recoverable raw materials, creating additional value while protecting downstream treatment systems.

Micro screens can be manufactured in different models according to process requirements

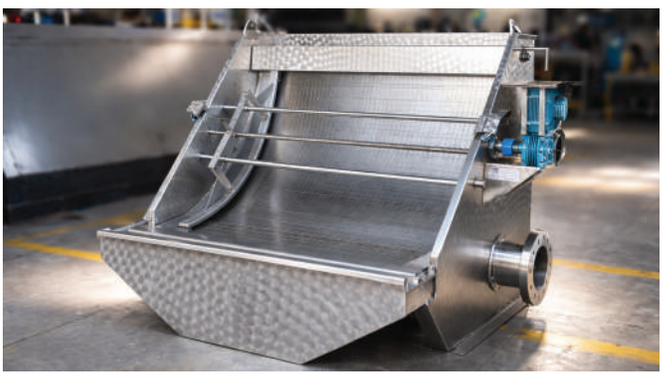
- Plastics from wash water in the plastics recycling sector
- Pumice and perlite from wastewater in denim washing plants
- Fibers from wastewater in the textile dyeing sector
- Feathers, skin, bones, etc. from wastewater in poultry processing plants
- Fish scales, bones, etc. in fish processing plants

Drum Screen

Solids accumulated on the drum screen surface are automatically removed by a pressurized spray water nozzles. The rotating drum continuously self-cleans, ensuring that wastewater is always in contact with a clean screening surface. This provides uninterrupted and efficient operation.The system is supplied complete with a control panel and washing valve.

Static Screen

The static screen has no moving parts, and cleaning is performed manually. However, an optional brush cleaning system can be integrated upon request.The specially designed screen surface is structured to minimize clogging and prevent blockage.



Technical Advantages

Enables recovery of valuable raw materials from wastewater
Significantly reduces the influent load to the treatment plant
Minimizes equipment failure and maintenance requirements in downstream processes
Improves overall treatment efficiency of the plant
Reduces operational costs

Features

Fully stainless steel screen surface
Lightweight and corrosion-resistant body
Fine separation down to 250 microns
Special anti-clogging screen design
Automatic cleaning system
Easy installation and operation

WATCH VIDEO

PERFORATED SCREEN

Perforated screens are installed in the inlet channel of wastewater treatment plants to remove coarse solids before they enter the system. By reducing the incoming solid load, they protect downstream equipment from damage, clogging, and excessive wear.

The screening surface features a moving belt design composed of sequentially assembled perforated plates with 5 mm diameter holes. These plates are interconnected by a chain mechanism and operate continuously along the screen path.
Captured solids are automatically conveyed to the discharge chute, ensuring uninterrupted and efficient operation. A specially designed rake system prevents screenings from falling back into the channel, while dual surface brushes and integrated washing nozzles provide effective and continuous cleaning of the screen surface.

The system operates via an automation-controlled panel that responds to the water level in the channel, ensuring reliable and energy-efficient performance.

Technical Advantages

- Fine screening of particles 5 mm and above
- Dual-brush surface cleaning mechanism
- Anti-fallback rake system
- Automatic washing with spray nozzles
- Robust and durable construction
- Easy installation and maintenance
- Moving screen surface design
- Low energy consumption

Perforated screen systems provide a reliable, efficient, and long-lasting solution for preliminary treatment processes.

MODEPO MODULAR STORAGE SYSTEMS

MODEPO is a modular liquid storage system designed for the safe and reliable storage of water. It is manufactured from high chemical-resistance polypropylene (PP), ensuring long service life even under demanding industrial conditions.

The system is constructed by assembling polypropylene modules measuring 50 × 100 cm, allowing flexible configuration according to project requirements.

With its excellent chemical resistance, MODEPO offers a strong alternative to AISI 316 stainless steel storage tanks. It is especially ideal for confined or indoor areas where the transportation and installation of prefabricated (monoblock) tanks is impractical or impossible.

Thanks to its modular structure, on-site assembly capability, and superior durability, MODEPO provides industrial facilities with a dependable, long-lasting, and adaptable storage solution.

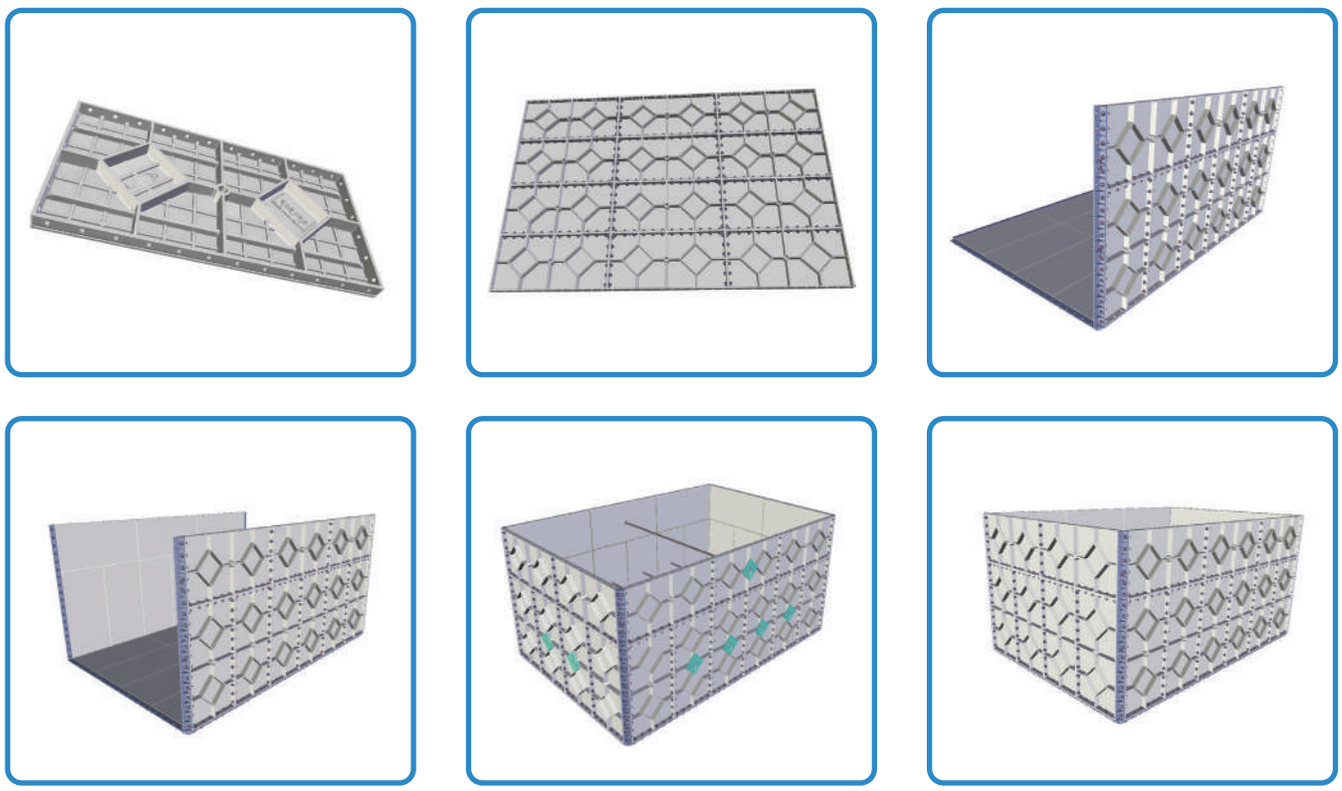
Technical Advantages

- Easy and fast installation in both indoor and outdoor areas
- Can be dismantled and reassembled
- Manufactured in plumbing-grade material quality
- Hygienic structure; resistant to algae formation and corrosion
- Leak-proof and high structural strength
- Manufactured from polypropylene
- Resistant to chemical corrosion
- No painting or maintenance required
- Modular and aesthetic design
- Compliant with food-grade regulations
- Long service life
- Low transportation cost

Application Areas

- Swimming pool balance tanks (due to high chlorine resistance)
- Potable water storage tanks (migration test report available)
- Various industrial storage applications
- Wastewater and water treatment plants
- Plating and acid bath tanks
- Cooling water storage
- Irrigation water storage
- Firefighting water tanks
- Chemical storage
- Saltwater storage

Installation Stages



The MODEPO system is installed on a concrete platform and consists of four main steps:

1. Assembly of modules using bolted connections
2. Ensuring leak-tightness at joint points through extrusion welding
3. Panel assembly and structural reinforcement using opposing tension elements
4. Completion of inlet and outlet piping connections

Thanks to its modular structure, installation is completed quickly and efficiently on-site under controlled conditions.

WATCH VIDEO

WASTE SLUDGE PROCESSING

Dewatering and drying of waste sludge is not only a legal requirement but also provides significant operational benefits:

- Reduces transportation costs to final disposal sites
- Requires less energy for drying after dewatering
- Increases the calorific value of sludge prior to incineration
- Reduces the amount of bulking material required before composting
- Minimizes excess moisture to support effective odor control
- Decreases leachate formation at landfill sites

FILTER PRESS

Filter presses are one of the primary pieces of equipment used for sludge dewatering and various filtration processes.Operating principle is based on the pressurising of the sludge between filter plates, while the liquid phase passes through filter cloths and is discharged from the system.
Depending on user requirements, filter presses are available in manual, semi-automatic, fully automatic, and heated drying models. With solid content levels reaching 30-35%, filter presses provide one of the highest dewatering efficiencies among comparable technologies. For this reason, filter press is widely used not only for waste sludge dewatering but also as filtration equipment in various industrial processes.

Due to low investment and operating costs, ease of operation, and high performance, filter presses offer a broad range of applications.

APPLICATION AREA

Wastewater Treatment Plants

Sludge generated in wastewater treatment plants is dewatered using a filter press. This significantly facilitates sludge storage, transportation, and disposal while considerably reducing associated costs.

Coal Washing Plants

Slurry generated during mining operations is first settled in a decanter, then dewatered using a filter press. The recovered water can be reused in the process, while the dewatered sludge is stored in a more stable solid form.

Chemical Industry

Filter presses are used for filtration in the production processes of various chemical compounds such as sodium bisulfite, zinc sulfate, copper sulfate, and zinc oxide.

Concrete Batching Plants

Large volumes of water are used in concrete batching plants for vehicle and site washing operations. This wastewater can be filtered and recovered for reuse within the facility. Due to its high treatment efficiency and operational simplicity, the filter press is a preferred solution for such applications. Another key advantage is its ability to dewater sludge containing aggregates and cement particles present in the water.

As a result, transportation and storage costs are reduced, and facilities operate in a cleaner and more sustainable manner.

Food and Biofuel Industry

In the filtration of cold-pressed vegetable oils, filter presses are used to achieve a clear and sediment-free product.

In biodiesel production, they ensure the removal of impurities from the oil, improving overall product quality.

Acetylene Production Facilities

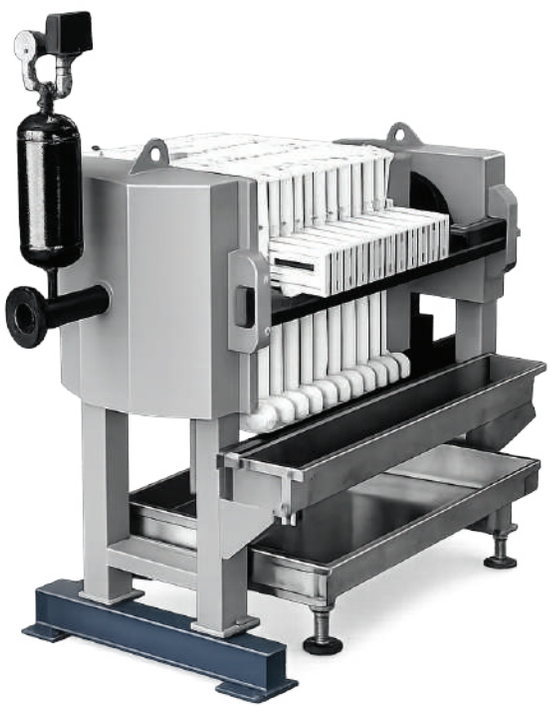
Lime sludge formed as a result of carbide neutralization is dewatered using a filter press. The resulting solid waste is safely stored and transported to disposal sites without environmental contamination.

Metal and Jewelry Industry

Filtration of metal plating baths, recovery of precious metals from gypsum blasting wastewater in the jewelry sector, recovery of valuable metals from polishing and buffing residues are common usage of filter

Natural Stone and Ceramic Industry

Filtration of marble cutting wastewater, dewatering of slurry in ceramic and bentonite production, achieving the required consistency for shaping and processing are common usage of filter press.



REFERENCES

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We proudly serve a wide range of industries, including:

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AVEKA ENVIRONMENTAL TECHNOLOGIES LTD.

Ziya Gökalp Mah. Süleyman Demirel Bulvarı,
Mall Of İstanbul Sit. Ofis Apt. No: 7 E/136
34490 Başakşehir / İSTANBUL / TÜRKİYE

+90 (212) 970 01 76

info@avekacevre.com

www.avekacevre.com

MADE IN TURKIYE

AVEKA ÇEVRE TEKNOLOJİLERİ LTD.
avekacevreteknolojileri3800
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