

Environmentally friendly water treatment technologies



For industry and municipalities

Introduction



Hidrofilt Group has been carrying out its activities in the fields of industrial water treatment, drinking water and industrial wastewater treatment since 1990.

From idea to implementation

Building on quality, environmental protection and operational safety, it holds itself to a high standard of service when it comes to the design, manufacturing, installation, commissioning, maintenance, servicing, remote monitoring, operation, spare parts and chemical supply of water treatment systems.

General contracting - Technology delivery

Being an EPC contractor for complete and turnkey project implementation or a technology supplier for the delivery of water treatment systems, we are always striving for the quick and professional satisfaction of customer needs.

Innovation

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With the innovative use of our extensive technological background, we offer high-quality solutions for the most diverse water treatment

International experience

In Hungary, the headquarters and production plant of Hidrofilt Ltd. are located in Nagykanizsa, whereas its regional office and service center are based in Érd. In order to support its export activities, subsidiaries were established in Slovakia, Romania and Poland. Hidrofilt Ltd. is a founding member of the Hungarian Water Technology Corporation Ltd. As a regional market leader in the manufacturing of water treatment technologies, the company has gained significant international experience over the past decades. Its products can be found throughout Europe, Asia, Africa and Central and South America.

Long-term partnerships

Being a privately owned business, Hidrofilt Group has the capability of rapid decision-making and flexible optimisation of its resources. It aims to maintain a strong and long-term trust-based relationship with its customers and partners in which all parties can mutually enjoy the advantages of the cooperation.



"We are building a world, where all human and living beings have access to heatlhy drinking water and where all industrial companies recycle and reuse their wastewater." **Borsos Ferenc - founder of Hidrofilt Group**



Environmentally friendly water treatment technologies

In the course of its activities, Hidrofilt Group actively contributes to the economical and environmentally friendly use of our natural resources, in particular water sources, paying special attention to the preservation of their original state. During the design and implementation of its water treatment systems, the Group strives for:

- energy efficiency
- exploiting water recycling possibilities
- the recycling of built-in materials according
- to the principles of a circular economy applying "Plant Lifecycle" management
- to increase system lifespan
- the use of biodegradable chemicals
- the use of natural absorbents
- environmentally friendly implementation and operation





> 4000 references

in 35 countries



> 100 monitored systems

> 160 employees

> 70 engineers

> 200 containerised water treatment systems

Together for our future...



Products







Membrane separation systems

Reverse osmosis desalination /RO, DPRO, TPRO/ Nanofiltration /NF/ Ultrafiltration /UF/ Microfiltration /MF/ Membrane Degassing Equipment /MC/ Electrodeionisation Equipment /CEDI/ Membrane Bioreactors /MBR/ Membrane Cleaning Systems /CIP/ Electrodialysis Systems /ED, EDR/ Advanced Membrane Technology /FO/ FO/

Ion Exchange Systems

Softeners /SAC/ Carbonate removers /WAC/ Complete desalination /SAC, SBA/ Mixed-bed desalination /MX/ Condensate treatment systems Organic scavenger resins Selective ion exchangers, heavy metal removers Nitrate, boron and fluoride content reduction

Industrial media filtration systems

Gravitational and pressurised multimedia filters /RGF, MMF/ Activated carbon filters /CF/ Iron and manganese removal /AMF/ Arsenic removal Coagulation Filters /Hydrobead/

Pre- and post-treatment

Chemical dosing stations, polyelectrolyte dissolving and dosing systems Clarifiers, homogenisers, settlers, plate settlers Multi-chamber reactors with inert material aid /IBS/ Dissolved air flotation /DAF/ Oil separators Neutralising systems Plastic storage and buffer tanks for storing corrosive hazardous chemicals Gas scrubbers, degassers, vacuum degassers Pressurised and gravitational stainless steel tanks Stainless steel filter housings for bag, candle and cross flow filtration

Sludge treatment

Gravitational thickeners Dewatering equipment Filter presses Centrifuges

Disinfection systems

Chlorine gas, chlorine dioxide, hypochlorite feed stations, electro-chlorinators Ozone generators UV disinfection equipment Chemical and thermal sanitation equipment

Chemicals

Oxidizing agents Reducing agents Flocculants and coagulants Biocides Antiscalants Inhibitors Conditioners for heating systems, boilers, steam generators Conditioners for closed and open cooling systems



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Integrated rack solutions for Ultrafiltration

Integrált tartószerkezeti megoldások ultraszűréshez

All services under one roof

0

GREEN DESIGN

ECO PRODUCTION

GREEN CONSTRUCTION







Project management

Expertise - Professionalism - Integrity

Technology provision General contracting Project implementation according to FIDIC contracts

Design

Creativity - Precision - Innovation

Complete construction, technological, mechanical, electrical and control engineering design.

- Licensing
- Production plans
- Construction plans

Production

Efficiency - Quality - Customised

Manufacturing of customised treatment technologies and containerised mobile water treatment systems.

- Stainless steel workshop with electropolishing
- Equipment assembly plant
- Plastic tank manufacturing and cutting workshop
- Electrical assembly workshop

Project implementation and commissioning

Flexibility - Professionalism - Security

Delivery, installation, testing and optimization of the various equipment making up the water treatment technology Operator training



Operation and maintenance

Speed - Experience - Reliability

Low operating cost, long lifespan Maintenance and service, 24-hour availability



MONITORING

Remote surveillance and monitoring system

Performance – Energy efficiency – Information

HIS /Hidrofilt Information System Online monitoring and data analysis Remote monitoring system Adaptive maintenance controll



Spare parts and chemical supply

Speed - Cost efficiency - High Standards

Warehouse supply of:

- Membranes
- Filters
- Spare parts
- Chemicals



GREEN R+D

Research and development

Sustainability - Environment - Innovation

Accredited laboratory measurements, quick water analyses Membrane, resin and filter tests Technology and product development Technology testing with pilot equipment Consulting and feasibility studies Vocational training



Quality Management

Integrated - Versatile - Committed to

ISO 9001, ISO 14001, ISO 45001 VCA/SCC** Workplace and occupational safety Accredited laboratory according to ISO/IEC 17025 Plastic and metal welding performed according to the ISO 3834 EN 10204 3.1. system

Environmentally friendly water treatment technologies







Oil, gas and chemical industry







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Production of fine-desalinated technological water

Water purification and water preparation for power systems /boilers, turbines, cooling systems/

Desalination technologies for hydrogen production

Mobile water treatment systems for EOR application

Purification and filtration of acids, bases, viscous solutions

Implementation of a treatment system for the production of desalinated process water from river water for the chemical industry.

Borsodchem Zrt. / Hungary 900 m³/h UF 750 m³/h RO 337 m3/h CEDI



Complete implementation of a treatment system for the production of fine-desalinated process water from the Danube River for the oil industry.

Slovnaft A.S. CHUV II-III. / Slovakia 750 m³/h UF 600 m³/h RO 840 m³/h MX



Complete implementation of a treatment system for the production of fine-desalinated process water for the

production of polysterene. Dunastyr Zrt. / Hungary 40 m³/h SAC/SBA



Complete implementation of a treatment system for the production of fine-desalinated process water from the Danube river for oil refinery and hydrogen production purposes.

MOL Plc. Százhalombatta / Hungary 200 m³/h UF 520 m³/h RO 320 m³/h MC 200 m³/h MX





Production of fine desalinated water from surface water using containerised technology for a chemical plant. MOL Plc. / Polyol Plant / Hungary 336 m³/h UF 282 + 234 m³/h RO 217 m³/h CEDI

Complete implementation of a water treatment system for the production of fine-desalinated water from surface water for the production of raw materials for rubber.

JSR MOL Synthetic Rubber Zrt. / Hungary 258 m³/h DAF 162 m³/h UF 66 + 48 m³/h RO 40 m³/h MC

10 m³/h



Complete implementation of a water treatment system for the production of partially desalinated process water from pretreated surface water, using EDR technology. PCC Rokita S.A. / Poland 127 m³/h EDR



Dimethylformamide filtration with membrane technology for the production of carbon fibre. Zoltek Zrt. / Mexico 10 m³/h Zoltek Zrt. Toray Group / Hungary



In 1968 TORAY began our membrane development program for watertreatment, and 50 years later, the name endures as a leading supplier of membrane technologies continuing to add new solutions for asustainable future. This constant pursuit of technological innovation has enabled us to strengthen our core assets: R&D know-how, strong customer and supplier bases and the dedicated people that stand behind our products and services. To experience lasting growth, partner with acompanyy that has, for decades, adapted to the changing needs of the market and looks to the horizon for the next big challenge.

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Energy sector





Demineralised water production for power plants: Demi water

- Specific electrical conductivity: < 0,2 μS/cm
- TOC: < 200 μg/l

Water treatment for heating systems: turbines, boilers, cooling and air conditioning systems

Geothermal energy use with desalination

Treatment of high-temperature wastewaters and condensates

Installation of a system for the production of fine-desalinated water from the Danube river for nuclear power plant use. MVM Paks Nuclear Power Plant Ltd. / Hungary 400 m³/h UF aton 360 m³/h RO 250 m³/h CEDI



Complete implementation of a water purification plant, treating surface water to produce technological water for power plant use. Tauron Wytwarzanie S.A. / Poland 2 x 80 m³/h IBS / RGF / UF

AURON





Complete implementation of a water treatment plant for the production of fine desalinated water from pre-treated surface water for power plant use. PGE Górnictwo I Energetyka S.A. / Poland 3 x 30 m³/h DPRO / UV / MX



Design and manufacturing of a water treatment system for the production of process water from pre-treated seawater. Alpha Utilities LLC / United Arab Emirates 25 m³/h RO / CEDI



Complete implementation of fine-desalinated technological water production system. Kazatomprom / Kazakhstan 16 m³/h RO / CEDI





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Electronic and pharmaceutical industry





Complete implementation of high-quality, high-purity water production systems

For the pharmaceutical industry based on USP and EP standards:

- Purified water
- Highly purified water
- Water for injection

For the electronic industry based on SEMI PV3 and ASTM D5127 standards:

- Ultrapure water
- High-purity water

Water treatment for humidifier systems

Production of demi water and highly-purified water from drinking water and purified wastewater for the microelectronic industry. Complete implementation of the water treatment system.

Ecosolifer Ltd. / Hungary 12 m³/h demi water 12 m³/h high-purity water



Complete implementation of a treatment system for the production of ultrapure water from well water for the electronic industry. Samsung Engineering Hungary Ltd. / Hungary 60 m³/h MMF+RO+CEDI









Design, manufacturing and on-site installation of a water treatment system for the production of pharmacopeial, PW and HPW grade purified water from potable water. FAT, SAT IQ/OQ testing and commissioning. Richter Gedeon Plc. / Hungary, Romania 2 x 30 m³/h RO+CEDI Budapest

3 x 6 m³/h DPO+CEDI Dorog

2 x 5 m³/h DPRO+CEDI Târgu Mureș







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Purifying and reusing industrial wastewater



Concentrate treatment

Leachate treatment

Treatment of wastewaters containing high concentration of heavy metals, oil, paint, ammonia and organic solvents

Industrial wastewater treatment and recycling /ZLD and MLD technologies/

Wastewater treatment for glass production and surface coating plants Soil remediation



Treatment of contaminated soil, caused by the operation of a tannery with mobile, containerised soil remediation technology. Application of complex technological and media filtration, membrane separation and ion-exchange technology. Hungary/Simontornya 400 m³/day

PURE WATER GROUP

Engineering purity

ADVANCED AND SUSTAINABLE WATER PURIFICATION EQUIPMENT

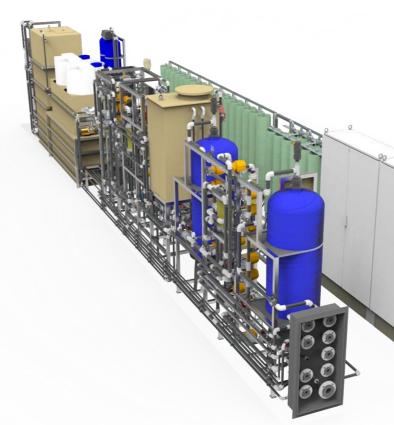
For water system integrators worldwide

PURE WATER GROUP CONGRATULATES **ROFILT ON ITS** 30th ANNIVERSARY!

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Design, production and installation of a containerised, mobile wastewater purification plant for the treatment of wastewaters from galvanizing processes.

Sil Stich Industrie-Lackierung Gmbh. / Germany



Treatment of landfill leachate with a mobile, containerised treatment plant. Complex water treatment process with membrane separation. Romania / Hungary 5 m³/day, 10 m³/day, 15 m³/day













LTD low temperature distillation Doosan Hungary / Hungary

Agriculture and food industry







Treatment of irrigation water, removal of sodium, desalination

Water treatment for aquaculture-based gardens and farms

Treatment of drinking water for animals

Water treatment for the production of pet food

Irrigation and feed-water production for greenhouse tomato cultivation. Greencoop Group / Slovakia 30 m³/h



Majsai Kert

Irrigation and feed-water production for greenhouse tomato cultivation. Majsai Garden Ltd. / Hungary

40 m³/h

Irrigation and feed-water production for greenhouse tomato cultivation. Farma Ráječek / Czech Republic 16 m³/h



Production of desalinated water and boiler feed water treatment in pet food production.

Piko-Pet Food Ltd. / Hungary 20 m³/h

Water treatment system for iron, manganese and ammonia removal from well water for aroma production.

Givaudan Hungary Ltd. / Hungary 58 m³/h



NKO PF

Treatment system for the production of desalinated water from surface water for starch manufacturing. Viresol Ltd / Hungary viresol 100 m³/h



Grundfos pumps for water treatment technology



Process and product water treatment, waste water treatment for the food industry: • Dairy industry

- Mineral water and soft drink production
- Spirits and brewing industry
- Vegetable oil and aroma production
- Slaughterhouses and meat processing plants

Steam production for food industry

Food technology solutions:

- · Juice thickening using membrane technology
- Removing color from sugar syrup

Cleaning and recycling of technological wastewater

Product and technological water for the pasteurization process during the production of energy drinks. Hell Energy Hungary Ltd. / Hungary 365 m³/h



Product and technological water for the pasteurization process during beer production.

Dreher Breweries Plc. / Hungary 100 m³/h



Production of technological water with ultrafiltration for the food canning industry. Globus Cannery Plc. / Hungary 150 m³/h

Treatment of well water and implementation of technological desalination systems for animal farms, slaughterhouses and meat processing plants. Bonafarm Group / Hungary 182 m³/h



Solutions for water and wastewater engineering

Optimal water quality requires reliable technology. Don't accept any compromises when it comes to precise as well as safe measurement and control technology that is especially customized for hygienically sensitive areas. Count on 65 years of guality, a high level of commitment, and outstanding industry expertise.



HIDR **SFILT**















German Water Partnership

Drinking water treatment





Reduction and removal of suspended solids, iron, manganese, ammonia, arsenic, boron, nitrite, nitrate and methane

Seawater and brackish water desalination

Swimming pool and thermal water treatment with ultrafiltration technology

During the past decades, Hidrofilt Group has constructed hundreds of water treatment plants that provide healthy drinking water for cities, towns and villages.

Removal of suspended solids from well water and application of ultrafiltration system for safety reasons at Miskolc Waterworks. Mivíz Ltd. / Hungary 33 000 m³/day UF

Removal of suspended solids, iron, manganese and ammonia from well water using ultrafiltration technology at Zalaegerszeg Waterworks. Zalavíz Plc. / Hungary 4 500 m³/day UF



Rehabilitation of Labugama and Kalatuwawa Water Treatment Plants: removal of suspended solids, iron, manganese, ammonia and color from the reservoir water. Complete implementation of the technology, including the provision of continuous plant operation. Water Board Sri Lanka / Sri Lanka 90 000 + 60 000 m³/day

Removal of suspended solids, iron, manganese and ammonia from well water in several communities. DRV Plc. / Hungary 30 118 + 4 080 + 270 m³/day AMF+CF

















HidroWell[©] mobile water treatment plants



Compact	Small footprint, optimal space utilisation
Mobile	Simple transportation, as the containers are standardised for marine transport
Modular	Capacity can be expanded by combining several containers
Fast	Quick availability, applicable in crisis and disaster situations
Intelligent	Fully instrumented, automated, integrated PLC, remote monitoring system

Economical	Directly from the supplier
Reliable	Long product life ensured by premium quality components.
Efficient	Low energy consumption and operating costs
Innovative	Alternative energy sources /generator, solar panels/
Versatile	Ability to extend with bottled or packaged water production system

HidroWell-A1 mobile drinking water treatment plants for surface water

Widely applicable mobile drinking water treatment units with ultrafiltration technology. EU / Peru / Cuba / Ecuador 200 m³/day

HidroWell-A2 mobile drinking water treatment plants for well water

Fully automated systems for reduction of iron, manganese, arsenic and boron content. Over 180 locations in the EU 200 m³/day

HydroWell-A3 mobile seawater desalination plants

Systems using ultrafiltration /UF/ and reversed osmosis /SWRO/ including an energy recovery system and remote monitoring. Tunisia / EU 50 m³/day

















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Intenational Group at Your services

Our partners, who have chosen Hidrofilt Group to maintain and operate their water treatment system during the past decades:

SANOFI



Unive





ACOBI CARBONS

SUSTAINABLE







(EGIS Coca:Cola



Jacobi Services, mobile filter units for plug and play connection across a range of different applications accompanied by our end to end media handling services.

Jacobi Carbons, global manufacture and supply of premium activated carbons for a wide range of industry applications.

Premium cleaning solutions

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aliaxis

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ndustrial systems business: PVC, PVC-C, PP-H, ABS, semi-finished products from PVDF materials, pipes, fittings, instruments and automatic fittings as well as flow measuring tools for water treatment, chemical and swimming pool building industries.

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OUR MEMBERSHIPS:









