



NEWWATER
GROUP

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POOLS, WELLNESS

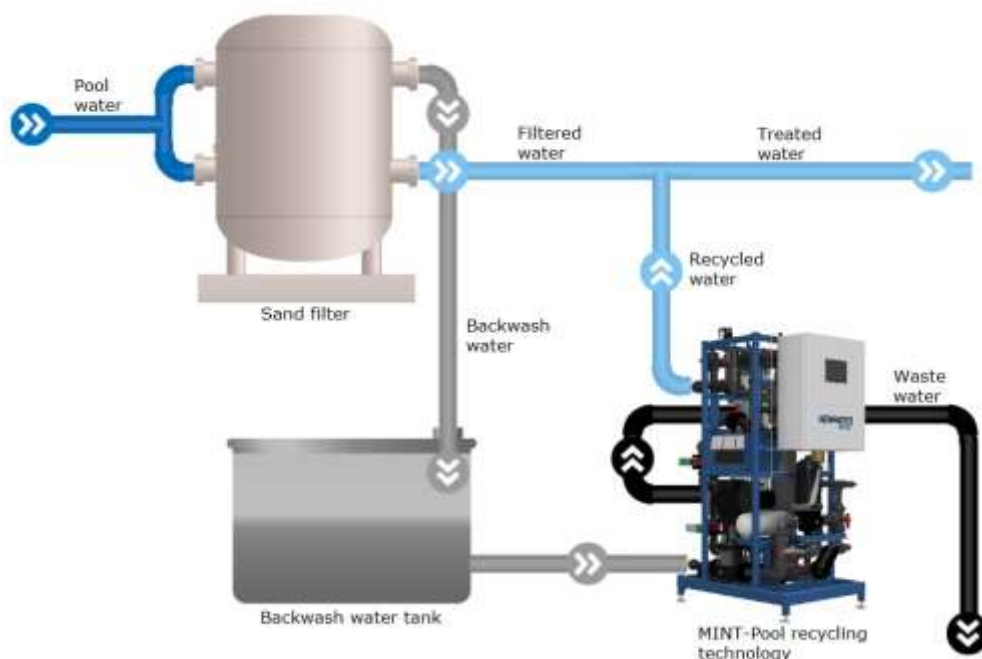
BACKWASH WATER
RECYCLING

Member of

ALL
FOR
WATER

IN-EKO
TEAM

Save water and energy



**Save up to
85% of wastewater
and
65% of energy
in heating costs!**

POOL WATER RECYCLING

**Great environmental and economical benefits
– excellent return rate of investment!**

Public pools, water amusement parks, and wellness centres discharge great amount of wastewater during operating. The temperature of this wastewater is often higher than 30°C, meaning every cubic metre counts.

MINT-POOL recycling units allow to return up to 85% of wastewater into circulation, saving up to 65% in energy costs used to heat fresh water, in the process – meaning there are clear environmental as well as economical benefits to recycling pool water.

Every recycled cubic metre of water saves...

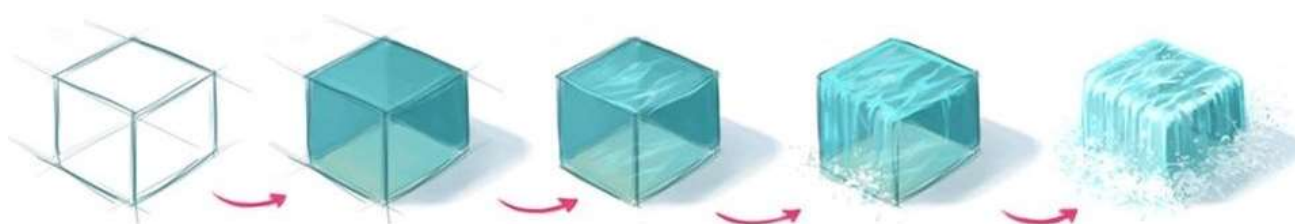
...**1 m³** of water being withdrawn from nearby natural sources.

...energy, chemical and other resource consumption used to treat **1 m³** of fresh water.

...energy necessary to deliver **1 m³** of water to the end consumer.

...**1 m³** of wastewater being drained into the sewerage.

...energy, chemicals, and other resources used to clean **1 m³** of wastewater.



MINT-POOL technology recycles wastewater from the operation of swimming pools and recycles it for further use. Wastewater produced by the cleaning of conventional sand filters or drained from the pool's buffer reservoir is collected in the accumulation tank, specifically designed and of adequate volume to retain the maximum amount of wastewater produced. Subsequently, the water is pumped through the technology, recycled and is then ready to be re-introduced back into the swimming pool water circuit as inlet water.



The effluent from the recycling technology is safe and poses **no health risks**, corresponds in quality to standard inlet water and complies with all legislative norms. The hygienic safety of the product is guaranteed thanks to the multi-barrier system, consisting of three separate disinfection stages. Firstly, the water is filtered through an ultrafiltration membrane, which retains viruses and bacteria. Next, the product is treated with UV light and finally, the water is disinfected chemically using chlorine. This robust **three-barrier sanitation system ensures the produced water is clean, harmless, and sanitized** even in the event of the malfunction of one of the stages.



Try it out for yourself! We offer pilot testing at your location. During this stage, the following can be confirmed: guarantee of product quality for the supervising body; optimal placement of the recycling unit; ideal accumulation tank volume; ease of operation and manipulation for technical staff. An area of approx. 5 m² as well as 3x400 V electrical connection is required for the installation of the recycling unit. The installation process requires 1-2 days.

MINT-POOL – Water recycling of the 21st century



MINT-POOL
technology receives
award from
CzechInno

Nositel
Čestného uznání odborné poroty projektu
VIZIONÁŘI
2022

MINT-POOL is designed by a specialist team at New Water Group together with other innovative partners based in the Czech Republic, delivering membrane solution to various international markets for over 30 years.

MINT-POOL is equipped to treat wastewater from multiple sources: sand filter backwashing, accumulation tank overflow, etc.

MINT-POOL is developed in line with the **MINT – Membrane INtelligent Technology** concept. Autonomous, self-learning tools are utilized to maximize recovery while maintaining excellent water quality. This allows for stable, long-term operation with low operating costs and **minimal need for supervision**.

MINT-POOL integrates the conventional ultrafiltration process with advanced pre-treatment, post-treatment, and disinfection steps. This creates a multi-barrier system that produces safe, high-quality water **without the use of chemical dosing**.

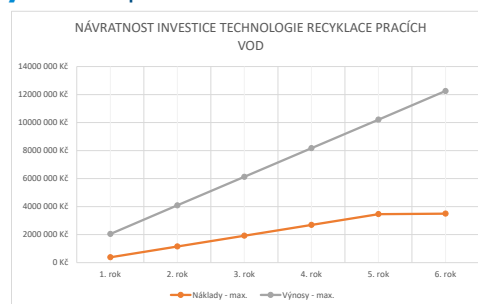
MINT-POOL removes suspended solids, turbidity, organic compounds, colloids, bacteria, viruses, free chlorine, chlorinated hydrocarbons, chloramines and nitrates.

Water treated by MINT-POOL technology can be used directly without additional chemical dosing and is not of corrosive nature (unlike demineralised water produced by reverse osmosis). Additionally, the water is free of any secondary by-products which are generally introduced by advanced oxidation processes (i.e. ozone)

MINT-POOL technology achieves high orders of recovery (**more than 85 %**) with low energy consumption (up to 0,80 kW/m³). Meanwhile, heat from the water is not lost during the process (temperature drop is 1-3 °C) which saves energy used for heating. Total operating costs range from **0.10 to 0.30 €/ m³ of produced water**, depending on regional energy, water, and sewage rates.

MINT-POOL technology can be installed in areas with limited space. With a floor plan of under 5 m², installation is possible in existing swimming pool control rooms or other spatially limited premises.

Returns of water recycling technology – pool water recycling technology saves on water and sewer rates as well as energy necessary to heat cold inlet water. Return calculations precede every single project and ensure the economic acceptability. Other non-economic factors to be kept in mind include a lesser strain on local wastewater treatment plants and additional environmental considerations of producing less wastewater. By utilizing **IQ-MINT**, a uniquely intelligent operating system, the **MINT-POOL** recycling technology is able to achieve the highest percentage of recycled water (recovery) on the market. This in turn means that a **return of investment of below 3 years** is possible in most cases.



MINT-POOL recycling units are fully automated. Sensors and probes allow the advanced operating system to regulate the technology and guarantee safety of operation. Use the touchscreen to enter or adjust operating parameters or connect remotely via web interface (GSM/wi-fi connection required). Remote access also allows New Water Group to provide technical assistance at any time. See our other software add-ons:

IQ-MINT is based on artificial intelligence with self-learning technology and allows the operating system to adjust operating parameters of the technology based on the current feed flow, maximizing recovery, **minimizing consumption of chemicals, and ensuring safety of operation.**



MINT-eBook is a software log and service manual combined in one useful tool. This add-on informs and notifies technical staff, assists with day-to-day maintenance, and oversees the service life of every component. As a result, this ensures longevity of operation and infrequent servicing.



Request a showing today. Save OPEX over 40.000 EUR/year.
THE FUTURE IS NEW WATER!