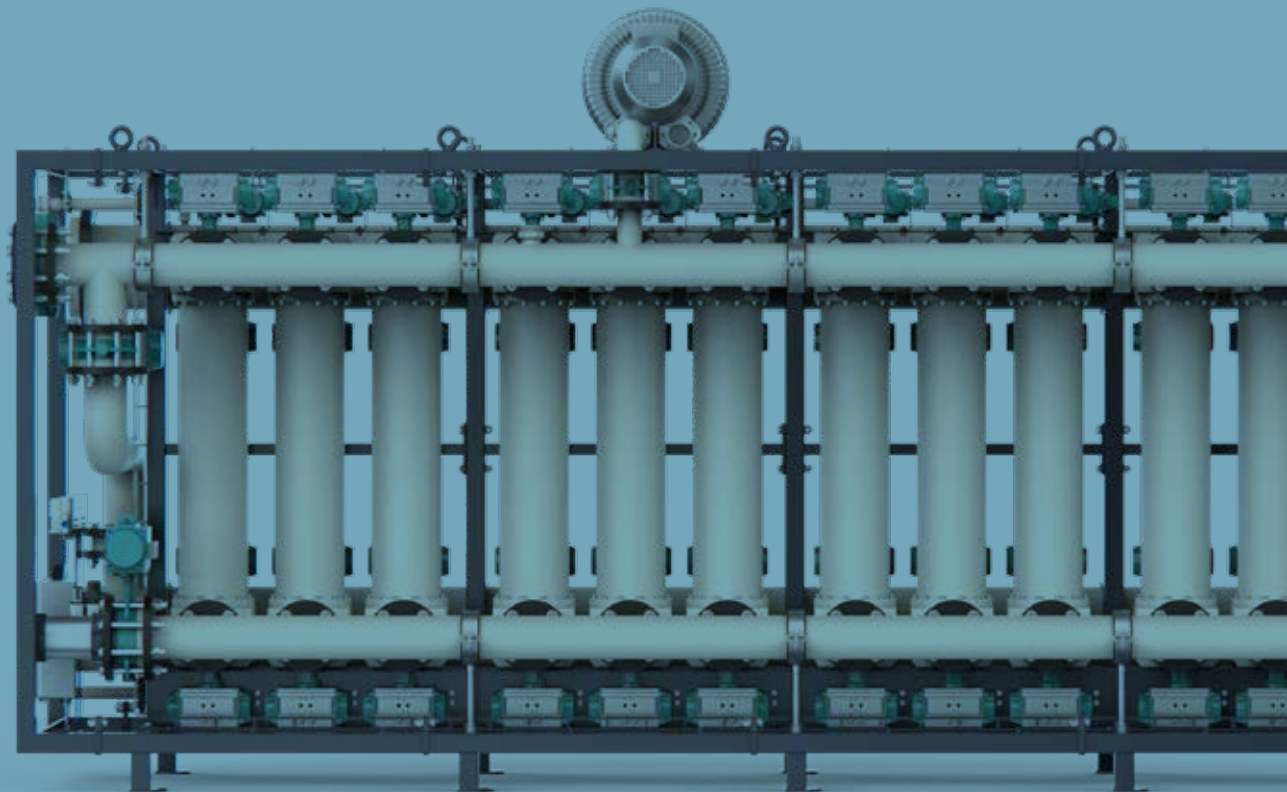


LIQTECH



**Commercial Pool
Filtration System**

LIQTECH

IMPROVING OUR FUTURE

The world is running out of clean water resources and it is essential that we treat the resources we have with respect and care. LiqTech has developed a unique ceramic membrane capable of removing contaminants, pathogens and Cryptosporidium etc. from water, thus providing robust filtration solutions for essential applications.



High Capacity, Small Footprint Pool Filtration Solution

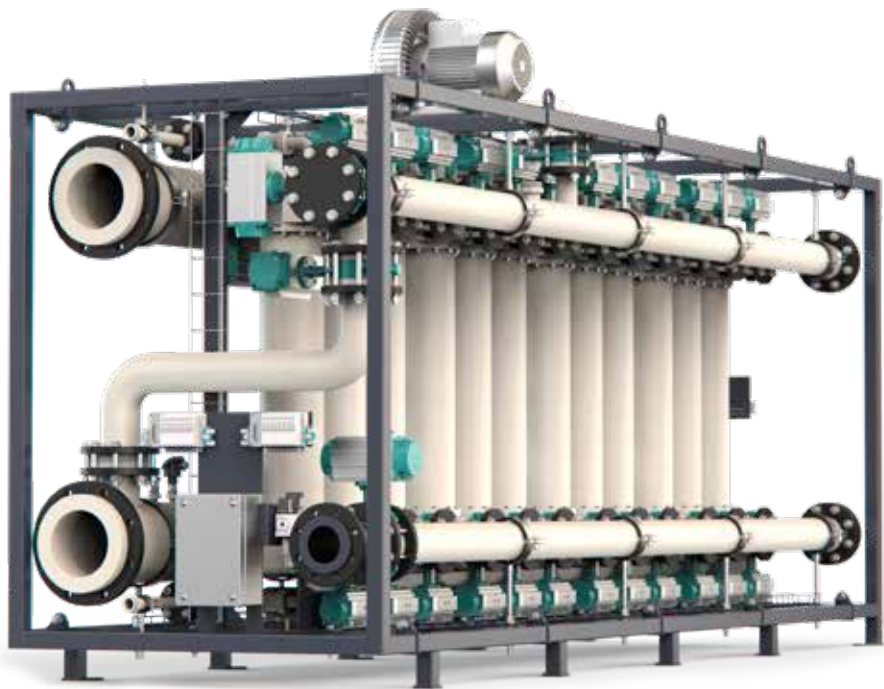
LiqTech offers best-in-class pool filtration solutions for commercial pools worldwide. Based on more than 20+ years of experience in the filtration industry, we offer up to 65% smaller footprint and cost-effective high-quality water.

Conventional technologies use a high amount of chemicals for disinfection, where our superior pool filtration system has a high focus on reducing chemical consumption. With a LiqTech water treatment system, we guarantee safe, clean, and clear water.

LiqTech offers innovative stand-alone or complete turnkey pool filtration systems based on high-quality silicon carbide (SiC) ceramic filters providing high efficiency and reduced life cycle costs. You will experience savings on backwash, electricity, chemicals, and maintenance.

Our turnkey solutions include installations of the entire pool water treatment system including chemical dosing, UV, monitoring and control systems, and recirculation pumps.

- + 20 Years of Operation
- + Smallest Footprint on The Market
- + ≥99% Removal of Microorganism e.g. Cryptosporidium
- + Improved Water Quality with Low OPEX
- + Easy To Service - Low Maintenance
- + Uses Less Water & Chemicals
- + High Efficiency & Low Life Cycle Costs



Dimension: L: 3040 mm W: 1165 mm H: 2010 mm
L: 120 inches W: 46 inches H: 80 inches
Capacity: 270 m³/h / 1190 gpm

Save water and space with LiqTech
high capacity pool filtration solution.



Smallest Footprint on The Market

- ⊕ Compact solution
- ⊕ Ambidextrous design
- ⊕ Expandable design
- ⊕ Fits through a standard doorway
- ⊕ Perfect for new-build & retrofit
- ⊕ Significant savings

Upgraded with the latest software and valves for increased reliability, LiqTech offers a compact pool filtration solution with the smallest footprint on the market – up to 65% reduction in footprint.

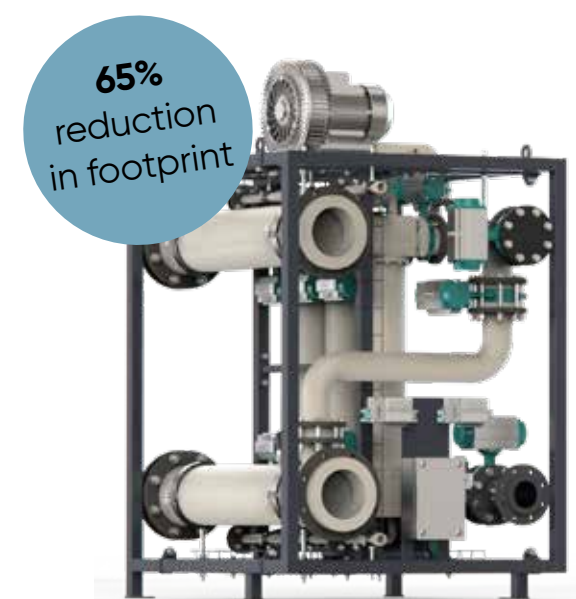
The “Ambidextrous” design, allowing all process connections to be installed from either side and expandable design, where additional housings can be added after installation, makes our solution highly flexible.

Our greatly reduced skid footprint with up to 75 m³/h filtration capacity per m² fits through a standard doorway and we can do it even smaller if required.

All this makes it perfect for both new-build and retrofit installation with significant savings on space and onsite installation costs.

LiqTech pool solution
1.7 m² / 18 ft²

Average sand filter
5.2 m² / 56 ft²



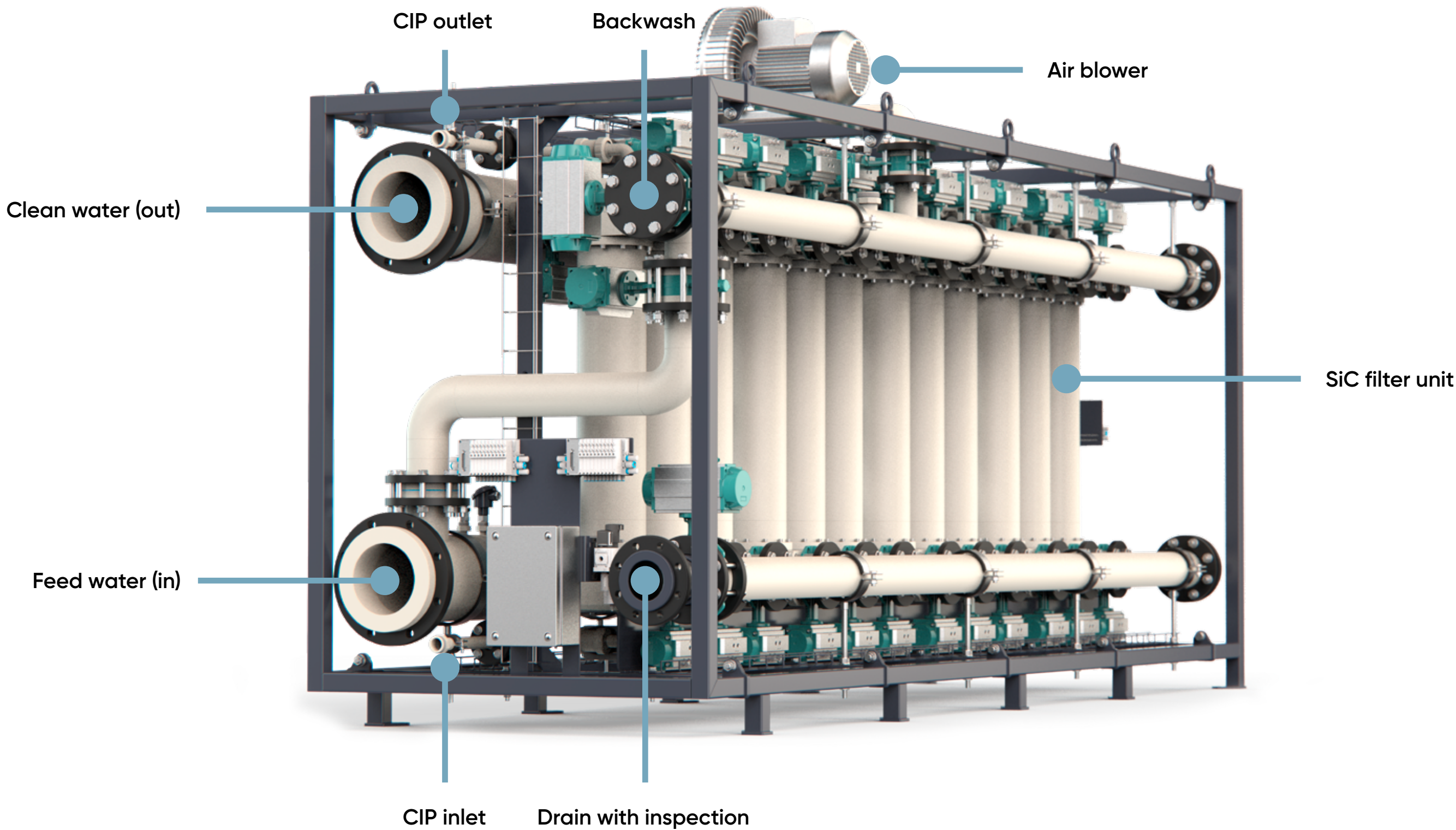
65%
reduction
in footprint



With a LiqTech pool solution, you will experience the smallest footprint on the market with the highest water quality.

Our filter is 22% smaller than regenerative and a full 65% smaller than a sand filter based on equal pool volume and flow.

System Overview





Benefits of SiC Membrane Technology

For more than two decades we have manufactured products of recrystallized silicon carbide (SiC). Our SiC membrane technology and systems will provide unique advantages for your business compared to other conventional pool filtration technologies.

SiC is chemically inert, abrasion resistance, and has a high affinity to water (small footprint) and extreme hardness, which makes it a very durable product and perfect for pool and spa filtration.

The membrane has a dead-end design, which yields a more cost-efficient filtration performance compared to other filtration principles with no risk of contaminated water passing through the filter.

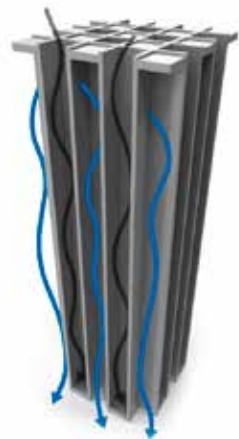
With a very high filtration area of 7 m² for a filtration element of Ø146 x 800 and an easy and fast backwash consuming only 75 liters, you will get the unique advantages of SiC membranes.

The pore size of the membrane walls allows water to pass through, but retaining contaminants.

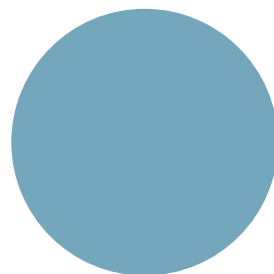
Dirty water in, clean water out. It is as simple as that.

Using our ceramic filters decreases the need for chemicals such as chlorine and acid which in turn provides a better bather experience and a better working environment. All in all, a much more environmentally friendly solution.

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Average sand filter



Media filter



SiC membrane



Unmatched Flux

SiC membranes have the highest flux of any membrane



Small Footprint

Smallest footprint for complete systems in the market



Excellent Thermal Properties

Our SiC membranes can withstand temperatures of 800°C



Unmatched Performance

High performance, low total cost of ownership



Chemically Inert

Our systems can withstand the full pH spectrum of 0-14



Efficient Cleaning

Any chemical can be used for cleaning, resulting in very low membrane fouling



Robustness

SiC is the second hardest material in the world next to diamonds



Long-Term Performance - Less Maintenance

Fully automated system with less down time and stable operation

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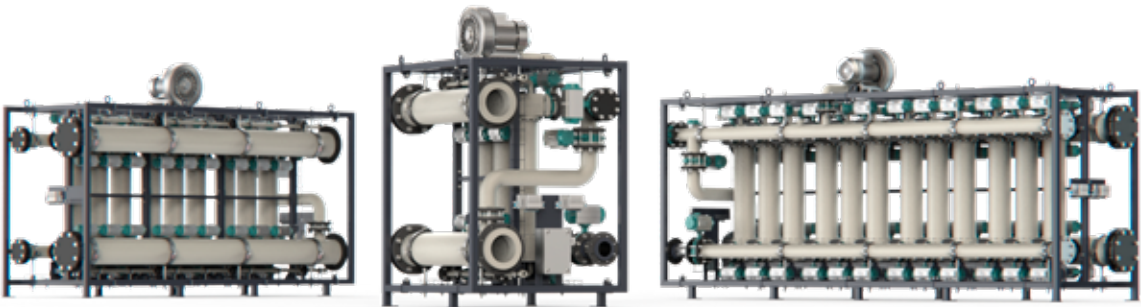
Our revolutionary SiC ceramic membranes are based on 20 years of experience.

Smallest Footprint on The Market - Easy Expandable

Superior Pool Filtration - Way Ahead

TECHNICAL DATA

Housing filtration capacity	20 - 30 m ³ /h / 90 - 130 gpm
Single skid capacity	1 - 12 housings



CONFIGURATIONS

Elements	Length	Width	Height with blower	Height without blower	Weight
1 - 3 housings	1380 mm 55 in.	1165 mm 46 in.	2010 mm 80 in.	1720 mm 68 in.	480 kg 1058 lb
4 - 6 housings	2210 mm 87 in.	1165 mm 46 in.	2010 mm 80 in.	1720 mm 68 in.	700 kg 1543 lb
7 - 9 housings	3040 mm 120 in.	1165 mm 46 in.	2010 mm 80 in.	1720 mm 68 in.	920 kg 2028 lb
10 - 12 housings	3870 mm 153 in.	1165 mm 46 in.	2010 mm 80 in.	1720 mm 68 in.	1140 kg 2513 lb

	CERAMIC	REGENERATIVE	SAND FILTER	CARTRIDGE
Automated system	+		+	
Uses less water for back-wash	+	+		+
Uses less chemicals	+			+
Minimizes crypto	+	+		
Take up less space	+			+
Dead-end filtration	+			
Uses no media	+			
Removes organic and inor-ganic material	+			
Filters down to 3 micron	+	+		+
24/7 monitoring	+		+	
Fits through a standard doorway	+			+
Minimal installation labor	+			
Pre-installed electrical and control cabinet	+			
Monitors temperature	+			
Monitors flow	+			
Monitors pressure and pres-sure drop	+		+	+



Benefits of the LiqTech System

- ⊕ Up to 65% reduction in footprint - smallest on the market
- ⊕ 70% water reduction in a backwash
- ⊕ 30% less chemical usage
- ⊕ At least 40% less residual turbidity
- ⊕ Up to 40% reduction in combined chlorine
- ⊕ Up to 40% fewer trihalomethanes (THM)
- ⊕ Low maintenance
- ⊕ Consistent water quality
- ⊕ Automatic chemical cleaning
- ⊕ Modular system design for flexible installation and capacity upgrades
- ⊕ No media costs - Low OPEX
- ⊕ Onsite and remote control of the system

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With more than 20+ years of experience in the filtration industry and 300+ water treatment systems installed worldwide, we are ready to provide you with a sustainable pool filtration solution.

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Commercial Pool Filtration Cases

For more than two decades, LiqTech has installed commercial pool filtration systems in a large number of centers.

Read more: www.liqtech.com

Water & Wellness Center

The main objective was to find a solution with a very compact system, yet still with a focus on water, chemicals- and energy savings.

The solution was a microfiltration water treatment system from LiqTech. It was chosen based on its ability to provide the best water quality and total cost of ownership.

The LiqTech system also saved vast amounts of water used for backwashing the system, while running flawlessly and reliably.

Therapy Pool

The pool was originally equipped with a sand filter system; however, the water quality was not quite satisfying.

A high-tech water treatment system from LiqTech was chosen based on its ability to provide the best water quality and smallest footprint for pool systems.

Today the microfiltration systems run smoothly, providing superior water quality, giving remarkable savings on back-wash, electricity, chemicals, and maintenance.

Water Park

One of the crucial points at Water Park was the compact size of the water treatment system, as additional sand filters would need a basement extension.

The Solution was a high-tech LiqTech water treatment system, featuring microfiltration membranes that take up 1/4 of the footprint compared to a sand filter solution.

The choice was also based on its ability to provide the best and most reliable water filtration technique, together with a clean and consistent water quality.

"LiqTech has delivered and installed an exceptional water treatment system that performs as promised. With the achieved savings the payback time is only three years."

Jan S. Johansen, Manager, Marselisborg Center

Worldwide References

With over 50 worldwide references, LiqTech is the chosen partner when it comes to safe, clean, and clear water for commercial pools. Please have a look at a selection of our references.

Country	Description	Number of housings
Denmark	Swimming pool	10
Denmark	Therapy pool	4
Denmark	Spa, wellness, and swimming pools	37
Denmark	Spa, wellness, and swimming pools	54
Denmark	25 m swimming pool, children's pool, and spa	15
Denmark	25 m swimming pool and children's pool	10
Norway	Spa, wellness, and swimming pools	44
Norway	Spa, wellness, and swimming pools	9
Norway	Pool	6
UK	17 m traditional pool	2
UK	25 m traditional pool	6
UK	25 m traditional pool	6
Spain	Swimming pool, 25 m learning pool, and spa	8
Spain	Swimming pool, 25 m learning pool, and spa	9
Spain	Swimming pool, 25 m learning pool, and spa	12
Spain	Swimming pool, 25 m learning pool, and spa	10
Spain	Learning pool	2
Spain	25 m swimming pool	4
Spain	25 m swimming pool, learning pool, and spa	12
Holland	Spa	2
Holland	Competition pool	12
France	Swimming and paddling pool	11
France	Aquatic centre	35
France	Spa and aquagym pool	5
France	Olympic, leisure, and paddling pool	10
Portugal	25 m learning pool, swimming pool and spa	9
Australia	25 m swimming pool	8
Australia	Competition pool	5



Better water quality, 65% reduced footprint, and 70% less water spend with a LiqTech industrial pool filter.



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