

# SMARTCLEAN PRECOAT MICRON FILTRATION SYSTEM

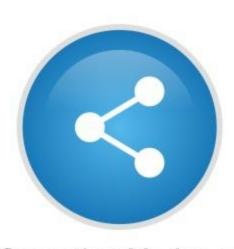
Intelligent Micron Filtration, Green Efficiency in One Step.



1µm Filtration Precision



2 Filter Media Options



3 Operating Modes with Smart Switching



4-Level Ultra-Quiet Pump Operation



Reduce chemical usage by 30%



Save 40% of the required space



Reduce maintenance requirements by 20%



Save water up to 90%





Ensure continuously clear and stable water quality

## 1

## SmartClean Precoat Micron Filtration System · An All-in-One Premium Water Treatment Solution

The SmartClean Precoat Micron Filtration System integrates high-precision filtration, intelligent automation, and ecoefficient technology into a single unit. Utilizing diatomaceous earth (DE) precoat membrane filtration, it delivers a filtration accuracy of 1–3µm, capturing over 99% of suspended solids, parasites (e.g., Cryptosporidium), and fine particles. The effluent turbidity remains stable at <0.1 NTU, significantly outperforming traditional sand filters, resulting in safer cleaner water.



Equipped with a PLC smart control system, the unit automatically switches between precoat, filtration and regeneration modes, ensuring user-friendly operation and efficient performance.



Compatible with both diatomaceous earth and perlite, the system is highly adaptable for various water conditions. It is ideal for swimming pools, water parks, hot springs and upscale hospitality venues that demand stringent water quality.



## Product Features



High-Precision Filtration for Ultra-Clean Water Uses DE precoat technology to achieve 1–3µm filtration with over 99% particle removal. Effluent

turbidity <0.1 NTU, vastly superior to sand filters.



Intelligent Control System for Easy Operation
Integrated PLC system allows one-touch
switching between precoat, filtration, and
regeneration modes. Fully automated, no
manual monitoring required.



### Regenerable Filter Media for Eco-Friendly Operation

Supports reuse of DE and perlite, reducing replacement frequency and backwash water. Saves costs and promotes sustainability.



## Highly Integrated Design for Space Efficiency

Combines pump, dosing tank, filter, and control system into a compact unit. Takes up only half the space of traditional systems for faster installation.



#### Smart Load Adjustment for Enhanced Durability

Automatically adjusts operation based on water quality and flow, optimizing energy use and extending filter media life.



# Ultra-Quiet Performance for Comfortable Environments

Features a 4-pole low-noise pump and optimized flow design for noise reduction – ideal for high-end hotels and clubs.



#### Water Hammer Protection for System Safety

The soft starting/stopping technology prevents water hammer impact, protecting equipment and piping, and enhancing system stability and longevity.



#### Multi-Media Compatibility for Greater Flexibility

Works with a variety of filter media including DE and perlite, allowing flexible adaptation to different pool and spa water treatment needs.

## Application Scenarios







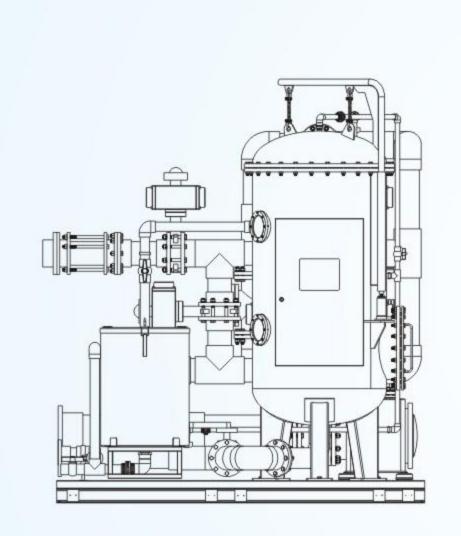
Perfect for high-end hotels, swimming pools, water parks, hot springs, spas, and any professional venue requiring superior water quality and stable operation.

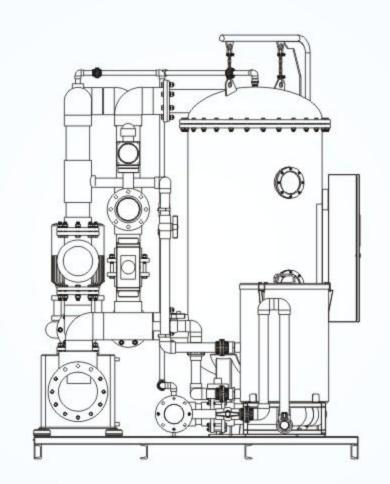


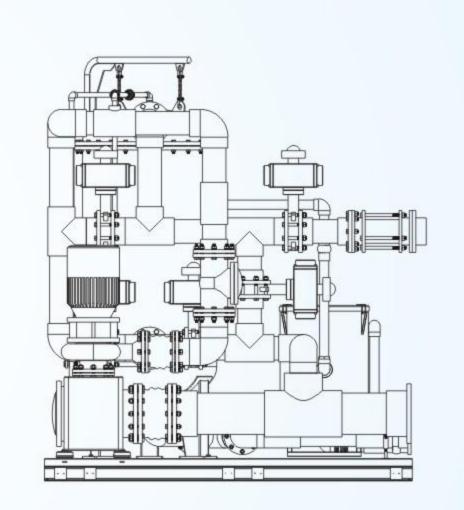
## Comparison: Traditional Sand Filtration vs. SmartClean Precoat Micron Filtration System\_

Comparison Item	Traditional Sand Filtration	SmartClean Precoat Micron Filtration System				
Water Quality	Less than <1 NTU	Stable and clear, turbidity <0.1 NTU				
Filter Media Options	Silica sand, glass media	Compatible with diatomaceous earth, perlite, and other fine media				
Backwash Frequency	1–2 times per week, lasting 6–7 minutes	Once every 2 weeks, lasting 1–2 minutes				
Backwash Intensity	50 m/h	5 m/h				
Water Wastage	High water consumption during backwash	Reduces backwash water by 90%				
Media Regeneration	Not supported	Reusable filter media supported				
Maintenance Mode	Primarily manual operation	One-button operation, fully automatic				
Footprint	Large footprint	Integrated design, reduces space usage by 40%				

## Product plan diagram \_







## Technical Specifications

Model	Filter Diameter	Filter Area (m²)	Flow Rate (m³/h)	Pump Power (kW)	Operating Power (kW)				1	Product Dimensions	
					Inverter Energy Saving Mode		Dackwach	Inlet Size	Outlet Size	Drain Size	(mm)
					Day	Night	Mode				100000
WL-HPF80	Ф650	15.3	76.5	7.5	5.5	3.8	7.5	DN200	DN125	DN80	2000×1800×2530
WL-HPF120	Ф800	23.65	118.25	11.0	8.0	5.5	11.0	DN250	DN150	DN100	2100×2000×2650
WL-HPF160	Ф900	30.47	152.35	15.0	10.9	7.5	15.0	DN250	DN150	DN125	2500×2200×2590
WL-HPF200	Ф1000	38.06	190.3	18.5	13.5	9.3	18.5	DN300	DN200	DN150	2500×2300×2720
WL-HPF280	Ф1200	54.75	273.75	22.0	16.0	11.0	22.0	DN300	DN200	DN150	2800×2700×2800
WL-HPF380	Ф1400	75.24	376.2	37.0	27.0	18.5	37.0	DN350	DN250	DN200	3500×3200×2935