

AZUD Helix AUTOMATIC

Water saving leader





Reliable
Efficient removal of inorganic and organic suspended particles bigger than **5-400 µm**, with a **non-stop clean water supply** based on the sequential backwash of each filter element.

Innovative
Double filtration effect ensured by the centrifugal separator **AZUD HELIX** and the **AZUD 3D DISCS** with both surface and in-depth particles filtration.

Sustainable
Minimum water and energy consumption thanks to the **AZUD DLP** technology that guarantees a very high self-cleaning efficiency of the filter media with low operation pressure.

Robust
Plug&play compact and modular solution made of high-quality technical thermoplastics, provides robustness, durability and high corrosion resistance.

Autonomous
AZUD controller that manages the automated self-cleaning sequence to guarantee a safe and autonomous operation.

Maintenance free
No moving parts to avoid maintenance and spare parts. No need of filtration media replacement.

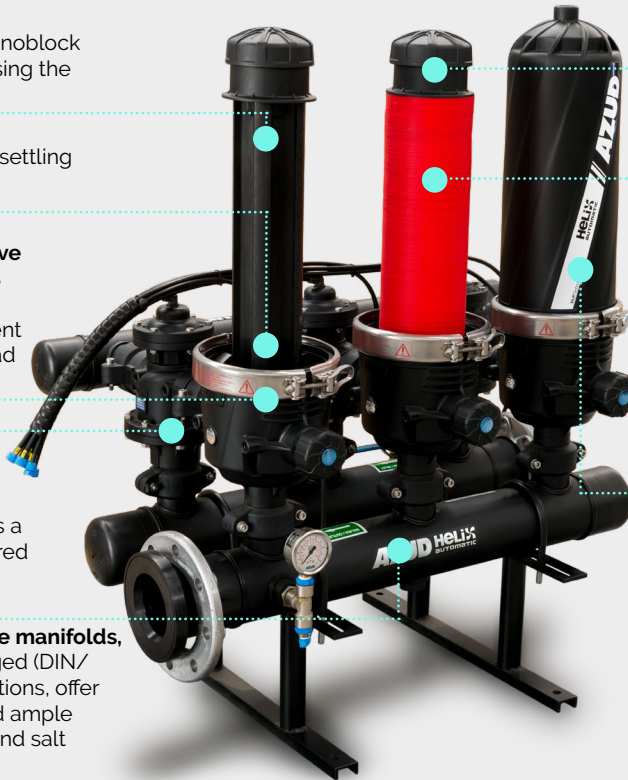
Supporting structure monoblock MBK with 4 columns housing the cleaning nozzles.

Patented centrifugal anti-settling baffle **AZUD HELIX**.

Plastic double check valve with double flap controls the flow of filtered water and cleaning water. Efficient design with minimum head loss.

Backwash valve allows the autonomous and independent cleaning of each filter and guarantees a continuous supply of filtered water.

Inlet, outlet and drainage manifolds, made of HDPE, with flanged (DIN/ANSI) or grooved connections, offer robustness, durability and ample resistance to chemicals and salt corrosion.



Spring loaded hydraulic piston, which compresses the disc column during the filtration phase, and allows it to decompress during the backwash phase.

Filter media consisting of a column of **AZUD DISCS** with a wide range of filtering degrees.

- | | |
|-----------------|-----------------|
| MG Discs | WS Discs |
| ■ 400 micron | ■ 130 micron |
| ■ 200 micron | ■ 100 micron |
| ■ 130 micron | ■ 50 micron |
| ■ 100 micron | ■ 20 micron |
| | ■ 10 micron |
| | ■ 5 micron |

Body and housing protects and houses the **filter element**, and thanks to a **safety clamp**, it can be easily opened without the need for tools.

| Ø Connection | Filter area per filter | Filter volume per filter |
|--------------|------------------------|--------------------------|
| 2" | 1.620 cm ² | 2.430 cm ³ |
| 3" | | |
| 4" | 3.240 cm ² | 4.860 cm ³ |

+ Applications



Protection of cooling systems



Filter media protection



UF membrane protection

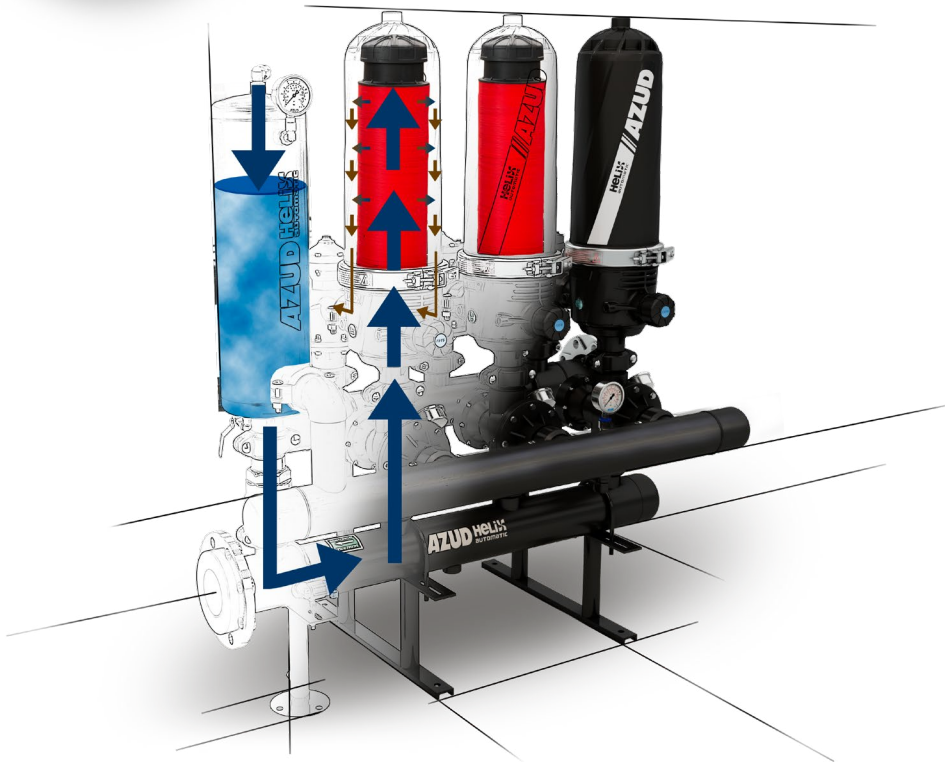


Process water reuse



Reclaimed water

AIR-ASSISTED SELF-CLEANING



Heavy duty applications

Exclusive **AIR ASSISTED BACKWASH** system for applications with high dirt loads of organic and sticky particles, such as open intake sources of sea or fresh water, industrial process water reuse or reclaimed wastewater.



Enhanced backwash

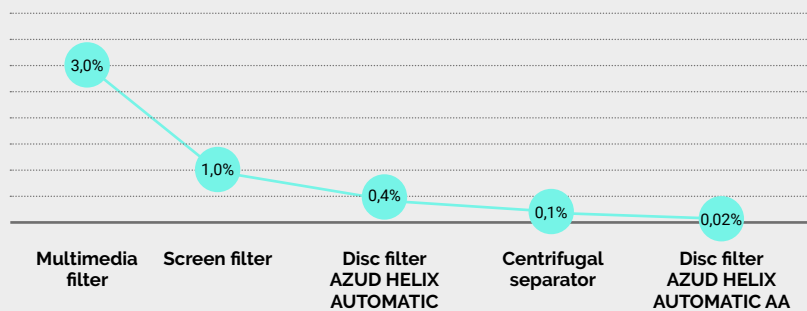
An external pneumatic source boosts the filtered water stored in the auxiliary tank while injecting air to generate a very high-speed water-air flushing fluid that ensures a **more effective self-cleaning of the filter media with less water consumption.**



Huge water saving

AZUD HELIX AUTOMATIC AA equipment requires just 10 l of filtered water during a flushing time of 6-8 seconds to clean efficiently each filter element, that means a **water saving of 99% versus multimedia filters.**

% Backwash flow / Filtered flow



+ AZUD Filtration Solutions



AZUD HELIX AUTOMATIC FT200 DLP

- ▶ Low flow rates (<300 m³/h)
- ▶ Medium TSS load
- ▶ Coarse filtration (>100 μm)



AZUD HELIX AUTOMATIC FT4DCL DLP

- ▶ Average flow rates (300 - 1.000 m³/h)
- ▶ Very compact design



AZUD HELIX AUTOMATIC FT200 DLP AA

- ▶ Low flow rates (<300 m³/h)
- ▶ High TSS load
- ▶ Fine filtration (<100 μm)
- ▶ Organic / sticky particles



AZUD HELIX AUTOMATIC FT4DC DLP

- ▶ High flow rates (>1,000 m³/h)
- ▶ Very compact design
- ▶ Adaptability according to the project

AZUD The Culture of Water

SUCCESS STORIES



Ref.: CFE
Comisión Federal de Electricidad
APPLICATION: Cooling tower side stream filtration
FLOW: 200 m³/h
LOCATION: Mexico



Ref.: Pharmaceutical industry
APPLICATION: Multimedia filter protection in a sea water desalination plant
FLOW FLOW: 120 m³/h
LOCATION: Spain



Ref.: ACCIONA
APPLICATION: UF membrane protection in a sea water desalination plant
FLOW: 19,800 m³/h
LOCATION: Qatar



Ref.: Plastics industry
APPLICATION: Filtration in cooling water system for plastic extrusion lines
FLOW: 5 x 50 m³/h
LOCATION: Germany



Ref.: Municipal wastewater treatment plant
APPLICATION: Reclaimed water for irrigation
FLOW: 150 m³/h
LOCATION: Mexico



Ref.: Municipal wastewater treatment plant
APPLICATION: Protection of microfiltration cartridges
FLOW: 500 m³/h
LOCATION: Brazil