AZUD

Filtration Technologies

19

TECHNICAL CATALOGUE

www.azud.com

91000819_01

AZUD, The Culture of Water

AZUD group is a worldwide leader designing and manufacturing Irrigation, Filtration and Water treatment systems.

We develop technology for an efficient, optimal and rational use of one of our most valuable resources, WATER. Our work philosophy makes us feel proud to own a significant number of patents.

Sound experience gives us the necessary knowledge not only to provide high-tech products, but also to supply efficient solutions for filtration and water treatment.

AZUD is committed with the Innovation since its beginnings, hence has spent an extensive number of resources to develop smart solutions for the water management.

In AZUD we manufacture equipment, but we sell SOLUTIONS.

A AZUD HELIX TECHNOLOGY

B AZUD LUXON TECHNOLOGY

C APPLICATIONS AND SECTORS

A

AZUD HELIX TECHNOLOGY

- **RELIABLE FILTRATION**, in a wide range of filtration degrees (5-400 micron), thanks to a double filtration effect; Centrifugal separation + Depth 3D filtration with multiple particle retention points.
- **EFFICIENT SELF-CLEANING,** with no interruption of clean water supply. The exclusive DLP TECHNOLOGY minimizes the backwash water volume and the energy consumption.
- **MINIMUM BACKWASH FREQUENCY,** thanks to the patented anti-clogging deflector AZUD HELIX and an increased filtration area per filter element.
- **PLUG&PLAY AND MODULAR SOLUTION,** made of technical thermoplastics, provides robustness and resistance to corrosion.

GENERAL TECHNICAL DATA

SELF-CLEANING DISC FILTRATION EQUIPMENT FOR LOW SALINITY WATER
AZUD HELIX AUTOMATIC FT200 DLP
AZUD HELIX AUTOMATIC FT200 AA DLP
AZUD HELIX AUTOMATIC FT4DCL DLP
AZUD HELIX AUTOMATIC FT4DC DLP
AZUD HELIX AUTOMATIC FT4DC DLP LP

SELF-CLEANING DISC FILTRATION EQUIPMENT FOR HIGH SALINITY WATER AND SEA WATER
AZUD HELIX AUTOMATIC FT200 SW DLP
AZUD HELIX AUTOMATIC FT200 SW AA DLP
AZUD HELIX AUTOMATIC FT4DCL SW DLP
AZUD HELIX AUTOMATIC FT4DC SW DLP
AZUD HELIX AUTOMATIC FT4DC SW DLP LP

CONTROL UNITS
AZUD FBC
AZUD FBC HF
AZUD FBC LOGIC

VALVES
SUSTAINING VALVE KIT
BACKWASH VALVES FOR HIGH FLOW FILTRATION MODULES

DISC FILTRATION SKID
AZUD HELIX AUTOMATIC FES

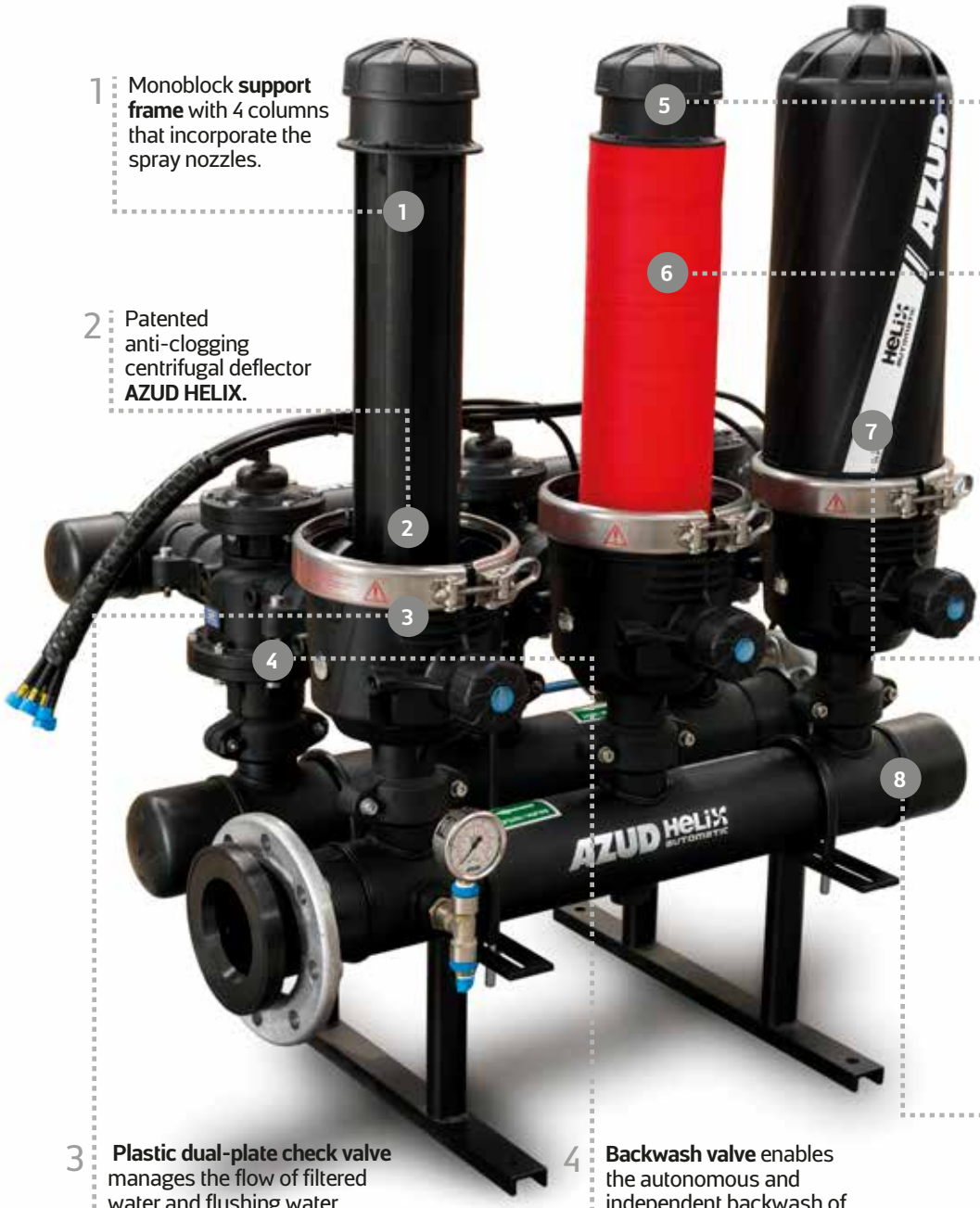
AUTOMATIC DISC FILTERS
AZUD HELIX AUTOMATIC FT DLP

MANUAL DISC AND SCREEN FILTERS AND SEMIAUTOMATIC SCREEN FILTER
AZUD HELIX SYSTEM FT
AZUD SPIRAL CLEAN
AZUD MODULAR 100

AZUD

AZUD HELIX AUTOMATIC FT DLP

SELF-CLEANING DISC FILTRATION EQUIPMENT



1 Monoblock **support frame** with 4 columns that incorporate the spray nozzles.

2 Patented anti-clogging centrifugal deflector **AZUD HELIX.**

3 **Plastic dual-plate check valve** manages the flow of filtered water and flushing water. Reliable design with a minimum pressure drop.

4 **Backwash valve** enables the autonomous and independent backwash of each filter and guarantees a continuous filtered water supply.

5 **Hydraulic piston with a spring** that compresses the disc stack during the filtration phase and releases the disc stack during the backwash phase.

6 **Filtration media** composed of the **AZUD DISC** stack with a wide range of filtration degrees:

MG disc	WS disc
400 micron	130 micron
200 micron	100 micron
130 micron	50 micron
100 micron	20 micron
	10 micron
	5 micron

7 **Base and lid** house and protect the filtration element. Easy opening system thanks to a tool-less **safety clamp.**

Ø Connection	Filtration area per filter	Filtration volume per filter
2" 3"	1620 cm²	2430 cm³
4"	3240 cm²	4860 cm³

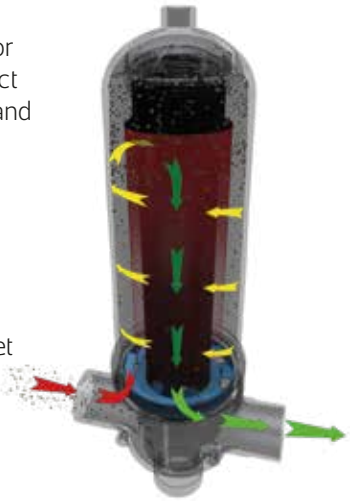
8 **Inlet, outlet and drainage manifolds,** made of HDPE, with DIN/ANSI flange or grooved connections, provide robustness, durability and maximum resistance to chemicals and to saline corrosion.

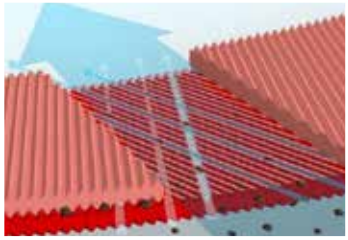
FILTRATION PHASE

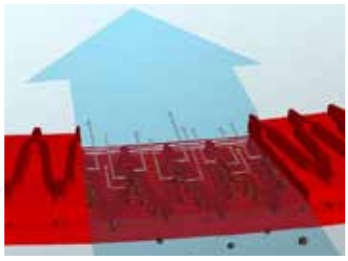
During filtration, water flows from the inlet manifold to the inside of the filter, passing through the anti-clogging deflector AZUD HELIX. This device generates a centrifugal helical effect that throws the heavy particles to the internal wall of the lid and away from the disc stack. This AZUD patent avoids a quick clogging of the filter, minimizing the backwash frequency.

The disc stack is compressed on the support frame by a pre-loaded spring. This forces the water to pass through the stack via the channels that are created between the discs.

Water flows OUT-IN through the disc stack towards the outlet manifold, while particles bigger than the filtration degree are trapped in the discs.





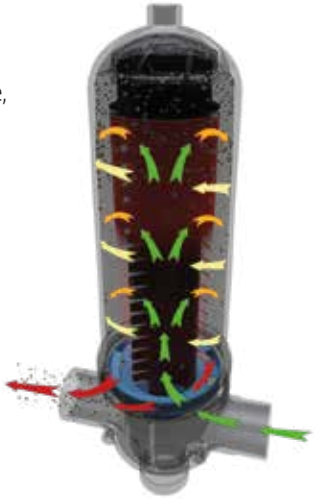


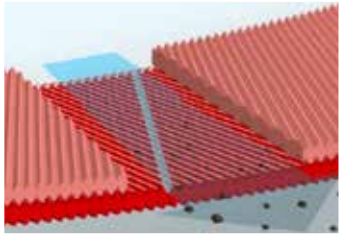
SELF-CLEANING PHASE

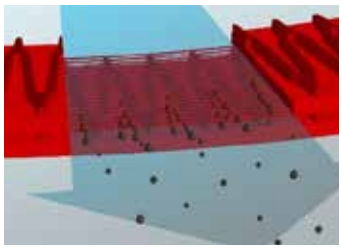
Automatic backwash can be activated by differential pressure, by time or by an external electrical signal.

The backwash valve of each filter reverses the flow, allowing the filtered pressurized water to flow IN-OUT through the discs. The disc stack is decompressed and the high-speed flushing water flowing through the spray nozzles creates a tangential cleaning effect, flushing out the trapped particles.

The filtration equipment is cleaned sequentially, so while one filter is being backwashed, the rest of the filters composing the filtration equipment are supplying filtered water.





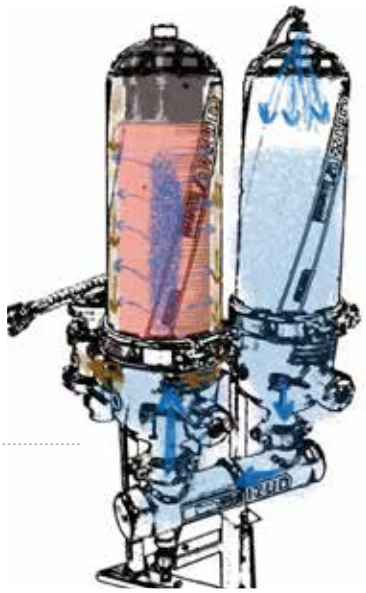


AIR ASSISTED BACKWASH (AA)

Exclusive AZUD system for applications with high loads of organic or filamentous suspended solids.

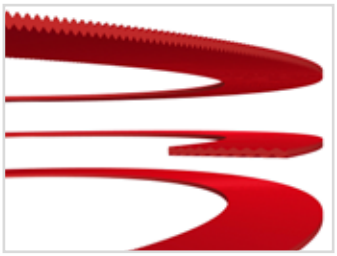
A water-air mix flowing at high speed backwashes each filtration element, providing a more agressive and effective cleaning.

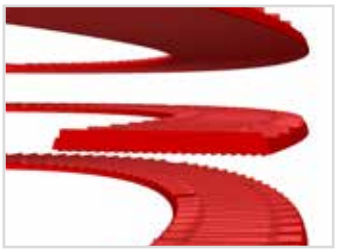
Water saving is 80% higher than conventional equipment.



COMPETITIVE ADVANTAGES

DISC





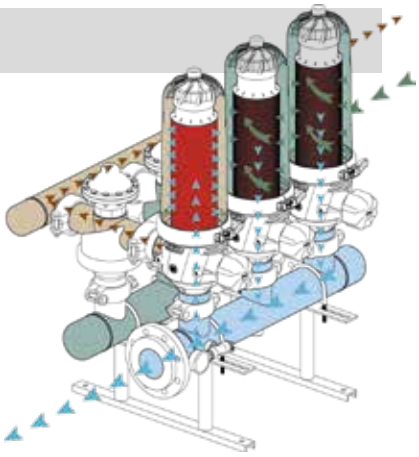
- **2 DISC TYPES** depending on each applications requirements:
  - **AZUD MG disc:** grooved filtration channels on both sides of the disc with multiple intersection crosses that are able to trap even smaller particles than the filtration degree.
  - **AZUD WS disc:** different geometry and functionality on both sides of the disc with a large volume of particle retention. Increased efficiency to remove organic and inorganic particles smaller than 100 micron.
- **INCREASED DEPTH FILTRATION AND PARTICLE RETENTION CAPACITY,** thanks to a longer grooved channel.
- **MORE FILTRATION CHANNELS PER DISC,** with increased grooves creating more intersection points.

FILTRATION ELEMENT

DLP Technology
Low Pressure Blackflush

- **INCREASED FILTRATION AREA,** thanks to a larger diameter of the AZUD disc and taller disc stack.
- **INCREASED FILTRATION VOLUME,** thanks to a larger filtration area and a longer grooved channel of the AZUD disc.
- **INCREASED PARTICLE RETENTION CAPACITY,** thanks to a larger number of disc and more filtration channels per disc.
- **LESS BACKWASH FREQUENCY,** thanks to the patented anti-clogging centrifugal deflector AZUD HELIX SYSTEM.
- **ENHANCED BACKWASH EFFICIENCY,** thanks to a higher flushing nozzles density with multiple impact points.
- **LOWER OPERATION PRESSURE,** thanks to the DLP low pressure technology.
- **SAFE AND EASY MAINTENANCE,** thanks to the tool-less opening safety clamp.
- **INDIVIDUAL FILTRATION ELEMENT PER FILTER,** optimizes the filtration performance thanks to the centrifugal deflector AZUD HELIX and ensures the quality of clean water, avoiding cross contamination during the backwash as in multi-cartridge filtration systems.

FILTRATION EQUIPMENT



- **MODULARITY,** with a wide range of flow rates and configurations using a minimum number of components .
- **WIDE RANGE OF FILTRATION DEGREES,** from 5 to 400 micron.
- **VERSATILITY,** thanks to the different materials and components meeting the application requirements.
- **NON-STOP FILTRATION,** thanks to the sequential self-cleaning that guarantees a continuous supply of clean water.

QUICK SELECTION GUIDE

APPROXIMATE SELECTION CRITERIA considering only raw water quality:

Quality	Raw water source	Filtration degree	Maximun flow per filter (1620 cm²)*	
			m³/h	gpm
GOOD	• Municipal water supply • Closed loop water recirculation system • Sea water taken from a beach well • Pre-treated water with multimedia filter or membrane technology • Deep water coming from a steady aquifer through a casing well, without suspended solids nor scaling salts	400 micron 200 micron 130 micron 100 micron 50 micron 20 micron 10 micron 5 micron	28 27 26 24 14 8 6 5	123 119 114 106 62 35 26 22
AVERAGE	• Open loop water recirculation system, for cold climates or good environmental quality • Clear and stable quality surface water (lakes and ponds, slow flowing rivers and canals) • Sea water taken far away from the coast line • Reclaimed wastewater after tertiary treatment • Industrial process water with low load of suspended solids	400 micron 200 micron 130 micron 100 micron 50 micron 20 micron 10 micron 5 micron	26 25 23 21 12 7 5 4	114 110 101 92 53 31 22 18
POOR	• Open loop water recirculation system, for hot climates or bad environmental quality • Bad surface water quality (lakes and ponds, rivers and canals) with increased biological growth • Well water from a poor aquifer quality and/or salts that may precipitate • Sea water open intake near ports or industrial zones, with a physical-chemical pre-treatment • Industrial process water with high load of inorganic suspended solids	400 micron 200 micron 130 micron 100 micron 50 micron 20 micron 10 micron 5 micron	24 22 19 18 10 6 4 3	106 97 84 79 44 26 18 13
VERY POOR	• Surface water (lakes, ponds, rivers and canals) affected by floods and storm water with soil erosion and no chemical pre-treatment • Sea water open intake near ports or industrial zones with no pre-treatment • Waste water after secondary treatment • Industrial process water with high load of sticky or filamentous organic suspended solids • Laundry water for reuse • Grey water for reuse	400 micron 200 micron 130 micron 100 micron 50 micron 20 micron 10 micron 5 micron	20 18 14 12 8 5 3 2	88 79 62 53 35 22 13 9

* Maximum flow rate without considering limitations given by the diameter and the type of auxiliary elements (manifolds, flanges and valves).
Note that design flow rate defines the backwash frequency of the filtration equipment.

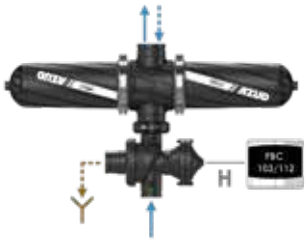
Ask AZUD for further information.

QATAR

- **End user:** Qatar Electricity & Water Co. (QEWC)
- **Application:** UF membrane protection in RAS ABU FONTAS 3. Seawater desalination plant to provide potable water
- **AZUD solution:** 24 units
  AZUD HELIX AUTOMATIC FT4DC20 SW LP 100 micron
- **Flow rate:** 19800 m^3/h

STANDARD SELF-CLEANING DISC FILTRATION EQUIPMENT

LOW SALINITY WATER (TDS < 6000 mg/l)

	Filters	Backwash valves Inlet/outlet/drainage manifolds	Scheme
FT200 DLP	**Filters Ø2"** (1-12 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: SS 302 • Clamp: SS 304	**Valves Ø2"** 3-way membrane (1 unit / filter) • Body: rPA • Shaft: SS 303. Seat: SS 304 • Spring: SS 302 • Command: Hydraulic (H) **Manifolds:** HDPE PE-100 **Flanges**: Aluminum	
FT200 AA DLP (air assisted)	**Filters Ø2"** (1-10 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: SS 302 • Clamp: SS 304 • AA tank: SS 304 epoxy coated	**Valves Ø2"** 3-way membrane (2 units / filter) • Body: rPA • Shaft: SS 303. Seat: SS 304 • Spring: SS 302 • Command: Pneumatic (PN) **Manifolds:** HDPE PE-100 **Flanges:** Aluminum	
FT4DCL DLP	**Filters Ø4"** (3-12 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: SS 302 • Clamp: SS 304	**Valves Ø3"** 3-way membrane (1 unit / filter) • Body: rPA • Shaft: SS 303. Seat: SS 304 • Spring: SS 302 • Command: Hydraulic (H) **Manifolds:** HDPE PE-100 **Flanges:** Aluminum	

HIGH FLOW FILTRATION MODULES

FT4DC DLP	**Filters Ø4"** (6/8/12 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: SS 302 • Clamp: SS 304	**Valves NOT INCLUDED;** recommendation: • Butterfly type with spring return pneumatic actuator (1 unit / module) • Butterfly type with double acting pneumatic actuator (1 unit / module) • Body: Aluminum • Seal: EPDM rubber • Disc: Coated cast iron **Manifolds:** HDPE PE-100 **Flanges:** Aluminum	
FT4DC DLP LP	**Filters Ø4"** (6/8/12 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: SS 302 • Clamp: SS 304	**Valves NOT INCLUDED;** recommendation: • Butterfly type with spring return pneumatic actuator (1 unit / module) • Butterfly type with double acting pneumatic actuator (3 unit / module) • Body: Aluminum • Seal: EPDM rubber • Disc: Coated cast iron **Manifolds:** HDPE PE-100 **Flanges:** Aluminum	

PP: Polypropylene **rPP:** Reinforced polypropylene **SS:** Stainless steel **rPA:** Reinforced polyamide **HDPE:** High density polyethylene

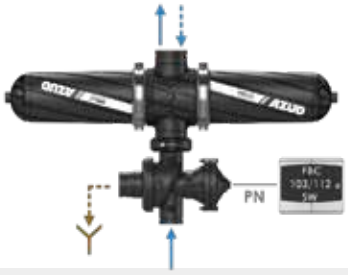
Low salinity water

High salinity water and sea water

Chlorinated water

Drinking water

HIGH SALINITY WATER AND SEA WATER (TDS: 6000 - 55000 mg/l)

	Filters	Backwash valves Inlet/outlet/drainage manifolds	Scheme
FT200 SW DLP	**Filters Ø2"** (2-12 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: HASTELLOY • Clamp: SS 316L	**Valves Ø2"** 3-way membrane (1 unit / filter) • Body: rPA • Shaft, seat and spring: SS DUPLEX • Command: Pneumatic (PN) **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	
FT200 SW AA DLP (air assisted)	**Filters Ø2"** (1-10 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: HASTELLOY • Clamp: SS 316L • AA tank: HDPE	**Valves Ø2"** 3-way membrane (2 units / filter) • Body: rPA • Shaft, seat and spring: SS DUPLEX • Command: Pneumatic (PN) **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	
FT4DCL SW DLP	**Filters Ø4"** (3-12 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: HASTELLOY • Clamp: SS 316L	**Valves Ø3"** 3-way membrane (1 unit / filter) • Body: rPA • Shaft, seat and spring: SS DUPLEX • Command: Pneumatic (PN) **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	

HIGH FLOW FILTRATION MODULES

FT4DC SW DLP	**Filters Ø4"** (6/8/12 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: HASTELLOY • Clamp: SS 316L	**Valves NOT INCLUDED;** recommendation: • Butterfly type with spring return pneumatic actuator (1 unit x module) • Butterfly type with double acting pneumatic actuator (1 units x module) • Body: rPP • Seal: EPDM rubber • Disc: PP **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	
FT4DC SW DLP LP	**Filters Ø4"** (6/8/12 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: HASTELLOY • Clamp: SS 316L	**Valves NOT INCLUDED;** recommendation: • Butterfly type with spring return pneumatic actuator (1 unit x module) • Butterfly type with double acting pneumatic actuator (3 units x module) • Body: rPP • Seal: EPDM rubber • Disc: PP **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	

PP: Polypropylene **rPP:** Reinforced polypropylene **SS:** Stainless steel **rPA:** Reinforced polyamide **HDPE:** High density polyethylene

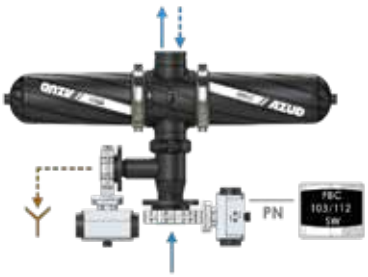
SPECIAL SELF-CLEANING DISC FILTRATION EQUIPMENT

Series not included in the technical catalogue. Check with AZUD Engineering Department for advice.

FILTERS Ø3"

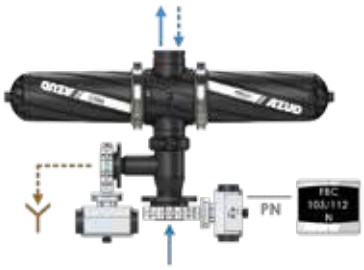
	Filters	Backwash valves Inlet/outlet/drainage manifolds	Scheme
FT300 DLP	**Filters Ø3"** (2-8 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: SS 302 • Clamp: SS 304	**Valves Ø3"** 3-way membrane (1 unit / filter) • Body: rPA • Shaft: SS 303. Seat: SS 304 • Spring: SS 302 • Command: Hydraulic (H) **Manifolds:** HDPE PE-100 **Flanges:** Aluminum	
FT300 HP DLP (PN 16 bar)	**Filters Ø3"** (2-8 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: epoxy-polyester coated carbon steel • Spring: SS 302 • Closing screws: SS 304	**Valves:** Butterfly type Ø2" with spring return pneumatic actuator (1 unit / filter) and Butterfly type Ø3" with double acting pneumatic actuator (1 unit / filter) • Body: Cast iron • Seal: EPDM rubber • Disc: Cast iron / SS 316L **Manifolds:** Carbon steel with epoxy polyester coating **Flanges:** Carbon steel with epoxy polyester coating	

HIGH SALINITY WATER AND SEA WATER (TDS: 6000 - 55000 mg/l)

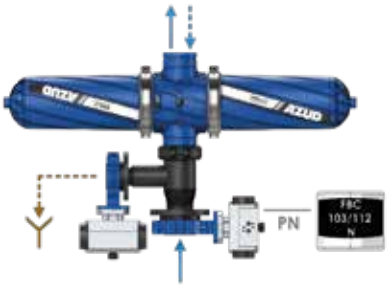
	Filters	Backwash valves Inlet/outlet/drainage manifolds	Scheme
FT700 SW DLP	**Filters Ø2"** (2-8 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: HASTELLOY • Clamp: SS 316L	**Valves:** Butterfly type Ø2" with spring return pneumatic actuator (1 unit / filter) and Butterfly type Ø2" with double acting pneumatic actuator (1 unit / filter) • Body: rPP • Seal: EPDM rubber • Disc: PP **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	
FT700 SW AA DLP (air assisted)	**Filters Ø2"** (1-10 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: HASTELLOY • Clamp: SS 316L • AA tank: HDPE	**Valves:** Butterfly type Ø2" with spring return pneumatic actuator (1 unit / filter) and Butterfly type Ø2" with double acting pneumatic actuator (3 units / filter) • Body: rPP • Seal: EPDM rubber • Disc: PP **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	
FT800 SW DLP	**Filters Ø4"** (3-12 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: HASTELLOY • Clamp: SS 316L	**Valves:** Butterfly type Ø2" with spring return pneumatic actuator (1 unit / filter) and Butterfly type Ø3" with double acting pneumatic actuator (1 unit / filter) • Body: rPP • Seal: EPDM rubber • Disc: PP **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	

PP: Polypropylene **rPP:** Reinforced polypropylene **SS:** Stainless steel **rPA:** Reinforced polyamide **HDPE:** High density polyethylene

CHLORINATED WATER (free chlorine ≥ 1.5 mg/l)

	Filters	Backwash valves Inlet/outlet/drainage manifolds	Scheme
FT700 CL DLP	**Filters Ø2"** (2-8 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPP • Spring: SS 302 • Clamp: SS 304	**Valves:** Butterfly type Ø2" with spring return pneumatic actuator (1 unit / filter) and Butterfly type Ø2" with double acting pneumatic actuator (1 unit / filter) • Body: rPP • Seat: EPDM rubber • Disc: PP **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	
FT800 CL DLP	**Filters Ø4"** (3-12 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPP • Spring: SS 302 • Clamp: SS 304	**Valves:** Butterfly type Ø2" with spring return pneumatic actuator (1 unit / filter) and Butterfly type Ø3" with double acting pneumatic actuator (1 unit / filter) • Body: rPP • Seat: EPDM rubber • Disc: PP **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	

DRINKING WATER CERTIFICATE

	Filters	Backwash valves Inlet/outlet/drainage manifolds	Scheme
FT700 DW DLP	**Filters Ø2"** (2-8 units) • MG/WS disc: PP/HDPE • Support structure: rPP FG • Base-lid: rPA FG • Spring: SS 302 • Clamp: SS 316L	**Valves:** Butterfly type Ø2" with spring return pneumatic actuator (1 unit / filter) and Butterfly type Ø2" with double acting pneumatic actuator (1 unit / filter) • Body: rPP • Seal: EPDM rubber • Disc: PP **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	
FT800 DW DLP	**Filters Ø4"** (3-12 units) • MG/WS disc: PP/HDPE • Support structure: rPP FG • Base-lid: rPA FG • Spring: SS 302 • Clamp: SS 316L	**Valves:** Butterfly type Ø2" with spring return pneumatic actuator (1 unit / filter) and Butterfly type Ø3" with double acting pneumatic actuator (1 unit / filter) • Body: rPP • Seal: EPDM rubber • Disc: PP **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel	

PP: Polypropylene **rPP:** Reinforced polypropylene **SS:** Stainless steel **rPA:** Reinforced polyamide **HDPE:** High density polyethylene **FG:** Food grade

URUGUAY

- **End user:** Estancias del lago
- **Application:** Make-up water filtration for a dairy industry
- **AZUD solution:**
  2 units AZUD LUXON MFH 9600/8
  125 micron
  6 units AZUD HELIX AUTOMATIC FT308/6
  20 micron
- **Flow rate:** 380 m^3/h

AZUD HELIX AUTOMATIC FT200 DLP

1-12 filters Ø2" with 3-way backwash valves Ø2"

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. backwash pressure	1.5 bar (22 psi)
Min. backwash flow	2.5 l/s (39 gpm) per filter
Backwash duration	15 - 25 s per filter
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

Filtration degrees

- 400 micron
- 200 micron
- 130 micron
- 100 micron
- 50 micron
- 20 micron
- 10 micron
- 5 micron

Power supply Control unit (NOT included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC

Filtration area	Model	Q max 130 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Grooved	Dimensions L-W-H (mm)	Control unit FBC
1620 cm²	**FT201** 1 filter Ø2"	24 (106)	**Ø2"**			•	842-247-1483	103/1
3240 cm²	**FT202** 2 filters Ø2"	48 (211)	**Ø3"**	•	•	•	745-700-1085	103/2
4860 cm²	**FT203** 3 filters Ø2"	50 (220) 72 (317)	**Ø3"** **Ø4"**	•	•	•	990-700-1105	103/3
6480 cm²	**FT204** 4 filters Ø2"	80 (352) 96 (423)	**Ø4"** **Ø6"**	•	•	•	1220-700-1155	112/4
8100 cm²	**FT205** 5 filters Ø2"	80 (352) 120 (528)	**Ø4"** **Ø6"**	•	•	•	1560-700-1155	112/5
9720 cm²	**FT206** 6 filters Ø2"	144 (634)	**Ø6"**	•	•	•	1835-700-1155	112/6
11340 cm²	**FT207** 7 filters Ø2"	160 (705)	**Ø6"**	•	•	•	2110-700-1155	112/7
12960 cm²	**FT208** 8 filters Ø2"	160 (705) 192 (845)	**Ø6"** **Ø8"**	•	•	•	2410-700-1200 2410-780-1200	112/8
14580 cm²	**FT209** 9 filters Ø2"	160 (705) 216 (951)	**Ø6"** **Ø8"**	•	•	•	2685-700-1200 2685-780-1200	112/9
16200 cm²	**FT210** 10 filters Ø2"	160 (705) 240 (1057)	**Ø6"** **Ø8"**	•	•	•	3005-700-1200 3005-780-1200	112/10
17820 cm²	**FT211** 11 filters Ø2"	240 (1057) 264 (1162)	**Ø8"** **Ø10"**	•	•	•	3310-780-1250 3310-885-1250	112/11
19440 cm²	**FT212** 12 filters Ø2"	240 (1057) 288 (1268)	**Ø8"** **Ø10"**	•	•	•	3310-780-1250 3585-885-1250	112/12

DRAINAGE MANIFOLD: Ø3" Grooved/PVC

*Maximum flow rate is limited by the size and type of the auxiliary elements (manifolds, flanges and valves).

Identification: AZUD HELIX AUTOMATIC **FT204/4FX** DLP **MG 130** MICRON

FILTER MODELS
FT201, FT202, FT203, FT204, FT205, FT206, FT207, FT208, FT209, FT210, FT211, FT212

Inlet and outlet manifolds DIAMETER (inch)
2, 3, 4, 6, 8, 10

Inlet and outlet manifolds CONNECTIONS
VX - Grooved **FX** - Flange DIN
FA - Flange ANSI
FX - Flange compatible DIN/ANSI (3", 4", 6" and 8")

FILTRATION DEGREE (micron)
MG disc: **MG 400, MG 200, MG 130, MG 100**
WS disc: **WS 130, WS 100, WS 50, WS 20, WS 10, WS 5**

AZUD HELIX AUTOMATIC FT200 AA DLP

1-10 filters Ø2" with 3-way backwash valves Ø2"

AIR ASSISTED BACKWASH

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. air pressure	4.5 bar (65 psi)*
Max. air pressure	6 bar (87 psi)*
Air flow x duration	18 l/s (285 gpm) x 10 s
Backwash volume	10 l water per filter
pH	4 - 11
Water temperature	≤ 60 ºC (140 ºF)

*Compressed air pressure > Water pressure

Filtration degrees

- 400 micron
- 200 micron
- 130 micron
- 100 micron
- 50 micron
- 20 micron
- 10 micron
- 5 micron

Power supply Control unit (NOT included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC

Filtration area	Model	Q max 130 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Grooved	Dimensions L-W-H (mm)	Control unit FBC
1620 cm²	**FT201 AA** 1 filter Ø2"	21 (92)	**Ø2"**			•	605-475-1065	101/1 AA
3240 cm²	**FT202 AA** 2 filters Ø2"	42 (185)	**Ø3"**	•	•	•	990-820-1310	110/2 AA
4860 cm²	**FT203 AA** 3 filters Ø2"	50 (220) 63 (277)	**Ø3"** **Ø4"**	•	•	•	1220-820-1330	110/3 AA
6480 cm²	**FT204 AA** 4 filters Ø2"	80 (352) 84 (370)	**Ø4"** **Ø6"**	•	•	•	1560-820-1380	110/4 AA
8100 cm²	**FT205 AA** 5 filters Ø2"	80 (352) 105 (462)	**Ø4"** **Ø6"**	•	•	•	1835-820-1380	110/5 AA
9720 cm²	**FT206 AA** 6 filters Ø2"	126 (555)	**Ø6"**	•	•	•	2110-820-1380	110/6 AA
11340 cm²	**FT207 AA** 7 filters Ø2"	147 (647)	**Ø6"**	•	•	•	2385-820-1380	110/7 AA
12960 cm²	**FT208 AA** 8 filters Ø2"	160 (705) 168 (740)	**Ø6"** **Ø8"**	•	•	•	2660-820-1420	110/8 AA
14580 cm²	**FT209 AA** 9 filters Ø2"	160 (705) 189 (832)	**Ø6"** **Ø8"**	•	•	•	2980-820-1420	110/9 AA
16200 cm²	**FT210 AA** 10 filters Ø2"	160 (705) 210 (925)	**Ø6"** **Ø8"**	•	•	•	3255-820-1420	110/10 AA

DRAINAGE MANIFOLD: Ø3" Grooved/PVC

*Maximum flow rate is limited by the size and type of the auxiliary elements (manifolds, flanges and valves).

Identification: AZUD HELIX AUTOMATIC **FT204/4FX AA** DLP **MG 130** MICRON

FILTER MODELS
FT201, FT202, FT203, FT204, FT205, FT206, FT207, FT208, FT209, FT210

Inlet and outlet manifolds DIAMETER (inch)
2, 3, 4, 6, 8

Inlet and outlet manifolds CONNECTIONS
VX - Grooved **FX** - Flange DIN
FA - Flange ANSI
FX - Flange compatible DIN/ANSI (3", 4", 6" and 8")

FILTRATION DEGREE (micron)
MG disc: **MG 400, MG 200, MG 130, MG 100**
WS disc: **WS 130, WS 100, WS 50, WS 20, WS 10, WS 5**

AZUD HELIX AUTOMATIC FT4DCL DLP

3-12 double filters Ø4" with 3-way backwash valves Ø3"

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. backwash pressure	1.5 bar (22 psi)
Min. backwash flow	5 l/s (79 gpm) per filter 4"
Backwash duration	20 - 30 s per filter 4"
pH	4 - 11
Water temperature	≤ 60 ºC (140 ºF)

Filtration degrees
400 micron
200 micron
130 micron
100 micron
50 micron
20 micron
10 micron
5 micron

Power supply Control unit (NOT included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC

Filtration area	Model	Q max 130 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Control unit FBC
9720 cm²	**FT4DCL3** 3 filters Ø4"	156 (687)	**Ø6"**	•	•	1040-1200-1690	103/3
12960 cm²	**FT4DCL4** 4 filters Ø4"	160 (705) 208 (916)	**Ø6" Ø8"**	•	•	1305-1200-1770	112/4
16200 cm²	**FT4DCL5** 5 filters Ø4"	160 (705) 240 (1057)	**Ø6" Ø8"**	•	•	1575-1200-1770	112/5
19440 cm²	**FT4DCL6** 6 filters Ø4"	240 (1057) 312 (1374)	**Ø8" Ø10"**	•	•	1870-1200-1875	112/6
22680 cm²	**FT4DCL7** 7 filters Ø4"	240 (1057) 364 (1603)	**Ø8" Ø10"**	•	•	2145-1200-1875	112/7
25920 cm²	**FT4DCL8** 8 filters Ø4"	240 (1057) 380 (1673)	**Ø8" Ø10"**	•	•	2420-1200-1875	112/8
29160 cm²	**FT4DCL9** 9 filters Ø4"	380 (1673) 468 (2061)	**Ø10" Ø12"**	•	•	2700-1200-2040	112/9
32400 cm²	**FT4DCL10** 10 filters Ø4"	380 (1673) 520 (2290)	**Ø10" Ø12"**	•	•	3120-1200-2010	112/10
35640 cm²	**FT4DCL11** 11 filters Ø4"	380 (1673) 572 (2519)	**Ø10" Ø12"**	•	•	3395-1200-2010	112/11
38880 cm²	**FT4DCL12** 12 filters Ø4"	380 (1673) 624 (2748)	**Ø10" Ø12"**	•	•	3670-1200-2010	112/12

DRAINAGE MANIFOLD: Ø4" Grooved/PVC

*Maximum flow rate is limited by the size and type of the auxiliary elements (manifolds, flanges and valves).

Identification: AZUD HELIX AUTOMATIC **FT4DCL6/8FX** DLP **MG 130** MICRON

FILTER MODELS
FT4DCL3, FT4DCL4, FT4DCL5, FT4DCL6, FT4DCL7, FT4DCL8, FT4DCL9, FT4DCL10, FT4DCL11, FT4DCL12

Inlet and outlet manifolds DIAMETER (inch)
6, 8, 10, 12

Inlet and outlet manifolds CONNECTIONS
FX - Flange DIN
FA - Flange ANSI
FX - Flange compatible DIN/ANSI (6" and 8")

FILTRATION DEGREE (micron)
MG disc: **MG 400, MG 200, MG 130, MG 100**
WS disc: **WS 130, WS 100, WS 50, WS 20, WS 10, WS 5**

AZUD HELIX AUTOMATIC FT4DC DLP

6-12 double filters Ø4" (backwash valves are not included)

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. backwash pressure	1.5 bar (22 psi)
Min. backwash flow	5 l/s (79 gpm) x double filters 4"
Backwash duration	30 - 45 s per module
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

Filtration degrees

- 400 micron
- 200 micron
- 130 micron
- 100 micron
- 50 micron
- 20 micron
- 10 micron
- 5 micron

Power supply Control unit (NOT included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC

Filtration degrees: 50 micron - 20 micron - 10 micron - 5 micron

Filtration area	Model	Q max* m³/h (gpm)	INLET/OUTLET/DRAINAGE MANIFOLD Connection I/O	Connection DRAIN	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Control unit FBC**
19440 cm²	**FT4DC6/6** 6 filters Ø4"	160 (704)	**Ø6"**	**Ø6"**	•	•	1405-1200-1680	110/n HF
25920 cm²	**FT4DC8/8** 8 filters Ø4"	224 (987)	**Ø8"**	**Ø8"**	•	•	1795-1200-1760	110/n HF
38880 cm²	**FT4DC12/10** 12 filters Ø4"	336 (1480)	**Ø10"**	**Ø10"**	•	•	2665-1200-1865	110/n HF

*Maximum flow calculated at 50 micron
**n: Depends on the number of filtration modules installed in parallel

Filtration degrees: 400 micron - 200 micron - 130 micron - 100 micron

Filtration area	Model	Q max* m³/h (gpm)	INLET/OUTLET/DRAINAGE MANIFOLD Connection I/O	Connection DRAIN	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Control unit FBC**
19440 cm²	**FT4DC6/8-6** 6 filters Ø4"	240 (1057)	**Ø8"**	**Ø6"**	•	•	1405-1200-1760	110/n HF
25920 cm²	**FT4DC8/10-8** 8 filters Ø4"	380 (1673)	**Ø10"**	**Ø8"**	•	•	1865-1200-1865	110/n HF
38880 cm²	**FT4DC12/12-10** 12 filters Ø4"	624 (2747)	**Ø12"**	**Ø10"**	•	•	2665-1200-2000	110/n HF

*Maximum flow calculated at 130 micron
**n: Depends on the number of filtration modules installed in parallel

Ask AZUD for further information.

AZUD HELIX AUTOMATIC FT4DC DLP LP

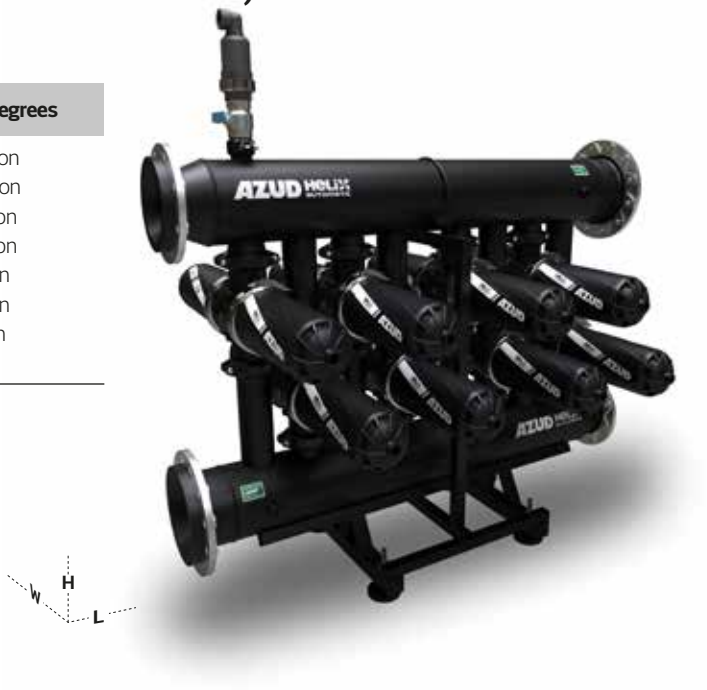
6-12 double filters Ø4" (backwash valves are not included)

EXTERNAL BACKWASH SOURCE

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. backwash pressure	1.5 bar (22 psi)
Min. backwash flow	5 l/s (79 gpm) x double filters 4"
Backwash duration	30 - 45 s per module
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

Filtration degrees
400 micron
200 micron
130 micron
100 micron
50 micron
20 micron
10 micron
5 micron

Power supply Control unit (NOT included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC



Filtration degrees: 50 micron - 20 micron - 10 micron - 5 micron

Filtration area	Model	Q max* m³/h (gpm)	INLET/OUTLET/DRAINAGE/PRESSURE MANIFOLD Connection I/O	Connection DRAIN/PRES.	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Control unit FBC**
19440 cm²	**FT4DC6/6 LP** 6 filters Ø4"	160 (704)	**Ø6"**	**Ø6"**	•	•	1405-1200-1680	110/n HF LP
25920 cm²	**FT4DC8/8 LP** 8 filters Ø4"	224 (987)	**Ø8"**	**Ø8"**	•	•	1795-1200-1760	110/n HF LP
38880 cm²	**FT4DC12/10 LP** 12 filters Ø4"	336 (1480)	**Ø10"**	**Ø10"**	•	•	2665-1200-1865	110/n HF LP

*Maximum flow calculated at 50 micron

**n: Depends on the number of filtration modules installed in parallel

Filtration degrees: 400 micron - 200 micron - 130 micron - 100 micron

Filtration area	Model	Q max* m³/h (gpm)	INLET/OUTLET/DRAINAGE/PRESSURE MANIFOLD Connection I/O	Connection DRAIN/PRES.	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Control unit FBC**
19440 cm²	**FT4DC6/8-6 LP** 6 filters Ø4"	240 (1057)	**Ø8"**	**Ø6"**	•	•	1405-1200-1760	110/n HF LP
25920 cm²	**FT4DC8/10-8 LP** 8 filters Ø4"	380 (1673)	**Ø10"**	**Ø8"**	•	•	1865-1200-1865	110/n HF LP
38880 cm²	**FT4DC12/12-10 LP** 12 filters Ø4"	624 (2747)	**Ø12"**	**Ø10"**	•	•	2665-1200-2000	110/n HF LP

*Maximum flow calculated at 130 micron

**n: Depends on the number of filtration modules installed in parallel

Ask AZUD for further information.

BELARUS

- **End user:** MOZYR OIL REFINERY
- **Application:** Make-up water filtration for cooling towers
- **AZUD solution:**
  7 systems AZUD HELIX AUTOMATIC FT200 AA 50/100 µm Shipping containers isolated for extreme weather (-35ºC /+ 35ºC)
- **Flow rate:** 2530 m^3/h

AZUD HELIX AUTOMATIC FT200 SW DLP

2-12 filters Ø2" with 3-way backwash valves Ø2"

Working conditions	
Salinity	6000 - 55000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. backwash pressure	1.5 bar (22 psi)
Min. backwash flow	2.5 l/s (39 gpm) per filter
Backwash duration	15 - 25 s per filter
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

Filtration degrees

- 400 micron
- 200 micron
- 130 micron
- 100 micron
- 50 micron
- 20 micron
- 10 micron
- 5 micron

Power supply Control unit (NOT included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC

Filtration area	Model	Q max 130 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Grooved	Dimensions L-W-H (mm)	Control unit FBC
3240 cm²	**FT202 SW** 2 filters Ø2"	48 (211)	**Ø3"**	•	•	•	745-700-1085	103/2 SW
4860 cm²	**FT203 SW** 3 filters Ø2"	50 (220) 72 (317)	**Ø3"** **Ø4"**	•	•	•	990-700-1105	103/3 SW
6480 cm²	**FT204 SW** 4 filters Ø2"	80 (352) 96 (423)	**Ø4"** **Ø6"**	•	•	•	1220-700-1155	112/4 SW
8100 cm²	**FT205 SW** 5 filters Ø2"	80 (352) 120 528)	**Ø4"** **Ø6"**	•	•	•	1560-700-1155	112/5 SW
9720 cm²	**FT206 SW** 6 filters Ø2"	144 (634)	**Ø6"**	•	•	•	1835-700-1155	112/6 SW
11340 cm²	**FT207 SW** 7 filters Ø2"	160 (705)	**Ø6"**	•	•	•	2110-700-1155	112/7 SW
12960 cm²	**FT208 SW** 8 filters Ø2"	160 (705) 192 (845)	**Ø6"** **Ø8"**	•	•	•	2410-700-1200 2410-780-1200	112/8 SW
14580 cm²	**FT209 SW** 9 filters Ø2"	160 (705) 216 (951)	**Ø6"** **Ø8"**	•	•	•	2685-700-1200 2685-780-1200	112/9 SW
16200 cm²	**FT210 SW** 10 filters Ø2"	160 (705) 240 (1057)	**Ø6"** **Ø8"**	•	•	•	3005-700-1200 3005-780-1200	112/10 SW
17820 cm²	**FT211 SW** 11 filters Ø2"	240 (1057) 264 (1162)	**Ø8"** **Ø10"**	•	•	•	3310-780-1250 3310-885-1250	112/11 SW
19440 cm²	**FT212 SW** 12 filters Ø2"	240 (1057) 288 (1268)	**Ø8"** **Ø10"**	•	•	•	3310-780-1250 3585-885-1250	112/12 SW

DRAINAGE MANIFOLD: Ø3" Grooved/PVC

*Maximum flow rate is limited by the size and type of the auxiliary elements (manifolds, flanges and valves).

Identification: AZUD HELIX AUTOMATIC **FT204/4FX** SW DLP **MG 130** MICRON

FILTER MODELS
FT202, FT203, FT204, FT205, FT206, FT207, FT208, FT209, FT210, FT211, FT212

Inlet and outlet manifolds DIAMETER (inch)
3, 4, 6, 8, 10

Inlet and outlet manifolds CONNECTIONS
VX - Grooved **FX** - Flange DIN
FA - Flange ANSI
FX - Flange compatible DIN/ANSI (6" and 8")

FILTRATION DEGREE (micron)
MG disc: **MG 400, MG 200, MG 130, MG 100**
WS disc: **WS 130, WS 100, WS 50, WS 20, WS 10, WS 5**

AZUD HELIX AUTOMATIC FT200 SW AA DLP

1-10 filters Ø2" with 3-way backwash valves Ø2"

AIR ASSISTED BACKWASH

Working conditions	
Salinity	6000 - 55000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. air pressure	4.5 bar (65 psi)*
Max. air pressure	6 bar (87 psi)*
Air flow x duration	18 l/s (285 gpm) x 10 s
Backwash volume	10 l water per filter
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

*Air pressure > Water pressure

Filtration degrees

- 400 micron
- 200 micron
- 130 micron
- 100 micron
- 50 micron
- 20 micron
- 10 micron
- 5 micron

Power supply Control unit (NOT included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC

Filtration area	Model	Q max 130 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Grooved	Dimensions L-W-H (mm)	Control unit FBC
1620 cm²	**FT201 SW AA** 1 filter Ø2"	21 (92)	**Ø2"**			•	605-475-1065	101/1 SW AA
3240 cm²	**FT202 SW AA** 2 filters Ø2"	42 (185)	**Ø3"**	•	•	•	990-820-1310	110/2 SW AA
4860 cm²	**FT203 SW AA** 3 filters Ø2"	50 (220) 63 (277)	**Ø3"** **Ø4"**	•	•	•	1220-820-1330	110/3 SW AA
6480 cm²	**FT204 SW AA** 4 filters Ø2"	80 (352) 84 (370)	**Ø4"** **Ø6"**	•	•	•	1560-820-1380	110/4 SW AA
8100 cm²	**FT205 SW AA** 5 filters Ø2"	80 (352) 105 (462)	**Ø4"** **Ø6"**	•	•	•	1835-820-1380	110/5 SW AA
9720 cm²	**FT206 SW AA** 6 filters Ø2"	126 (555)	**Ø6"**	•	•	•	2110-820-1380	110/6 SW AA
11340 cm²	**FT207 SW AA** 7 filters Ø2"	147 (647)	**Ø6"**	•	•	•	2385-820-1380	110/7 SW AA
12960 cm²	**FT208 SW AA** 8 filters Ø2"	160 (705) 168 (740)	**Ø6"** **Ø8"**	•	•	•	2660-820-1420	110/8 SW AA
14580 cm²	**FT209 SW AA** 9 filters Ø2"	160 (705) 189 (832)	**Ø6"** **Ø8"**	•	•	•	2980-820-1420	110/9 SW AA
16200 cm²	**FT210 SW AA** 10 filters Ø2"	160 (705) 210 (925)	**Ø6"** **Ø8"**	•	•	•	3255-820-1420	110/10 SW AA

DRAINAGE MANIFOLD: Ø3" Grooved/PVC

*Maximum flow rate is limited by the size and type of the auxiliary elements (manifolds, flanges and valves).

Identification: AZUD HELIX AUTOMATIC **FT204/4FX** SW AA DLP **MG 130** MICRON

FILTER MODELS
FT201, FT202, FT203, FT204, FT205, FT206, FT207, FT208, FT209, FT210

Inlet and outlet manifolds DIAMETER (inch)
2, 3, 4, 6, 8

Inlet and outlet manifolds CONNECTIONS
VX - Grooved **FX** - Flange DIN
FA - Flange ANSI
FX - Flange compatible DIN /ANSI (6" and 8")

FILTRATION DEGREE (micron)
MG disc: **MG 400, MG 200, MG 130, MG 100**
WS disc: **WS 130, WS 100, WS 50, WS 20, WS 10, WS 5**

AZUD HELIX AUTOMATIC FT4DCL SW DLP

3-12 double filters Ø4" with 3-way backwash valves Ø3"

Working conditions	
Salinity	6000 - 55000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. backwash pressure	1.5 bar (22 psi)
Min. backwash flow	5 l/s (78 gpm) per filter 4"
Backwash duration	20 - 30 s per filter 4"
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

Filtration degrees

- 400 micron
- 200 micron
- 130 micron
- 100 micron
- 50 micron
- 20 micron
- 10 micron
- 5 micron

Power supply Control unit (NOT included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC

Filtration area	Model	Q max 130 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Control unit FBC
9720 cm²	**FT4DCL3 SW** 3 filters Ø4"	156 (687)	**Ø6"**	•	•	1040-1200-1690	103/3 SW
12960 cm²	**FT4DCL4 SW** 4 filters Ø4"	160 (705) 208 (916)	**Ø6" Ø8"**	•	•	1305-1200-1770	112/4 SW
16200 cm²	**FT4DCL5 SW** 5 filters Ø4"	160 (705) 240 (1057)	**Ø6" Ø8"**	•	•	1575-1200-1770	112/5 SW
19440 cm²	**FT4DCL6 SW** 6 filters Ø4"	240 (1057) 312 (1374)	**Ø8" Ø10"**	•	•	1870-1200-1875	112/6 SW
22680 cm²	**FT4DCL7 SW** 7 filters Ø4"	240 (1057) 364 (1603)	**Ø8" Ø10"**	•	•	2145-1200-1875	112/7 SW
25920 cm²	**FT4DCL8 SW** 8 filters Ø4"	240 (1057) 380 (1673)	**Ø8" Ø10"**	•	•	2420-1200-1875	112/8 SW
29160 cm²	**FT4DCL9 SW** 9 filters Ø4"	380 (1673) 468 (2061)	**Ø10" Ø12"**	•	•	2700-1200-2040	112/9 SW
32400 cm²	**FT4DCL10 SW** 10 filters Ø4"	380 (1673) 520 (2290)	**Ø10" Ø12"**	•	•	3120-1200-2010	112/10 SW
35640 cm²	**FT4DCL11 SW** 11 filters Ø4"	380 (1673) 572 (2519)	**Ø10" Ø12"**	•	•	3395-1200-2010	112/11 SW
38880 cm²	**FT4DCL12 SW** 12 filters Ø4"	380 (1673) 624 (2748)	**Ø10" Ø12"**	•	•	3670-1200-2010	112/12 SW

DRAINAGE MANIFOLD: Ø4" Grooved/PVC

*Maximum flow rate is limited by the size and type of the auxiliary elements (manifolds, flanges and valves).

Identification: AZUD HELIX AUTOMATIC **FT4DCL6/8FX** SW DLP **MG 130** MICRON

FILTER MODELS
FT4DCL3, FT4DCL4, FT4DCL5, FT4DCL6, FT4DCL7, FT4DCL8, FT4DCL9, FT4DCL10, FT4DCL11, FT4DCL12

Inlet and outlet manifolds DIAMETER (inch)
6, 8, 10, 12

Inlet and outlet manifolds CONNECTIONS
FX - Flange DIN
FA - Flange ANSI
FX - Flange compatible DIN/ANSI (6" and 8")

FILTRATION DEGREE (micron)
MG disc: **MG 400, MG 200, MG 130, MG 100**
WS disc: **WS 130, WS 100, WS 50, WS 20, WS 10, WS 5**

AZUD HELIX AUTOMATIC FT4DC SW DLP

6-12 double filters Ø4" (backflushing valves are not included)

Working conditions	
Salinity	6000 - 55000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. backwash pressure	1.5 bar (22 psi)
Min. backwash flow	5 l/s (79 gpm) x double filters Ø4"
Backwash duration	30 - 45 s per module
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

Filtration degrees

- 400 micron
- 200 micron
- 130 micron
- 100 micron
- 50 micron
- 20 micron
- 10 micron
- 5 micron

Power supply Control unit (NOT included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC

Filtration degrees: 50 micron - 20 micron - 10 micron - 5 micron

Filtration area	Model	Q max* m³/h (gpm)	INLET/OUTLET/DRAINAGE MANIFOLD Connection I/O	Connection DRAIN	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Control unit FBC**
19440 cm²	**FT4DC6/6 SW** 6 filters Ø4"	160 (704)	**Ø6"**	**Ø6"**	•	•	1405-1200-1680	110/n HF SW
25920 cm²	**FT4DC8/8 SW** 8 filters Ø4"	224 (987)	**Ø8"**	**Ø8"**	•	•	1795-1200-1760	110/n HF SW
38880 cm²	**FT4DC12/10 SW** 12 filters Ø4"	336 (1480)	**Ø10"**	**Ø10"**	•	•	2665-1200-1865	110/n HF SW

*Maximum flow calculated at 50 micron
**n: Depends on the number of filtration modules installed in parallel

Filtration degrees: 400 micron - 200 micron - 130 micron - 100 micron

Filtration area	Model	Q max* m³/h (gpm)	INLET/OUTLET/DRAINAGE MANIFOLD Connection I/O	Connection DRAIN	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Control unit FBC**
19440 cm²	**FT4DC6/8-6 SW** 6 filters Ø4"	240 (1057)	**Ø8"**	**Ø6"**	•	•	1405-1200-1760	110/n HF SW
25920 cm²	**FT4DC8/10-8 SW** 8 filters Ø4"	380 (1673)	**Ø10"**	**Ø8"**	•	•	1865-1200-1865	110/n HF SW
38880 cm²	**FT4DC12/12-10 SW** 12 filters Ø4"	624 (2747)	**Ø12"**	**Ø10"**	•	•	2665-1200-2000	110/n HF SW

*Maximum flow calculated at 130 micron
**n: Depends on the number of filtration modules installed in parallel

Ask AZUD for further information.

AZUD HELIX AUTOMATIC FT4DC SW DLP LP

6-12 double filters Ø4" (backflushing valves are not included)

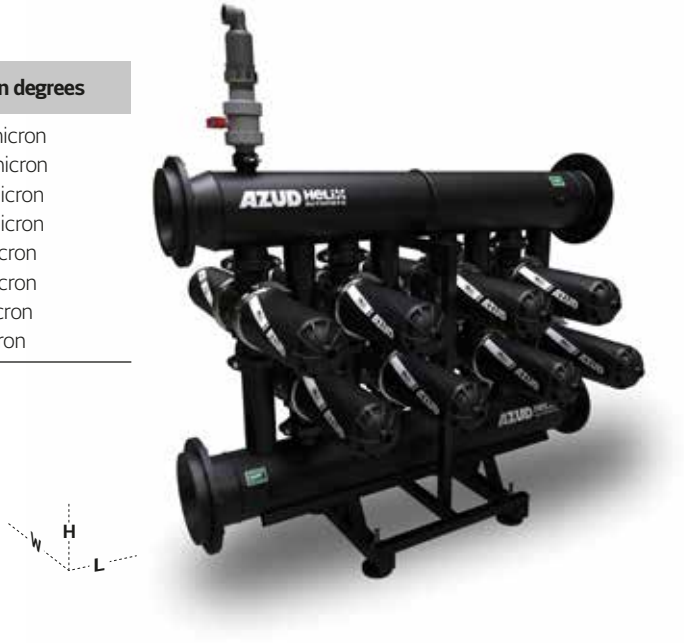
EXTERNAL SOURCE BACKWASH

Working conditions	
Salinity	6000 - 55000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. backwash pressure	1.5 bar (22 psi)
Min. backwash flow	5 l/s (79 gpm) x double filters Ø4"
Backwash duration	30 - 45 s per module
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

Filtration degrees

- 400 micron
- 200 micron
- 130 micron
- 100 micron
- 50 micron
- 20 micron
- 10 micron
- 5 micron

Power supply Control unit (NOT included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC



Filtration degrees: 50 micron - 20 micron - 10 micron - 5 micron

Filtration area	Model	Q max* m³/h (gpm)	INLET/OUTLET/DRAINAGE/PRESSURE MANIFOLD Connection I/O	Connection DRAIN/PRES.	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Control unit FBC**
19440 cm²	**FT4DC6/6 SW LP** 6 filters Ø4"	160 (704)	**Ø6"**	**Ø6"**	•	•	1405-1200-1680	110/n HF SW LP
25920 cm²	**FT4DC8/8 SW LP** 8 filters Ø4"	224 (987)	**Ø8"**	**Ø8"**	•	•	1795-1200-1760	110/n HF SW LP
38880 cm²	**FT4DC12/10 SW LP** 12 filters Ø4"	336 (1480)	**Ø10"**	**Ø10"**	•	•	2665-1200-1865	110/n HF SW LP

*Maximum flow calculated at 50 micron

**n: Depends on the number of filtration modules installed in parallel

Filtration degrees: 400 micron - 200 micron - 130 micron - 100 micron

Filtration area	Model	Q max* m³/h (gpm)	INLET/OUTLET/DRAINAGE/PRESSURE MANIFOLD Connection I/O	Connection DRAIN/PRES.	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Control unit FBC**
19440 cm²	**FT4DC6/8-6 SW LP** 6 filters Ø4"	240 (1057)	**Ø8"**	**Ø6"**	•	•	1405-1200-1760	110/n HF SW LP
25920 cm²	**FT4DC8/10-8 SW LP** 10 filters Ø4"	380 (1673)	**Ø10"**	**Ø8"**	•	•	1865-1200-1865	110/n HF SW LP
38880 cm²	**FT4DC12/12-10 SW LP** 12 filters Ø4"	624 (2747)	**Ø12"**	**Ø10"**	•	•	2665-1200-2000	110/n HF SW LP

*Maximum flow calculated at 130 micron

**n: Depends on the number of filtration modules installed in parallel

Ask AZUD for further information.

DUBAI

- **End user:** BUSINESS BAY DCP
- **Sector:** HVAC
- **Application:** Filtration for cooling towers
- **AZUD solution:**
  12 units AZUD HELIX AUTOMATIC FT4DC7
  20 micron
- **Flow rate:** 1190 m^3/h

AZUD FBC
Control units with CONTROLLER

Characteristics	
Controller	Allows the user to configure the number of filtration stations and the self-cleaning cycle of each filtration station.
Display	Backlit digital display to show the filtration equipment status and the information about the self-cleaning of every filtration station.
Electrical box	IP65 with viewer, including the auxiliary components (transformer, relay, fuse and terminal connections).
Differential pressure gauge	With visual indicator and electrical switch for the backwash activation.
Solenoid	Pilot electrovalves for the backwash valves with hydraulic/pneumatic command.
Support	Metal / plastic pannel, which integrates the protection housing, differential pressure gauge and the valves solenoid.

	FBC 103/1...3 FBC 112/4...12	FBC 101/1 AA FBC 110/2...10 AA	FBC 103/1...3 SW FBC 112/4...12 SW	FBC 101/1 SW AA FBC 110/2...10 SW AA
Filtration equipment	**FT200 DLP FT4DCL DLP**	**FT200 AA DLP**	**FT200 SW DLP FT4DCL SW DLP**	**FT200 SW AA DLP**
Power supply	220 / 110 V AC (50/60 Hz)	220 / 110 V AC (50/60 Hz)	220 / 110 V AC (50/60 Hz)	220 / 110 V AC (50/60 Hz)
Operating voltage	Solenoid Valves 24 V AC	Solenoid Valves 24 V AC	Solenoid Valves 24 V AC	Solenoid Valves 24 V AC
Nº of filtration stations	FBC 103: 1-3 FBC 112: 4-12	FBC 101 AA: 1 FBC 110 AA: 2-10	FBC 103 SW: 1-3 FBC 112 SW: 4-12	FBC 101 SW AA: 1 FBC 110 SW AA: 2-10
Self-cleaning activation	TIME, PRESSURE DIFFERENTIAL, MANUAL AND/OR EXTERNAL ELECTRICAL SIGNAL			
Extra output 24 V AC	Included for sustaining valve command. With aditional relay that informs about backwashing status of the equipment			
Digital input	FILTRATION REAL TIME COUNTER, BACKWASH START and BACKWASH CANCEL (voltage free contact)			
Pressure differential gauge	0.1 - 1.0 bar	0.1 - 1.0 bar	0.2 - 2.1 bar 0-10 bar manometer with membrane separator	0.2 - 2.1 bar 0-10 bar manometer with membrane separator
Solenoid	3 way NC. Hydraulic command	4/2 way type. Pneumatic command 6 bar pressure regulator	4/2 way type. Pneumatic command 6 bar pressure regulator	4/2 way type. Pneumatic command 6 bar pressure regulator
Languages	English/Spanish or French/German	English/Spanish or French/German	English/Spanish or French/German	English/Spanish or French/German
Room temperature	≤ 55 ºC (131 ºF)			

Identification: AZUD FBC **101/1 AA 220 V AC ENG/ESP**

FBC CONTROL UNIT MODELS	POWER SUPLY	LANGUAGE
103/1, 103/2, 103/3, 112/4, 112/5, 112/6, 112/7, 112/8, 112/9, 112/10, 112/11, 112/12 101/1 AA, 110/2 AA, 110/3 AA , 110/4 AA, 110/5 AA, 110/6 AA, 110/7 AA, 110/8 AA, 110/9 AA, 110/10 AA 103/1 SW, 103/2 SW, 103/3 SW, 112/4 SW, 112/5 SW, 112/6 SW, 112/7 SW, 112/8 SW, 112/9 SW, 112/10 SW, 112/11 SW, 112/12 SW 101/1 SW AA, 110/2 SW AA, 110/3 SW AA , 110/4 SW AA, 110/5 SW AA, 110/6 SW AA, 110/7 SW AA, 110/8 SW AA, 110/9 SW AA, 110/10 SW AA	**220 V AC 110 V AC**	**ENG/ESP FRA/DEU**

AZUD FBC LOGIC
Control units with PLC and HMI

Characteristics	
PLC	Allows the user to configure the number of filtration stations and the self-cleaning cycle of each filtration station. Configure warnings and alarm set points with a user profile through an access control.
Display (HMI)	Color touch display (HMI) that indicates filtration equipment working status and the information relative to each filtration station. Includes alerts and alarms, visual reading, and a historical parameters database.
Electrical box	IP65 metal box, with security key. Display, emergency shooter and pilots that indicate the equipment status are integrated on the door.
Support	Metal support stand for electrical box, pressure indicator and valves solenoid.

	FBC LOGIC L112/1...12	FBC LOGIC M112/1...12	FBC LOGIC H112/1...12
Filtration equipment		**ALL SERIES**	
Power supply		220 / 110 V AC (50/60 Hz)	
Operating voltage		Solenoid Valves: 24 V DC	
Solenoid		Hydraulic command (3 way NC) or Pneumatic command (4/2 way)	
Nº of filtration stations		1 - 12	
PLC inputs	14 Digitals	14 Digitals 4 Analog	14 Digitals 4 Analog
PLC outputs		18 Digitals	
Display (HMI)	4 inch TFT 65536 colors	7 inch TFT 65536 colors	7 inchTFT 16 millon
Pressure Indicator	Differential pressure gauge 0.1 - 1.0 bar	Pressure transmitter 0 - 10 bar	Pressure transmitter 0 - 10 bar
Backwash activation		TIME, PRESSURE DIFFERENTIAL, MANUAL (HMI) AND/OR EXTERNAL ELECTRICAL SIGNAL	
Communication system	-	Modbus TCP/IP	Modbus TCP/IP, GSM remote control communications
Languages		English/Spanish/French/German	
Room temperature		≤ 55 ºC (131 ºF)	

Ask AZUD for further information.

BRAZIL

- **End user:** AQUAPOLO SAO PAULO
- **Application:** Microfiltration cartridge (5µm) protection. Municipal WWTP (MBR) with a tertiary treatment for industrial water applications
- **AZUD solution:** 8 racks
  AZUD HELIX AUTOMATIC FT4DC7 5 micron
- **Flow rate:** 400 m^3/h

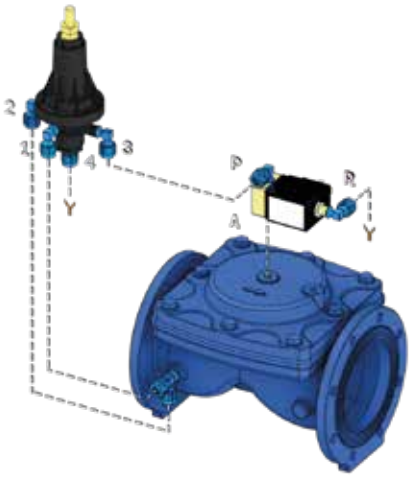
SUSTAINING VALVE KIT

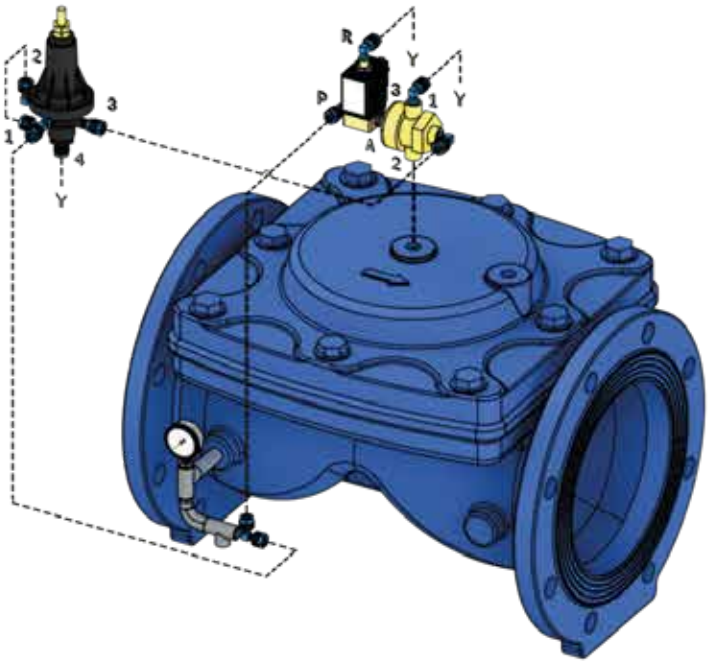
Membrane 2-way (NO) hydraulic valve + Solenoid + Regulating pilot

Characteristics	
Max. working pressure	PN10 - 10 bar (145 psi) PN6 - 6 bar (87 psi)
Body material	Cast iron with epoxy polyester coating
Spring material	SS 304
Diaphragm material	Natural rubber reinforced with nylon fabric
Regulating pilot	Plastic (1 - 10 bar)
DLP Regulating pilot	Plastic (0.6 - 6 bar)
Solenoid	3/2-way NC Hydraulic command
Operating voltage	24 V AC FBC 24 V DC FBC LOGIC

Connection	
Ø2"	Thread BSP
Ø3"	Flange DIN 2576
Ø4"	Flange DIN 2576
Ø6"	Compatible flange DIN 2576 / ANSI B16.5
Ø8"	Compatible flange DIN 2576 / ANSI B16.5
Ø10"	Flange DIN 2576
Ø12"	Flange DIN 2502

Schemes **For 2" - 3" - 4"** **For 6" - 8" - 10" - 12"**





BACKWASH VALVES FOR HIGH FLOW FILTRATION MODULES

Valves for AZUD HELIX AUTOMATIC FT4DC DLP and FT4DC DLP LP

Characteristics	
Max. working pressure	PN10 - 10 bar (145 psi)
Type	WAFER
Body material	Aluminum coated
Seal material	EPDM
Disc material	Coated cast iron
Available actuators	Pneumatic double acting Pneumatic spring return Hand wheel with gear reduction
Recommended pneumatic pressure	6 bar / 87 psi
Available sizes	Ø6" (DN 150) Ø8" (DN 200) Ø10" (DN 250) Ø12" (DN 300)

Valves for AZUD HELIX AUTOMATIC FT4DC SW DLP and FT4DC SW DLP LP

Characteristics	
Max. working pressure	PN10 - 10 bar (145 psi) PN6* - 6 bar (87 psi)
Type	FLANGE
Body material	rPP
Seal material	EPDM
Disc material	PP
Available actuators	Pneumatic double acting Pneumatic spring return Hand wheel with gear reduction
Recommended pneumatic pressure	6 bar / 87 psi
Available sizes	Ø6" (DN 150) Ø8" (DN 200) Ø10" (DN 250) Ø12" (DN 300)

*For filtration of water above 40 ºC, the nominal pressure of the valves decreases to 6 bar (87 psi)

AZUD HELIX AUTOMATIC FES
Pump + Sustaining valve kit + AZUD FBC LOGIC

Characteristics	
Feed Pump	Horizontal centrifugal pump. Body and Impeller of foundry and shaft of AISI 304. Three-phase motor and IE3 efficiency. IP 55 protection.
Control Unit	AZUD FBC LOGIC L112 that include: PLC, touch screen (HMI), solenoid, differential pressure gauge, IP65 metal box, protections and starts of electromechanical equipment. Power Supply: 3 x 220 / 400 V AC (50 Hz).
Valves & Accesories	HDPE pipe, check valve and manual isolation valves at the inlet and at the outlet made of coated cast iron. Sustaining Valve Kit included.
Support	Structure made of carbon steel with protective coating.
Filtration Equipment	Not included. The equipment must come with special configuration to be conected to the FES.

Filtration degrees		
400 micron	130 micron	50 micron
200 micron	100 micron	20 micron

Model	Operating range	Inlet / Outlet / Drainage Manifold	Compatible filtration equipment	Dimensions L-W-H (mm)	Power (kW)
		FT200 DLP SERIES			
FT200 8-24/2	For 2.7 bar, 8 m³/h For 2.2 bar, 24 m³/h	Ø2" / Ø2" / Ø2"	FT201/2FX (400 to 20 micron)	1000 x 900 x 1700	2.2
FT200 15-50/3	For 2.7 bar, 15 m³/h For 2.2 bar, 50 m³/h	Ø3" / Ø3" / Ø3"	FT202/3FX, FT203/3FX (400 to 20 micron)	1200 x 1000 x 1700	5.5
FT200 20-50/4	For 2.7 bar, 20 m³/h For 2.2 bar, 50 m³/h	Ø4" / Ø4" / Ø3"	FT203/4FX to FT205/4FX (50, 20 micron) FT204/6FX to FT206/6FX (20 micron)*	1300 x 1000 x 1700	5.5
FT200 50-90/6	For 2.7 bar, 50 m³/h For 2.1 bar, 90 m³/h	Ø6" / Ø6" / Ø3"	FT203/4FX to FT205/4FX (400 to 100 micron)* FT204/6FX to FT206/6FX (50 micron) FT207/6FX to FT210/6FX (50, 20 micron) FT208/8FX to FT212/8FX (20 micron)*	1700 x1200 x 1700	7.3
FT200 90-160/6	For 2.8 bar, 90 m³/h For 2.3 bar, 160 m³/h	Ø6" / Ø6" / Ø3"	FT204/6FX to FT210/6FX (400 to 100 micron) FT208/8FX to FT212/8FX (50 micron)*	1800 x 1200 x 1700	14.3
FT200 160-240/8	For 3.1 bar, 160 m³/h For 2.5 bar, 240 m³/h	Ø8" / Ø8" / Ø3"	FT208/8FX to FT212/8FX (400 to 100 micron)	2000 x 1500 x 1700	21.7

*Connection adapters are needed for Filtration Equipment.

Available options : Outlet and/or drainage flow indicator sensors. | Modbus TCP/IP or RTU communication. | Remote control system

Ask AZUD for further information.

Model	Operating range	Inlet / Outlet / Drainage Manifold	Compatible filtration equipment	Dimensions L-W-H (mm)	Power (kW)
			FT200 AA DLP SERIES		
FT200AA 5-22/2	For 2.7 bar, 5 m^3/h For 2.3 bar, 22 m^3/h	Ø2" / Ø2" / Ø2"	FT201/2FX AA (400 to 20 micron)	1000 x 900 x 1700	3.7
FT200AA 12-50/3	For 2.8 bar, 12 m^3/h For 2.2 bar, 50 m^3/h	Ø3" / Ø3" / Ø3"	FT202/3FX AA, FT203/3FX AA (400 to 20 micron)	1200 x 1000 x 1700	7.7
FT200 AA 18-50/4	For 2.8 bar, 18 m^3/h For 2.2 bar, 50 m^3/h	Ø4" / Ø4" / Ø3"	FT203/4FX AA to FT205/4FX AA (50, 20 micron) FT204/6FX AA (50, 20 micron)* FT205/6FX AA to FT207/6FX AA (20 micron)*	1300 x 1000 x 1700	8
FT200 AA 50-90/6	For 2.7 bar, 50 m^3/h For 2.1 bar, 90 m^3/h	Ø6" / Ø6" / Ø3"	FT203/4FX AA to FT205/4FX AA (400 to 100 micron)* FT204/6FX AA (100 micron) FT205/6FX AA to FT207/6FX AA (50 micron) FT208/6FX AA to FT210/6FX AA (50, 20 micron) FT208/8FX AA to FT210/8FX AA (20 micron)*	1700 x 1200 x 1700	9.5
FT200 AA 90-160/6	For 2.8 bar, 90 m^3/h For 2.3 bar, 160 m^3/h	Ø6" / Ø6" / Ø3"	FT204/6FX AA to FT210/6FX AA (400 to 100 micron) FT208/8FX AA to FT210/8FX AA (50 micron)*	1800 x 1200 x 1700	16.5
FT200 AA 160-240/8	For 3.1 bar, 160 m^3/h For 2.5 bar, 240 m^3/h	Ø8" / Ø8" / Ø3"	FT208/8FX AA to FT210/8FX AA (400 to 100 micron)	2000 x 1500 x 1700	24
			FT 4DCL DLP SERIES		
FT4DCL 50-160/6	For 2.9 bar, 50 m^3/h For 2.2 bar, 160 m^3/h	Ø6" / Ø6" / Ø4"	FT4DCL3/6FX to FT4DCL5/6FX (400 to 20 micron) FT4DCL4/8FX to FT4DCL8/8FX (50, 20 micron)* FT4DCL6/10FX to FT4DCL12/10FX (20 micron)* FT4DCL9/12FX, FT4DCL10/12FX (20 micron)*	1900 x1300 x 1700	14.3
FT4DCL 160-240/8	For 3.1 bar, 160 m^3/h For 2.5 bar, 240 m^3/h	Ø8" / Ø8" / Ø4"	FT4DCL4/8FX to FT4DCL8/8FX (400 to 100 micron) FT4DCL6/10FX to FT4DCL12/10FX (50 micron)* FT4DCL9/12FX (50 micron)* FT4DCL11/12FX, FT4DCL12/12FX (20 micron)*	2100 x 1500 x 1700	21.7
FT4DCL 280-380/10	For 2.9 bar, 280 m^3/h For 2.8 bar, 380 m^3/h	Ø10" / Ø10" / Ø4"	FT4DCL6/10FX to FT4DCL12/10FX (400 to 100 micron) FT4DCL10/12FX to FT4DCL12/12FX (50 micron)*	2300 x 1600 x 1700	41
FT4DCL 360-630/12	For 3.5 bar, 360 m^3/h For 2.6 bar, 630 m^3/h	Ø12" / Ø12" / Ø4"	FT4DCL9/12FX to FT4DCL12/12FX (400 to 100 micron)	2500 x 1800 x 1700	57

*Connection adapters are needed for Filtration Equipment.

Available options : Outlet and/or drainage flow indicator sensors. | Modbus TCP/IP or RTU communication. | Remote control system

Ask AZUD for further information.

FILTRATION SOLUTIONS FOR ANY NEED

We provide filtration solutions that optimize the energy and water savings. AZUD Disc and Screen technologies are a reliable and efficient solution for a great variety of raw water qualities and operating conditions.

- **Modularity, versatility, compatibility.**
- **Compact systems for easy transport and installation.**
- **Ease of maintenance, no tool requirements.**
- **Optimized rate of filtered water vs footprint.**

AZUD HELIX SYSTEM FT

AZUD SPIRAL CLEAN

AZUD MODULAR 100

AZUD HELIX AUTOMATIC FT DLP

STANDARD series: low salinity water - TDS < 6000 mg/l
SW series: high salinity water and sea water - TDS: 6000 - 55000 mg/l

	Materials of construction			
	FT DLP	FT SW DLP	FT CL DLP	FT DW DLP
MG disc	PP	PP	PP	PP FG
WS disc	HDPE	HDPE	HDPE	HDPE
Disc support	rPP	rPP	rPP	rPP FG
Spring	SS 302	HASTELLOY	SS 302	SS 302
Base/Lid	rPA	rPA	rPP	rPA FG
Clamp	SS 304	SS 316L	SS 304	SS 316L
Sealing o-rings	NBR	NBR	NBR	NBR

Filtration degrees

- 400 micron
- 200 micron
- 130 micron
- 100 micron
- 50 micron
- 20 micron
- 10 micron
- 5 micron

Working conditions	
Max. working pressure	10 bar (145 psi)*
Min. working pressure	0.8 bar (11.6 psi)
Min. backwash pressure	1.5 bar (22 psi)
Min. backwash flow	2.5 l/s (39 gpm) per filter 2" and 3" 5 l/s (79 gpm) per filter 4"
Backwash duration	15 - 25 s
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

*6 bar (87 psi) for FT CL DLP only.

DLP Technology
Low Pressure Blackflush

Filtration area	Model	Q max 130 µm m³/h (gpm)	Connections	Dimensions L-W-H (mm)
1620 cm²	**2" SUPER**	26 (114)	2SR / 2SA - 3 Threaded connections (BSP or NPT repectively) 2SV - 2 Grooved connections 90º + 1 Threaded connection 2SW - 2 Grooved connections 180º + 1 Threaded connection	310-212-720
1620 cm²	**3"**	26 (114)	3NR / 3NA - 3 Threaded connections (BSP or NPT repectively) 3NV - 2 Grooved connections 90º + 1 Threaded connection 3NW - 2 Grooved connections 180º + 1 Threaded connection	335-212-735
3240 cm²	**4" SUPER**	52 (229)	4SL - 2 Grooved connections 180º	340-212-1200

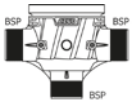
Diameters

2" SUPER

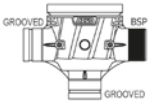
3"

4" SUPER

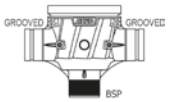
Connections



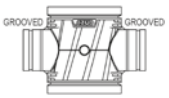
2SR/3NR/2SA/3NA



2SV/3NV



2SW/3NW



4SL

Identification: AZUD HELIX AUTOMATIC FT **2SR DLP MG 130** MICRON

CONNECTION (inch)
2": **2SR, 2SA, 2SV, 2SW**
3": **3NR, 3NA, 3NV, 3NW**
4": **4SL**

TYPE OF FILTER according to water type
DLP - Low salinity water (TDS < 6000 mg/l)
SW DLP - High salinity water and sea water (TDS: 6000 - 55000 mg/l)
CL DLP - Chlorinated water (free chlorine ≥ 1.5 mg/l)
DW DLP - Suitable for drinking water

FILTRATION DEGREE (micron)
MG disc: **MG 400, MG 200, MG 130, MG 100**
WS disc: **WS 130, WS 100, WS 50, WS 20, WS 10, WS 5**

PP: Polypropylene **rPP:** Reinforced polypropylene **SS:** Stainless steel **rPA:** Reinforced polyamide **HDPE:** High density polyethylene **FG:** Food grade
NBR: Nitrile rubber

AZUD HELIX SYSTEM FT

STANDARD series: low salinity water - TDS < 6000 mg/l
SW series: high salinity water and sea water - TDS: 6000 - 55000 mg/l

	Materials of construction			
	FT	**FT SW**	**FT CL**	**FT DW**
MG disc	PP	PP	PP	PP FG
WS disc	HDPE	HDPE	HDPE	HDPE
Disc support	rPP	rPP	rPP	rPP FG
Base/Lid	rPA	rPA	rPP	rPA FG
Clamp	SS 304	SS 316L	SS 304	SS 316L
Sealing o-rings	NBR	NBR	NBR	NBR

Filtration degrees

- 400 micron
- 200 micron
- 130 micron
- 100 micron
- 50 micron
- 20 micron
- 10 micron
- 5 micron

Working conditions	
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

*6 bar (87 psi) for FT CL only.

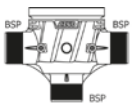
Filtration area	**Model**	**Q max 130 µm m³/h (gpm)**	**Connections**		**Dimensions** L-W-H (mm)
1198 cm²	**2"**	30 (132)	**Ø2"**	2NR / 2NA - 3 Threaded connections (BSP or NPT respectively) 2NV - 2 Grooved connections 90º + 1 Threaded connection 2NW - 2 Grooved connections 180º + 1 Threaded connection	310-212-595
1699 cm²	**2" SUPER**	30 (132)	**Ø2"**	2SR / 2SA - 3 Threaded connections (BSP or NPT respectively) 2SV - 2 Grooved connections 90º + 1 Threaded connection 2SW - 2 Grooved connections 180º + 1 Threaded connection	310-212-720
1198 cm²	**3" COMPACT**	50 (220)	**Ø3"**	3CR / 3CA - 3 Threaded connections (BSP or NPT respectively) 3CV - 2 Grooved connections 90º + 1 Threaded connection 3CW - 2 Grooved connections 180º + 1 Threaded connection	336-212-610
1699 cm²	**3"**	50 (220)	**Ø3"**	3NR / 3NA - 3 Threaded connections (BSP or NPT respectively) 3NV - 2 Grooved connections 90º + 1 Threaded connection 3NW - 2 Grooved connections 180º + 1 Threaded connection	336-212-735
2396 cm²	**4"**	70 (308)	**Ø4"**	4NL - 2 Grooved connections 180º 4NB - 2 Flange connections DIN 2576 180º	341-212-950
3398 cm²	**4" SUPER**	100 (440)	**Ø4"**	4SL - 2 Grooved connections 180º 4SB - 2 Flange connections DIN 2576 180º	341-212-1200
3398 cm²	**6"**	100 (440)	**Ø6"**	6SB - 2 Flange connections DIN 2576 180º	531-212-1200

Diameters

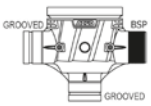
2" **2" SUPER** **3" COMPACT** **3"**

4" **4" SUPER**

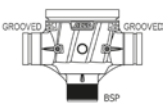
Connections



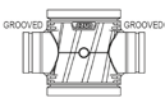
2NR/2NA/2SR/2SA 3CR/3CA/3NR/3NA



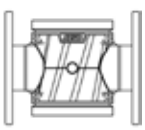
2NV/2SV/3CV/3NV



2NW/2SW/3CW/3NW



4NL/4SL



4NB/4SB/6NB

Identification: AZUD HELIX SYSTEM **FT 2SR SW MG 130** MICRON

CONNECTION (inch)
2": **2NR, 2NA, 2NV, 2NW, 2SR, 2SA, 2SV, 2SW**
3": **3NR, 3NA, 3NV, 3NW, 3CR, 3CA, 3CV, 3CW**
4": **4NL, 4NB, 4SL, 4SB**
6": **6NB**

TYPE OF FILTER according to water salinity
FT - Low salinity water (TDS < 6000 mg/l)
FT SW - High salinity water and sea water (TDS: 6000 - 55000 mg/l)
FT CL - Chlorinated water (free chlorine ≥ 1.5 mg/l)
FT DW - Suitable for drinking water

FILTRATION DEGREE (micron)
MG disc: **MG 400, MG 200, MG 130, MG 100**
WS disc: **WS 130, WS 100, WS 50, WS 20, WS 10, WS 5**

PP: Polypropylene **rPP:** Reinforced polypropylene **SS:** Stainless steel **rPA:** Reinforced polyamide **HDPE:** High density polyethylene **FG:** Food grade **NBR:** Nitrile rubber

AZUD SPIRAL CLEAN

STANDARD series: low salinity water - TDS < 6000 mg/l

Materials of construction	
Screen	316L stainless steel (SS 316L)
Screen support	Polypropylene (PP)
Base/Lid	Reinforced polyamide (rPA)
Clamp	304 stainless steel (SS 304)
Sealing o-rings	Nitrile rubber (NBR)

Filtration degrees

- 200 micron
- 130 micron
- 100 micron

Working conditions	
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. Cleaning pressure	2 bar (29 psi)
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

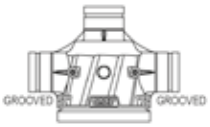
Filtration area	Model	Q max 130 µm m³/h (gpm)	Connections		Dimensions L-W-H (mm)
890 cm²	**2"**	30 (132)	**Ø2"**	2NR / 2NA - 2 Threaded connections 180º (BSP or NPT respectively) 2NW - 2 Grooved connections 180º	310-212-875
1190 cm²	**2" SUPER**	30 (132)	**Ø2"**	2SR / 2SA - 2 Threaded connections 180º (BSP or NPT respectively) 2SW - 2 Grooved connections 180º	310-212-1000
890 cm²	**3" COMPACT**	50 (220)	**Ø3"**	3CR / 3CA - 2 Threaded connections 180º (BSP or NPT respectively) 3CW - 2 Grooved connections 180º	336-212-890
1190 cm²	**3"**	50 (220)	**Ø3"**	3NR / 3NA - 2 Threaded connections 180º (BSP or NPT respectively) 3NW - 2 Grooved connections 180º	336-212-1015

Diameters

2" **2" SUPER** **3" COMPACT** **3"**

Connections

2NR/2NA/2SR/2SA
3CR/3CA/3NR/3NA



2NW/2SW/3CW/3NW

Identification: AZUD SPIRAL CLEAN **2SR** **130** MICRON

CONNECTION (inch)
2": **2NR, 2NA, 2NW, 2SR, 2SA, 2SW**
3": **3NR, 3NA, 3NW, 3CR, 3CA, 3CW**

FILTRATION DEGREE (micron)
200, 130, 100

AZUD MODULAR 100

STANDARD series: low salinity water - TDS < 6000 mg/l

Materials of construction	
Disc	Polypropylene (PP)
Screen	SS 316L with molded PP support
Base/Lid	Polypropylene (PP)
Sealing o-rings	Nitrile rubber (NBR)

Working conditions	
Max. working pressure	8 bar (116 psi)
Min. working pressure	0.8 bar (11.6 psi)
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

Filtration degrees

DISC	SCREEN
130 micron	530 micron
	200 micron
	130 micron
	100 micron

Filtration area	Model	Q max 130 µm m³/h (gpm)	Connections		Dimensions L-W-H (mm)
180 cm²	**3/4"**	5 (22)	**Ø3/4"**	BSP / NPT - 2 Threaded connections 180º	158-82-174
180 cm²	**1"**	6 (26)	**Ø1"**	BSP / NPT - 2 Threaded connections 180º	158-82-174
310 cm²	**1 1/4"**	10 (44)	**Ø1 1/4"**	BSP / NPT - 2 Threaded connections 180º	231-115-204
310 cm²	**1 1/2"**	14 (62)	**Ø1 1/2"**	BSP / NPT - 2 Threaded connections 180º	231-115-204
535 cm²	**1 1/2" SUPER**	20 (88)	**Ø1 1/2"**	BSP / NPT - 2 Threaded connections 180º	252-147-244
535 cm²	**2"**	25 (110)	**Ø2"**	BSP / NPT - 2 Threaded connections 180º	267-147-250

Diameters

3/4" **1"** **1 1/4"** **1 1/2"** **1 1/2" SUPER** **2"**

Identification: AZUD MODULAR **100** **3/4" BSP** **130** MICRON

CONNECTION (inch)
3/4" BSP, 1" BSP, 1 1/4" BSP, 1 1/2" BSP, 2" BSP
3/4" NPT, 1" NPT, 1 1/4" NPT, 1 1/2" NPT, 2" NPT

FILTRATION DEGREE (micron)
Disc: **130**
Screen: **530, 200, 130, 100**

Information for any need
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AZUD

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@AZUDWater

Technical data sheets, filtration equipment drawings, certificates, references, newsletters.

...AND MUCH MORE CONTENT

B

AZUD LUXON TECHNOLOGY

- **RELIABLE FILTRATION** in a wide range of filtration degrees (50-1000 micron), thanks to a robust stainless steel screen housed in a steel vessel.
- **EFFICIENT SELF-CLEANING** with no interruption of clean water supply. The exclusive AZUD suction nozzles provides high suction capacity with low water consumption.
- **EASY MAINTENANCE** with multiple devices for easy inspection and maintenance.
- **PLUG&PLAY AND MODULAR SOLUTION,** easy installation and high filtration capacity with minimum footprint.

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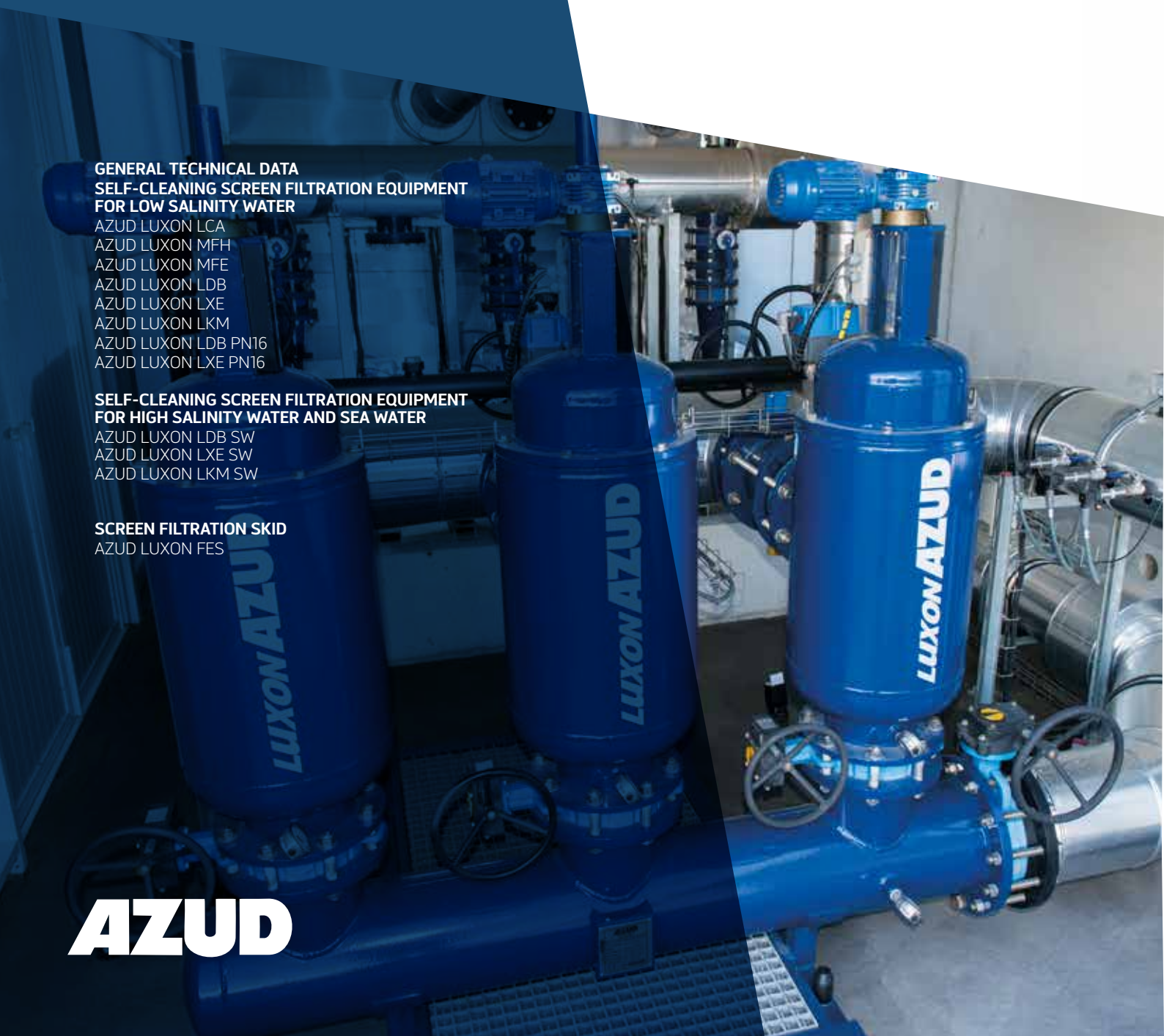
GENERAL TECHNICAL DATA
SELF-CLEANING SCREEN FILTRATION EQUIPMENT FOR LOW SALINITY WATER
AZUD LUXON LCA
AZUD LUXON MFH
AZUD LUXON MFE
AZUD LUXON LDB
AZUD LUXON LXE
AZUD LUXON LKM
AZUD LUXON LDB PN16
AZUD LUXON LXE PN16

SELF-CLEANING SCREEN FILTRATION EQUIPMENT FOR HIGH SALINITY WATER AND SEA WATER
AZUD LUXON LDB SW
AZUD LUXON LXE SW
AZUD LUXON LKM SW

SCREEN FILTRATION SKID
AZUD LUXON FES



AZUD

AZUD LUXON

SELF-CLEANING SCREEN FILTRATION EQUIPMENT

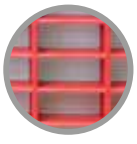
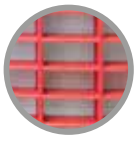
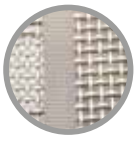
1 **Coarse screen** - only in horizontal models - prevents entry of larger particles that could interfere with the cleaning mechanism.

2 **Filtration element** composed by a fine **weave wire stainless steel screen** where particles bigger than the filtration degree are trapped. The screen incorporates a **support** that provides mechanical resistance.

3 **Drain valve,** that as a result of the pre-set pressure differential, allows the extraction of trapped particles in the screen towards the drain discharge.

4 **Vessel** houses and protects the filtration element. Made of coated carbon steel or stainless steel.

5 **Cleaning mechanism**. Scanner with suction nozzles that spirals along the screen and removes the trapped particles.
Hydraulic command: turbine + hydraulic piston.
Electric command: electric motor.

	Screen support FILTRATION DEGREE			CLEANING MECHANISM
HYDRAULIC Models **LCA/MFH**	 **PVC**: 1000, 500, 300, 200, 125, 100, 80 micron	 **Molded PP:** 1000, 500, 300, 200, 125, 100, 80, 50 micron		 Suction nozzle scanner with helical movement of the scanner by **HYDRAULIC COMMAND**
ELECTRIC Models **LDB/LXE**	 **PVC:** 1000, 500, 300, 200, 125, 100, 80 micron	 **Molded PP:** 1000, 500, 300, 200, 125, 100, 80, 50 micron	 **SS:** 1000, 500, 300, 200, 125, 100, 80, 50 micron	 Suction nozzle scanner with helical movement of the scanner by **ELECTRIC MOTOR**

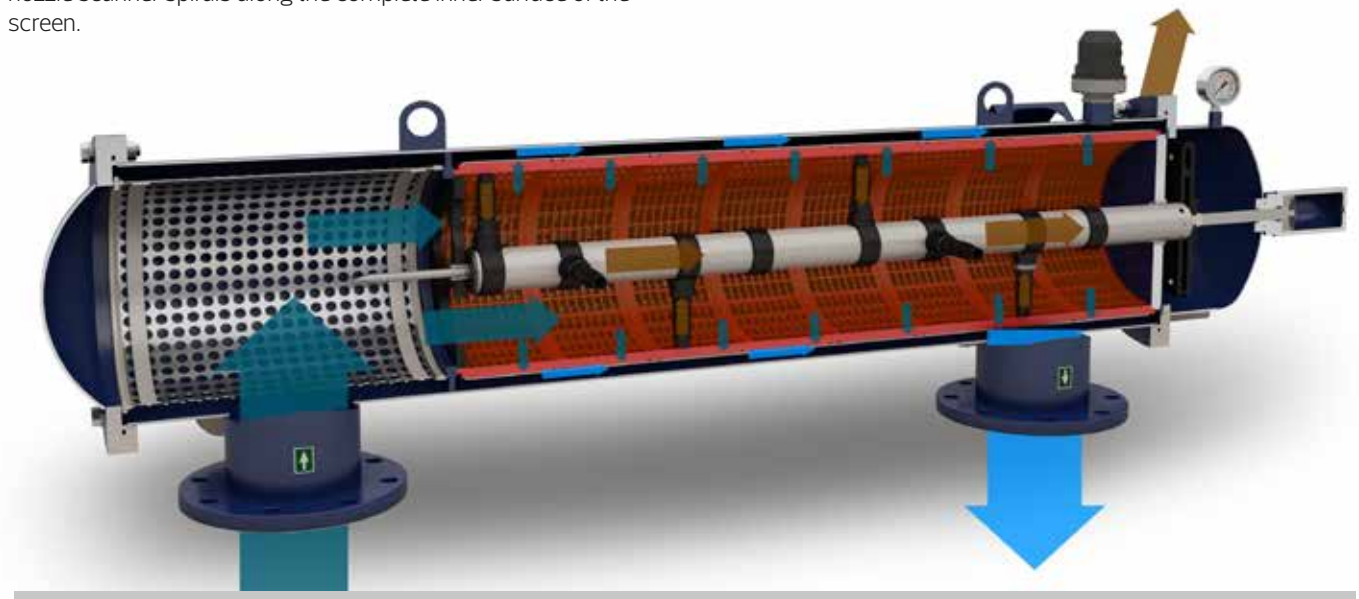
FILTRATION PHASE

Raw water enters from the inlet manifold to the coarse screen, trapping larger particles that could interfere with the filter cleaning mechanism -in vertical models, large and heavy particles are separated by gravity. Then water flows IN-OUT through the weave wire screen, trapping in the inner screen surface bigger particles than the filtration degree. Clean water flows out through the outlet manifold . Particles build-up creates a filter cake that increases the pressure differential between inlet and outlet, and this activates the cleaning cycle when the pre-set point is reached.

SELF-CLEANING PHASE

Clean water supply is not interrupted when the cleaning cycle is activated. The cleaning phase starts with the opening of the drain valve, that creates a pressure gradient between the pressurized inner filter and the atmosphere. At the same time, the suction nozzle scanner spirals along the complete inner surface of the screen.

As a result of the pressure difference, a high velocity Suction Effect is created at the inlet of the nozzles, making the water flows OUT- IN through the filter element and vacuuming all the particles retained on the screen surface.



VERTICAL

HYDRAULIC Models | **ELECTRIC Models**

Axis position: VERTICAL
Connections configuration: ANGLE

- Compact equipment, specified for high flow rates.
- Heavy particles separation by gravity.

LCA series

LDB series **LKM series**

HORIZONTAL

HYDRAULIC Models | **ELECTRIC Models**

Axis position: HORIZONTAL
Connections configuration: PARALLEL

- 6 mm coarse screen included.
- Hinged lid for an easy opening.

MFH series

MFE series

LXE series

COMPETITIVE ADVANTAGES

AZUD LUXON SELF-CLEANING FILTRATION EQUIPMENT

- Wide range of filtration degrees (50 - 1000 micron).
- Wide range of filtration areas (900 - 21300 cm^2).
- Large filtration capacity in minimum footprint.
- Different water qualities. Variety of materials and components as per the application requirements.
- Non-stop filtration during cleaning phase.
- Plug&Play installation. Easy opening vessel with hinge for maintenance labours.
- High quality, resistant and durable surface treatment. Special executions according to application requirements.
- Modularity. Wide range of flow rates and configurations using a minimum number of components.

AZUD LUXON LCA / AZUD LUXON MFH

Helical movement of the scanner by HYDRAULIC COMMAND

- No need of electrical supply. Autonomous self-cleaning thanks to a turbine and hydraulic piston that commands the helical movement of the suction scanner.
- AZUD exclusive suction nozzles for hydraulic models, with high suction capacity of large particles with low water consumption.
- Molded PP support, provides saline corrosion resistance, high open-area and modular construction.
- Controller includes differential pressure sensor, allowing time regulated cleanings, accurate adjustment of the pressure differential set-point and direct reading of the pressure value at any time. Controller allows the activation of auxiliary elements (pressure sustaining valve) to optimize the self-cleaning process.

AZUD LUXON LDB / AZUD LUXON LXE

Helical movement of the scanner by ELECTRIC MOTOR

- The electric motor with gearbox commands the helical movement of the suction scanner. Therefore, the successful self-cleaning process is guaranteed independent from the working pressure value.
- Lower working pressure required.
- Multilayer SS screen, with 4 floating layers, provides a higher open area, an excellent mechanical resistance to DP and expanded life span.
- AZUD exclusive suction nozzles for electric models, with enhanced cleaning of multilayer SS screen and low water consumption.

QUICK SELECTION GUIDE

APPROXIMATE SELECTION CRITERIA considering only the raw water quality:

Quality	Raw water source	Filtration degree	Maximun flow per filter 1000 cm²* m³/h	Maximun flow per filter 1000 cm²* gpm
GOOD	• Municipal water supply • Closed loop water recirculation system • Sea water taken from a beach well • Pre-treated water with multimedia filter or membrane technology • Deep water coming from a steady aquifer through a casing well, without suspended solids nor scaling salts	1000 micron 500 micron 300 micron 200 micron 125 micron 100 micron 80 micron 50 micron	89 82 76 60 50 45 30 22	392 361 335 264 220 198 132 97
AVERAGE	• Open loop water recirculation system, for cold climates or good environmental quality • Clear and stable quality surface water (lakes and ponds, slow flowing rivers and canals) • Sea water taken far away from the coast line • Reclaimed wastewater after tertiary treatment • Industrial process water with low load of suspended solids	1000 micron 500 micron 300 micron 200 micron 125 micron 100 micron 80 micron 50 micron	80 74 68 48 40 36 24 15	353 325 301 211 176 159 106 68
POOR	• Open loop water recirculation system, for hot climates or bad environmental quality • Bad surface water quality (lakes and ponds, rivers and canals) with increased biological growth • Well water from a poor aquifer quality and/or salts that may precipitate • Sea water open intake near ports or industrial zones, with a physical-chemical pre-treatment • Industrial process water with high load of inorganic suspended solids	1000 micron 500 micron 300 micron 200 micron 125 micron 100 micron 80 micron 50 micron	62 57 53 36 30 27 18 11	274 253 234 159 132 119 79 48
VERY POOR	• Surface water (lakes, ponds, rivers and canals) affected by floods and storm water with soil erosion and no chemical pre-treatment • Sea water open intake near ports or industrial zones with no pre-treatment • Industrial process water with high load of sticky and fibrous organic suspended solids	1000 micron 500 micron 300 micron 200 micron 125 micron 100 micron 80 micron 50 micron	53 49 46 27 20 18 12 9	235 217 201 119 88 79 53 39

* Maximum flow rate without considering limitations given by the diameter and the type of auxiliary elements (manifolds, flanges and valves).
Note that design flow rate defines the backwash frequency of the filtration equipment.

Ask AZUD for further information.

CHILE

- **End user:** COPPER MINE SIERRA GORDA
- **Application:** Make-up water filtration for industrial process water. Sea water intake
- **AZUD solution:** 7 units
  AZUD LUXON LXE 21300/14 SW 100 micron
- **Flow rate:** 5400 m^3/h

STANDARD SELF-CLEANING SCREEN FILTRATION EQUIPMENT

LOW SALINITY WATER (TDS < 6000 mg/l)

	Cleaning command	Axis position	Vessel Filtration element Drainage valve	Cleaning mechanism	Scheme
LCA	HYDRAULIC	VERTICAL	**Carbon steel vessel** with internal and external epoxy-polyester coating. PN10 **SS 316L weave wire screen** with: • PVC support • Molded PP support **2-ways membrane drainage valve:** • Ø1" of reinforced polyamide • Ø2" of reinforced polyamide	Turbine, piston and PVC scanner with suction nozzles	
MFH	HYDRAULIC	HORIZONTAL	**Carbon steel vessel** with internal and external epoxy-polyester coating. PN10 **SS 316L weave wire screen** with: • Molded PP support **2-ways membrane drainage valve:** • Ø2" of reinforced polyamide	Turbine, piston and SS 304 scanner with suction nozzles	
MFE	ELECTRIC	HORIZONTAL	**Carbon steel vessel** with internal and external epoxy-polyester coating. PN10 **SS 316L weave wire screen** with: • Molded PP support **2-ways membrane drainage valve:** • Ø2" of reinforced polyamide	Motor, gearbox and SS 304 scanner with suction nozzles	
LDB	ELECTRIC	VERTICAL	**Carbon steel vessel** with internal and external epoxy-polyester coating. PN10 **SS 316L weave wire screen** with: • PVC support • Molded PP support • SS 304 support **2-ways membrane drainage valve:** • Ø1" of reinforced polyamide • Ø2" of reinforced polyamide • Ø2" of brass	Motor, gearbox and SS 304 scanner with suction nozzles	

LOW SALINITY WATER (TDS < 6000 mg/l)

	Cleaning command	Axis position	Vessel Filtration element Drainage valve	Cleaning mechanism	Scheme
LKM	ELECTRIC	VERTICAL	**Carbon steel vessel** with internal and external epoxy-polyester coating. PN10 • **SS 304 perforated plate** • **SS 304 wedge wire screen** **2-ways membrane with mechanical closure drainage valve:** • Ø2" of epoxy-polyester coated cast iron • Ø3" of epoxy-polyester coated cast iron	Motor, gearbox and SS 304 rotating Shaft with NYLON BRUSHES	
LXE	ELECTRIC	HORIZONTAL	**Carbon steel vessel** with internal and external epoxy-polyester coating. PN10 **SS 316L weave wire screen** with: • SS 304 support **2-ways membrane drainage valve:** • Ø2" of brass	Motor, gearbox and SS 304 scanner with suction nozzles	

HIGH PRESSURE (PN16 bar) AND LOW SALINITY WATER (TDS < 6000 mg/l)

	Cleaning command	Axis position	Vessel Filtration element Drainage valve	Cleaning mechanism	Scheme
LDB PN16	ELECTRIC	VERTICAL	**Carbon steel vessel** with internal and external epoxy-polyester coating. **SS 316L weave wire screen** with: • SS 304 support **2-ways membrane with mechanical closure drainage valve:** • Ø1" of epoxy-polyester coated cast iron • Ø2" of epoxy-polyester coated cast iron	Motor, gearbox and SS 304 scanner with suction nozzles	
LXE PN16	ELECTRIC	HORIZONTAL	**Carbon steel vessel** with internal and external epoxy-polyester coating. **SS 316L weave wire screen** with: • SS 304 support **2-ways membrane with mechanical closure drainage valve:** • Ø2" of epoxy-polyester coated cast iron	Motor, gearbox and SS 304 scanner with suction nozzles	

HIGH SALINITY WATER AND SEA WATER (TDS: 6000 - 55000 mg/l)

	Cleaning command	Axis position	Vessel Filtration element Drainage valve	Cleaning mechanism	Scheme
LDB SW	ELECTRIC	VERTICAL	**Carbon steel vessel** with rubber lined internal coating and epoxy-polyester external coating. PN10 **SS SUPERDUPLEX weave wire screen with:** • PVC support • SS SUPERDUPLEX support **2-ways ball drainage valve with electric actuator:** • Ø1" of reinforced polypropylene • Ø2" of reinforced polypropylene	Motor, gearbox and SS SUPERDUPLEX scanner with suction nozzles	
LKM SW	ELECTRIC	VERTICAL	**Carbon steel vessel** with rubber lined internal coating and epoxy-polyester external coating. PN10 **• SS SUPERDUPLEX perforated plate** **• SS SUPERDUPLEX wedge wire screen** **2-ways ball drainage valve with electric actuator:** • Ø2" of reinforced polypropylene • Ø3" of reinforced polypropylene	Motor, gearbox and SS SUPERDUPLEX rotating Shaft with NYLON BRUSHES	
LXE SW	ELECTRIC	HORIZONTAL	**Carbon steel vessel** with rubber lined internal coating and epoxy-polyester external coating. PN10 **SS SUPERDUPLEX weave wire screen with:** • SS SUPERDUPLEX support **2-ways ball drainage valve with electric actuator:** • Ø2" of reinforced polypropylene	Motor, gearbox and SS SUPERDUPLEX scanner with suction nozzles	

CHINA

- **End user:** QUINGDAO MUNIPALITY
- **Application:** UF membrane protection for a treated sewage effluent in a municipal WW plant
- **AZUD solution:** 7 units
  AZUD LUXON LDB 20100/20 500 micron
  Vessel in SS 316L. Vertical installation to reduce footprint
- **Flow rate:** 13300 m^3/h

AZUD LUXON LCA

VERTICAL - Weave wire screen - Suction nozzle scanner
Hydraulic command

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. flushing pressure	2.5 bar (36 psi)
Water temperature	≤ 60 ºC (140 ºF)

Power supply Control unit (included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC
4 batteries of 1.5 V LR 14-C	12 V DC latch

Screen support	Filtration degree (micron)
PVC	1000, 500, 300, 200, 125, 100, 80
Molded PP	1000, 500, 300, 200, 125, 100, 80, 50

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
SCREEN 316L SS with PVC SUPPORT							
900 cm²	**LCA 900/2**	30 (132)	**Ø2"**	•	•	540-545-620	2.8 l/s (44 gpm) x 8 s
	LCA 900/3	42 (185)	**Ø3"**				
1600 cm²	**LCA 1600/3**	50 (220)	**Ø3"**	•	•	540-540-775	2.8 l/s (44 gpm) x 15 s
	LCA 1600/4	75 (198)	**Ø4"**				
SCREEN 316L SS with POLYPROPYLENE SUPPORT							
2400 cm²	**LCA 2400 M/4**	90 (396)	**Ø4"**	•	•	610-585-870	2.8 l/s (44 gpm) x 18 s
	LCA 2400 M/6	113 (498)	**Ø6"**				
4800 cm²	**LCA 4800 M/4**	90 (396)	**Ø4"**	•	•	610-685-1145	5.6 l/s (89 gpm) x 20 s
	LCA 4800 M/6	170 (749)	**Ø6"**				
	LCA 4800 M/8	226 (995)	**Ø8"**				
7200 cm²	**LCA 7200 M/6**	170 (749)	**Ø6"**	•	•	610-685-1430	8.4 l/s (133 gpm) x 20 s
	LCA 7200 M/8	300 (1321)	**Ø8"**				
	LCA 7200 M/10	338 (1448)	**Ø10"**				

DRAINAGE (hydraulic activation):
Ø1" BSP thread
Ø2" Grooved / BSP thread

* Maximum flow limited by the diameter of the flange connections

Identification: AZUD LUXON LCA **2400 M/4 ANSI 125** MICRON **220 V AC**

FILTER MODEL
PVC support: **900, 1600**
Molded PP support: **2400 M, 4800 M, 7200 M**

DIAMETER (inch) and inlet and outlet FLANGE TYPE
DIN flange: **4, 10**
ANSI flange: **4 ANSI, 10 ANSI**
DIN/ANSI flange: **6, 8**

FILTRATION DEGREE (micron)
PVC support: **1000, 500, 300, 200, 125, 100, 80**
Molded PP support: **1000, 500, 300, 200, 125, 100, 80, 50**

Equipment WITH Control Unit (STANDARD)
Power supply: **220 V AC, 110 V AC, 12 V DC**
Equipment WITHOUT Control Unit (OPTIONAL)
Operating voltage: **EV 24 V AC, EV 12 V DC LATCH**

AZUD LUXON MFH

HORIZONTAL - Weave wire screen - Suction nozzle scanner - Hydraulic command

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. flushing pressure	2.5 bar (36 psi)
Water temperature	≤ 60 °C (140 °F)

Power supply Control unit (included)	Control Voltage Valves
220 / 110 V AC (50/60 Hz)	24 V AC
4 batteries of 1.5 V LR 14-C	12 V DC latch

Screen support	Filtration degree (micron)
Molded PP	1000, 500, 300, 200, 125, 100, 80, 50

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
SCREEN 316L SS with POLYPROPYLENE SUPPORT							
2400 cm²	**MFH 2400 M/4**	90 (396)	**Ø4"**	•	•	1160-675-625	2.8 l/s (44 gpm) x 30 s
	MFH 2400 M/6	113 (498)	**Ø6"**				
4800 cm²	**MFH 4800 M/4**	90 (396)	**Ø4"**	•	•	1435-675-625	5.6 l/s (89 gpm) x 30 s
	MFH 4800 M/6	170 (749)	**Ø6"**				
	MFH 4800 M/8	226 (995)	**Ø8"**				
7200 cm²	**MFH 7200 M/6**	170 (749)	**Ø6"**	•	•	1710-675-625	8.4 l/s (133 gpm) x 30 s
	MFH 7200 M/8	300 (1321)	**Ø8"**				
	MFH 7200 M/10	338 (1448)	**Ø10"**				
9600 cm²	**MFH 9600 M/8**	300 (1321)	**Ø8"**	•	•	1985-675-625	11.2 l/s (178 gpm) x 30 s
	MFH 9600 M/10	451 (1986)	**Ø10"**				
	MFH 9600 M/12	451 (1986)	**Ø12"**				
12000 cm²	**MFH 12000 M/8**	300 (1321)	**Ø8"**	•	•	2260-675-625	14 l/s (222 gpm) x 30 s
	MFH 12000 M/10	500 (2202)	**Ø10"**				
	MFH 12000 M/12	564 (2483)	**Ø12"**				

DRAINAGE (hydraulic activation):
Ø2" Grooved / BSP thread

* Maximum flow limited by the diameter of the flange connections.

Identification: AZUD LUXON MFH **7200 M/10 ANSI 125** MICRON **220 V AC**

FILTER MODEL Molded PP support: **2400 M, 4800 M, 7200 M**	DIAMETER (inch) and inlet and outlet FLANGE TYPE DIN flange: **4, 10, 12** ANSI flange: **4 ANSI, 10 ANSI** DIN/ANSI flange: **6, 8**	FILTRATION DEGREE (micron) **1000, 500, 300, 200, 125, 100, 80, 50**	Equipment WITH Control Unit (STANDARD) Power supply: **220 V AC, 110 V AC, 12 V DC** Equipment WITHOUT Control Unit (OPTIONAL) Operating voltage: **EV 24 V AC, EV 12 V DC LATCH**

AZUD LUXON MFE

HORIZONTAL - Weave wire screen - Suction nozzle scanner - Electric motor command

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. flushing pressure	2 bar (29 psi)
Water temperature	≤ 60 °C (140 °F)

Power supply Control unit (included)	Control Voltage Valves
380 / 220 / 110 V AC (50/60 Hz)	24 V DC

Screen support	Filtration degree (micron)
Molded PP	1000, 500, 300, 200, 125, 100, 80, 50

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
SCREEN 316L SS with POLYPROPYLENE SUPPORT							
2400 cm²	**MFE 2400 M/4**	90 (396)	**Ø4"**	•	•	1420-675-625	2.8 l/s (44 gpm) x 20 s
	MFE 2400 M/6	113 (498)	**Ø6"**				
4800 cm²	**MFE 4800 M/4**	90 (396)	**Ø4"**	•	•	1695-675-625	5.6 l/s (89 gpm) x 20 s
	MFE 4800 M/6	170 (749)	**Ø6"**				
	MFE 4800 M/8	226 (995)	**Ø8"**				
7200 cm²	**MFE 7200 M/6**	170 (749)	**Ø6"**	•	•	1970-675-625	8.4 l/s (133 gpm) x 20 s
	MFE 7200 M/8	300 (1321)	**Ø8"**				
	MFE 7200 M/10	338 (1448)	**Ø10"**				
9600 cm²	**MFE 9600 M/8**	300 (1321)	**Ø8"**	•	•	2245-675-625	11.2 l/s (178 gpm) x 20 s
	MFE 9600 M/10	451 (1986)	**Ø10"**				
	MFE 9600 M/12	451 (1986)	**Ø12"**				
12000 cm²	**MFE 12000 M/8**	300 (1321)	**Ø8"**	•	•	2520-675-625	14 l/s (222 gpm) x 20 s
	MFE 12000 M/10	500 (2202)	**Ø10"**				
	MFE 12000 M/12	564 (2483)	**Ø12"**				

DRAINAGE (hydraulic activation):
Ø2" Grooved / BSP thread

* Maximum flow limited by the diameter of the flange connections.

Identification: AZUD LUXON MFE **7200 M/10 ANSI 125** MICRON **220 V AC**

FILTER MODEL Molded PP support: **2400 M, 4800 M, 7200 M, 9600 M, 12000 M**	DIAMETER (inch) of inlet and outlet FLANGE TYPE DIN flange: **4, 10, 12** ANSI flange: **4 ANSI, 10 ANSI, 12 ANSI** DIN/ANSI flange: **6, 8**	FILTRATION DEGREE (micron) **1000, 500, 300, 200, 125, 100, 80, 50**	Control Unit Power supply: **380 V AC, 220 V AC, 110 V AC**

ITALY

- **End user:** FIAT IVECO CAR FACTORY
- **Application:** Spray nozzles protection
  Raw water with metal drilling lubricant
- **AZUD solution:** 14 units
  AZUD LUXON LXE 21300S/10 LP SW 50 micron
- **Flow rate:** 350 m^3/h

AZUD LUXON LDB

VERTICAL - Weave wire screen - Suction nozzle scanner
Electric motor command

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. flushing pressure	2 bar (29 psi)
Water temperature	≤ 60 °C (140 °F)

Power supply Control unit (included)	Control Voltage Valves
380/220/110 V AC (50/60 Hz)	24 V DC

Screen support	Filtration degree (micron)
PVC	1000, 500, 300, 200, 125, 100, 80
Molded PP	1000, 500, 300, 200, 125, 100, 80, 50
SS 304	1000, 500, 300, 200, 125, 100, 80, 50

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
			SS 316L SCREEN with PVC SUPPORT				
900 cm²	**LDB 900/2**	30 (132)	**Ø2"**	•	•	630-570-920	0.7 l/s (11 gpm) x 8 s
	LDB 900/3	45 (198)	**Ø3"**				
1600 cm²	**LDB 1600/3**	50 (220)	**Ø3"**	•	•	630-575-1015	1 l/s (16 gpm) x 16 s
	LDB 1600/4	80 (352)	**Ø4"**				
			SS 316L SCREEN with POLYPROPYLENE SUPPORT				
2400 cm²	**LDB 2400 M/4**	90 (396)	**Ø4"**	•	•	700-620-1120	1.1 l/s (17 gpm) x 18 s
	LDB 2400 M/6	120 (528)	**Ø6"**				
4800 cm²	**LDB 4800 M/4**	90 (396)	**Ø4"**	•	•	700-710-1395	2.5 l/s (40 gpm) x 21 s
	LDB 4800 M/6	170 (749)	**Ø6"**				
	LDB 4800 M/8	240 (1057)	**Ø8"**				
7400 cm²	**LDB 7400 M/6**	170 (749)	**Ø6"**	•	•	800-750-2190	4.5 l/s (71 gpm) x 25 s
	LDB 7400 M/8	300 (1321)	**Ø8"**				
	LDB 7400 M/10	370 (1629)	**Ø10"**				
9800 cm²	**LDB 9800 M/8**	300 (1321)	**Ø8"**	•	•	800-750-2470	5.8 l/s (92 gpm) x 25 s
	LDB 9800 M/10	490 (2157)	**Ø10"**				
	LDB 9800 M/12	490 (2157)	**Ø12"**				
12300 cm²	**LDB 12300 M/10**	500 (2202)	**Ø10"**	•	•	800-750-2740	7.2 l/s (114 gpm) x 25 s
	LDB 12300 M/12	615 (2708)	**Ø12"**				
	LDB 12300 M/14	615 (2708)	**Ø14"**				
	LDB 12300 M/16	615 (2708)	**Ø16"**				

DRAINAGE (hydraulic activation):
Ø1" BSP thread
Ø2" Grooved / BSP thread

* Maximum flow limited by the diameter of the flange connections

AZUD LUXON LDB

VERTICAL - Weave wire screen - Suction nozzle scanner - Electric motor command

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
			SS 316L SCREEN with SS 304 SUPPORT				
1000 cm²	**LDB 1000 S/2**	30 (132)	**Ø2"**	•	•	630-570-920	0.7 l/s (11 gpm) x 8 s
	LDB 1000 S/3	50 (220)	**Ø3"**				
1800 cm²	**LDB 1800 S/3**	50 (220)	**Ø3"**	•	•	630-575-1015	1.0 l/s (16 gpm) x 16 s
	LDB 1800 S/4	90 (396)	**Ø4"**				
2700 cm²	**LDB 2700 S/3**	50 (220)	**Ø3"**	•	•	700-620-1120	1.1 l/s (17 gpm) x 18 s
	LDB 2700 S/4	90 (396)	**Ø4"**				
	LDB 2700 S/6	135 (594)	**Ø6"**				
5400 cm²	**LDB 5400 S/4**	90 (396)	**Ø4"**	•	•	700-710-1395	2.5 l/s (40 gpm) x 21 s
	LDB 5400 S/6	170 (749)	**Ø6"**				
	LDB 5400 S/8	270 (1189)	**Ø8"**				
	LDB 5400 S/10	270 (1189)	**Ø10"**				
8000 cm²	**LDB 8000 S/6**	170 (749)	**Ø6"**	•	•	800-750-2190	4.5 l/s (71 gpm) x 25 s
	LDB 8000 S/8	300 (1321)	**Ø8"**				
	LDB 8000 S/10	400 (1761)	**Ø10"**				
10600 cm²	**LDB 10600 S/8**	300 (1321)	**Ø8"**	•	•	800-750-2470	5.8 l/s (92 gpm) x 25 s
	LDB 10600 S/10	500 (2202)	**Ø10"**				
	LDB 10600 S/12	530 (2334)	**Ø12"**				
	LDB 10600 S/14	530 (2334)	**Ø14"**				
13200 cm²	**LDB 13200 S/8**	300 (1321)	**Ø8"**	•	•	800-750-2740	7.2 l/s (114 gpm) x 25 s
	LDB 13200 S/10	500 (2202)	**Ø10"**				
	LDB 13200 S/12	660 (2906)	**Ø12"**				
	LDB 13200 S/14	660 (2906)	**Ø14"**				
	LDB 13200 S/16	660 (2906)	**Ø16"**				
16500 cm²	**LDB 16500 S/8**	300 (1321)	**Ø8"**	•	•	930-905-2500	5.8 l/s (92 gpm) x 25 s
	LDB 16500 S/10	500 (2202)	**Ø10"**				
	LDB 16500 S/12	700 (3082)	**Ø12"**				
	LDB 16500 S/14	825 (3633)	**Ø14"**				
	LDB 16500 S/16	825 (3633)	**Ø16"**				
	LDB 16500 S/18	825 (3633)	**Ø18"**				
21300 cm²	**LDB 21300 S/10**	500 (2202)	**Ø10"**	•	•	930-905-2770	7.2 l/s (114 gpm) x 25 s
	LDB 21300 S/12	700 (3082)	**Ø12"**				
	LDB 21300 S/14	850 (3743)	**Ø14"**				
	LDB 21300 S/16	1065 (4690)	**Ø16"**				
	LDB 21300 S/18	1065 (4690)	**Ø18"**				
	LDB 21300 S/20	1065 (4690)	**Ø20"**				

DRAINAGE (hydraulic activation):
Ø1" BSP thread
Ø2" Grooved / BSP thread

* Maximum flow limited by the diameter of the flange connections

Identification: AZUD LUXON LDB **10600 S/10 ANSI 125** MICRON **220 V AC**

FILTER MODEL
PVC support: **900, 1600**
Molded PP support:
2400 M, 4800 M, 7400 M, 9800 M, 12300 M
SS 304 support: **1000 S, 1800 S, 2700 S, 5400 S, 8000 S, 10600 S, 13200 S, 16500 S, 21300 S**

DIAMETER (inch) and inlet and outlet FLANGE TYPE
DIN flange: **2, 3, 4, 10, 12, 14, 16, 18 ,20**
ANSI flange: **2 ANSI, 3 ANSI, 4 ANSI, 10 ANSI, 12 ANSI, 14 ANSI, 16 ANSI, 18 ANSI, 20 ANSI**
DIN/ANSI flange: **6, 8**

FILTRATION DEGREE (micron)
PVC support: **1000, 500, 300, 200, 125, 100, 80**
Molded PP support: **1000, 500, 300, 200, 125, 100, 80, 50**
SS 304 support: **1000, 500, 300, 200, 125, 100, 80, 50**

CONTROL UNIT
POWER SUPPLY
380 V AC, 220 V AC, 110 V AC

AZUD LUXON LXE

HORIZONTAL - Weave wire screen - Suction nozzle scanner - Electric motor command

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. flushing pressure	2 bar (29 psi)
Water temperature	≤ 60 °C (140 °F)

Power supply Control unit (included)	Control Voltage Valves
380/220/110 V AC (50/60 Hz)	24 V DC

Screen support	Filtration degree (micron)
SS 304	1000, 500, 300, 200, 125, 100, 80, 50

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
			SS 316L SCREEN with SS 304 SUPPORT				
2700 cm²	**LXE 2700 S/3**	50 (220)	**Ø3"**	•	•	1715-765-700	1.4 l/s (22 gpm) x 25 s
	LXE 2700 S/4	90 (396)	**Ø4"**				
	LXE 2700 S/6	135 (594)	**Ø6"**				
5400 cm²	**LXE 5400 S/4**	90 (396)	**Ø4"**	•	•	2140-765-700	2.8 l/s (44 gpm) x 25 s
	LXE 5400 S/6	170 (748)	**Ø6"**				
	LXE 5400 S/8	270 (1189)	**Ø8"**				
8000 cm²	**LXE 8000 S/6**	170 (749)	**Ø6"**	•	•	2415-765-700	4.5 l/s (71 gpm) x 25 s
	LXE 8000 S/8	300 (1321)	**Ø8"**				
	LXE 8000 S/10	400 (1761)	**Ø10"**				
	LXE 8000 S/12	400 (1761)	**Ø12"**				
10600 cm²	**LXE 10600 S/8**	300 (1321)	**Ø8"**	•	•	2690-765-700	5.8 l/s (92 gpm) x 25 s
	LXE 10600 S/10	500 (2202)	**Ø10"**				
	LXE 10600 S/12	530 (2334)	**Ø12"**				
	LXE 10600 S/14	530 (2334)	**Ø14"**				
13200 cm²	**LXE 13200 S/8**	300 (1321)	**Ø8"**	•	•	2965-765-700	7.2 l/s (114 gpm) x 25 s
	LXE 13200 S/10	500 (2202)	**Ø10"**				
	LXE 13200 S/12	660 (2906)	**Ø12"**				
	LXE 13200 S/14	660 (2906)	**Ø14"**				
16500 cm²	**LXE 16500 S/8**	300 (1321)	**Ø8"**	•	•	2710-975-925	5.8 l/s (92 gpm) x 25 s
	LXE 16500 S/10	500 (2202)	**Ø10"**				
	LXE 16500 S/12	700 (3082)	**Ø12"**				
	LXE 16500 S/14	825 (3633)	**Ø14"**				
	LXE 16500 S/16	825 (3633)	**Ø16"**				

DRAINAGE (hydraulic activation):
Ø2" BSP thread / grooved

* Maximum flow limited by the diameter of the flange connections.

AZUD LUXON LXE

HORIZONTAL - Weave wire screen - Suction nozzle scanner - Electric motor command

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
			SS 316L SCREEN with SS 304 SUPPORT				
21300 cm²	**LXE 21300 S/10**	500 (2202)	**Ø10"**	•	•	2985-975-925	7.2 l/s (114 gpm) x 25 s
	LXE 21300 S/12	700 (3082)	**Ø12"**				
	LXE 21300 S/14	850 (3743)	**Ø14"**				
	LXE 21300 S/16	1065 (4690)	**Ø16"**				
	LXE 21300 S/18	1065 (4690)	**Ø18"**				
	LXE 21300 S/20	1065 (4690)	**Ø20"**				

DRAINAGE (hydraulic activation):
Ø2" BSP thread / grooved

* Maximum flow limited by the diameter of the flange connections.

Identification: AZUD LUXON LXE **10600 S/10 ANSI 125** MICRON **220 V AC**

FILTER MODEL	DIAMETER (inch) y inlet and outlet flange type	FILTRATION DEGREE (micron)	CONTROL UNIT POWER SUPPLY
SS 304 support: **2700 S, 5400 S, 8000 S, 10600 S, 13200 S, 16500 S, 21300 S**	DIN flange: **3, 4, 10, 12, 14, 16, 18 ,20** ANSI flange: **3 ANSI, 4 ANSI, 10 ANSI, 12 ANSI, 14 ANSI, 16 ANSI, 18 ANSI, 20 ANSI** DIN/ANSI flange: **6, 8**	SS 304 support: **1000, 500, 300, 200, 125, 100, 80, 50**	**380 V AC, 220 V AC, 110 V AC**

AZUD LUXON LKM

VERTICAL - Wedge wire screen / perforated plate
Scanner with brush - Electric motor command

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	2 bar (11.6 psi)
Min. flushing pressure	2 bar (29 psi)
Water temperature	≤ 60 °C (140 °F)

Power supply Control unit (included)	Control Voltage Valves
380/440 V AC (50/60 Hz)	24 V DC

Screen support	Filtration degree (micron)
SS perforated plate	800, 1500, 2500, 3500
SS 304 WW	200, 300, 500, 800

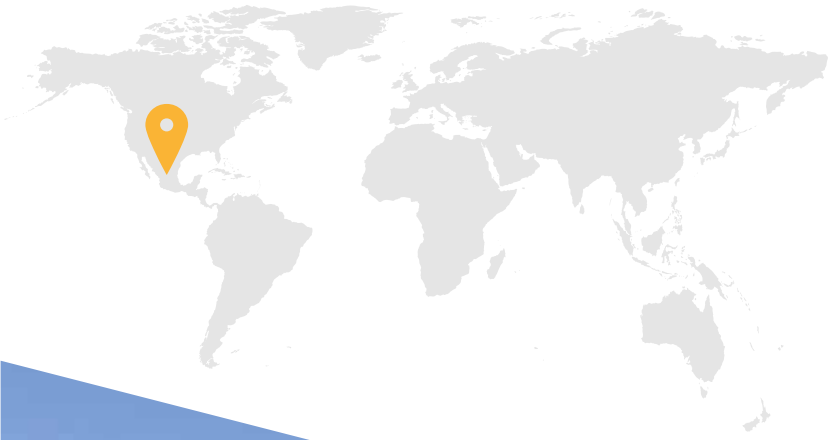
Filtration area	Model	Q max 800 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
			STAINLESS STEEL PERFORATED PLATE				
8000 cm²	**LKM 8000 S/10**	500 (2202)	**Ø10"**	•	•	825-780-1600	10 l/s (158 gpm) x 30 s
10600 cm²	**LKM 10600 S/14**	775 (3412)	**Ø14"**	•	•	825-815-1780	10 l/s (158 gpm) x 30 s
	LKM 10600 S/16	775 (3412)	**Ø16"**				
13200 cm²	**LKM 13200 S/14**	800 (3522)	**Ø14"**	•	•	825-775-2150	10 l/s (158 gpm) x 30 s
16500 cm²	**LKM 16500 S/16**	1200 (5283)	**Ø16"**	•	•	965-975-1940	13 l/s (206 gpm) x 30 s
	LKM 16500 S/20	1210 (5327)	**Ø20"**				
21300 cm²	**LKM 21300 S/20**	1575 (6934)	**Ø20"**	•	•	970-1010-2215	13 l/s (206 gpm) x 30 s
			STAINLESS STEEL WEDGE WIRE SCREEN				
8000 cm²	**LKM 8000 W/8**	300 (1321)	**Ø8"**	•	•	825-780-1600	10 l/s (158 gpm) x 30 s
	LKM 8000 W/10	500 (2202)	**Ø10"**				
10600 cm²	**LKM 10600 W/10**	500 (2202)	**Ø10"**	•	•	825-815-1780	10 l/s (158 gpm) x 30 s
	LKM 10600 W/12	600 (2641)	**Ø12"**				
	LKM 10600 W/14	775 (3412)	**Ø14"**				
13200 cm²	**LKM 13200 W/12**	600 (2641)	**Ø12"**	•	•	825-775-2150	10 l/s (158 gpm) x 30 s
	LKM 13200 W/14	800 (3522)	**Ø14"**				
16500 cm²	**LKM 16500 W/14**	800 (3522)	**Ø14"**	•	•	965-975-1940	13 l/s (206 gpm) x 30 s
	LKM 16500 W/16	1200 (5283)	**Ø16"**				
21300 cm²	**LKM 21300 W/16**	1200 (5283)	**Ø16"**	•	•	970-1010-2215	13 l/s (206 gpm) x 30 s
	LKM 21300 W/18	1500 (6604)	**Ø18"**				
	LKM 21300 W/20	1575 (6934)	**Ø20"**				

DRAINAGE (hydraulic activation):
Ø2" Flange
Ø3" Flange

* Maximum flow limited by the diameter of the flange connections.

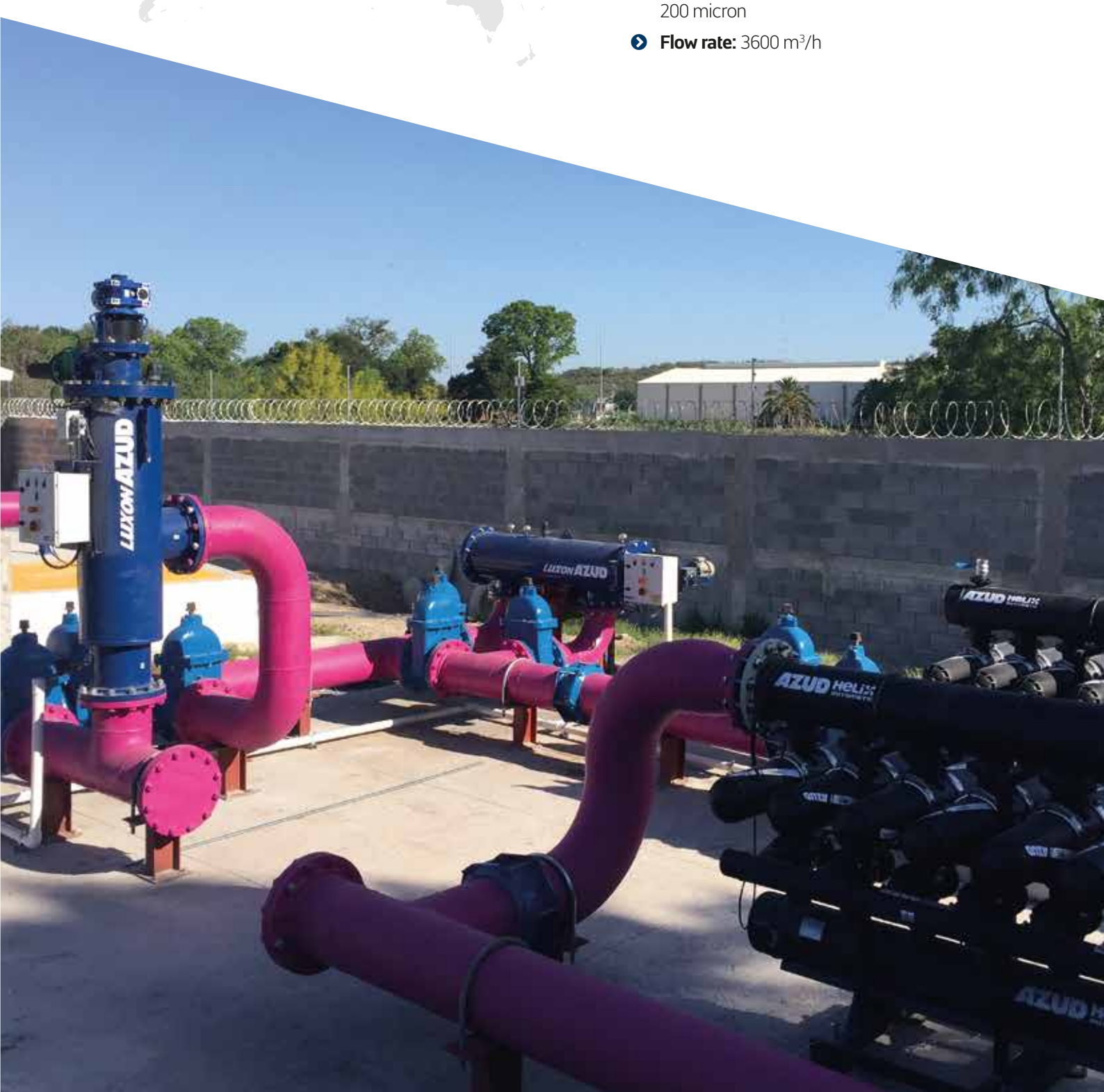
Identification: AZUD LUXON LKM **10600 W/10 ANSI 800** MICRON **380 V AC**

FILTER MODEL	DIAMETER (inch) of inlet and outlet flange type	FILTRATION DEGREE (micron)	CONTROL UNIT POWER SUPPLY
SS perforated plate: **8000 S, 10600 S, 13200 S, 16500 S, 21300 S** SS wedge wire screen: **8000 W, 10600 W, 13200 W, 16500 W, 21300 W**	DIN flange: **10, 12, 14, 16, 18 ,20** ANSI flange: **10 ANSI, 12 ANSI, 14 ANSI, 16 ANSI, 18 ANSI, 20 ANSI** DIN/ANSI flange: **8**	SS perforated plate: **800, 1500, 2500, 3500** SS wedge wire screen: **200, 300, 500, 800**	**380 V AC**



MEXICO

- **End user:** KIA CAR FACTORY – MONTERREY
- **Application:** Treated sewage effluent filtration
- **AZUD solution:**
  1 unit AZUD LUXON LKM 13200 S/12 5000 micron
  1 unit AZUD LUXON LXE 10600 S/10 1000 micron
  1 unit AZUD HELIX AUTOMATIC FT4DCL5/10 400 micron
  1 unit AZUD HELIX AUTOMATIC FT4DCL6/10 200 micron
- **Flow rate:** 3600 m^3/h



AZUD LUXON LDB PN16

VERTICAL - Weave wire screen - Suction nozzle scanner
Electric motor command

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	16 bar (232 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. flushing pressure	2.0 bar (29 psi)
Water temperature	≤ 60 °C (140 °F)

Power supply Control unit (included)	Control Voltage Valves
380/220/110 V AC (50/60 Hz)	24 V DC

Screen support	Filtration degree (micron)
SS 304	1000, 500, 300, 200, 125, 100, 80, 50

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2502	Flange ANSI B16.5 Class 150	Dimensions L-W-H (mm)	Flushing flow rate x duration
SCREEN SS316L with SS 304 SUPPORT							
1000 cm²	**LDB 1000 S/2 PN16**	30 (132)	**Ø2"**	•	•	630-570-920	0.7 l/s (11 gpm) x 8 s
	LDB 1000 S/3 PN16	50 (220)	**Ø3"**				
1800 cm²	**LDB 1800 S/3 PN16**	50 (220)	**Ø3"**	•	•	630-575-1015	1.0 l/s (16 gpm) x 16 s
	LDB 1800 S/4 PN16	90 (396)	**Ø4"**				
2700 cm²	**LDB 2700 S/3 PN16**	50 (220)	**Ø3"**	•	•	700-620-1120	1.1 l/s (17 gpm) x 18 s
	LDB 2700 S/4 PN16	90 (396)	**Ø4"**				
	LDB 2700 S/6 PN16	135 (594)	**Ø6"**				
5400 cm²	**LDB 5400 S/4 PN16**	90 (396)	**Ø4"**	•	•	700-710-1395	2.5 l/s (40 gpm) x 21 s
	LDB 5400 S/6 PN16	170 (749)	**Ø6"**				
	LDB 5400 S/8 PN16	270 (1189)	**Ø8"**				
	LDB 5400 S/10 PN16	270 (1189)	**Ø10"**				
8000 cm²	**LDB 8000 S/6 PN16**	170 (749)	**Ø6"**	•	•	800-750-2190	4.5 l/s (71 gpm) x 25 s
	LDB 8000 S/8 PN16	300 (1321)	**Ø8"**				
	LDB 8000 S/10 PN16	400 (1761)	**Ø10"**				
10600 cm²	**LDB 10600 S/8 PN16**	300 (1321)	**Ø8"**	•	•	800-750-2470	5.8 l/s (92 gpm) x 25 s
	LDB 10600 S/10 PN16	500 (2202)	**Ø10"**				
	LDB 10600 S/12 PN16	530 (2334)	**Ø12"**				
	LDB 10600 S/14 PN16	530 (2334)	**Ø14"**				
13200 cm²	**LDB 13200 S/8 PN16**	300 (1321)	**Ø8"**	•	•	800-750-2740	7.2 l/s (114 gpm) x 25 s
	LDB 13200 S/10 PN16	500 (2202)	**Ø10"**				
	LDB 13200 S/12 PN16	660 (2906)	**Ø12"**				
	LDB 13200 S/14 PN16	660 (2906)	**Ø14"**				
	LDB 13200 S/16 PN16	660 (2906)	**Ø16"**				
16500 cm²	**LDB 16500 S/8 PN16**	300 (1321)	**Ø8"**	•	•	930-905-2500	5.8 l/s (92 gpm) x 25 s
	LDB 16500 S/10 PN16	500 (2202)	**Ø10"**				
	LDB 16500 S/12 PN16	700 (3082)	**Ø12"**				
	LDB 16500 S/14 PN16	825 (3633)	**Ø14"**				
	LDB 16500 S/16 PN16	825 (3633)	**Ø16"**				
	LDB 16500 S/18 PN16	825 (3633)	**Ø18"**				

DRAINAGE (hydraulic activation):
Ø1" BSP thread
Ø2" Grooved / BSP thread / flange

* Maximum flow limited by the diameter of the flange connections

AZUD LUXON LDB PN16

VERTICAL - Weave wire screen - Suction nozzle scanner - Electric motor command

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2502	Flange ANSI B16.5 Class 150	Dimensions L-W-H (mm)	Flushing flow rate x duration
			SS 316L SCREEN with SS 304 SUPPORT				
21300 cm²	**LDB 21300 S/10 PN16**	500 (2202)	**Ø10"**	•	•	930-905-2770	7.2 l/s (114 gpm) x 25 s
	LDB 21300 S/12 PN16	700 (3082)	**Ø12"**				
	LDB 21300 S/14 PN16	850 (3743)	**Ø14"**				
	LDB 21300 S/16 PN16	1065 (4690)	**Ø16"**				
	LDB 21300 S/18 PN16	1065 (4690)	**Ø18"**				
	LDB 21300 S/20 PN16	1065 (4690)	**Ø20"**				

DRAINAGE (hydraulic activation):
Ø2" Flange

* Maximum flow limited by the diameter of the flange connections

Identification: AZUD LUXON LDB **10600 S/10 ANSI** PN16 **125** MICRON **220 V AC**

FILTER MODEL	DIAMETER (inch) and inlet and outlet flange type	FILTRATION DEGREE(micron)	CONTROL UNIT POWER SUPPLY
SS 304 support: **1000 S, 1800 S, 2700 S, 5400 S, 8000 S, 10600 S, 13200 S, 16500 S, 21300 S**	DIN flange: **2, 3, 4, 8, 10, 12, 14, 16, 18 ,20** ANSI flange: **2 ANSI, 3 ANSI, 4 ANSI, 8 ANSI, 10 ANSI, 12 ANSI, 14 ANSI, 16 ANSI, 18 ANSI, 20 ANSI** DIN/ANSI flange: **6**	SS 304 support: **1000, 500, 300, 200, 125, 100, 80, 50**	**380 V AC, 220 V AC, 110 V AC**

AZUD LUXON LXE PN16

HORIZONTAL - Weave wire screen - Suction nozzle scanner - Electric motor command

Working conditions	
Salinity	< 6000 mg/l
Max. working pressure	16 bar (232 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. flushing pressure	2.0 bar (29 psi)
Water temperature	≤ 60 °C (140 °F)

Power supply Control unit (included)	Control Voltage Valves
380/220/110 V AC (50/60 Hz)	24 V DC

Screen support	Filtration degree (micron)
SS 304	1000, 500, 300, 200, 125, 100, 80, 50

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2502	Flange ANSI B16.5 Class 150	Dimensions L-W-H (mm)	Flushing flow rate x duration
SCREEN SS 316L with SS 304 SUPPORT							
2700 cm²	**LXE 2700 S/3 PN16**	50 (220)	**Ø3"**	•	•	1715-765-700	1.4 l/s (22 gpm) x 25 s
	LXE 2700 S/4 PN16	90 (396)	**Ø4"**				
	LXE 2700 S/6 PN16	135 (594)	**Ø6"**				
5400 cm²	**LXE 5400 S/4 PN16**	90 (396)	**Ø4"**	•	•	2140-765-700	2.8 l/s (44 gpm) x 25 s
	LXE 5400 S/6 PN16	170 (748)	**Ø6"**				
	LXE 5400 S/8 PN16	270 (1189)	**Ø8"**				
8000 cm²	**LXE 8000 S/6 PN16**	170 (749)	**Ø6"**	•	•	2415-765-700	4.5 l/s (71 gpm) x 25 s
	LXE 8000 S/8 PN16	300 (1321)	**Ø8"**				
	LXE 8000 S/10 PN16	400 (1761)	**Ø10"**				
	LXE 8000 S/12 PN16	400 (1761)	**Ø12"**				
10600 cm²	**LXE 10600 S/8 PN16**	300 (1321)	**Ø8"**	•	•	2690-765-700	5.8 l/s (92 gpm) x 25 s
	LXE 10600 S/10 PN16	500 (2202)	**Ø10"**				
	LXE 10600 S/12 PN16	530 (2334)	**Ø12"**				
	LXE 10600 S/14 PN16	530 (2334)	**Ø14"**				
13200 cm²	**LXE 13200 S/8 PN16**	300 (1321)	**Ø8"**	•	•	2965-765-700	7.2 l/s (114 gpm) x 25 s
	LXE 13200 S/10 PN16	500 (2202)	**Ø10"**				
	LXE 13200 S/12 PN16	660 (2906)	**Ø12"**				
	LXE 13200 S/14 PN16	660 (2906)	**Ø14"**				
16500 cm²	**LXE 16500 S/8 PN16**	300 (1321)	**Ø8"**	•	•	2710-975-925	5.8 l/s (92 gpm) x 25 s
	LXE 16500 S/10 PN16	500 (2202)	**Ø10"**				
	LXE 16500 S/12 PN16	700 (3082)	**Ø12"**				
	LXE 16500 S/14 PN16	825 (3633)	**Ø14"**				
	LXE 16500 S/16 PN16	825 (3633)	**Ø16"**				

DRAINAGE (hydraulic activation):
Ø2" Flange

* Maximum flow limited by the diameter of the flange connections

AZUD LUXON LXE PN16

HORIZONTAL - Weave wire screen - Suction nozzle scanner - Electric motor command

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2502	Flange ANSI B16.5 Class 150	Dimensions L-W-H (mm)	Flushing flow rate x duration
SS 316L SCREEN with SS 304 SUPPORT							
21300 cm²	**LXE 21300 S/10 PN16**	500 (2202)	**Ø10"**	•	•	2985-975-925	7.2 l/s (114 gpm) x 25 s
	LXE 21300 S/12 PN16	700 (3082)	**Ø12"**				
	LXE 21300 S/14 PN16	850 (3743)	**Ø14"**				
	LXE 21300 S/16 PN16	1065 (4690)	**Ø16"**				
	LXE 21300 S/18 PN16	1065 (4690)	**Ø18"**				
	LXE 21300 S/20 PN16	1065 (4690)	**Ø20"**				

DRAINAGE (hydraulic activation):
Ø2" Flange

* Maximum flow limited by the diameter of the flange connections

Identification: AZUD LUXON LXE **10600 S/10 ANSI** PN16 **125** MICRON **220 V AC**

FILTER MODEL	DIAMETER (inch) and inlet and outlet FLANGE TYPE	FILTRATION DEGREE (micron)	CONTROL UNIT POWER SUPPLY
SS 304 support: **2700 S, 5400 S, 8000 S, 10600 S, 13200 S, 16500 S, 21300 S**	DIN flange: **2, 3, 4, 8, 10, 12, 14, 16, 18, 20** ANSI flange: **3 ANSI, 4 ANSI, 8 ANSI, 10 ANSI, 12 ANSI, 14 ANSI, 16 ANSI, 18 ANSI, 20 ANSI** DIN/ANSI flange: **6**	SS 304 support: **1000, 500, 300, 200, 125, 100, 80, 50**	**380 V AC, 220 V AC, 110 V AC**

AZUD LUXON LDB SW

VERTICAL - Weave wire screen - Suction nozzle scanner Electric motor command

Working conditions	
Salinity	6000 - 55000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. flushing pressure	2.0 bar (29 psi)
Water temperature	≤ 60 °C (140 °F)

Power supply Control unit (included)	Control Voltage Valves
380/220/110 V AC (50/60 Hz)	24 V DC

Screen support	Filtration degree (micron)
PVC	1000, 500, 300, 200, 125, 100, 80
SS SUPERDUPLEX	1000, 500, 300, 200, 125, 100, 80, 50

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
SS SUPERDUPLEX SCREEN with PVC SUPPORT							
900 cm²	**LDB 900/2 SW**	30 (132)	**Ø2"**	•	•	630-570-920	0.7 l/s (11 gpm) x 8 s
	LDB 900/3 SW	45 (198)	**Ø3"**				
1600 cm²	**LDB 1600/3 SW**	50 (220)	**Ø3"**	•	•	630-575-1015	1 l/s (16 gpm) x 16 s
	LDB 1600/4 SW	80 (352)	**Ø4"**				
SCREEN SS SUPERDUPLEX with SS SUPERDUPLEX SUPPORT							
1000 cm²	**LDB 1000 S/2 SW**	30 (132)	**Ø2"**	•	•	630-570-920	0.7 l/s (11 gpm) x 8 s
	LDB 1000 S/3 SW	50 (220)	**Ø3"**				
1800 cm²	**LDB 1800 S/3 SW**	50 (220)	**Ø3"**	•	•	630-575-1015	1.0 l/s (16 gpm) x 16 s
	LDB 1800 S/4 SW	90 (396)	**Ø4"**				
2700 cm²	**LDB 2700 S/3 SW**	50 (220)	**Ø3"**	•	•	700-620-1120	1.1 l/s (17 gpm) x 18 s
	LDB 2700 S/4 SW	90 (396)	**Ø4"**				
	LDB 2700 S/6 SW	135 (594)	**Ø6"**				
5400 cm²	**LDB 5400 S/4 SW**	90 (396)	**Ø4"**	•	•	700-710-1395	2.5 l/s (40 gpm) x 21 s
	LDB 5400 S/6 SW	170 (749)	**Ø6"**				
	LDB 5400 S/8 SW	270 (1189)	**Ø8"**				
	LDB 5400 S/10 SW	270 (1189)	**Ø10"**				
8000 cm²	**LDB 8000 S/6 SW**	170 (749)	**Ø6"**	•	•	800-750-2190	4.5 l/s (71 gpm) x 25 s
	LDB 8000 S/8 SW	300 (1321)	**Ø8"**				
	LDB 8000 S/10 SW	400 (1761)	**Ø10"**				
10600 cm²	**LDB 10600 S/8 SW**	300 (1321)	**Ø8"**	•	•	800-750-2470	5.8 l/s (92 gpm) x 25 s
	LDB 10600 S/10 SW	500 (2202)	**Ø10"**				
	LDB 10600 S/12 SW	530 (2334)	**Ø12"**				
	LDB 10600 S/14 SW	530 (2334)	**Ø14"**				

DRAINAGE (motorized valve):
Ø1" BSP thread
Ø2" Flange

* Maximum flow limited by the diameter of the flange connections

AZUD LUXON LDB SW

VERTICAL - Weave wire screen - Suction nozzle scanner - Electric motor command

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
SCREEN SS SUPERDUPLEX with SS SUPERDUPLEX SUPPORT							
13200 cm²	**LDB 13200 S/8 SW**	300 (1321)	**Ø8"**				
	LDB 13200 S/10 SW	500 (2202)	**Ø10"**				
	LDB 13200 S/12 SW	660 (2906)	**Ø12"**	•	•	800-750-2740	7.2 l/s (114 gpm) x 25 s
	LDB 13200 S/14 SW	660 (2906)	**Ø14"**				
	LDB 13200 S/16 SW	660 (2906)	**Ø16"**				
16500 cm²	**LDB 16500 S/8 SW**	300 (1321)	**Ø8"**				
	LDB 16500 S/10 SW	500 (2202)	**Ø10"**				
	LDB 16500 S/12 SW	700 (3082)	**Ø12"**	•	•	930-905-2500	5.8 l/s (92 gpm) x 25 s
	LDB 16500 S/14 SW	825 (3633)	**Ø14"**				
	LDB 16500 S/16 SW	825 (3633)	**Ø16"**				
	LDB 16500 S/18 SW	825 (3633)	**Ø18"**				
21300 cm²	**LDB 21300 S/10 SW**	500 (2202)	**Ø10"**				
	LDB 21300 S/12 SW	700 (3082)	**Ø12"**				
	LDB 21300 S/14 SW	850 (3743)	**Ø14"**	•	•	930-905-2770	7.2 l/s (114 gpm) x 25 s
	LDB 21300 S/16 SW	1065 (4690)	**Ø16"**				
	LDB 21300 S/18 SW	1065 (4690)	**Ø18"**				
	LDB 21300 S/20 SW	1065 (4690)	**Ø20"**				

DRAINAGE (motorized valve):
Ø1" BSP thread
Ø2" Flange

* Maximum flow limited by the diameter of the flange connections

Identification: AZUD LUXON LDB **10600 S/10 ANSI** SW **125** MICRON **220 V AC**

FILTER MODEL
PVC support: **900, 1600**
SS SUPERDUPLEX support: **1000 S, 1800 S, 2700 S, 5400 S, 8000 S, 10600 S, 13200 S, 16500 S, 21300 S**

DIAMETER (inch) and inlet and outlet FLANGE TYPE
DIN flange: **2, 3, 4, 10, 12, 14, 16, 18 ,20**
ANSI flange: **2 ANSI, 3 ANSI, 4 ANSI, 10 ANSI, 12 ANSI, 14 ANSI, 16 ANSI, 18 ANSI, 20 ANSI**
DIN/ANSI flange: **6, 8**

FILTRATION DEGREE (micron)
PVC support: **1000, 500, 300, 200, 125, 100, 80**
SS SUPERDUPLEX support: **1000, 500, 300, 200, 125, 100, 80, 50**

CONTROL UNIT
POWER SUPPLY
380 V AC, 220 V AC, 110 V AC

AZUD LUXON LXE SW

HORIZONTAL - Weave wire screen - Suction nozzle scanner - Electric motor command

Working conditions	
Salinity	6000 - 55000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. flushing pressure	2.0 bar (29 psi)
Water temperature	≤ 60 °C (140 °F)

Power supply Control unit (included)	Control Voltage Valves
380/220/110 V AC (50/60 Hz)	24 V DC

Screen support	Filtration degree (micron)
SS SUPERDUPLEX	1000, 500, 300, 200, 125, 100, 80, 50

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
SS SUPERDUPLEX SCREEN with SS SUPERDUPLEX SUPPORT							
2700 cm²	**LXE 2700 S/3 SW**	50 (220)	**Ø3"**	•	•	1715-765-700	1.4 l/s (22 gpm) x 25 s
	LXE 2700 S/4 SW	90 (396)	**Ø4"**				
	LXE 2700 S/6 SW	135 (594)	**Ø6"**				
5400 cm²	**LXE 5400 S/4 SW**	90 (396)	**Ø4"**	•	•	2140-765-700	2.8 l/s (44 gpm) x 25 s
	LXE 5400 S/6 SW	170 (749)	**Ø6"**				
	LXE 5400 S/8 SW	270 (1189)	**Ø8"**				
8000 cm²	**LXE 8000 S/6 SW**	170 (749)	**Ø6"**	•	•	2415-765-700	4.5 l/s (71 gpm) x 25 s
	LXE 8000 S/8 SW	300 (1321)	**Ø8"**				
	LXE 8000 S/10 SW	400 (1761)	**Ø10"**				
	LXE 8000 S/12 SW	400 (1761)	**Ø12"**				
10600 cm²	**LXE 10600 S/8 SW**	300 (1321)	**Ø8"**	•	•	2690-765-700	5.8 l/s (92 gpm) x 25 s
	LXE 10600 S/10 SW	500 (2202)	**Ø10"**				
	LXE 10600 S/12 SW	530 (2334)	**Ø12"**				
	LXE 10600 S/14 SW	530 (2334)	**Ø14"**				
13200 cm²	**LXE 13200 S/8 SW**	300 (1321)	**Ø8"**	•	•	2965-765-700	7.2 l/s (114 gpm) x 25 s
	LXE 13200 S/10 SW	500 (2202)	**Ø10"**				
	LXE 13200 S/12 SW	660 (2906)	**Ø12"**				
	LXE 13200 S/14 SW	660 (2906)	**Ø14"**				
16500 cm²	**LXE 16500 S/8 SW**	300 (1321)	**Ø8"**	•	•	2710-975-925	5.8 l/s (92 gpm) x 25 s
	LXE 16500 S/10 SW	500 (2202)	**Ø10"**				
	LXE 16500 S/12 SW	700 (3082)	**Ø12"**				
	LXE 16500 S/14 SW	825 (3633)	**Ø14"**				
	LXE 16500 S/16 SW	825 (3633)	**Ø16"**				

DRAINAGE (motorized valve):
Ø2" Flange

* Maximum flow limited by the diameter of the flange connections

AZUD LUXON LXE SW

HORIZONTAL - Weave wire screen - Suction nozzle scanner - Electric motor command

Filtration area	Model	Q max 125 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
SS SUPERDUPLEX SCREEN with SS SUPERDUPLEX SUPPORT							
21300 cm²	**LXE 21300 S/10 SW**	500 (2202)	**Ø10"**	•	•	2985-975-925	7.2 l/s (114 gpm) x 25 s
	LXE 21300 S/12 SW	700 (3082)	**Ø12"**				
	LXE 21300 S/14 SW	850 (3743)	**Ø14"**				
	LXE 21300 S/16 SW	1065 (4690)	**Ø16"**				
	LXE 21300 S/18 SW	1065 (4690)	**Ø18"**				
	LXE 21300 S/20 SW	1065 (4690)	**Ø20"**				

DRAINAGE (motorized valve):
Ø2" Flange

* Maximum flow limited by the diameter of the flange connections

Identification: AZUD LUXON LXE **10600 S/10 ANSI** SW **125** MICRON **220 V AC**

FILTER MODEL	DIAMETER (inch) and inlet and outlet flange type	FILTRATION DEGREE (micron)	CONTROL UNIT POWER SUPPLY
SS SUPERDUPLEX support: **2700 S, 5400 S, 8000 S, 10600 S, 13200 S, 16500 S, 21300 S**	DIN flange: **3, 4, 10, 12, 14, 16, 18 ,20** ANSI flange: **3 ANSI, 4 ANSI, 10 ANSI, 12 ANSI, 14 ANSI, 16 ANSI, 18 ANSI, 20 ANSI** DIN/ANSI flange: **6, 8**	SS SUPERDUPLEX support: **1000, 500, 300, 200, 125, 100, 80, 50**	**380 V AC, 220 V AC, 110 V AC**

AZUD LUXON LKM SW

VERTICAL - Weave wire screen / perforated plate
Scanner with brush - Electric motor command

Working conditions	
Salinity	6000 - 55000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	2 bar (11.6 psi)
Min. flushing pressure	2 bar (29 psi)
Water temperature	≤ 60 °C (140 °F)

Power supply Control unit (included)	Control Voltage Valves
380/440 V AC (50/60 Hz)	24 V DC

Screen support	Filtration degree (micron)
SS SUPERDUPLEX perforated plate	800, 1500, 2500, 3500
SS SUPERDUPLEX WW	200, 300, 500, 800

Filtration area	Model	Q max 800 µm* m³/h (gpm)	INLET AND OUTLET MANIFOLD Connection	Flange DIN 2576	Flange ANSI B16.5	Dimensions L-W-H (mm)	Flushing flow rate x duration
STAINLESS STEEL PERFORATED PLATE							
8000 cm²	**LKM 8000 S/10 SW**	500 (2202)	**Ø10"**	•	•	825-780-1600	10 l/s (158 gpm) x 30 s
10600 cm²	**LKM 10600 S/14 SW**	775 (3412)	**Ø14"**	•	•	825-815-1780	10 l/s (158 gpm) x 30 s
	LKM 10600 S/16 SW	775 (3412)	**Ø16"**				
13200 cm²	**LKM 13200 S/14 SW**	800 (3522)	**Ø14"**	•	•	825-775-2150	10 l/s (158 gpm) x 30 s
16500 cm²	**LKM 16500 S/16 SW**	1200 (5283)	**Ø16"**	•	•	965-975-1940	13 l/s (206 gpm) x 30 s
	LKM 16500 S/20 SW	1210 (5327)	**Ø20"**				
21300 cm²	**LKM 21300 S/20 SW**	1575 (6934)	**Ø20"**	•	•	970-1010-2215	13 l/s (206 gpm) x 30 s
STAINLESS STEEL WEDGE WIRE SCREEN							
8000 cm²	**LKM 8000 W/8 SW**	300 (1321)	**Ø8"**	•	•	825-780-1600	10 l/s (158 gpm) x 30 s
	LKM 8000 W/10 SW	500 (2202)	**Ø10"**				
10600 cm²	**LKM 10600 W/10 SW**	500 (2202)	**Ø10"**	•	•	825-815-1780	10 l/s (158 gpm) x 30 s
	LKM 10600 W/12 SW	600 (2641)	**Ø12"**				
	LKM 10600 W/14 SW	775 (3412)	**Ø14"**				
13200 cm²	**LKM 13200 W/12 SW**	600 (2641)	**Ø12"**	•	•	825-775-2150	10 l/s (158 gpm) x 30 s
	LKM 13200 W/14 SW	800 (3522)	**Ø14"**				
16500 cm²	**LKM 16500 W/14 SW**	800 (3522)	**Ø14"**	•	•	965-975-1940	13 l/s (206 gpm) x 30 s
	LKM 16500 W/16 SW	1200 (5283)	**Ø16"**				
21300 cm²	**LKM 21300 W/16 SW**	1200 (5283)	**Ø16"**	•	•	970-1010-2215	13 l/s (206 gpm) x 30 s
	LKM 21300 W/18 SW	1500 (6604)	**Ø18"**				
	LKM 21300 W/20 SW	1575 (6934)	**Ø20"**				

DRAINAGE (motorized valve):
Ø2" Flange
Ø3" Flange

* Maximum flow limited by the diameter of the flange connections.

Identification: AZUD LUXON LKM **10600 W/10 ANSI SW 800** MICRON **380 V AC**

FILTER MODEL
SS SUPERDUPLEX perforated plate: **8000 S, 10600 S, 13200 S, 16500 S, 21300 S**
SS SUPERDUPLEX wedge wire screen: **8000 W, 10600 W, 13200 W, 16500 W, 21300 W**

DIAMETER (inch) of inlet and outlet flange type
DIN flange: **10, 12, 14, 16, 18 ,20**
ANSI flange: **10 ANSI, 12 ANSI, 14 ANSI, 16 ANSI, 18 ANSI, 20 ANSI**
DIN/ANSI flange: **8**

FILTRATION DEGREE (micron)
SS SUPERDUPLEX perforated plate: **800, 1500, 2500, 3500**
SS SUPERDUPLEX wedge wire screen: **200, 300, 500, 800**

CONTROL UNIT
POWER SUPPLY
380 V AC

SOUTH AFRICA

- **End user:** MacNeil Plastics
- **Application:** Full stream in cooling tower
- **AZUD solution:** 4 sets of AZUD LUXON MFH 9600/8 125 MICRON
- **Flow rate:** 216 m^3/h

AZUD LUXON FES

Pump + Sustaining valve kit + AZUD FBC LOGIC

Characteristics	
Feed Pump	Horizontal centrifugal pump. Body and Impeller of foundry and shaft of AISI 304. Three-phase motor and IE3 efficiency. IP 55 protection.
Control Unit	AZUD LOGIC FBC L112 that include: PLC, touch screen (HMI), pressure transmitters, IP65 metal box, protections and starts of electromechanical equipment. Power Supply: 3 x 220 / 400 V AC (50 Hz).
Valves & Accesories	Coated carbon steel pipe, check valve and manual isolation valves at the inlet and at the outlet made of coated cast iron. Sustaining valve included.
Support	Structure made of carbon steel with protective coating.
Filtration Equipment	Not included. The equipment must come with special configuration to be conected to the FES.

Filtration degrees (micron)
1000 - 500 - 300 - 200 - 125 - 100 - 80

Model	Operating range	Inlet / Outlet / Drainage Manifold	Compatible filtration equipment	Dimensions L-W-H (mm)	Power (kW)
		LUXON LCA SERIES			
LCA 20-100/4	For 3.6 bar, 20 m³/h For 2.8 bar, 100 m³/h	Ø4" / Ø4" / Ø2"	LCA 2400 M/4 (80 to 1000 micron) LCA 2400 M/6 (80, 100 micron)* LCA 4800 M/4 (80 to 1000 micron)	1500 x 1400 x 1700	11.3
LCA 50-170/6	For 3.7 bar, 50 m³/h For 3.1 bar, 170 m³/h	Ø6" / Ø6" / Ø2"	LCA 2400 M/6 (125 to 1000 micron) LCA 4800 M/6 (80 to 1000 micron) LCA 7200 M/6 (80 to 1000 micron)	1600 x 1600 x 1700	19.9
		LUXON LDB SERIES			
LDB 20-100/4	For 3.6 bar, 20 m³/h For 2.8 bar, 100 m³/h	Ø4" / Ø4" / Ø2"	LDB 2400 M/4 (80 to 1000 micron) LDB 2400 M/6 (80, 100 micron)* LDB 4800 M/4 (80 to 1000 micron)	1500 x 1400 x 1700	11.7
LDB 50-170/6	For 3.7 bar, 50 m³/h For 3.1 bar, 170 m³/h	Ø6" / Ø6" / Ø2"	LDB 2400 M/6 (125 to 1000 micron) LDB 4800 M/6 (80 to 1000 micron) LDB 7400 M/6 (80 to 1000 micron)	1600 x 1600 x 1700	20.3

*Connection adapters are needed for Filtration Equipment.

Available options : Outlet and/or drainage flow indicator sensors. | Modbus TCP/IP or RTU communication. | Remote control system

Ask AZUD for further information.

Model	Operating range	Inlet / Outlet / Drainage Manifold	Compatible filtration equipment	Dimensions L-W-H (mm)	Power (kW)
			LUXON MFH SERIES		
MFH 20-100/4	For 3.6 bar, 20 m^3/h For 2.8 bar, 100 m^3/h	Ø4" / Ø4" / Ø2"	MFH 2400 M/4 (80 to 1000 micron) MFH 2400 M/6 (80, 100 micron)* MFH 4800 M/4 (80 to 1000 micron)	1700 x 1400 x 1700	11.3
MFH 50-170/6	For 3.7 bar, 50 m^3/h For 3.1 bar, 170 m^3/h	Ø6" / Ø6" / Ø2"	MFH 2400 M/6 (125 to 1000 micron) MFH 4800 M/6 (80 to 1000 micron) MFH 4800 M/8 (80 micron)* MFH 7200 M/6 (80 to 1000 micron)	2000 x 1600 x 1700	19.9
MFH 80-300/8	For 3.8 bar, 80 m^3/h For 2.5 bar, 300 m^3/h	Ø8" / Ø8" / Ø2"	MFH 4800 M/8 (100 to 1000 micron) MFH 7200 M/8 (80, 100 micron) MFH 7200 M/10 (80, 100 micron)* MFH 9600 M/8 (80 to 1000 micron) MFH 9600 M/10 (80 micron)* MFH 9600 M/12 (80 micron)*	2200 x 1800 x 1700	30.7
MFH 200-500/10	For 3.3 bar, 200 m^3/h For 2.8 bar, 500 m^3/h	Ø10" / Ø10" / Ø2"	MFH 7200 M/10 (125 to 1000 micron) MFH 9600 M/10 (100 to 1000 micron) MFH 9600 M/12 (100, 125 micron)* MFH 12000 M/10 (80 to 1000 micron) MFH 12000 M/12 (80 micron)*	2500 x 1900 x 1700	49.5
MFH 300-700/12	For 3.9 bar, 300 m^3/h For 2.9 bar, 700 m^3/h	Ø12" / Ø12" / Ø2"	MFH 9600 M/12 (200 to 1000 micron) MFH 12000 M/12 (80 to 1000 micron)	2500 x 2000 x 1700	70.8
			LUXON MFE SERIES		
MFE 20-100/4	For 3.6 bar, 20 m^3/h For 2.8 bar, 100 m^3/h	Ø4" / Ø4" / Ø2"	MFE 2400 M/4 (80 to 1000 micron) MFE 2400 M/6 (80, 100 micron)* MFE 4800 M/4 (80 to 1000 micron)	2100 x 1500 x 1700	11.7
MFE 50-170/6	For 3.7 bar, 50 m^3/h For 3.1 bar, 170 m^3/h	Ø6" / Ø6" / Ø2"	MFE 2400 M/6 (125 to 1000 micron) MFE 4800 M/6 (80 to 1000 micron) MFE 4800 M/8 (80 micron)* MFE 7200 M/6 (80 to 1000 micron)	2400 x 1600 x 1700	20.3
MFE 80-300/8	For 3.8 bar, 80 m^3/h For 2.5 bar, 300 m^3/h	Ø8" / Ø8" / Ø2"	MFE 4800 M/8 (100 to 1000 micron) MFE 7200 M/8 (80, 100 micron) MFE 7200 M/10 (80, 100 micron)* MFE 9600 M/8 (80 to 1000 micron) MFE 9600 M/10 (80 micron)* MFE 9600 M/12 (80 micron)*	2700 x 1800 x 1700	31.1
MFE 200-500/10	For 3.3 bar, 200 m^3/h For 2.8 bar, 500 m^3/h	Ø10" / Ø10" / Ø2"	MFE 7200 M/10 (125 to 1000 micron) MFE 9600 M/10 (100 to 1000 micron) MFE 9600 M/12 (100, 125 micron)* MFE 12000 M/10 (80 to 1000 micron) MFE 12000 M/12 (80 micron)*	2700 x 1900 x 1700	49.9
MFE 300-700/12	For 3.9 bar, 300 m^3/h For 2.9 bar, 700 m^3/h	Ø12" / Ø12" / Ø2"	MFE 9600 M/12 (200 to 1000 micron) MFE 12000 M/12 (80 to 1000 micron)	2700 x 2000 x 1700	71.2
			LUXON LXE SERIES		
LXE 20-100/4	For 3.6 bar, 20 m^3/h For 2.8 bar, 100 m^3/h	Ø4" / Ø4" / Ø2"	LXE 2700 S/4 (80 to 1000 micron) LXE 2700 S/6 (80 micron)* LXE 5400 S/4 (80 to 1000 micron)	2100 x 1500 x 1700	11.7
LXE 50-170/6	For 3.7 bar, 50 m^3/h For 3.1 bar, 170 m^3/h	Ø6" / Ø6" / Ø2"	LXE 2700 S/6 (100 to 1000 micron) LXE 5400 S/6 (80 to 1000 micron) LXE 5400 S/8 (80 micron)* LXE 8000 S/6 (80 to 1000 micron)	2400 x 1600 x 1700	20.3
LXE 80-300/8	For 3.8 bar, 80 m^3/h For 2.5 bar, 300 m^3/h	Ø8" / Ø8" / Ø2"	LXE 5400 S/8 (100 to 1000 micron) LXE 8000 S/8 (80 to 1000 micron) LXE 8000 S/10 (80 micron)* LXE 8000 S/12 (80 micron)* LXE 10600 S/8 (80 to 1000 micron) LXE 10600 S/10 (80 micron)* LXE 10600 S/12 (80 micron)* LXE 13200 S/8 (80 to 1000 micron) LXE 16500 S/8 (80 to 1000 micron)	2700 x 1800 x 1700	31.1
LXE 200-500/10	For 3.3 bar, 200 m^3/h For 2.8 bar, 500 m^3/h	Ø10" / Ø10" / Ø2"	LXE 8000 S/10 (100 to 1000 micron) LXE 8000 S/12 (100, 200 micron)* LXE 10600 S/10 (100 to 1000 micron) LXE 10600 S/12 (100, 125 micron)* LXE 13200 S/10 (80 to 1000 micron) LXE 13200 S/12 (80 micron)* LXE 16500 S/10 (80 to 1000 micron) LXE 16500 S/12 (80 micron)*	2700 x 1900 x 1700	49.9
LXE 300-700/12	For 3.9 bar, 300 m^3/h For 2.9 bar, 700 m^3/h	Ø12" / Ø12" / Ø2"	LXE 8000 S/12 (300 to 1000 micron) LXE 10600 S/12 (200 to 1000 micron) LXE 13200 S/12 (100 to 1000 micron) LXE 16500 S/12 (100 to 1000 micron)	2700 x 2000 x 1700	71.2

*Connection adapters are needed for Filtration Equipment.

Available options : Outlet and/or drainage flow indicator sensors. | Modbus TCP/IP or RTU communication. | Remote control system

C

APPLICATIONS AND SECTORS

Municipal sector

Industrial sector

Residential / services sector

FILTRATION FOR COOLING TOWERS

FILTRATION FOR HEAT EXCHANGE SYSTEMS

ULTRAFILTRATION MEMBRANE PROTECTION

MAKE-UP WATER FILTRATION

MEDIA FILTERS PREFILTRATION

SPRAY NOZZLES PROTECTION

FILTRATION IN WATER TANKS, LAKES AND FONTS

DISINFECTION SYSTEMS PROTECTION

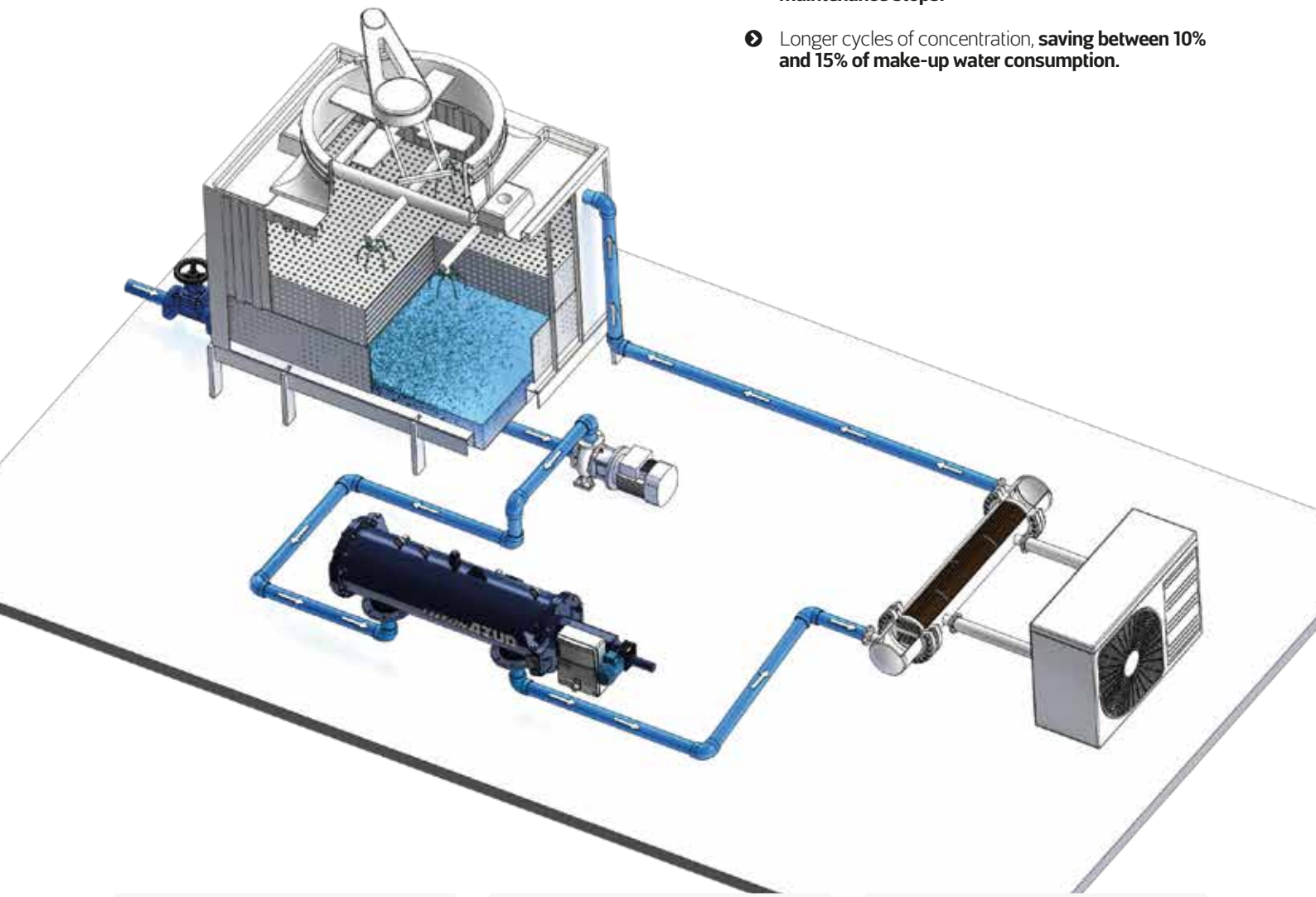
FILTRATION FOR WATER RECYCLING SYSTEMS

PARTICLES RECOVERY

AZUD

Filtration for cooling towers

- Scale and sedimentation prevention, **reducing between 1% and 5% of energy consumption** by improving the heat transfer coefficient.
- Biofouling prevention, **reducing between 10% and 20% of chemical consumption.**
- Longer periods of continuous operation with **less maintenance stops.**
- Longer cycles of concentration, **saving between 10% and 15% of make-up water consumption.**



2x AZUD HELIX AUTOMATIC 210 AA
CFE power plant

200 m³/h | 200 micron | Mexico

3x AZUD LUXON LXE 13200 S/12
General Motors car factory

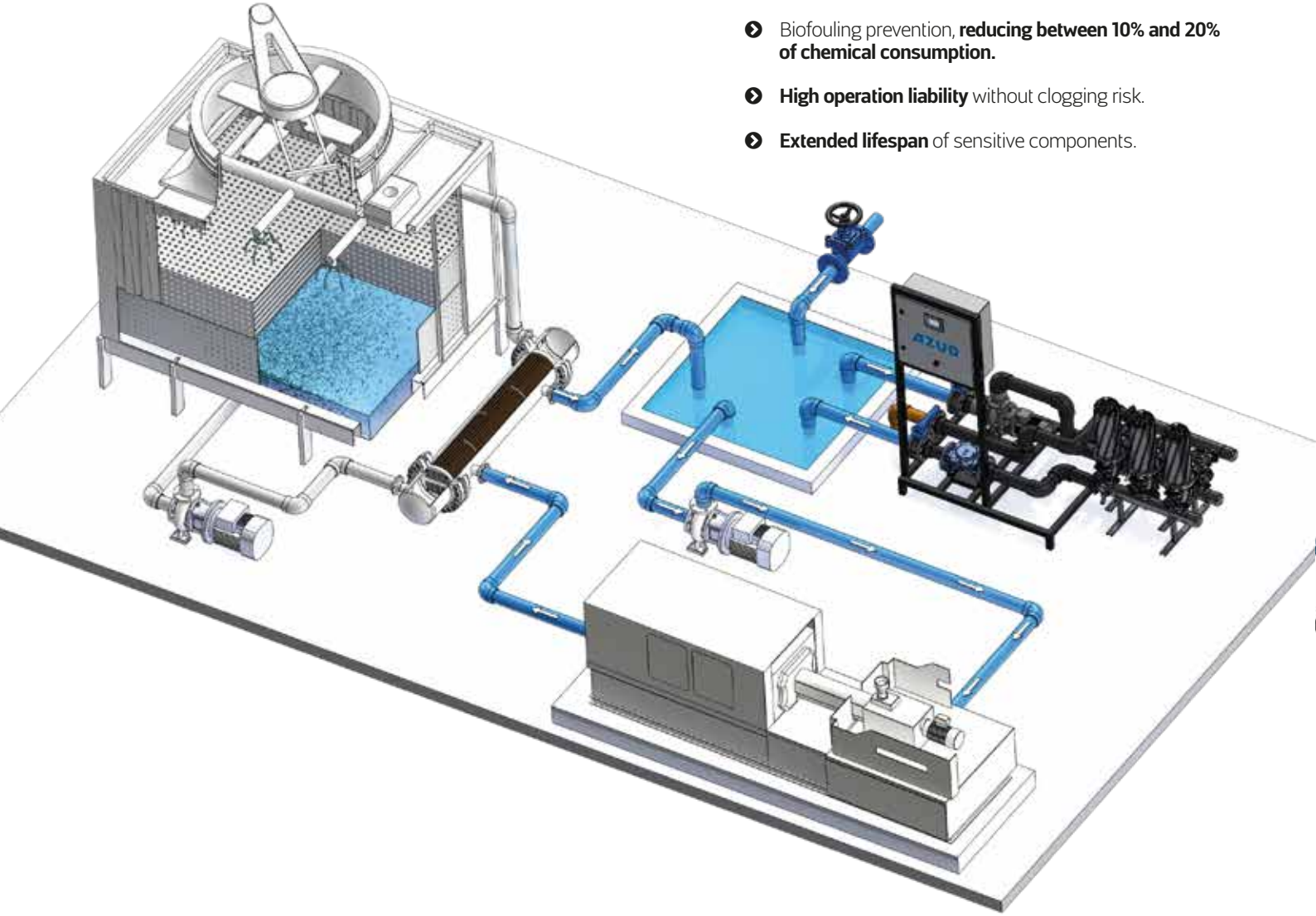
750 m³/h | 50 micron | Argentina

8x AZUD HELIX AUTOMATIC 4DCL5
IMG Worlds of Adventure fun park

1120 m³/h | 50 micron | Dubai

Filtration for heat exchange system

- Scale and sedimentation prevention, **reducing between 1% and 5% of energy consumption** by improving the heat transfer coefficient.
- Reliable filtration performance, ensuring continuous operation of the production line with **minimum maintenance.**
- Biofouling prevention, **reducing between 10% and 20% of chemical consumption.**
- **High operation liability** without clogging risk.
- **Extended lifespan** of sensitive components.



3x AZUD LUXON LDB 5400 S/8
Mould injection machine circuit

300 m³/h | 125 micron | Spain

4x AZUD HELIX AUTOMATIC 4DCL9
Westbay office towers

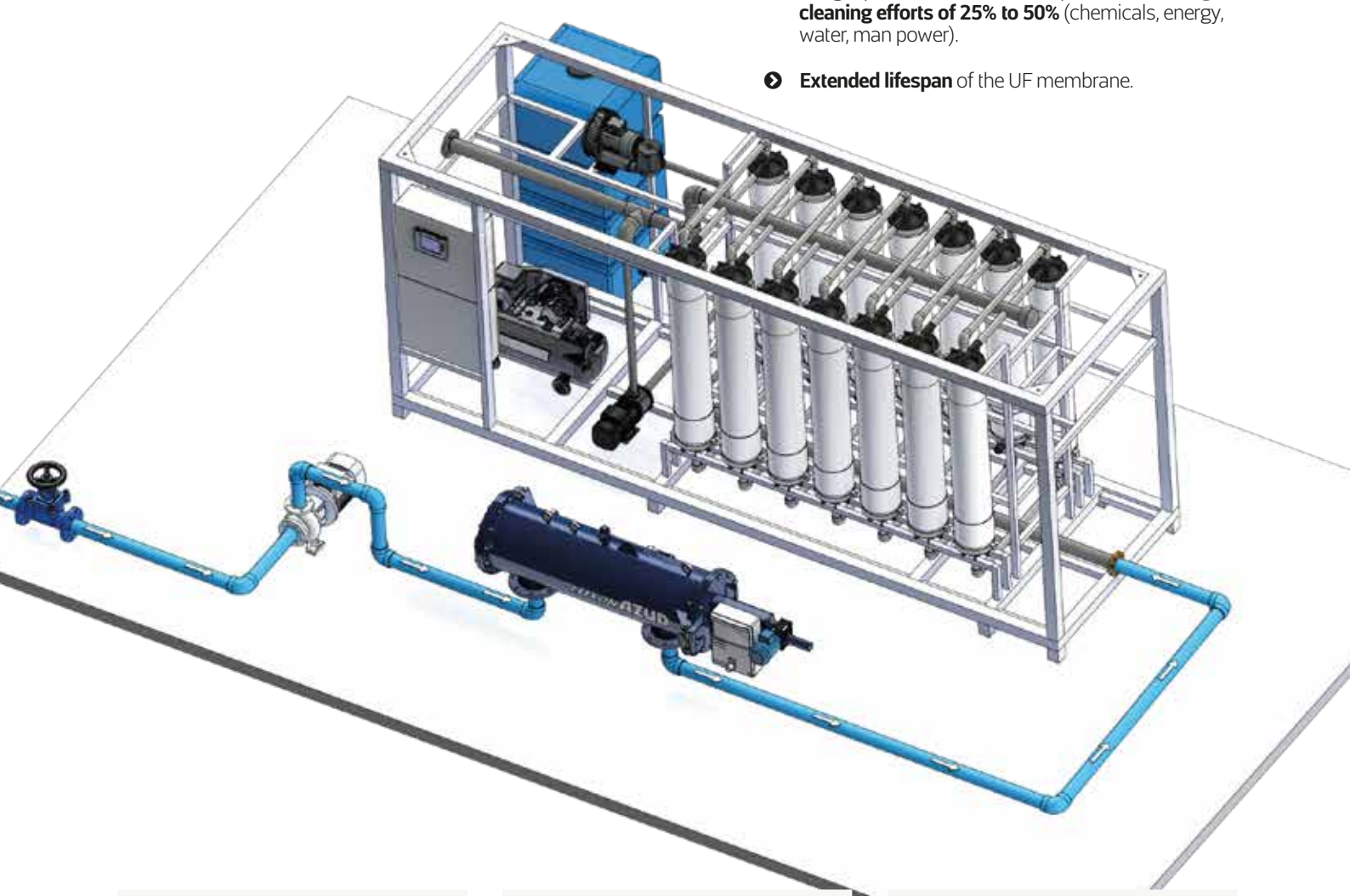
800 m³/h | 50 micron | Qatar

7x AZUD HELIX AUTOMATIC 4DC12
Milan EXPO'15 pavilions

2180 m³/h | 100 micron | Italy

Ultrafiltration membrane prefiltration

- Guaranteed **UF membrane protection** with a physical barrier.
- Permanent clogging prevention. **No fibres breaking risk.**
- Improves UF membrane performance with lower backwash frequency, **saving between 5% and 10% water consumption.**
- Longer periods of continuous operation, **reducing CIP cleaning efforts of 25% to 50%** (chemicals, energy, water, man power).
- **Extended lifespan** of the UF membrane.



3x AZUD LUXON LDB 13200 S/14
Shandong water reclaim

500 m³/h | 100 micron | China

7x AZUD LUXON LDB 20100/20 SW
Quingdao desalination plant

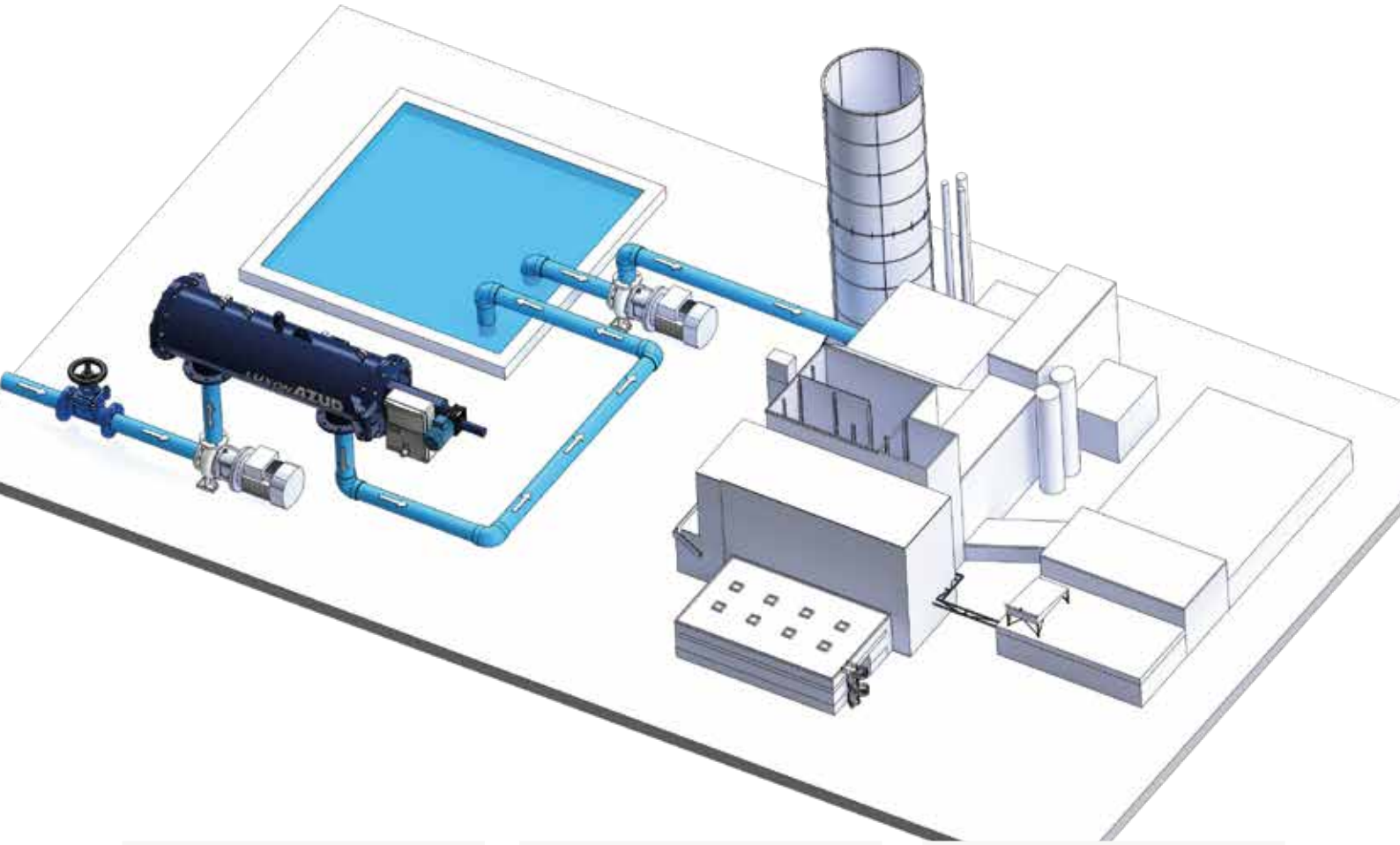
5250 m³/h | 100 micron | China

AZUD HELIX AUTOMATIC 203 AA
Holmes-Place fitness center spa

60 m³/h | 200 micron | Germany

Make-up water filtration

- Scale and sedimentation prevention, reducing **inspection and maintenance** costs but also the pressure drop with **1% to 5% of energy saving.**
- Suspended particle removal, **optimizing downstream equipment performance.**
- Suspended organic matter removal, **reducing disinfection cost.**
- Constant availability of **optimum process water.**
- **Extended lifespan** of sensitive components.



2x AZUD HELIX AUTOMATIC 210 AA
Coca-Cola bottling factory

500 m³/h | 200 micron | Chile

AZUD LUXON LXE 13200 S/10
Nogoli San Luis storage dam

120 m³/h | 100 micron | Argentina

6x AZUD HELIX AUTOMATIC 4DC12
Shemursha City water plant

1000 m³/h | 20 micron | Russia

Media filters prefiltration

- **Clogging prevention** of raw water distribution nozzles.
- Less backwash frequency with better inlet water quality, **reducing between 10% and 20% of water consumption.**
- Removes suspended organic matter (BIOFOULING prevention), **delaying the filtration media replacement and reducing maintenance labour.**
- Reliable filtration performance, ensuring **continuous operation of the production line with minimum maintenance cost.**

AZUD HELIX AUTOMATIC 703 SW AA
ENI Ancona oil platform

15 m³/h | 10 micron | Italy

6x AZUD LUXON LDB 4800/8
Zhongguan steel mill

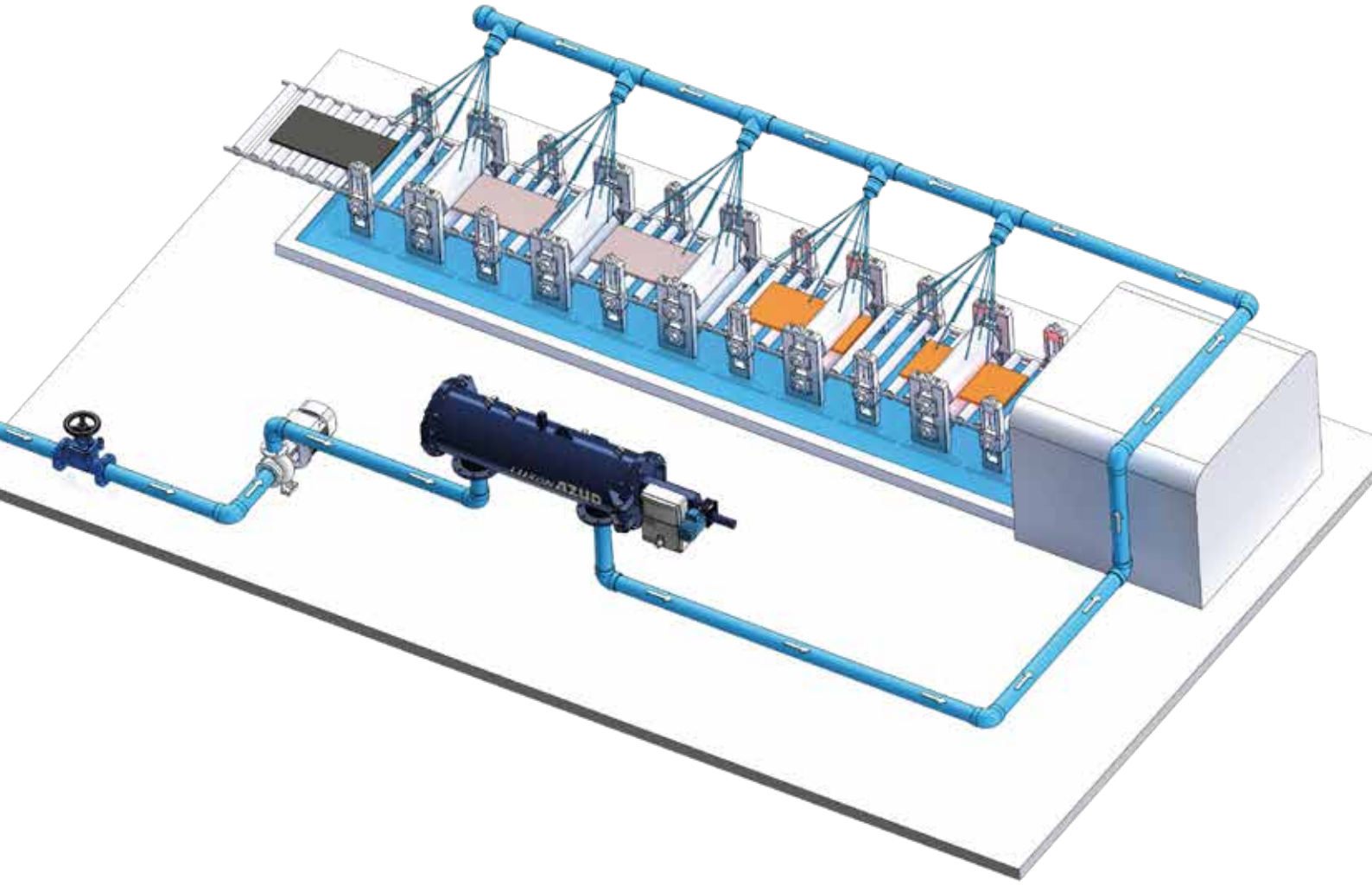
100 m³/h | 50 micron | China

AZUD HELIX AUTOMATIC 203
Service water treatment line

45 m³/h | 200 micron | Russia

Spray nozzles protection

- Removing particles 5 to 10 times smaller than the nozzles diameter, **eliminating obstruction risk.**
- High operation liability with **constant water availability at all spray points.**
- Removes suspended particles load, ensuring **continuous production with less inspection and maintenance cost.**



2x AZUD LUXON LXE 2700 S/4
OCP Khouribga phosphate mine

30 m³/h | 50 micron | Morocco

AZUD HELIX AUTOMATIC 206 AA
Volkswagen car factory

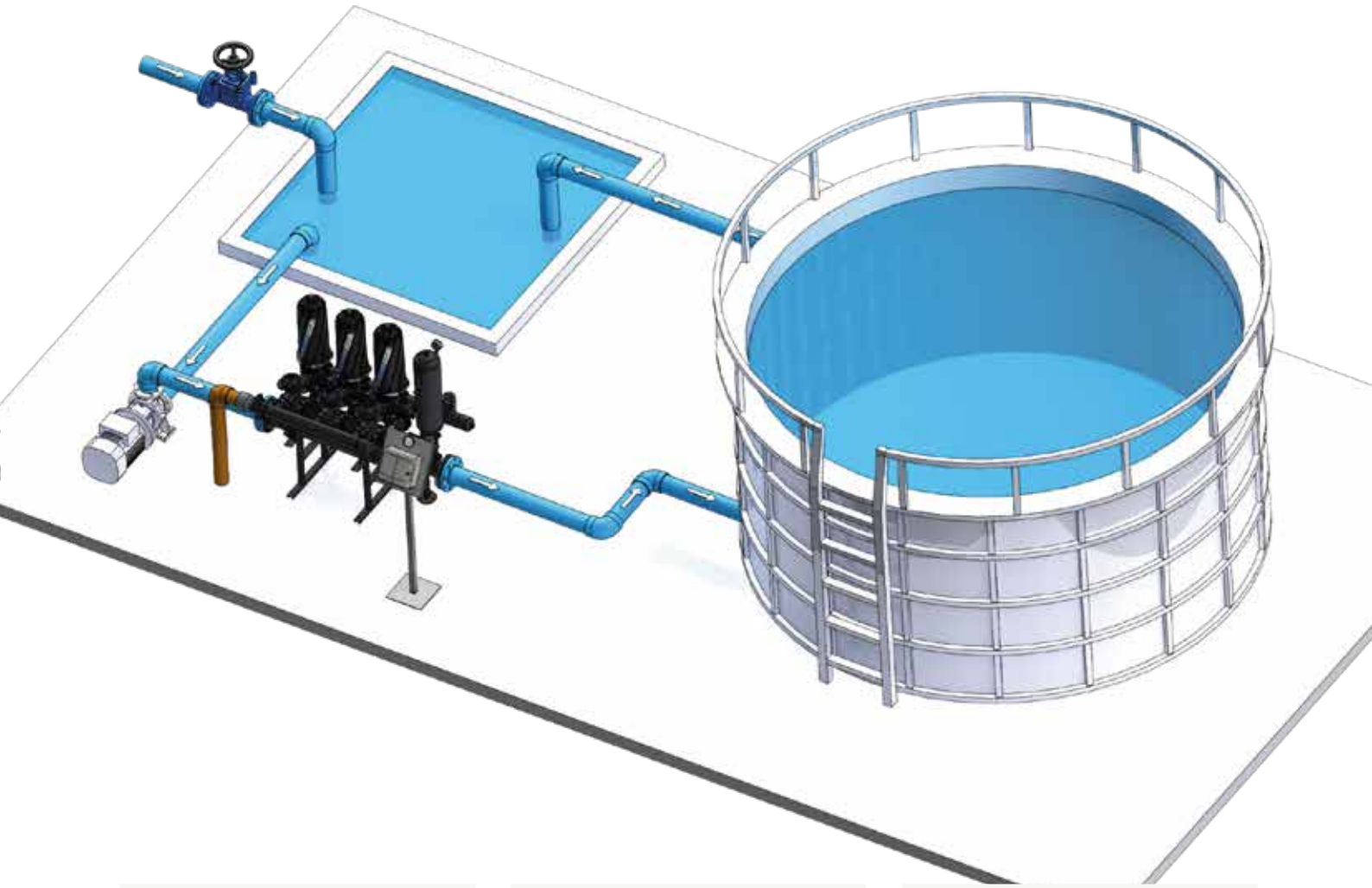
75 m³/h | 100 micron | Mexico

AZUD HELIX AUTOMATIC 4DCL6
Codelco copper mine

60 m³/h | 5 micron | Chile

Filtration in water tanks, lakes and fonts

- Removes suspended particles load, **improving the water quality and reducing inspection and maintenance labour.**
- Reduces suspended organic matter, increasing **the effectiveness of the downstream disinfection.**
- **Extended lifespan** of sensitive components in the recirculation loop, like pump seals and accessories.



2x AZUD HELIX AUTOMATIC 406
Barcelona Montjuic magic fountain

720 m³/h | 130 micron | Spain

8x AZUD LUXON LDB 8000 S/8
Shanghai Disneyland resort

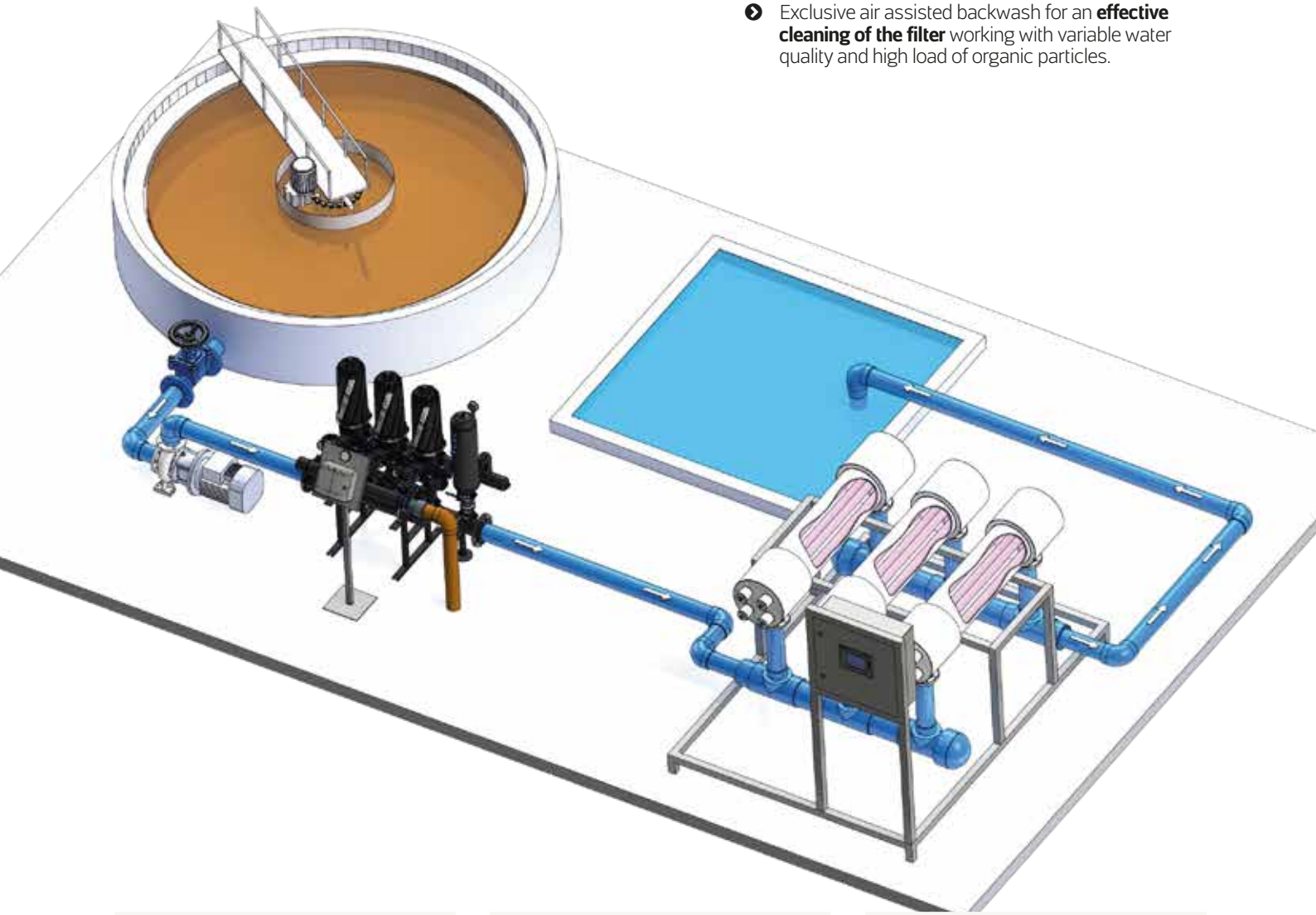
1600 m³/h | 25 micron | China

2x AZUD HELIX AUTOMATIC 4DCL8
Boadilla Del Monte financial city

700 m³/h | 130 micron | Spain

Disinfection system protection

- Removes suspended particles larger than 20 µm, **ensuring the effectiveness of the UV lamps.**
- **TSS reduction** to comply with water reuse regulations.
- Suspended organic matter reduction, requiring **less residual disinfection dosage.**
- Exclusive air assisted backwash for an **effective cleaning of the filter** working with variable water quality and high load of organic particles.



2x AZUD HELIX AUTOMATIC 4DCL9
AGBAR Santiago WWTP

450 m³/h | 100 micron | Chile

AZUD HELIX AUTOMATIC 201 AA
Villas Coco De Mar water reclaim

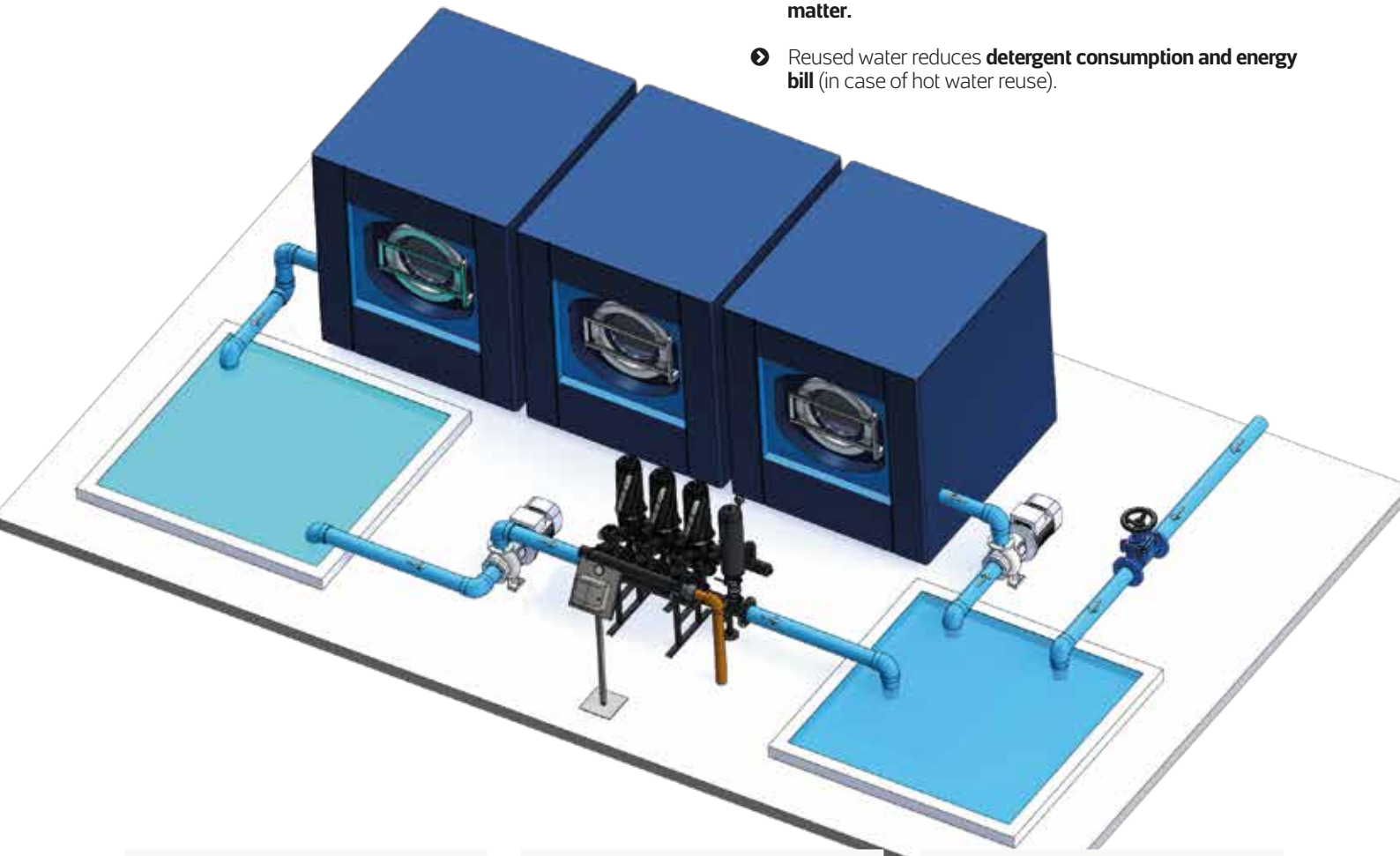
6 m³/h | 20 micron | Panama

AZUD LUXON LXE 5400 S/6
Temoac Morelos WWTP

50 m³/h | 50 micron | Mexico

Filtration for water recycling systems

- **Exclusive Air assisted backwash** for an effective filter cleaning with water with high load of organic particles and filamentous particles.
- WS disc type for an **effective cleaning of sticky particles.**
- Allows **high volumes of water savings.**
- Water recovery allows **between 40% and 50% of water savings and decreases drain water discharge,** producing a **lower environmental impact.**
- TSS reduction helps the **oxydation process of the organic matter.**
- Reused water reduces **detergent consumption and energy bill** (in case of hot water reuse).



AZUD HELIX AUTOMATIC 201 AA
Education city Premier Inn hotel

3 m³/h | 100 micron | Qatar

AZUD HELIX AUTOMATIC 202 AA
Guadalupe Island hotel laundry

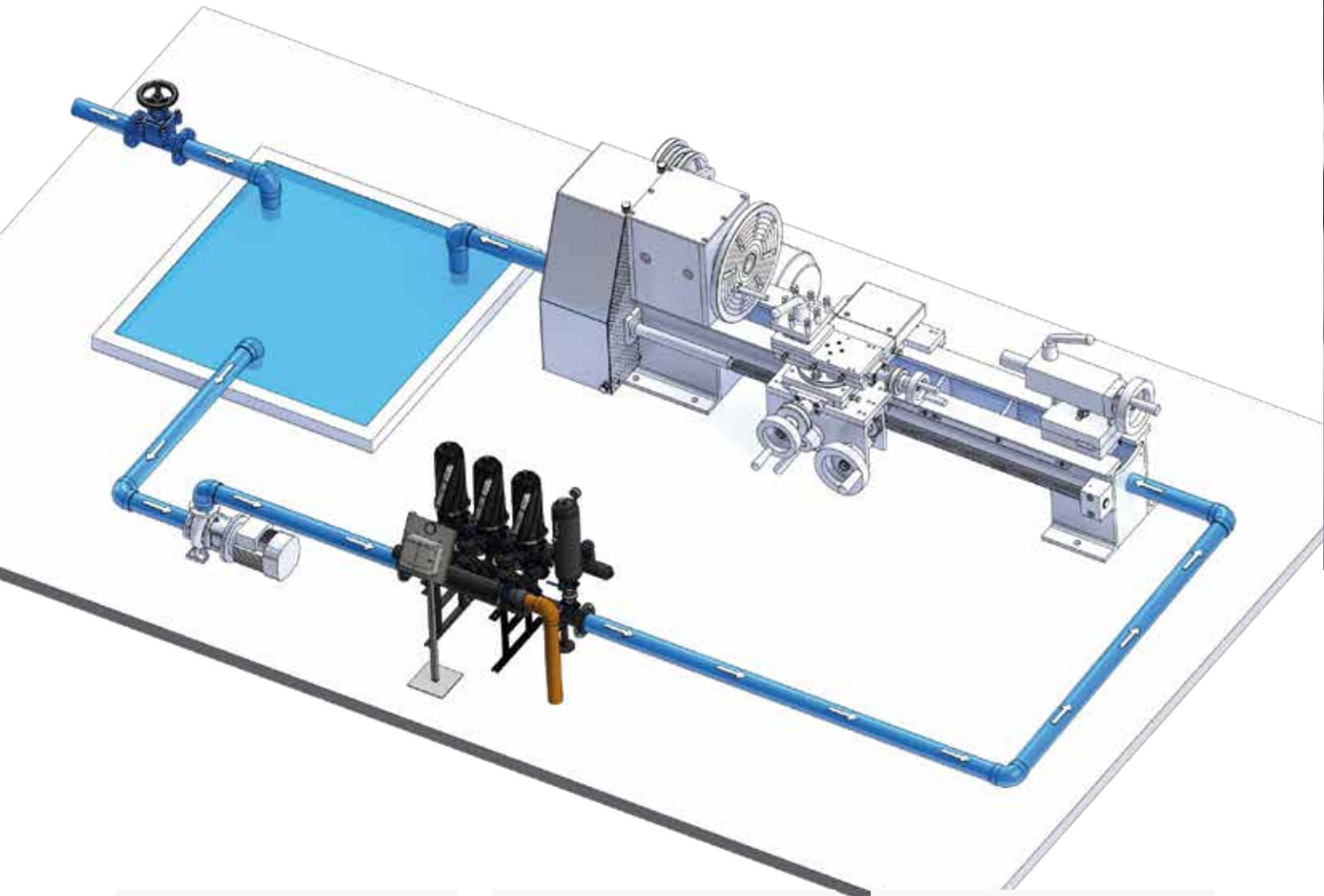
20 m³/h | 100 micron | France

AZUD HELIX AUTOMATIC 202 AA
Water recovery in vehicle washing

10 m³/h | 20 micron | Saudi Arabia

Particles recovery

- Exclusive Air assisted backwash for an effective filter cleaning and a **higher recovery of valuable particles.**
- High particle recovery capacity, **decreasing environmental impact.**
- Discs filter with fine filtration degree (5 to 20 µm) allows to **retain most part of the total particles amount.**



AZUD HELIX AUTOMATIC 204 AA
CAM machinery factory

15 m³/h | 20 micron | Italy

2x AZUD HELIX AUTOMATIC 706 SW
Algae harvest for biofuel

60 m³/h | 5 micron | Portugal

2x AZUD LUXON LDB 5400 S/6
Gold mine

80 m³/h | 20 micron | South Africa

35 years
of experience

AZUD develops technology and solutions enabling an efficient, optimum and rational use of such a valuable resource as the water. We do not only offer products, we supply irrigation, filtration and water treatment solutions.

www.azud.com

AZUD

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