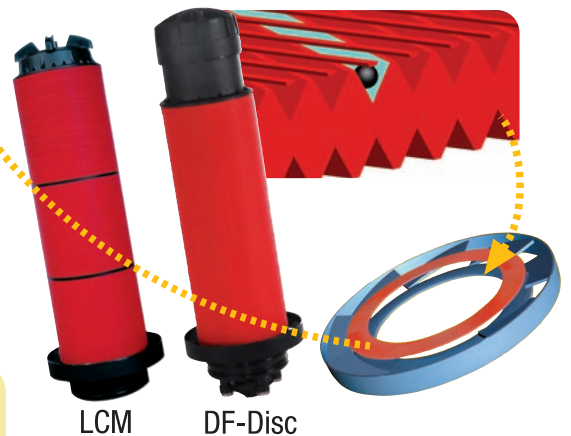


In line equipments with grooved discs filtering elements, High Density Polyethylene manifolds and "Manual backflushing activation Kit" to each filter, including the grooved ending and two 2" valves.



## ADVANTAGES

- ✓ **Disc Filtration. Maximum safety.** Its studied design and the materials used in its manufacture guarantee a long life and high resistance.
- ✓ **AZUD HELIX System.** Optimization of the performance and minimum frequency and intensity of maintenance labours.
- ✓ **Self-cleaning filtering element.** The LCM equipments allow to house both manual filtering elements and DF-DISC, the automatic filtering device.



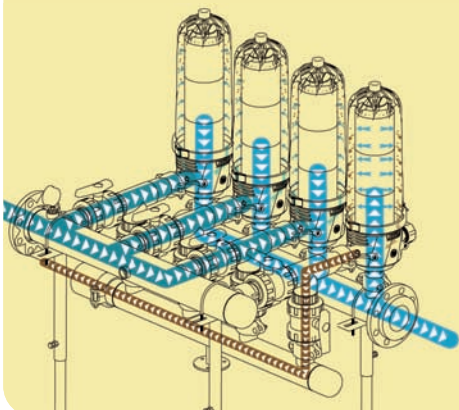
## TECHNOLOGY

**AZUD HELIX LCM equipment backflushes without any interruption of water supply to the crop. The backflushing is sequential: One filter is in backflushing stage while the rest of the equipment is in filtration stage, supplying water to the installation.**

**FILTRATION STAGE:** The helix generates a centrifuge helical effect, which moves away from the discs the particles in the water. This is translated in a lesser frequency and intensity of the maintenance labours, with the subsequent saving of water.

Through the discs is made the in-depth filtration process.

**BACKFLUSHING STAGE:** When the operator change the position of the two valves from the manual backflushing activation kit in one of the filters, the filtered water comes into the filter in the opposite direction through the filtering element structure. The solids previously retained during filtration stage are expelled from them the discs and drained outside through the drainage manifold.



- ✓ **Modularity.** Versatility, compatibility. The system permits a wide range of possibilities with a minimal number of components.
- ✓ **Maximum facility of transport and installation.**
- ✓ **Manufactured in plastic materials.**
- ✓ **Low Maintenance.** Without tooling. Maximum resistance, with movable parts not susceptible to wearing due to a continuous operation..
- ✓ **Water and energy saving.**

**Filtration** Maximum recommended flow rate per filter (m<sup>3</sup>/h)  
AZUD HELIX SYSTEM filter Filtering surface 1.699 cm<sup>2</sup>

Quality of water	Backflushing frequency		
	Low	Average	High
GOOD	16	23	30
AVERAGE	14	20	26
POOR	13	18	23
VERY POOR	8	12	18

**HOW TO CHOOSE AZUD HELIX AUTOMATIC EQUIPMENTS**

1. Determine the required filtration grade.
2. Establish the quality of the water.
3. Calculate according to the following equation, the numbers of filters required with the selected SERIE.

$$\text{Number of filters} = \frac{\text{Flow to filter in the installation}}{\text{Max. Flow per filter}}$$

**MATERIAL**

Manifolds	Hight Density Polyethylene
Housing	Polyamide reinforced with glass fibre
Filtering element	PP grooved discs
Sealing element	NBR

pH>4 • Maximum pressure 10 bar / 145 psi • Maximum temperature 60°C / 140 F

Model	Specifications			Dimensions (mm)									
	N. Filters	Manifold	Filtering Surface (cm <sup>2</sup> )	F	E	D	L	W	R	T	S	H	
202/4FH	2"x 2	4"-110	3,398	320	380	715	735	973	127	496	267	1085	
202/4VH	2"x 2	4"-110	3,398	320	380	615	700	973	127	496	267	1085	
203/4FH	2"x 3	4"-110	5,097	320	380	930	980	973	127	496	267	1085	
203/4VH	2"x 3	4"-110	5,097	320	380	830	945	973	127	496	267	1085	
204/6FH	2"x 4	6"-160	6,796	320	404	1245	1275	1031	177	546	292	1135	
204/6VH	2"x 4	6"-160	6,796	320	404	1145	1267	998	177	546	292	1135	
205/6FH	2"x 5	6"-160	8,495	320	404	1520	1550	1031	177	546	292	1135	
205/6VH	2"x 5	6"-160	8,495	320	404	1420	1542	998	177	546	292	1135	
206/6FH	2"x 6	6"-160	10,194	320	404	1795	1825	1031	177	546	292	1135	
206/6VH	2"x 6	6"-160	10,194	320	404	1695	1817	998	177	546	292	1135	

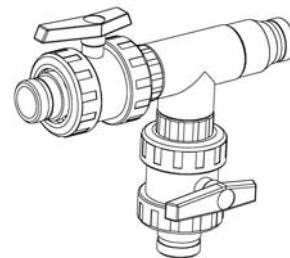
Other configurations in [www.azud.com](http://www.azud.com)

**BACKFLUSHING OPERATION**

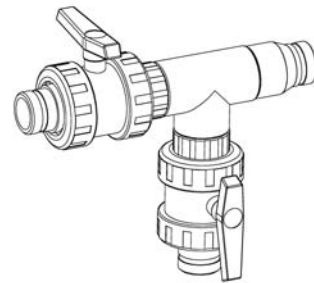
The arrangement of these elements permits to connect the inlet manifold to the access way of each one of the filters and to the drainage manifold and make a manual backflushing of the same.

The backflushing operation is made acting on the two valves incorporated to the "Manual backflushing activation kit". Backflushing is made sequentially until completing the backflushing of all the filters in the equipment.

It is recommended to make a backflushing when the differential pressure reaches 0.5 bar. It is recommended a diary backflushing.



Filtration position



Backflushing position

**AZUD HELIX SYSTEM**

