

AZEZ

UDI[®] filters

Automatically Self-Cleaning Electric Screen Filter:

The **UDI[®] AZEZ** is an automatically self-cleaning filter which offers the most efficient solution to filtering water with changing dirt/waste loads or fluctuating flow rates. The self-cleaning system enables the filter cake formed to be sucked from the filter gauze and large quantities of dirt/waste to be discharged without having to interrupt the filtration process. The short cleaning time of 20-30 seconds using a minimum of flushing water is sufficient to clean the whole filter element.

Features of this unique design are the following parts:

A suction device with nozzles to remove and dispose dirt from the filter element.
A motor with a worm connection, which moves the suction system in a continuous radial motion through the system, cleaning the entire filter element.

UDI[®] Automatically Self-Cleaning Electric Screen Filters are available in a wide range for a great variety of applications.

The filters are available from 2" up to 14" (DN 50mm - 350mm) with a capacity up to 550 m³/h. The filter surface varies: 2260 - 3560 - 5900 - 7500 cm² and a perforation of 400 to 10 microns. The working pressure is 2 to 8 bar (10 bar max).

Possibilities include adaptations to the water quality, using for instance an enlarged filtering surface, stainless-steel (sintered) filter screen, multi-jet nozzle system and an advanced flushing program.

For adaptations to quantity, all types can be jointed together to form a filter unit of unprecedented capacity.

Coating:

In preparation for the coating, the filters are provided with a special layer of zinc phosphate. This treatment ensures proper adhesion of the coating and protects against rusting through from the inside.

The polyester coating is subsequently applied electrostatically, both internally and externally, before being furnace-hardened. The whole process involves 7 steps, and results in a perfect coating having a thickness of approx. 100 microns.



Subject to changes and/or misprints

Advantages of UDI[®] Automatically Self-Cleaning Electric Screen Filter:

Efficient and fully-automatically self-cleaning system capable of processing high dirt/waste concentrations.

Low loss of pressure.

Filtration continues without interruption during the self-cleaning operation.

Long life as a result of polyester-coated steel, stainless-steel filter gauze and flushing mechanism.

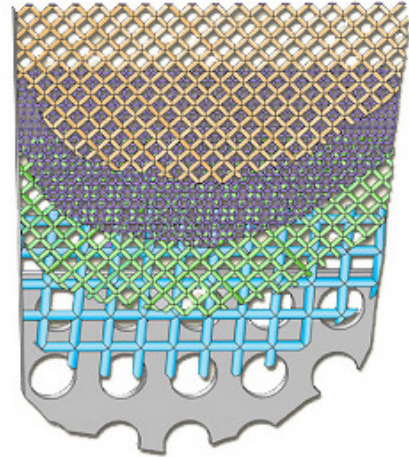
Low flushing capacity, at minimal loss of flushing water.

High filter efficiency resulting from the use of the unique stainless-steel super screen.

Unique Super Screen Filter Element:

The Super Screen filter element is composed of several layers of stainless steel 316L. Thus, a self-supporting structure has been created that has a very large filtering surface.

In addition, the five different stainless-steel layers produce a form of deep-filtering action for an absolute filtering result.



Construction:

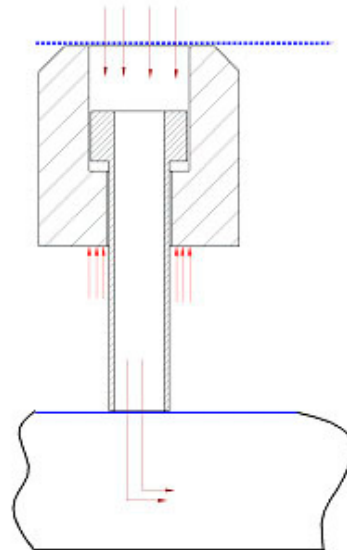
Horizontal cylinder with supply and discharge pipes in parallel at the bottom. In-line version upon request. Options possible.

Applications:

- Process water
- Cooling-water processes
- Industrial water
- Recirculation systems
- Irrigation systems
- Pre-filtration disinfection system

Self-adjusting flushing nozzle:

The current generation of AZEZ filters is provided with patented nozzles which due to hydraulic differences follow the filter element as closely as possible during the backwashing of the filter. This results in very efficient cleaning using as little flushing water as possible.



Working:

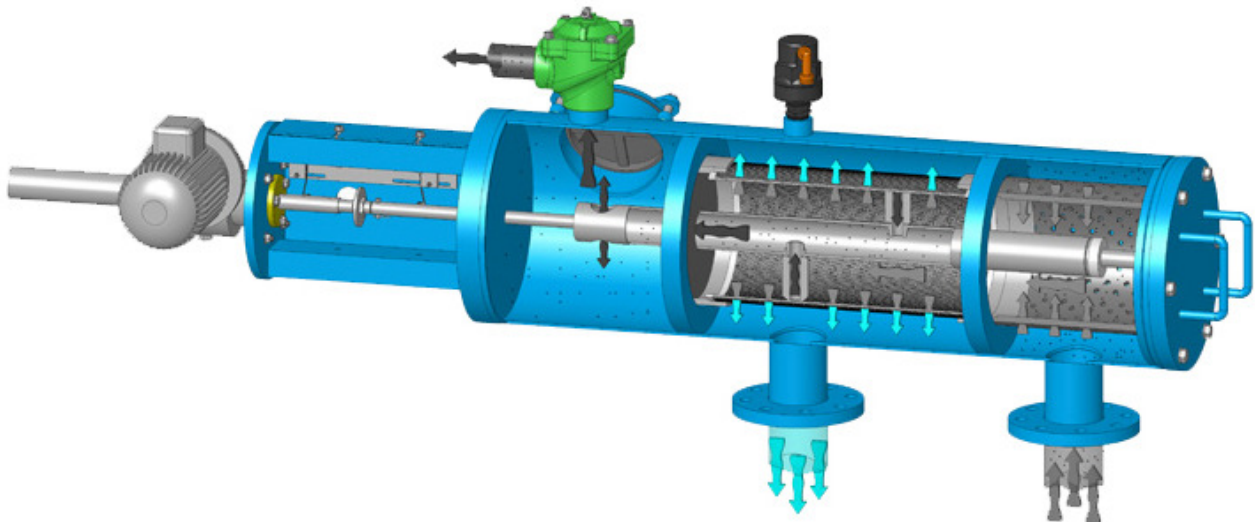
Filtration proceeds in two phases.

First phase: during this phase, the water is roughly filtered to protect the fine filter and guarantee the cleaning process.

Second phase: in this phase, the water flows from inside the filter through the fine-filter element to the outside. The filtering process leaves a dirt deposit on the surface of the filter element. This deposit improves the filtration efficiency of the fine filter. The filtering process produces a differential pressure which increases as the deposit becomes thicker. This fact can be used to start the self-cleaning process.

The filter is provided with a pressure gauge and a differential-pressure switch with which, using a computer, PLC control or switch box, the cleaning process can be activated in the most efficient manner.

Self-cleaning takes place by moving the suction system in a spiral movement across the whole filter surface, the dirt being sucked from the surface and subsequently drained off.



Materials:

- Filter body: polyester-coated steel (option: stainless steel)
- Filter element: coarse screen: PVC inside element
fine filter: Super Screen; several layers of stainless steel sintered together
(Option: 2"-3": PVC element with stainless-steel filter screen)
- Rubbers: natural rubber NR
- Filter perforation: 400-300-200-130-100-80 microns (on request: 50-30-15-10 microns).

Type	Unit	715302	715303	715304	715306	715308	715310	715312	715314
Connection	Inch	2"	3"	4"	6"	8"	10"	12"	14"
Capacity *	m ³ /h	25	40	80	150	300	400	470	550
Diameter	Inch	12"	12"	12"	12"	16"	16"	16"	16"
Flange: (ISO 7005 PN10) DN		50	80	100	150	200	250	300	350
-Bolt circle diameter	mm	125	160	180	240	295	350	400	460
-Bolt holes	mm	4Ø18	8Ø18	8Ø18	8Ø22	8Ø22	12Ø22	12Ø22	12Ø22
Weight	kg	155	160	174	180	280	290	330	355
Length	mm	1905	1905	2155	2155	2395	2395	2685	2685
In/out distance	mm	430	430	600	600	780	780	990	990
Drain valve(s)	Inch	1x1 1/2"	1x1 1/2"	1x2"	1x2"	1x2"	1x2"	1x2"	1x2"
Filter area	cm ²	2260	2260	3560	3560	5900	5900	7500	7500
Working pressure max.	bar	8	8	8	8	8	8	8	8
Flushing pressure min.	bar	2	2	2	2	2	2	2	2
Flushing capacity min.	m ³ /h	8	8	10	10	12	12	14	14
Flushing water **	litre	45	45	55	55	100	100	115	115
Flushing motor	2 x 380V 50Hz 0.25kW								

* see our application guideline for using UDI automatic filters.

** based on a pressure differential of 1.0-1.2 bar between de inlet and flushing-chamber pressure.



UDI Automatic filters are provided with a CE certification mark.



UVAR

Subject to changes and/or improvements