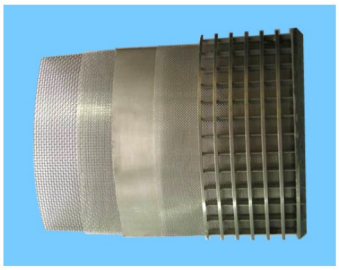
Water Solution Provider

FILTRATION

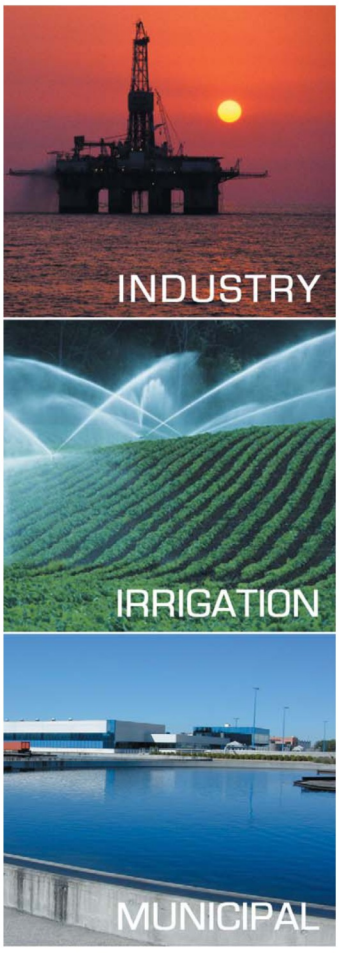
Automatic self cleaning filter for fine filtration



- Flow rate up to 4,000 m3/h/unit
- Fine filtration degree from 800 to 3 micron
- Large filtration area up to 40,000 cm2

Application:

- Industry
- Irrigation
- Municipal



How does AMIAD filters work?

Filtering process:

Raw water flows into the filter through the cylindrical filter element from inside out, causing particles to accumulate on the inside screen surface which causes the developing of filter cake. The accumulation of the filter cake causes pressure differential between the filter inlet and outlet.

A pressure differential switch senses the pressure differential across the screen and when it reaches a preset value, the cleaning mechanism is operated.

Cleaning process:

The filter begins the self cleaning process when the pressure differential across the screen reaches a preset value or a pre-determined lapse of time. Cleaning of the filter's fine screen is carried out by the suction scanner which is a motor driven assembly that rotates while also moving linearly.

Water Solution Provider

It consists of central tube with tubular nozzle equally spaced along the length of the central tube. An exhaust flush valve connects the internal cavity of the suction scanner to atmospheric pressure outside the filter body. By opening the exhaust valve, the differential pressure between the water inside the filter and the atmospheric outside the filter creates high suction forces at the openings of each of the suction scanner nozzles.

The suction force causes water to flow backwards through a small area of screen in front of each nozzle, pulling the filter cake off the screen and sucking it into the suction scanner and out through the exhaust valve to waste. The driving mechanism rotates the suction scanner in a slow, controlled motion. The cleaning cycle is complete in approx. 30 seconds. During this time the nozzle cover 100% of the screen removing the filter cake from the entire surface. During the self-cleaning cycle, filtered water continuous to flow down stream of the filter.

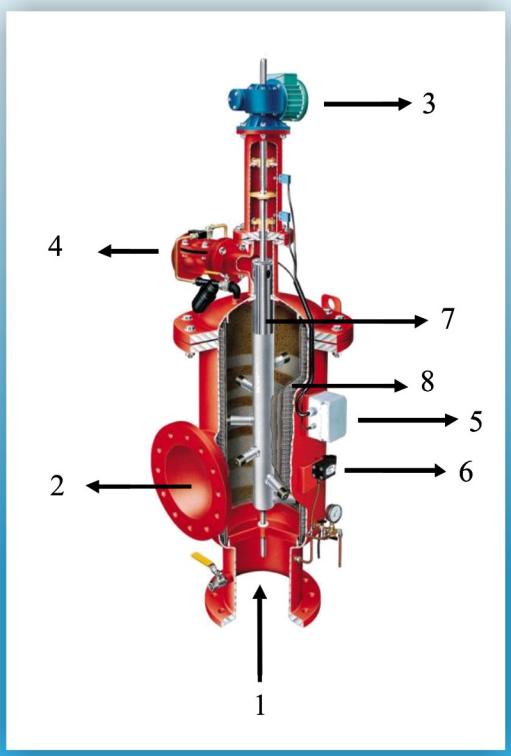
Control system:

The filter is equipped with a pressure differential switch that transmits an electric signal to the electronic control board, which initiates the flush cycle.

A solenoid operates the exhaust valve by means of a hydraulic command or compressed air. The filter operation and cleaning cycle is controlled and monitored by a Programmable Logic Control (PLC). The PLC allows maximum flexibility in control options and has many features that can be incorporated per-customer's need.

Model:

SAF-1500, SAF-3000, SAF-4500, SAF-6000
EBS 10,000, Mega EBS 40,000, AMF Series



1. Inlet
2. Outlet
3. Drive Unit
4. Exhaust Valve
5. Wiring Box
6. Pressure Differential Switch
7. Suction Scanner
8. Screen