

Pond water filtration for agricultural irrigation

Filternox® Automatic Self-Cleaning SPT-SBV-MR





https://youtu.be/-I9b-p77IPM









- + A 322-acre (138-hectare) cherry and pomegranate orchard is irrigated using a drip system.
- + The water accumulated in the pond used to be directed to an outdated filtration system that consisted of 2 submersible pumps and 10 sand and disc filters. However, due to the frequent backflushing of the sand filters and the system's inability to perform proper filtration, it failed to clean the water adequately before it was sent to the irrigation drip system.
- + During the summer months when temperatures increase, algal blooms and other biological factors can cause frequent backflushing of the sand filters which in turn can create crevices and cracks in the filter media, hindering proper filtration and ultimately leading to clogging of irrigation lines.
- + When we were consulted to propose a solution for these problems, we recommended our new generation filters and more specifically our internationally patented filter model Filternox® Automatic Self-Cleaning SPT-SBV-MR.



+ Our Filternox® Automatic Self-Cleaning SPT-SBV-MR patented filter model has delivered solutions for similar agricultural irrigation systems in Turkey, France, United Arab Emirates, Saudi Arabia, Spain, Italy, Serbia, Chile, Cuba and many other countries.



+ These filters perform functions that sand filters cannot accomplish. They smoothly and reliably provide the desired solution to the problem, with significant advantages. A comparison chart and these advantages can be found on the next page.







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Sand Filters

Filternox® Automatic Self-Cleaning SPT-SBV-MR Model Filter

- The desired objective cannot be achieved with this equipment.
- It works smoothly and provides the desired solution to the process.
- The footprint was significantly larger.
- It takes up 1/50 of the sand filters' space.

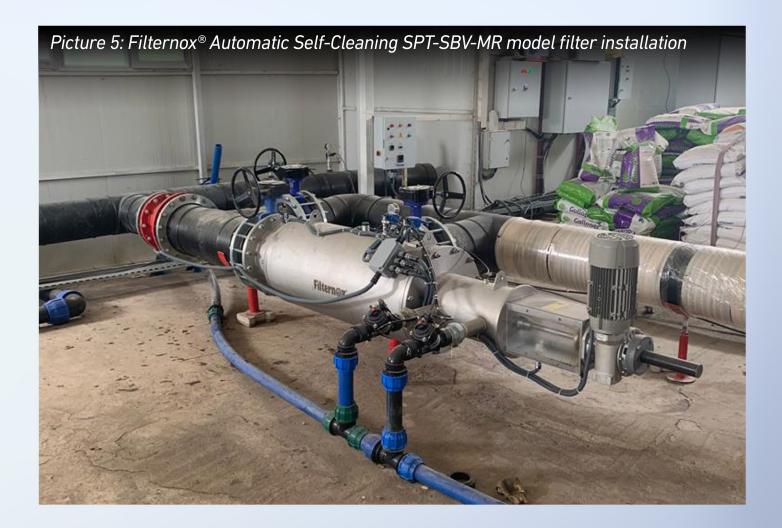
• The shipping cost is high.

- The shipping cost is comparatively low.
- Excessive water drained during backflushing represents a waste of water.
- With less water drained during backflushing, it helps save water.
- Excessive energy consumption increased operating costs.
- It saves operating costs by consuming 25 times less energy.
- It has an epoxy painted, carbon steel body.
- It has a longer operational life thanks to its AISI 304L stainless steel body.

• Outdated technology.

• New technology.





- + The SPT-SBV-MR model is one of our latest generation filter developments and it is internationally patented. It has a combined, double-stage cleaning mechanism with brushes and vacuum nozzles and two separate drainage valves on its body. Its specific technology allows the filtration of both coarse and fine particle pollutants in a single chamber.
- + Filternox® Automatic Self-Cleaning SPT-SBV-MR filters provide exceptional performance and offer a permanent and definitive solution for applications with fluctuating, high levels of contamination.







The technical details of the Filternox® Automatic Self-Cleaning SPT-SBV-MR filter for this application are shown in the table below.

Filter Model	SPT-SBV-MR
Filtration Level	130 micron
Operating Pressure	2,5 - 3 bar
Flow Rate	500 m³/h
Filter Body Material	AISI 304L
Filter Element Material	AISI 316L
Total Irrigation Area	322 acres (138 hectares)
Control System	PLC Control System & HMI Touch
	screen









Thank you

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