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SIC | Drinking Water

A SAND FILTRATION PLANT IN AGRINIO, GREECE WAS FACED WITH DETERIORATING RAW WATER QUALITY AND AGEING EQUIPMENT IN NEED OF REPLACEMENT.





A sand filtration plant in Agrinio, Greece was faced with deteriorating raw water quality and ageing equipment in need of replacement.



MADE IN USA

COMPLIANT UF/MF

THE ONLY BABA

MEMBRANE

The key to upgrading a conventional treatment plant is to utilize as much existing infrastructure as possible in order to minimize construction costs and shorten project schedules. Unfortunately, not many membrane technologies are able to upgrade existing gravity filters due to space limitations.



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THE SOLUTION

The design solution was to utilize pre-fabricated steel tanks to house new membrane equipment for the plant upgrade. With a flow demand of over 5.0 MGD, the costs of a steel tank approach could prove costly unless the cost of the tanks could be minimized. Due to the compact nature of SiC, the pre-fabricated steel tank approach proved economical as the size of the tanks were kept to a minimum. Coupled with the ability of SiC to handle challenging surface water sources while producing permeate that is free of bacteria, heavy metals, and turbidity, the SiC UF membranes provided a comprehensive solution for the ageing conventional water treatment plant.

The Ovivo team developed a solution for the customer consisting of five pre-fabricated steel tanks to up grade the gravity sand filter plant. The containerized solution, which also included pumps, valves, and other equipment simplified both design and project execution.



THE OVIVO DIFFERENCE

Ovivo was able to provide a complete solution for the client: engineering, equipment, and SiC membranes from a single supplier. By being able to provide a complete system solution, Ovivo was able to reduce total constructed costs and project schedule while delivering the latest in water treatment innovation.

RAW WATER QUALITY

Water Temperature	10-35 oC
Influent TSS	50 mg/l
Fe	0.1 mg/l

PLANT DESIGN PARAMETERS

Plant Commissioning	2024
No. Trains	5
Plant Capacity	5.7 MGD (21,600 m3/day)
Design Flux	169 gfd (288 lmh)



