

## Wastewater Treatment OC Series: HOD™ UV for Open Channel

Simply Performing.



As standards for wastewater reuse become stricter, municipalities need effective effluent disinfection treatment systems

Following several treatment stages, municipal effluent undergoes tertiary filtration and disinfection. While disinfection can be carried out using chemicals, its hazardous impact on the environment and the handling risks present major challenges. That's why municipalities are opting for chemical-free UV treatment.

Current UV solutions feature numerous lamps which consume energy and are complex to replace. The lack of adequate monitoring and control causes inefficient water treatment.

### Atlantium's HOD UV Wastewater Treatment System

With successful proven record in closed vessels for wastewater treatment around the world, our low pressure, high intensity HOD™ (Hydro-Optic Disinfection) UV system features an optimized design delivering enhanced performance, based on Atlantium's years of experience in designing, providing, and servicing thousands of HOD UV systems.

The design is based on the most powerful validated CFD-I process, the HOD UV system serves different flow rates and water conditions.

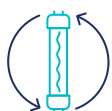


## Designed to Overcome Challenges

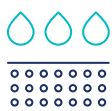
The smart modular design ensures high energy efficiency and enables easy maintenance.



Optimal flow adjustment structure



Easy access for lamp replacement



Water level sensor



Lamp cleaning mechanism enables easy maintenance



Lamp ON indicator

Built-in UVT sensors indicate which lamp needs to be replaced.

Easy replacement of lamps – without removing the entire bank.



Advanced and powerful LP high intensity 1000W lamps = optimal performance with fewer lamps and smaller foot print.

Power adjusted from 50% to 100% according to ongoing water quality monitoring.



Vertical installation expresses in high energy efficiency – less UV photons escape from the water



### UV dose = UVT x flow rate x lamp output

Atlantium's HOD UV system is designed based on hydro-optic principles that ensure you keep in full flow:

- \* Optimized flow adjustment structure for eliminating escape routes and increasing system's efficiency
- \* Unique sensors configuration to continuously monitor UVT levels and lamp operational indicators, which ensure reliable and efficient high disinfection levels – without the headache!