

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.

Through years of hands-on experience and close engagement with field challenges, we adopted a unique design approach that improves system efficiency and delivers superior results.

Our system's design is built on decades of field experience and developed in full compliance with the most powerful and validated CFD-I process—ensuring pure, reliable performance across a wide range of flow rates and water conditions.



Key Benefits



Optimal flow

Each HOD UV module features unique hydraulic flow guides around the lamps, optimizing water flow and preventing bypass routes for maximum efficiency.



Advanced & 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.



Smart modular design

Modular structure to fit any flow rate, in series/in parallel.



Lamp ON indicator

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



DPM (Deposit Prevention Mechanism)

Maintains optimal UV light performance without the use of chemicals, while reducing maintenance frequency.



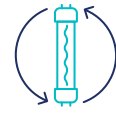
Vertical installation

Allows easy servicing from the top and high energy efficiency - less UV photons escape from the water



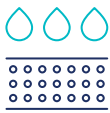
Easy to maintain

The HOD UV module housing and electrical wiring are positioned above the channel, enabling easy cables disconnection for serviceability.



Easy lamp replacement

Individual lamps can be replaced while keeping the HOD UV module in place, which can be raised by a monorail for easy access. Lamps are easily replaced without removing the entire bank.



Water level sensor - Included



UVT sensor - Included, as part of the UV module

