

Industry: Wastewater Treatment

DURON

Water disinfection in open channel

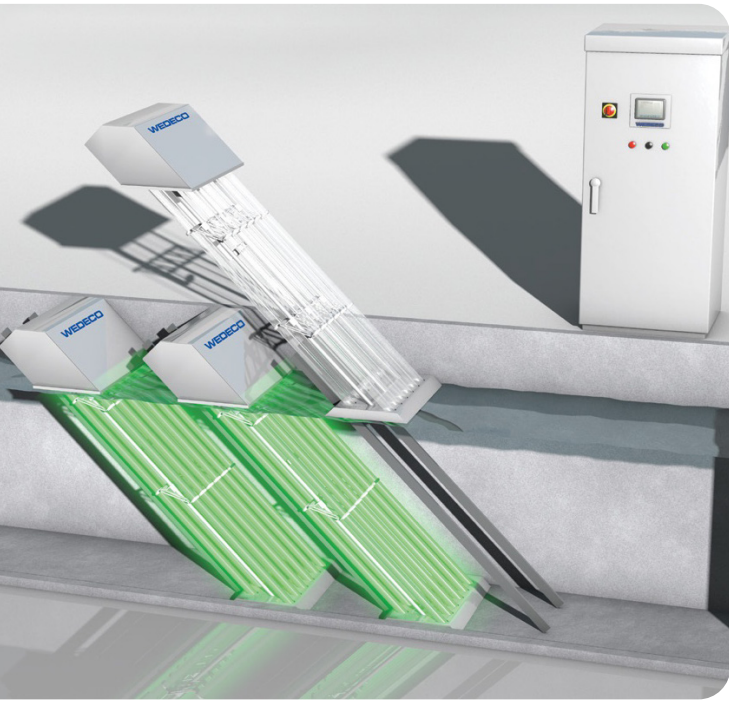


**UV-C system for waste
water disinfection in
open channel**

Wedeco Duron is an open-channel UV disinfection system for wastewater applications. It is designed to allow for easy retrofit of existing chlorine contact basins using one of the most powerful Ecoray UV lamps, a Xylem technology made in Germany.

Tested under a broad range of effluent conditions, it provides a sustainable disinfection solution without any hazardous byproduct formation. It ensures the highest disinfection performance up to reuse standards as well as for low-quality effluents.

GENERAL INFORMATION



Peace of mind

Third-party validation and built-in redundancy ensure high performance and run times. New app-based connectivity enables easy monitoring and intuitive troubleshooting via mobile device.

More affordable with fewer lamps

Higher powered unique 800 W Ecoray® UV lamps and more flexible module lamp arrangement allow for more efficient designs and cut overall installation and operational costs by over 25%.

Easy maintenance

Fewer UV lamps and easy access to all components with integral module lifting allow for simple and fast maintenance. Short lamps increase safety for operators on site.

Simple retrofit capability

Duron provides the largest flow capacity per channel in the industry to cut down total costs of installation. It is highly customizable to help convert more chlorine contact basins into chemical free UV disinfection systems.

Superior ease of installation

Adjustable mounting bars allow for higher channel tolerances, ensuring fail-safe and fast installation. Fewer control boxes and smart cable routing reduce electrical works.

TECHNICAL FEATURES

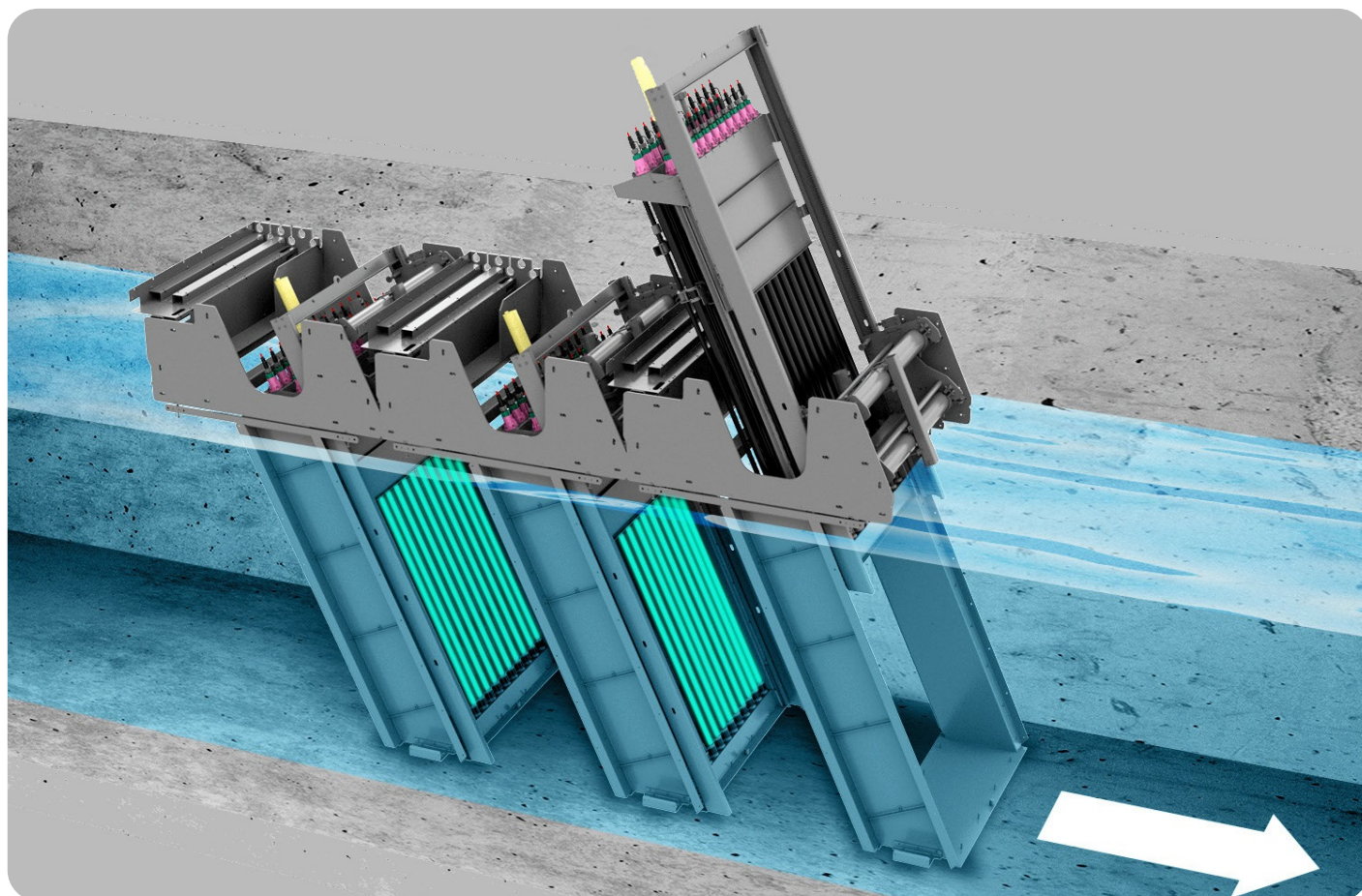
- Suitable for the disinfection of wastewater (primary, secondary or tertiary), water reuse, aquaculture and stormwater overflows.
- Modular system for customized design serving flow rates from 500 m³/h up to several thousand m³/h.
- Validated performance by state-of-the-art bioassay in compliance with USEPA's UVDGM (2006), IUVA Protocol (2011) and NWRI Guidelines (2003/2012) including Title 22 acceptance
- High efficiency Ecoray UV lamp and ballast technology
- OptiDose Control - Xylem's Wedeco true intensity based control philosophy using an ÖNORM-certified UV intensity sensor
- EcoTouch or PLC controlled - operator-friendly UV system control with SCADA communication
- Chemical-free, automatic, mechanical wiping system
- Integrated, automatic module lifting



TECHNICAL SPECIFICATIONS

UV Transmittance range	20 - 70%
Maximum flow rate	1000 - 10 000 m ³ /h
Validation type	NWRI, UVDGM
Lamp technology	Ecoray Low-pressure, high output amalgam
Power per lamp	600 W / 800 W
Lamp configuration	Stagered, inclined
Number of lamps per bank	6 / 12
Lamp lifetime	14 000 h
Cleaning system	Automatic, mechanical
Module lifting device	Integrated (automated or manual)
Channel width	750 - 3000 mm
Minimum channel length	6 000 mm
Level control device	Fixed weir / motorized weir plate
Protection class	IP67
Variable power output	50% to 100%

INSTALLATION



ADVANTAGES

- Reduced maintenance effort by using an automatic quartz tube cleaning system
- Wide range of options available
- Excellent EMC protection, exceeds industrial and household standards
- Continuous self-monitoring of UV intensity, reactor temperature and water flow combined with a high-performance memory and analysis system
- Extremely low pressure drop
- Variable installation positions for easy integration into existing water treatment systems

BENEFITS

- Safe and effective disinfection with tested and certified UV systems
- No harmful by-products (such as THMs from chlorination)
- Very low operating costs due to variable lamp power control
- No corrosion or by-product formation (DBP)
- Unrestricted discharge into emissary
- Reduced costs for water treatment

