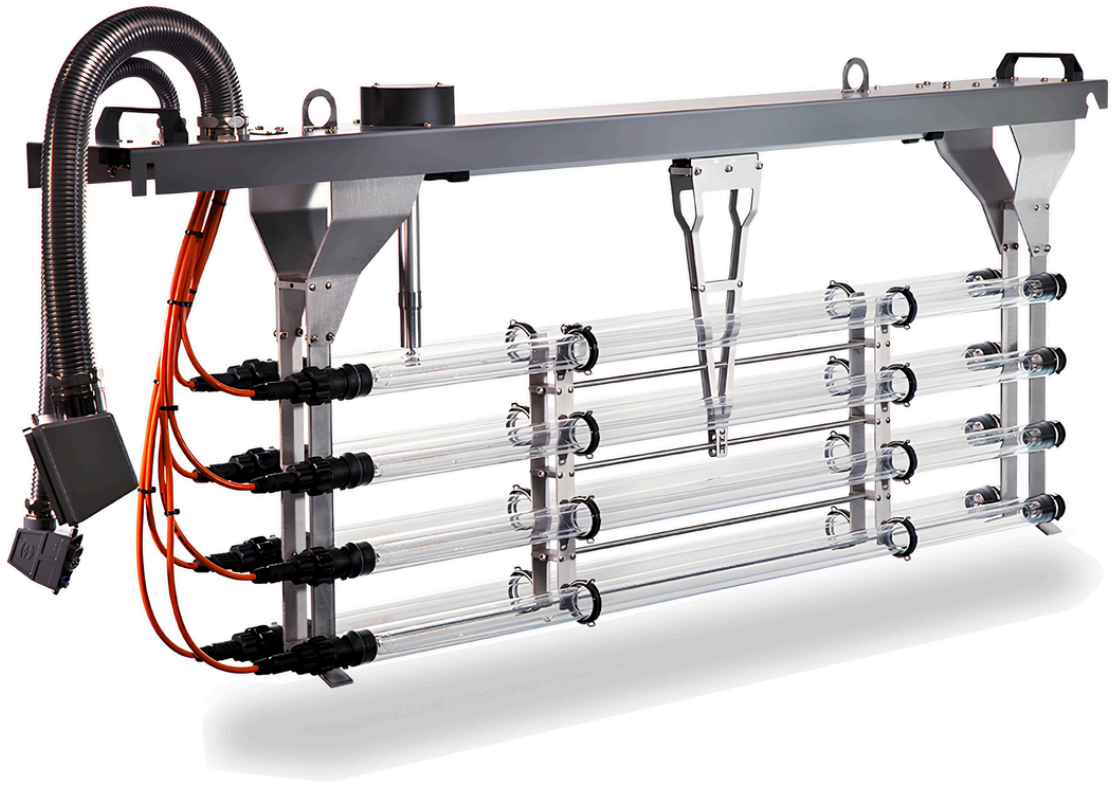
Wedeco TAK 55

Wastewater treatment using UV light
Reliable, proven performance



- Suitable for use in wastewater (primary, secondary or tertiary), water reuse, and aquaculture applications
- Modular system for customized design serving flow rates from 500 m³/h (3 MGD) up to several thousand m³/h (>100 MGD)
- High-efficiency EcoRay® UV lamp and ballast technology
- OptiDose™ Control system - 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

WEDECO® TAK 55 lamp module

The WEDECO TAK 55 lamp modules stand out because they are designed for long term use, and hydraulically optimized. The compact UV lamp arrangement allows for highly concentrated power in a very small space. The result is treatment performance secured at all times even with larger volume flows and low UV transmission.

Depending on local circumstances and performance requirements, both the entire TAK system and the arrangement of the individual UV lamp modules can be customized— the number and arrangement of the modules, number of lamps per module and the distance of the UV lamp from one another

Leading sensor technology

The UV intensity in the water is influenced by the age of the lamp, the cleanliness of the quartz tube and the UV transmission in the water. This is why the WEDECO® TAK 55 system monitors and measures the actual UV radiation emitted using integrated sensors constantly.

The WEDECO UV intensity sensor is integrated into the TAK module in such a way that it is automatically purified. This calibrated sensor stands out with its high UV wavelength selectivity, highly stable operating performance and a long service life.

Fully-automatic preventive cleaning

Depending on water quality, organic or inorganic deposits may form on the quartz protection tubes of the lamps, which can limit the performance the UV light. The fullyautomatic TAK wiping system mitigates this problem by providing excellent cleaning performance that significantly reduces the formation of deposits.

The wiping system is equipped with specially designed PTFE wiper rings which do not interfere with the treatment process and clean without the addition of chemical additives. The continuously operational wiper frequency can easily be adapted to the properties of the wastewater.

Model	TAK 55 UV disinfection system
UV transmittance range in % (1cm)	35 -75
Maximum flow rate (m³/h / MGD)	several 1000 m³/h >100 mgd
Validation type	NWRI, UVDGM
Lamp technology	Ecoray Low-pressure, high-output amalgam
Power per lamp W	315
Number of lamps per row	4-18
Lamp life (hours)	14000
Lamp certification	x
UV intensity monitoring	One (1) sensor per bank
Control philosophy	OptiDose (true sensor based variable lamp output)
Individual lamp monitoring	x
Ballast type	Electronic, high-efficiency, variable output (50 to 100% power)
Controller	EcoTouch/PLC
UV system control cabinet material	Painted sheet steel
UV electrical standards	cUL/CE/UL
Common outputs	System Status, Lamp Status, Alarm Messages, Process Values
UV system control cabinet scada communication	Yes
UV electrical requirements	CE: 400/230 +/- 10%, 50 Hz (TN-S Net) cUL: 480/277 +/- 10%, 60 Hz (5 Wire WYE; L1, L2, L3, N, GND
Ambient air temperature	5-50°C
Protection class	IP54/cUL Type 12 (4X optional)

SPECTRA®
PROFESSIONAL UV SOLUTIONS

str. Zizinului nr. 110, Brașov, 500407, România

www.spectra.ro

+40 770 717 189

contact@akro.ro

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