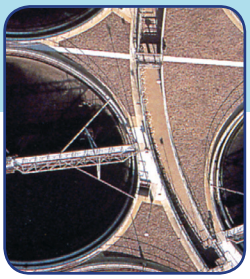
BIO UV
Ultraviolet Solutions



WASTE WATER

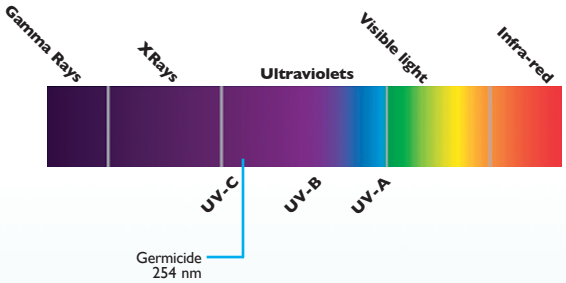
BIO-UV has developed sanitizers using the most advanced UV technologies for tertiary treatment by disinfecting municipal or industrial waste water.

BIO-UV treatment makes it possible to:
- protect the environment downstream of the discharge of treatment plants, particularly when there are bathing areas, white water activities, fishing and aquaculture activities nearby
- reuse the purified waste water for agricultural irrigation, spraying of green open spaces and golf courses, or for industrial processes (washing water etc.)

BIO-UV proposes a low pressure technology and various types of reactors in order to adapt to the aims of the treatment and to the installation and maintenance constraints. In certain cases, prior filtration (on a sand bed) may be necessary.

PRINCIPLE

At 254 nanometers, the optimum wavelength for destroying micro-organisms (viruses, bacteria, algae, yeasts, mould...), UV-C rays penetrate to the heart of DNA and disturb the metabolism of cells until they are totally destroyed. All germs are thus deactivated (including ***Legionella*** and ***Cryptosporidium***) and cannot reproduce.



EFFECTIVE DOSE

The reactors in the **BIO-UV** ranges are dimensioned according to the flow rate: it is the combination of the contact time in the reactor and the power of the lamp(s), that will ensure that the necessary dose (expressed in millijoules per square centimeter or mJ/cm^2) sufficient to kill 99.9% of the micro-organisms (bacteria, viruses, algae in suspension,…) is received.

BENEFITS

- **Continuous treatment and immediate effectiveness of the disinfection**: the bacteria are destroyed in the reactor. There is therefore no need to provide contact times beyond the disinfection station
- **No disinfection by-products are produced that could pollute the environment or restrict the reuse of the water** (as in the case of chlorine or ozone)
- **Simple technology, economic investment and operation**, particularly compared to systems using membranes
- **Automatic maintenance and cleaning of quartz sleeves, guaranteeing the efficiency of the BIO-UV equipment**
- **Continuous monitoring of the efficiency of the disinfection with remote management to meet operating requirements**

BIO UV
Ultraviolet Solutions

BIO UV
Ultraviolet Solutions

IAM SERIES CLOSED REACTOR - LOW PRESSURE

Description	Max. flow rate in m³/h *	Performance in millijoules per cm² at actual recommended flow rates**	UV Lamp : Power consumption Number	Connection DN	Length of reactor in mm	Diameter of reactor in mm
IAM2205/120	12	40	2 x 120 W	DN 100	985	205
IAM2273/300	27	40	2 x 300 W	DN 150	1339	273
IAM3273/300	41	40	3 x 300 W	DN 150	1339	273
IAM4273/300	55	40	4 x 300 W	DN 200	1339	273
IAM5273/300	70	40	5 x 300 W	DN 200	1339	273

* Contact us for other flow rates
** The performance of these devices have been calculated at the end of the lamp life and with a transmission of 70%

ADVANTAGES

- UV monitoring sensor complying with Austrian standard ÖNORM providing correct continuous operation of the sanitizer
- LCD display of UV intensity, remote management via a 4-20mA output
- Personalization of reactors according to the installation, operation and maintenance constraints (diameter of flanges, inlet/outlet positioning, vertical/horizontal reactor, etc.)
- Single-base lamps and patented sealing system for an easy maintenance
- Automatic or manual quartz wiper system without dismantling (option)
- Lamp life : 13,000 hours

RW SERIES CLOSED REACTOR - LOW PRESSURE

Description	Max. flow rate in m³/h *	Performance in millijoules per cm² at actual recommended flow rates**	UV Lamp : Power consumption Number	Connection DN	Length of reactor in mm	Diameter of reactor in mm
RW 4168/120	10	40	4 x 120 W	DN 100	1342	168
RW 4168/170	20	40	4 x 170 W	DN 100	1339	168
RW 4219/300	40	40	4 x 300 W	DN 150	1570	219
RW 4273/400	60	40	4 x 400 W	DN 200	2000	273
RW 6273/400	90	40	6 x 400 W	DN 200	2000	273
RW 8273/400	150	40	8 x 400 W	DN 200	2000	273
RW 10355/400	190	40	10 x 400 W	DN 250	2000	355
RW 12355/400	230	40	12 x 400 W	DN 250	2000	355
RW 14355/400	260	40	14 x 400 W	DN 250	2000	355
RW 16406/400	315	40	16 x 400 W	DN 300	2005	408
RW 24508/400	455	40	24 x 400 W	DN 300	2016	508
RW 30609/400	508	40	30 x 400 W	DN 350	2043	609
RW 48711/400	900	40	48 x 400 W	DN 400	2020	700

* Contact us for other flow rates
** The performances of these devices have been calculated at the end of the lamp life and with a transmission of 60%

ADVANTAGES

- UV monitoring sensor complying with Austrian standard ÖNORM providing correct continuous operation of the sanitizer
- LCD display of UV intensity, remote management via a 4-20mA output
- Personalization of reactors according to the installation, operation and maintenance constraints (diameter of flanges, inlet/outlet positioning)
- Horizontal installation of the reactor
- Single-base lamps and patented sealing system for an easy maintenance
- Automatic standard quartz wiper system without dismantling
- Possibility of lamp power regulation
- Lamp life : 16,000 hours

Member of siet

ISO 9001:2008 BUREAU VERITAS Certification

BIO UV
Ultraviolet Solutions
850 avenue Louis Médard • 34400 LUNEL • FRANCE
Tél : +33(0)4 99 133 911 • Fax : +33(0)4 99 133 919
e-mail: export@bio-uv.com
www.bio-uv.com

PARTENAIRES TECHNIQUES

EPA Est.
#075659-FRA-001

© 2017 BIO-UV
vH-08/17