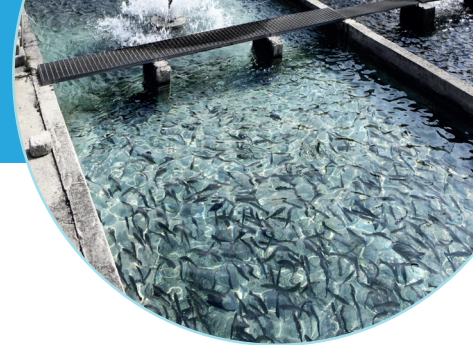


# AQUACULTURE, PISCICULTURE, AQUARIUMS

## Treatment of salt water and corrosive water



The **BIO-UV Group** has developed a range of special reactors for **disinfecting salt water and/or corrosive water**, able to meet the most stringent requirements of professionals and thus optimize their operation in total safety. Our HDPE range makes it possible to treat all flow rates. The **BIO-UV HDPE reactors** treat these various applications and many sites on a daily basis and their operators swear by them and are totally satisfied with their performance.

### Principle

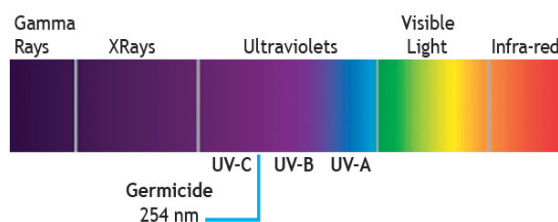
The sun emits invisible light : ultraviolet light. This natural phenomenon is reproduced inside the reactors in the **BIO-UV Group's** product range using powerful lamps, the result of leading-edge technology, that emit UV-C rays.

### Benefits

- **UV reactors adapted** to the flow rates to be treated (1.6 to 1185 m<sup>3</sup>/h)
- **Reactors that take account of the specific transmission of the water:** ensuring the effectiveness of the passage through the UV rays
- **Power in millijoules ensuring true efficiency right to the end of the lamps' life** and guaranteeing the effective destruction of undesirable micro-organisms (parasites, bacteria, viruses, algae, ...)
- UV dose guaranteed to the end of the lamps' life
- **Permanent back-up** at the service of professionals
- **Healthy, crystal-clear water guaranteed**
- **Avoids the use of any chemical substances**
- **Simple design** for an easy maintenance
- **Simple and quick to install**
- **No risk to flora and fauna**
- **Completely environmentally friendly**
- **BIO-UV HDPE reactors: a durable guarantee against corrosion**

### Action

At the wavelength 254nm, the UV-C penetrate to the DNA heart and **eradicate micro-organism** (virus, bacteria, algae, yeasts, mould, including Legionella, Cryptosporidium, Giardia and Toxoplasma that are hardly destroyed by ozone and not at all by chlorine at standard doses), destroying cell metabolism until they are completely destroyed. **Thus all germs are deactivated and cannot reproduce.**



### The effective dose

The reactors of the **BIO-UV Group** ranges are dimensioned according to the pump flow rate, as 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<sup>2</sup>) sufficient to kill **99.9% of the micro-organisms.**



UV open channel systems available





## TTPE HO SERIES REACTORS (High Intensity HO lamps)

Description	Max. flow rate in m³/h	Performance in millijoules per cm² at actual recommended flow rates*	UV lamp: Number x Power consumption	Connection Diameter	Height of reactor in mm	Diameter of reactor in mm
PE 330 HO	1.6	30	1 x 33 W	D 32	472	110
PE 870 HO	7	30	1 x 87 W	D 50	1001	160
PE 1160 HO	7	30	1 x 87 W	D 75	1066	160
PE 2160 HO	10	30	2 x 87 W	D 75	1066	160
PE 3160 HO	16	30	3 x 87 W	D 75	1066	160
PE 4250 HO	31	30	4 x 87 W	D 140	1066	250
PE 5250 HO	38	30	5 x 87 W	D 140	1066	250
PE 6250 HO	45	30	6 x 87 W	D 140	1066	250

## TTPE AM SERIES REACTORS (High Intensity AM lamps)

Description	Max. flow rate in m³/h	Performance in millijoules per cm² at actual recommended flow rates*	UV lamp: Number x Power consumption	Connection Diameter	Height of reactor in mm	Diameter of reactor in mm
PE 2315/300 AM	56	30	2 x 300 W	D 200	1330	315
PE 3315/300 AM	88	30	3 x 300 W	D 200	1330	315
PE 4315/300 AM	117	30	4 x 300 W	D 200	1330	315
PE 5315/300 AM	144	30	5 x 300 W	D 200	1330	315
PE 6315/300 AM	168	30	6 x 300 W	D 200	1330	315
PE 7315/300 AM	196	30	7 x 300 W	D 200	1330	315
PE 4315/400 AM	219	30	4 x 400 W	D 250	1926	315
PE 6315/400 AM	347	30	6 x 400 W	D 315	1926	315
PE 8355/400 AM TS	467	30	8 x 400 W	D 355	1919	355
PE 6355/800 AM TS	648	30	6 x 800 W	D 355	1932	355
PE 8400/800 AM TS	825	30	8 x 800 W	D 400	1932	400
PE 10450/800 AM TS	935	30	10 x 800 W	D 450	1932	450
PE 12500/800 AM TS	1185	30	12 x 800 W	D 500	1932	500
PE 14500/800 AM TS	NA	30	14 x 800 W	D 500	1932	500

\* The performance of these devices have been calculated at the end of the lamps' life and with a transmission of 85%



## Advantages

- **High performance HDPE reactors** with high intensity (HO) or Amalgam (AM) UV-C lamps using state-of-the-art technologies
- Very long lamp life (12 000 to 16 000 hours depending on the number of switchings on)
- Touch screen + Communication MODBUS available for AM TS range
- Dedicated electronic ballasts guaranteeing maximum UV output of lamps and integrated monitoring
- Single-base lamps with patented sealing system for an easy maintenance
- Lamp operating indicator light for each lamp
- Insignificant pressure loss
- Inlet/outlet connections using unions supplied
- Drain plug
- Maintenance: lamp change and cleaning of the quartz sheath very quick and simple