

WATER FOR INDUSTRIAL PROCESSES



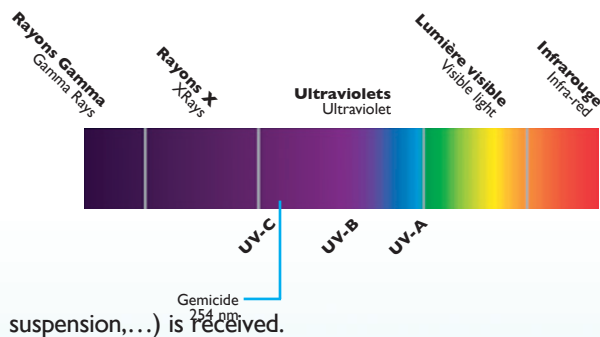
BIO-UV reactors are suitable for the treatment of water for industrial processes. The principal applications are as follows:

- Disinfection of water for industrial processes
- Disinfection of water for cleaning and rinsing
- Downstream protection of membrane-type treatment systems (reverse osmosis units, ultrafiltration etc...)
- Maintenance of the quality of stored water: raw water, treated water
- Dechloramination: Reduction of the chlorine-free rate
- Dechloramination: Reduction of the combined chlorine rate



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

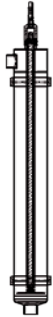
The reactors in the **BIO-UV** ranges are dimensioned according to the flow rate: it is the combination of the contact time in the reactor and the power of the lamp(s) that will ensure that the necessary dose (expressed in millijoules per square centimeter or mJ/cm²) sufficient to kill 99.9% of the micro-organisms (bacteria, viruses, algae in

BENEFITS

- **Treatment simple to use and does not modify the physico-chemical characteristics of the water:** no change in the taste, smell, etc...
- **No disinfection by-products created that are harmful to human health**
- **No risk of under or over-dosing**
- **No chemical product monitoring and handling constraints**
- **May be combined with other treatment processes** (filtration, softening etc...)
- **Advanced oxidation treatment in the presence of catalysts**



IBP + SERIES REACTORS

Description	Max.flow rate in m ³ /h *	Performance in millijoules per cm ² at actual recommended flow rates**	UV lamp : Number Power consumption	Connection	Height of reactor in mm	Diameter of reactor in mm	
IBP 10 HO +	4,6	40	1 x 87 W	1"	1067	90	
IBP 30 HO +	6,6	40	1 x 87 W	1 1/2"	1072	114	
IBP 40 HO +	9,3	40	1 x 105 W	1 1/2"	1326	114	
IBP 2150 HO +	13	40	2 x 87 W	2"	1083	150	
IBP 3150 HO +	22	40	3 x 87 W	2"	1083	150	
IBP 4205 HO +	39	40	4 x 87 W	2 1/2"	1096	205	
IBP 5205 HO +	54	40	5 x 87 W	2 1/2"	1096	205	
IBP 5 AM +	3,5	40	1 x 40 W	1"	554	114	
IBP 10 AM +	8,5	40	1 x 120 W	1"	1067	90	
IBP 30 AM +	10,6	40	1 x 120 W	1 1/2"	1072	114	
IBP 2150 AM +	25	40	2 x 120 W	2"	1083	150	
IBP 3150 AM +	41	40	3 x 120 W	2"	1083	150	

* Contact us for other flow rates

** The performance of these devices have been calculated at the end of the lamps' life and with a transmission of 98%

ADVANTAGES

- Excellent disinfecting performance by optimization of UV emissions and of the hydraulic flow
- Compact reactors, easy to install
- Use of single-base lamps, patented sealing system and vertical design for an easy maintenance
- Optional UV sensor and monitor offering data reporting by a diode and contact type alarm
- Personalization of connection possible; DN flanges, clamps etc...
- Advanced oxidation combination with catalysts
- Lamp life optimized: 13 000 hours depending on the number of switchings on



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BIO-UV, Technical Partner of the French Swimming Federation

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