

WATER FOOD PROCESS

Beverage industry

BIO-UV, the ultraviolet water treatment specialist for more than 15 years, has developed a range of **water treatment systems for industrial processes.**



Application

- Disinfection of **water for food process**
- Disinfection of **water for cleaning and rinsing** (water bottling facility)
- Maintaining the **quality of stored water** : raw water, treated water source

Action

UV-C rays are effective at killing 99.9% of the micro-organisms (bacteria, viruses, algae in suspension,...).

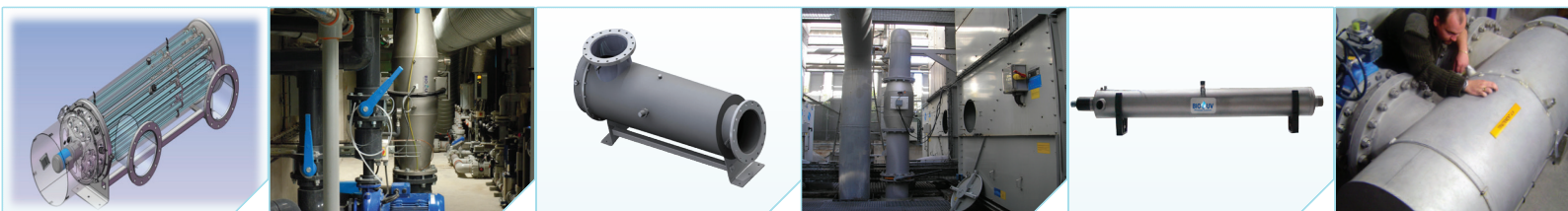
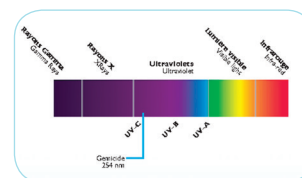


Benefits

- 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**

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 and cannot reproduce.



IBP SERIES REACTORS

Description*	Number of UV lamps per system	Max. flow rate* in m ³ /h for 40mJ/cm ²	Max. flow rate* in m ³ /h for 120mJ/cm ²	Max. flow rate* in m ³ /h for 240mJ/cm ²
Exemple of disinfection	Power consumption	Abatement of 4 LOG Coliforms, E. Coli, Enterocoques	Abatement of 2 LOG Clavibacter	Abatement of 3 LOG Fusarium
IBP 10 HO +	1 x 87 W	4,6	NC	NC
IBP 30 HO +	1 x 87 W	6,6	2	NC
IBP 40 HO +	1 x 105 W	9,3	3	NC
IBP 2150 HO +	2 x 87 W	13	4	2
IBP 3150 HO +	3 x 87 W	22	7	3,5
IBP 4205 HO +	4 x 87 W	39	13	6,5
IBP 5205 HO +	5 x 87 W	54	18	9
IBP 5 AM +	1 x 40 W	3,5	NC	NC
IBP 10 AM +	1 x 120 W	8,5	2,5	NC
IBP 30 AM +	1 x 120 W	10,5	3,5	NC
IBP 2150 AM +	2 x 120 W	25	8	4
IBP 3150 AM +	3 x 120 W	41	13,5	7

DW SERIES REACTORS

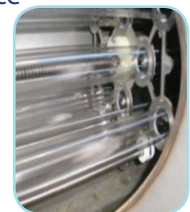
Description*	Number of UV lamps per system Power consumption	Max. flow rate* in m ³ /h for 40mJ/cm ²
DW 1114/55	1 x 55 W	2,2
DW 2150/120	2 x 120 W	30
DW 4205/120	4 x 120 W	70
DW 3323/400	3 x 400 W	186
DW 5355/500	5 x 500 W	437
DW 10508/500	10 x 500 W	695

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

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%



BIO-UV

850 avenue Louis Médard - CS 90022
34403 LUNEL Cedex - FRANCE
Tel. 0033(0)4 99 133 911 - Fax. 0033(0)4 99 133 919
E-mail : export@bio-uv.com - www.bio-uv.com

Member of

