



ACQUA™  
by DAVEY

food & beverage process water  
for the dairy industry



# Partnering with leading disinfection specialist BIO-UV Group

Acqua by Davey understands the need to partner with other innovative companies, in order to provide the best water solution for our customers.

In 2000, BIO-UV Group developed and patented a water treatment system based on UV-C disinfection technology. The sun produces an invisible light: UV light (UV-C). This natural phenomenon is reproduced inside the BIO-UV Group range of reactors, thanks to powerful lamps producing UV-C light with the latest technologies.

## How UV-C technology works

At a wavelength of 254 nanometres (nm), UV-C light will reach the core of the DNA and eliminate microorganisms (virus, bacteria, algae, yeast, mould... including Legionella, Cryptosporidium, Giardia and Toxoplasma that aren't removed by ozone or chlorine at normal doses), by disrupting the cell's metabolism until they die. **All the pathogens are therefore deactivated and cannot reproduce.**

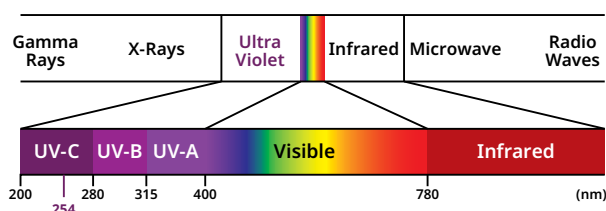
BIO-UV systems are just the **right fit for the dairy industry process water**: process water disinfection, washing and CIP water disinfection, storage disinfection (in-tank UV) and brine treatment.

## Benefits of UV disinfection

- Simple treatment that does not affect the water quality: no change in taste or odour
- No disinfection by-products that could affect human health
- No risk of underdosing or overdosing
- High disinfection performance
- Can be combined with other treatment processes

## The right dose

The BIO-UV Group range of reactors are sized based on flowrate as it is the combination between the contact time in the reactor and the power of the lamps that will ensure that the right dose (in mJ/cm<sup>2</sup>) is applied for the **elimination of 99,9% of microorganisms.**



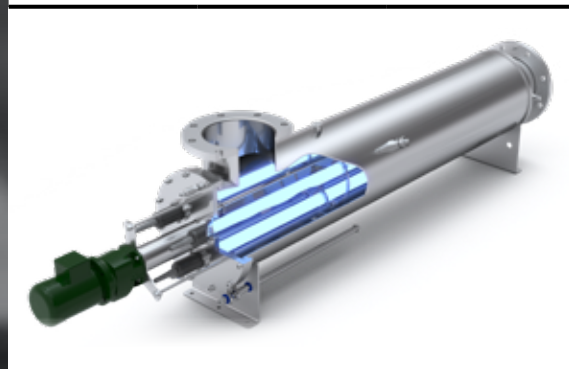
## Food & Beverage Industry IBP range

Model	UV lamp (number x power usage)	Max. flow rate for 40mJ/cm <sup>2</sup> delivered dose (m <sup>3</sup> /hr)
IBP 10 HO +	1 x 87 W	4.6
IBP 30 HO +	1 x 87 W	6.6
IBP 40 HO +	1 x 105 W	9.3
IBP 2150 HO +	2 x 87 W	13
IBP 3150 HO +	3 x 87 W	22
IBP 4205 HO +	4 x 87 W	39
IBP 5205 HO +	5 x 87 W	54
IBP 5 AM +	1 x 40 W	3,5
IBP 10 AM +	1 x 120 W	8.5
IBP 30 AM +	1 x 120 W	10.5
IBP 2150 AM +	2 x 120 W	25
IBP 3150 AM +	3 x 120 W	41
IBP 4205 AM +	1 x 105 W	80



## ÖNORM Validated Drinking Water Range

Model	UV lamp (number x power usage)	Max. flow rate for 40mJ/cm <sup>2</sup> delivered dose (m <sup>3</sup> /hr)
DW 1114/55	1 x 55 W	2,15
DW 1150/120	1 x 120 W	13
DW 2150/120	2 x 120 W	32
DW 4205/120	4 x 120 W	70,5
DW 3323/400	3 x 400 W	186,8
DW 5355/500	5 x 500 W	437
DW 10508/500	10 x 500 W	695



NOTE: Performances above and left, are given at end of lamp life and 98% UVT. Contact us for other flow rates.

### Options

- Reactor customisation to meet your requirements
- PLC (counter, UV intensity sensor, temperature)
- Manual or automatic quartz sleeve wiper system
- CIP system
- HDPE reactors for corrosive conditions

ACQUA™  
by DAVEY

MEDICAL • FARM • COMMERCIAL



Acqua by Davey is a BIO-UV Group distributor in Australia, New Zealand & the South Pacific

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