

BWT BEWADES SERIES

Certified UV Disinfection

” For safe and hygienic
water quality

- Chemical free solution:
No change in taste, colour or odour
- Compact design and easy installation
- Highly efficient

For You and Planet Blue.

BWT
BEST WATER TECHNOLOGY

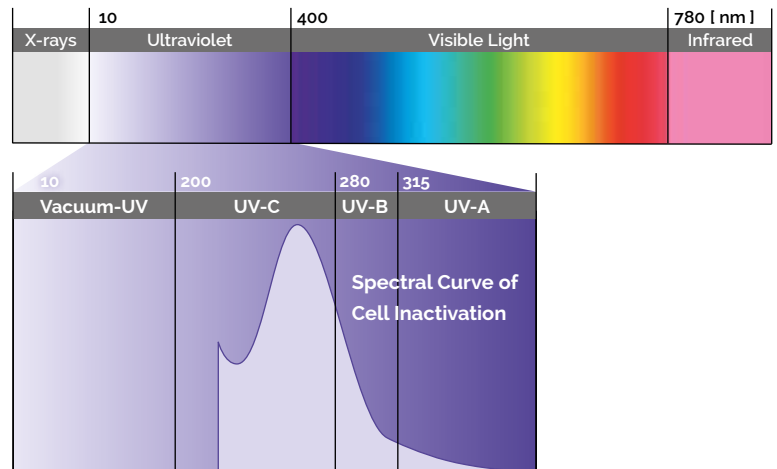
BWT BEWADES SERIES

Use of Solar power instead of chemical water treatment

UV light destroys bacteria naturally

The fact that natural UV rays of the sun also have a bactericidal effect is shown by the following observation: if water in PET bottles is exposed to the sunlight it is very quickly disinfected. This simple procedure – known as solar water disinfection is used in many developing countries.

For public and domestic drinking water supply and the needs of industry high performance Bewades units are equipped with state-of-the-art UVC lamps.



Ultraviolet is a light with very high energy levels and a wavelength of 200-400 nm. The most effective wavelengths for disinfection is 254 nm.

How does UV disinfection work?



Inactivation of pathogenic germs

Disinfection means a 99.99% reduction of the pathogenic germs which are present in water. After exposure to UVC light with a dose of 400J/m² the genetic information (DNA) of bacteria and microorganism is damaged that heavily, that they are unable to reproduce and finally 'killed'.

No harmful by-products will be generated and there is no change in the water chemistry, taste, colour and odour!

Advantages at a glance - BWT BEWADES SERIES

- No harmful chemicals or by-products
- Sufficient for 4 log reduction (99.99%) of health related bacteria, viruses and protozoa in the water phase
- High quality stainless steel chamber (1.4571 / 1.4404) - Welded in Germany
- State-of-the-Art high efficient BWT UV lamps
- Compact design with low space requirements
- Simply to install and easy service lamp exchange without water flow interruption
- Low operating and maintenance costs
- Extremely low pressure drop

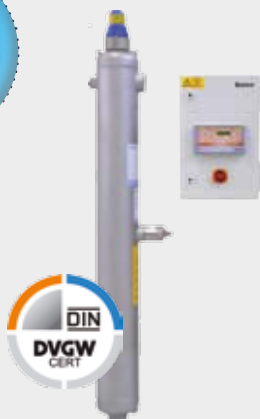


BWT UV SYSTEMS

Leading know-how and customized solutions in UV treatment - for safe and high-quality water!



Certified
Premium
Water Quality



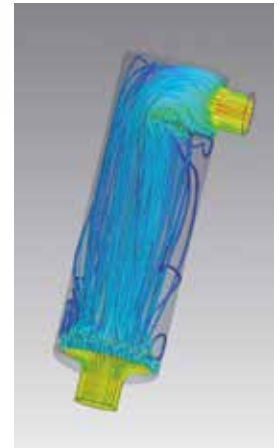
BEWADES N

Bewades N

DVGW Certified disinfection performance (**3rd party validated**) confirmed by microbiological tests for all drinking water applications.

Technical features:

- According to the stringent, internationally recognized standards of the German Technical and Scientific Association for Gas and Water (DVGW)
- Sophisticated Microprocessor based UV control II - easy to use
- Validated sensor technology for highest operational safety
- Electronic ballasts for a long lamp life and to compensate voltage fluctuations
- CFD optimized hydraulically design ensures safe water disinfection and saves energy costs



Flow visualisation by Computational Fluid Dynamics (CFD)

High Intensity
UV for poor
water qualities



BEWADES HI

Bewades HI

With all the features required by German DVGW - **excellent for poor water qualities** with low UV transmittance.

Technical features:

- High density of lamps per diameter to ensure sufficient performance in turbid waters
- Sophisticated microprocessor based UV control II - easy to use
- Validated sensor technology for highest operational safety
- Electronic ballasts for a long lamp life and to compensate voltage fluctuations

Economical
&
Reliable
Water Hygiene



BEWADES LC

Bewades LC

Reactor design taken from the Bewades N series and **reduced to essential features**: Simplicity, Robustness and Reliability for all areas of water disinfection.

Technical features:

- Integrated cooling fan to fulfill all requirements for warm climates
- Easy control displaying total hours of operation and lamp performance
- Compact design for easy Installation and servicing
- Potential-free contact for lamp failure connection to building control

TECHNICAL DETAILS

BWT BEWADES UV SYSTEMS



		Bewades N	Bewades HI	Bewades LC
	Type	80W80/11 N - 1080W270/50 N	70W70/08 HI - 2000W200/40 HI	70W70/08 LC - 400W200/17 LC
Nominal connection width	DN	32 - 200	20 - 200	20 - 80
Maximum flow rate *)	m³/h	1.8 - 251	2.4 - 328	2.4 - 38
Generated amount of ozone	mg/h	-	-	-
Max. operating pressure	bar	10	10	10
Expected lamp life (depends on operating conditions)	h	12,000	12,000	12,000
Connection power	Watt	80 - 1,130	100 - 2,100	90 - 450
Number of UV lamps		1 - 4	1 - 10	1 - 2

*) @ T100 =70% UVT, 400J/m², End of lamplife

Bewades HP

Reinforced construction **for high pressure applications** up to 25 bar - e.g. high-rise buildings

Technical features:

- Superior welding performance – **engineered by BWT**– to withstand extreme conditions
- Sophisticated Microprocessor based UV control II
- Validated sensor technology for highest operational safety
- Meets all requirements of National Standard of Republic of China



BEWADES HP

Bewades PairOx

2 in one solution: rack mounted unit combining two disinfection technologies - UV and ozone

Technical features:

- Process principle: single lamp emits 254 nm for UV disinfection and 185 nm for ozone generation from air
- For controlling the microbiological conditions in tank systems
- Simplified setup for easy operation and maintenance



BEWADES PAIROX

Reinforced
design for
up to 25 bar

Hygiene &
Safety
for your
storage water

BWT – For You and Planet Blue.



Bewades HP	Bewades PairOx	Bewades MQ
400W200/17 HP – 800W200/22 HP	LC 5.0	400-8000 MQ
80 - 125	40	80 - 300
38 - 90	10	24 - 1,122
-	110	-
25	10	10
12,000	12,000	8,000
450 - 850	205	450 - 8,050
2- 4	1	1 - 4

Pure "spring"
water for
your pool



BEWADES MQ

Bewades MQ

For perfect clear spring water for your pool **without the typical chlorine smell** and any eye or skin irritation

Technical features:

- Medium pressure multi-wavelength system to disinfect and to eliminate bound chlorine
- Manual or automatic wiper system for simplified maintenance
- Dimmable ballasts to reduce the power consumption to the minimum required
- Communication interface with analogue In-/output

Also available as cost effective basic version Bewades MQ LC



BWT – The Company

Best Water Technology Group (BWT) is Europe's leading water technology company. Our water partner network comprises the group's 3,300 employees and thousands of plumbers, planners, architects and hygiene experts. Our Research & Development teams, using state-of-the-art methods, work on new processes and materials to create products that are both ecological and economical. Looking ahead, a key development issue is a reduction in the products' use of operating resources and energy consumption and the resulting minimisation of CO₂ emissions.

Whether at the place where the water pipe enters the building ('point of entry') or at the tapping point ('point of use'), BWT's trend-setting 'Made in Europe' products have proved their quality millions of times over in the treatment of: drinking water, mineral water and ultrapure water for the pharmaceutical industry; water for swimming pools; heating and process water; boiler and cooling water; and water for air-conditioning. BWT's wide-ranging innovations guarantee maximum safety, hygiene and

health in the daily use of water – that precious elixir of life. These innovations, among others, include: SEPTRON®, the world's first electrodeionisation module (EDI) with spiral wrap; manganese oxide activation (MDA) – a method for effective manganese removal; AQA total bipolar technology for chemical-free limescale protection; SANISAL – the world's first regeneration salt for softening water systems, which also works as a disinfectant; and the new, revolutionary Mg²⁺ technology that improves the taste of filtered water, coffee and tea.

Through its unique, high efficiency membranes for fuel cells and batteries, BWT is creating a cleaner, more sustainable energy supply for the 21st century.

BWT – For You and Planet Blue signifies that our mission is to take ecological, economical and social responsibility, to provide our customers and partners with the best products, systems, technologies and services in all areas of water treatment and, at the same time, to make a valuable contribution to preserving the global resources of our blue planet.



For You and Planet Blue.

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