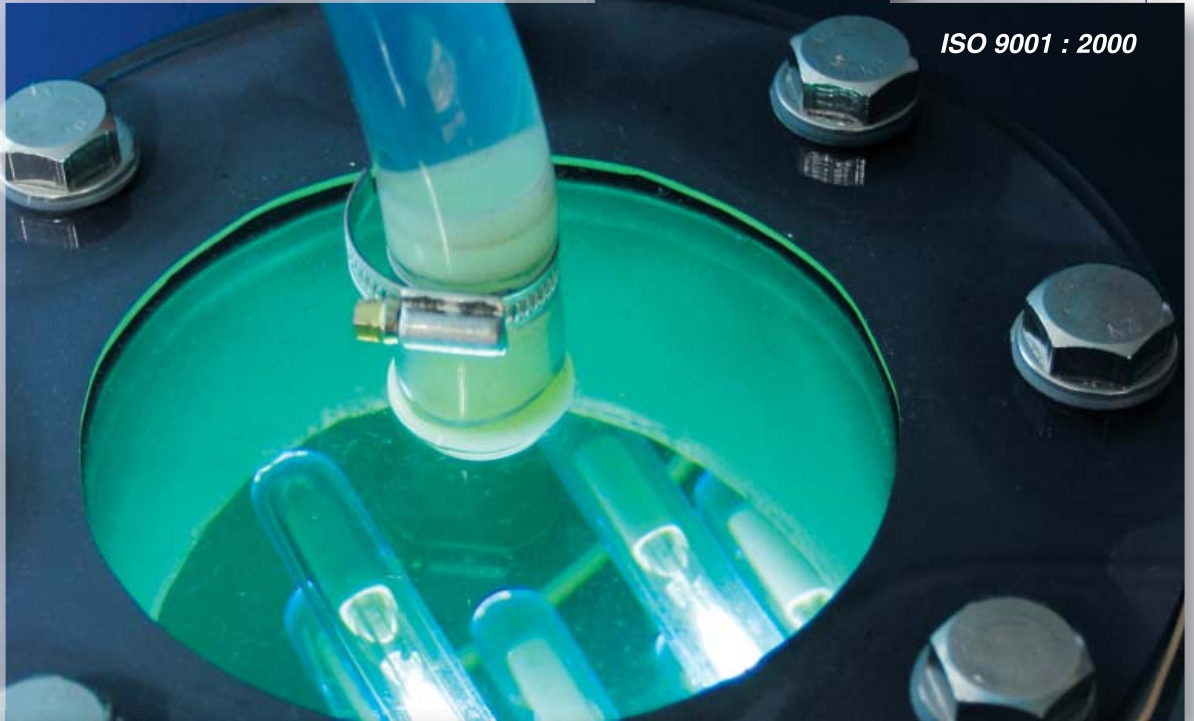


TITANIUM

TITANIUM



ISO 9001 : 2000



TITANIUM

ADVANCED OXIDATION TECHNOLOGY

Why **TITANIUM**?



◆ THE NEW TECHNOLOGY

TITANIUM is introducing a new technology for water and sewage disinfection.

It is based on the combination of the well proven ultraviolet light radiation and a photo catalytic effect in the water, i.e. a combination of UV light and semiconductor titanium dioxide. This kind of process is called **ADVANCED OXIDATION PROCESS**. Due to this enhanced oxidation process viruses, bacteria and other pathogens existing in water are inactivated faster and more effectively than in other systems working nowadays.

Moreover, in our devices we are using our own, new patented way to drive the UV lamp - ECG (Electronic Control Gear) which reduces the power consumption, prolongs the lamp's lifetime, reduces solarization effect as well as enables the advanced control of the UV fluence. As a results of our work we can present the products and systems which are more technological advanced and definitely much more economical than the conventional UV systems.

◆ HOW THE DISINFECTION WORKS

Bacteria, viruses, and other micro organisms are sensitive to UV light at a particular wavelength of 253,7 nanometers. Their reproductive capability is destroyed by cross linking and splitting their DNA, which means that they are inactivated and no longer constitute a threat to human health.

In the ultraviolet disinfection system the water is passing in submerged UV lamps emitting lethal doses of energy, destroying the pathogens. Its strength depends on the UV light intensity and the time of exposure.

In the Titanium system this process is enhanced by using a reactor chamber made of titanium and containing titanium dioxide. The UV radiation and the titanium dioxide cause the rise of a photo catalytic process. This process creates OH radicals which possess the highest oxygenation potential, thus it is better in use than ozone or chlorine. Such a solution makes the process of disinfection much more effective than traditional UV systems. Additionally, the AOP process does not leave any permanent changes in physical and chemical parameters as well as in the taste of the cleaned water.



◆ SOLUTIONS

The reasons for choosing the **TITANIUM** products for your own use:

- ◆ they contain no chemicals and in case of existing installations they can considerably diminish their quantity. It makes our products friendly for people and environment.
- ◆ this method of cleaning does not change the scent and taste of water.
- ◆ due to the microprocessor inspection of parameters this system works unfailingly incessantly informing about its own status.
- ◆ it assures low power consumption, long vitality and the low cost of service.

The disinfection with the use of UV radiation can be used everywhere, where in a particular moment we expect the bacteriological protections:

- ◆ drinking water
- ◆ water in cooling towers
- ◆ water in bubble pools and swimming pools
- ◆ water for fish breeding
- ◆ water for pig and chicken farms



That's why **TITANIUM** is the best choice!

MODELS OF TITANIUM SYSTEMS AVAILABLE NOW

<i>Model</i>	<i>AOP 05</i>	<i>AOP 1</i>	<i>AOP 5</i>	<i>AOP 20</i>	<i>AOP 50</i>	<i>AOP 100</i>
Capacity						
Flow rates [l/min]	4	8	85	330	830	1660
Flow rates [m³/h]	0,25	0,5	5	20	50	100
Pressure drop [bar]	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1
Electrical						
Voltage [V]	230	230	230	230	230	230
Power consumption [W]	15	26	95	380	700	1300
Reactor dimension						
Diameter x lenght [mm]	45x310	50x550	70x1100	160x1100	220x1100	280x1100
Material	Titanium	Titanium	Titanium	Titanium	Titanium	Titanium
Flange dimension	G1/2"	G1/2"	DN 50	DN 100	DN 125	DN 150
Control Functions						
Constant UV regulation	Yes	Yes	Yes	Yes	Yes	Yes
Lamp lifetime control	Yes	Yes	Yes	Yes	Yes	Yes
Soft heating function	Yes	Yes	Yes	Yes	Yes	Yes
Failure indications	Yes	Yes	Yes	Yes	Yes	Yes
Mild start	Yes	Yes	Yes	Yes	Yes	Yes
Measurement UV intensity	Option	Option	Option	Option	Option	Option
Remote control system	Option	Option	Option	Option	Option	Option
Measurement of water temperature inside reactor	Option	Option	Option	Option	Option	Option

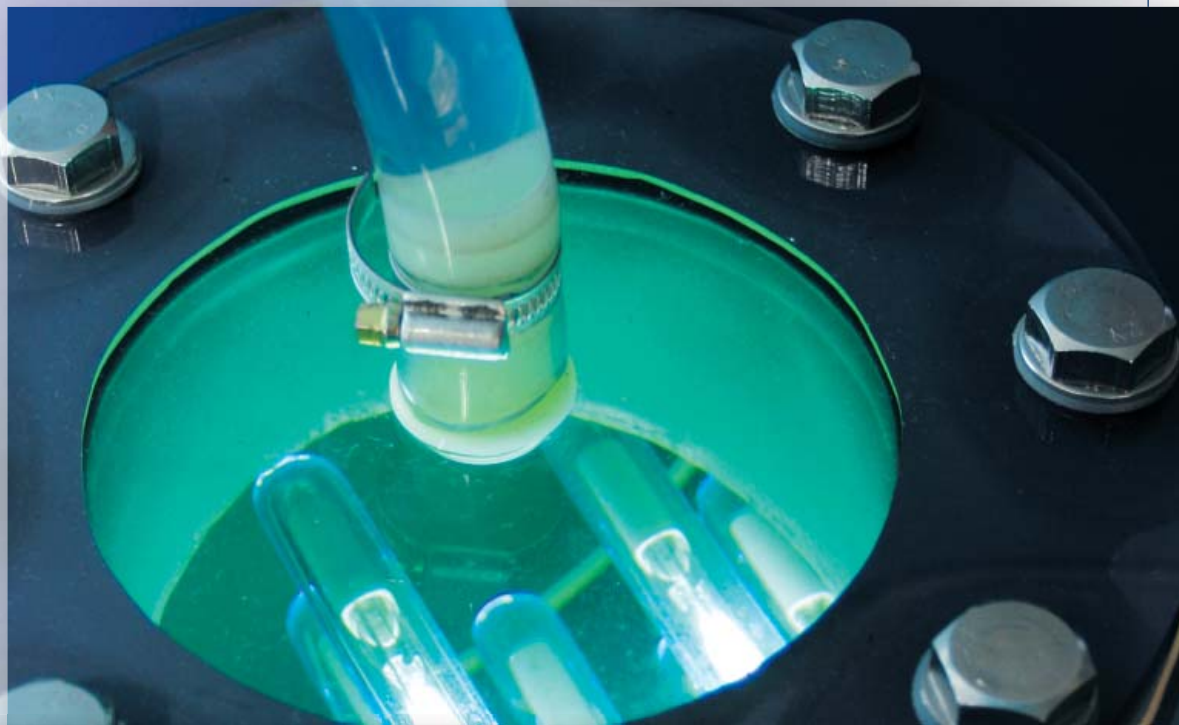
Minimum dose - 400J/m²

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*The most
technologically advanced system
of water and sewage disinfection by the UV rays
with the use of ADVANCED OXIDATION TECHNOLOGY.*



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ADVANCED OXIDATION TECHNOLOGY

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