

# BIOMIMETIC WATER TREATMENT SOLUTIONS FOR INDUSTRIAL APPLICATIONS



Carbon footprint reduction



PATENDED SOLUTION

## CERTIFICATIONS & RECOGNITION

- Southern California Edison (SCE) validated
- EU Commission Horizon 2020 validated
- Swedac Certified
- Electric Power Research Institute (EPRI)
- Accreditation DAkKS – potable water tests
- Food and Drug Administration – food usage
- IVG Cooling Tower Approved for Utility Incentives in USA
- Certificat BioCompatibility test Following EC/ ISO 10993
- Recognition Ministry of Water Holland
- 2020 : DVGW W270 certification approved for its compliance with the PA2200 test
- “Energy Innovator Award 2019” for the most virtuous supplier in the field of cooling towers in Western Europe
- REALice referenced Utility Incentives USA and Canada - Top 20 Esource Innovations

**SOLUTION APPROVED BY ENERGY PRODUCERS/UTILITIES IN NORTH AMERICA**



In your cooling, production or freezing process, a cooling tower is an essential part of the value, efficiency and capacity of your facility. The treatment of cooling water and especially its efficiency directly influence the financial return. So far, this water treatment is mainly carried out with the use of chemicals. **The IVG-CT solution based on integrated Vortex Process Technology allowing you to operate your cooling water completely without chemicals.**

## MEASURED RESULTS EFFICIENCY



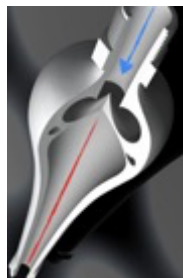
- Water savings of 15 to 50%**
- Energy savings of 6 to 10%**
- 95% reduction in chemical use**
- Optimization of monitoring and maintenance**
- Increase the lifespan of your installations**
- Reducing your carbon footprint**



**Vortex Process Technology: The vortex shapes and transforms the water flowing through it**

The technology creates a strong vortex movement in the water with high pressure gradients and very low central pressure. Cavitation is carried out in a controlled environment which transforms the water and makes it possible to:

- Degas and eliminate microbubbles,
- Decrease viscosity,
- Increase conductivity,
- Increase thermal capacity,
- Precipitate calcium in non-adherent crystals,
- Reduce corrosion





Areas of applications	✓	Water based Cooling Towers & Evaporative Condensers. All the water used by your production process can also be treated with the IVG-CT solution
Increase in life expectancy of your equipment	✓	As limescale, corrosion and microbiological growth are eliminated, the equipment (cooling towers, exchangers) will have a longer lifespan.
Optimisation	✓	The cooling capacity will increase due to the greater thermal capacity of the cooling water.
Maintenance	✓	Reduced maintenance, operational functioning and 24/7 remote assistance..
Tailor Made solution	✓	The solution is sized according to the specific needs of each installation and additional technologies can be added (electrolysis without chemicals, nano-filtration ... etc.)
Modular design "Plug and play "	✓	Our installations can easily be added to an existing installation - retrofitting as a side stream solution
Opex	✓	The OPEX will decrease as well as the use of chemicals, less drinking water and wastewater, reduction of the water footprint.
Return on investment	✓	Return on investment up to 3 years, full operational lease will save you 15-60% on OPEX cooling water.
Software	✓	We develop monitoring software and perform updates remotely without downtime.
Monitoring (SCADA system)	✓	The main control points are the pH value, conductivity level, flow rate and pressure. Reporting accessible on several types of media



Our solutions are deployed in > 80 chemical-free installations in the Benelux, United States and UAE.



Worldwide distribution :  
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