



NOMINEES AQUATECH INNOVATION AWARD 2013

(In alphabetical order by product name, product description as provided by the exhibitor)

Category: Waste Water Treatment

- **Aecomix Reactor - Nijhuis Water Technologies**
Aecomix is a new anaerobic reactor based on solids retention by Dissolved Air Flotation. A robust, unique single step concept for food & beverage plants to treat waste waters and organic waste streams in one reactor. TSS up to 40,000 mg/l. FOG up to 20,000 mg/l. Removal efficiency on organic matter = 98 %. Sustainable lower OPEX, no blockages by fat, no chemical cleaning, biogas production.
- **Anaerobic MBR - X-Flow (Pentair)**
Maximize waste-to-energy. This new solution was created to treat high-strength and high-solid waste streams found in industries such as distilleries, dairies and bio-ethanol producers. The Anaerobic MBR system maximizes the renewable energy production while generating superb quality effluent that can be reused or discharged directly to the sewer.

Category: Water treatment

- **Color Removal Package (CRP) - X-Flow (Pentair)**
The Color Removal Package (CRP) was developed to retain NOM, which is often expressed as DOC, UV adsorption or color, and to do so without the use of coagulation. At the same time there is minimal retention of hardness ions such as calcium and magnesium, making this the ideal membrane for drinking water production from soft surface waters.
- **HumVi Liquid – Vitens**
HumVi Liquid is a fulvic/humic acid product. Vitens developed a technology to filter and process these substances from drinking water in a way to use this former waste product as fertilizer in the agricultural sector. The application increases crop yields and reduces the use of pesticides and fertilizers such as phosphor, which directly benefits the farmer.
- **TrojanUV Solo Lamp - Trojan Technologies**
It is no longer necessary for municipalities installing UV technology to make a choice between energy efficiency and a small footprint. The revolutionary TrojanUV Solo Lamp combines the best features of both low pressure and medium pressure lamps. This enables high electrical efficiency and reduced lamp count.

Category: Transport & Storage

- **High Rate Filtration System - RWB Water Services**
To prevent unfiltered sewer discharges in storm conditions, this high rate filtration system filters the rain water, which flowed directly to the river before, by using an original filter media. This new treatment system can be installed in existing facilities and supplies stable filtrate quality during rainfall flow fluctuation.



Continued: Category Transport & Storage

- Sofrel LT US - LACROIX Sofrel
New GPRS data logger for measuring flow rates, self-monitoring and permanent diagnostics of waste water networks. Incorporating a transducer, the SOFREL LT-US now allows: Continuous measuring of the level of effluents; detection of overflows into storm overflow sewers; calculation of overflow rates and volumes in the natural environment; permanent diagnostics and self-monitoring of the network.

Category: Process Control Technology & Process Automation

- N2O Wastewater System - Unisense A/S
Nitrous Oxide accounts for up to 80% of GHG emissions from wastewater treatment plants. The N2O Wastewater System is the world's first and only system to measure dissolved N2O dynamics directly in bulk waters for on-site, real-time monitoring and control. The robust N2O Wastewater Sensor has costs reduced by 80% against complicated off-gas setups and is ideal for long-term N2O emission optimization
- Universal fm Measuring System - Dinotec Water + Pool Technology
Revolutionary measuring system "universal fm" for measurement and control of Cl₂, ClO₂, O₃, H₂ O₂. USP's are: Wear-free disinfection electrode; automatic self-check system (a recalibration of the electrode is virtually dispensed with); automatic electrode cleaning; integrated plausibility check for accurate measurement results; pressure-resistant flow assembly up to 10 bar at 20°C; fast and safe commissioning.

Category: Innovation - Not yet to market

- Early Biofouling Detection Biosensor - Mekorot National Water
The target of this new innovation, which was successfully achieved, was to develop an automated device for the early detection of biofouling potential of RO membranes. This biosensor can detect biofouling before it even occurs on the membrane. This system can be adapted to prevent biofouling of any equipment.