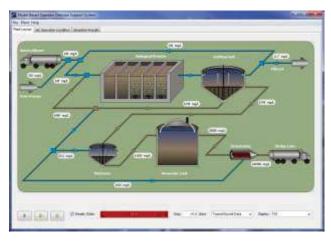


Advanced Water and Wastewater Training Simulator and Plant Analysis System

 $SimuWorks^{ imes}$ is an industry first - a flight-simulator for water and wastewater treatment plants. Leveraging the proven technology of Hydromantis' $GPS-X^{ imes}$, the industry's most advanced mathematical modelling and simulation software, $SimuWorks^{ imes}$ takes training and plant analysis opportunities to new heights.

SimuWorks™ represents an evolution in the use of water and wastewater treatment simulation and modelling technology, extending its use beyond the engineering offices. Utilizing real-life SCADA and information system interfaces, SimuWorks™ presents views and functionality familiar to operators and administrators alike in a platform that accurately simulates the behavior of a specific plant.



The loss of process knowledge is a challenge wastewater treatment plant (WWTP) management need to address as experienced operators consider retirement. Efficient methods for facilitating the transfer of general and site-specific knowledge are key, and the use of numerical models of WWTPs to educate and train personnel offer the following advantages:



- Site-specific calibrated models capture the knowledge of your plant
- Plant specific models and interfaces target and enhance training
- Customized training and development scenarios impart site-specific knowledge
- Helps to standardize levels of knowledge/ability
- Provides an interactive, realistic and immersive training environment





SimuWorks™ can be deployed as a complete life-size replica of a specific control room, set-up as a mobile control room for regional training with a library of various plant models, used in more traditional multi-station classroom environments or loaded on individual workstations.

Advanced Operator Training and Development

SimuWorks[™] is a state of the art operator training and development platform that allows instructors to train and evaluate new or existing operators in a controlled and safe environment. The training takes place within a full-scale replica of an actual control room and utilizes real SCADA and Information systems tied to plant models that closely simulate actual plant behaviour. The training can offer exposure to many simple or highly complex scenarios within a realistic environment but with no risk to actual plant performance.

Because the trainees can operate the virtual plant in the same manner they would the real plant (e.g. have access to the same operational control parameters, such as DO set-points and sludge wastage), learning is systematic and adopted well. Site-specific models have been used to train operators on such topics as step-feeding during storm events, troubleshooting nitrification/denitrification and what to do during periods of poor settling.



SimuWorks[™] offers a platform for fast and efficient testing and validation of any number of plant optimization or upgrade possibilities without putting the plant at risk. Users can evaluate new technologies, test new operational control strategies, run "what-if" scenarios (capacity, flow rates, chemical dosing, energy usage, etc.) and more. The implementation of SimuWorks[™] can promote a better understanding of plant control at all levels within an organization.

Project Management and Risk Analysis

SimuWorks[™] becomes an important part of the planning process for projects. By simulating various scenarios around downtime for plant maintenance or modifications, potential risks are identified.













WATPRO™

www.hydromantis.com

Hydromantis offers expert consulting for treatment plant modelling, design and optimization and is the developer and owner of the industry's most popular modelling and simulation software including: GPS-X, Toxchem, CapdetWorks and WatPro.