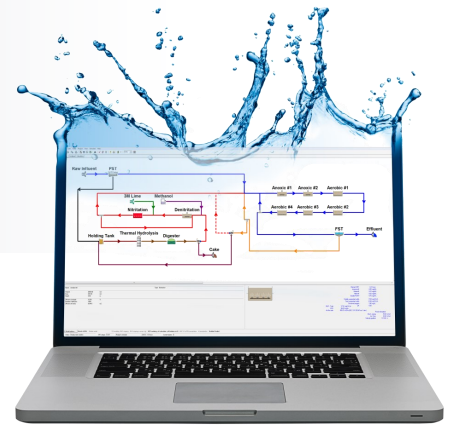


BIOWIN



WHY BIOWIN?

BioWin wastewater process simulation software ties together biological, chemical, and physical process models to provide insight into the whole plant. BioWin simulations help engineers and operators make decisions that reduce capital and operating costs and ensure treatment objectives are met. BioWin has been a recognized leader in the simulation field for 25 years.

WHO USES BIOWIN?

BioWin is used around the world by:

- Consulting engineers
- Infrastructure owners (e.g. cities, regional municipalities, water authorities)
- Equipment manufacturers / suppliers
- Wastewater treatment plant operations companies
- Academic institutions

WHAT IS BIOWIN USED FOR?

BioWin is used to:

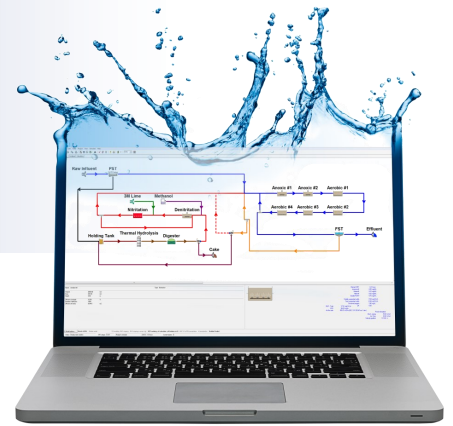
- Select optimal treatment processes
- Reduce capital investment
- Explore strategies for reducing wastewater treatment plant energy consumption and operating costs
- Evaluate expansion of existing treatment plants
- Make daily decisions about plant operation
- Teach students and operators fundamental wastewater treatment concepts
- Build model extensions and conduct research into emerging technologies



THE ENVIROSIM TEAM

Together, over 100 years of wastewater process modeling experience.
www.envirosim.com • info@envirosim.com • tel +1 905-481-2607 • fax +1 905-481-2610

BIOWIN



BIOWIN KEY FEATURES

- Integrated activated sludge / anaerobic digestion model enables whole-plant modeling from influent to effluent
- Most accurate and intensively researched biological model reduces required calibration effort
- Largest and most extensive number of state variables and components tracked
- Modeling of anaerobic ammonia oxidizing bacteria for investigation of side- and main-stream deammonification strategies
- Calculation of blower power requirements, taking into account factors such as inlet air temperature and relative humidity and pressure losses in the air delivery system



- Ability to explore onsite power generation and heat recovery via CHP
- Easily implement up to three different daily electricity tariff rates; these patterns can be different across two “seasons” (e.g. summer and winter)
- Comprehensive and system wide pH model
- Chemical and biological P removal
- Spontaneous struvite precipitation
- Comprehensive gas transfer modeling
- Model development capability (Model Builder)

