



Mantis.AI™

Hatch Digital Twin

As utility managers, you need to meet stringent effluent compliance limits while optimizing your operational costs, carbon footprint and energy requirement. To manage dynamic events like wet weather flow, scheduled and un-scheduled maintenance and control optimization require constant attention to find best the operational strategies to meet utility objectives. The Mantis.AI™ platform extends on the capabilities of SimuWorks™ by using real time data for performance forecasting, plant optimization, and operational benchmarking. The platform uses the power of well proven first-principle models and combines it with machine learning algorithms to provide guidance on the best operational strategies to meet compliance and reduce operational cost.

The Mantis.AI™ Digital Twin uses live weather data, past historical plant performance and Artificial Intelligence (AI) algorithms to create accurate near-term forecasts for influent and environmental conditions. Our cutting-edge research into influent forecasting allows operators to view plant performance forecasts in the same way that you would view weather forecasts. Operators can see potential process upsets before they occur and use that information to take appropriate action.

How Can Mantis.AI Help Me?

- Hatch's Mantis.AI platform performs simulation analysis and forecasting in real time, allowing users to investigate changes to near-term plant behaviour and use on-going energy optimization studies to reduce costs.
- Typical analyses can include:
 - Forecasting of potential upsets from changes in influent loading
 - Finding the optimal DO setpoints and recycle rates to reduce energy costs while meeting effluent targets
 - Optimizing dual-point chemical dosage for phosphorus removal
 - Using the model to identify and flag problems with sensor data

Request a demo – contact hydromatis@hatch.com

Expert Customer Support

- Whether you're looking for an online tutorial, need help from our industry-leading support team, or want to explore our custom training options, we've got you covered.

Extensive Online Resources

- Our resource library includes a wide range of videos covering the basics of our solutions, outlining new features, and an extensive list of modelling examples to help guide you.

Customized Workshop Training

- Our Hatch experts are available to lead customized online or in-person workshops to provide training, answer questions and help troubleshoot issues with user models.

Industry-leading Customer Support

- As a Hatch customer, you have access to our industry-leading support team. Our specialists will get back to you within 48 hours.

Optimization and modelling solutions

Get your hands on the market leader products for water and wastewater treatment plant analysis, design and operational support.

GPS-X

SimuWorks

Mantis.AI

ToxChem

CapdetWorks