

MIKE Powered by DHI 2016

Embedding knowledge in technology

MODELLING SOFTWARE FOR WATER ENVIRONMENTS

MIKE is proven technology with a continuous focus on high quality, functionality, and performance. We constantly strive to serve your needs better by improving our software using real world testing to continuously enhance quality. We learn from every project and, through systematic software updates, integrate this knowledge and experience into our technologies.

MORE THAN SOFTWARE

We offer access to online services and hardware – providing even more possibilities for unique, innovative, and integrated solutions for your water related challenges. For this release,

we are unveiling two new offerings: MIKE INFO, which is designed to optimise your data handling work flow, and MIKE OPERATIONS, which serves your online modelling needs. For details on these exciting additions to the MIKE family, please visit our webpage: www.mikepoweredbydhi.com.

The best way to ensure the success of our clients is by providing value added training and capacity building. Through THE ACADEMY by DHI, we offer a wide range of standard and tailored training courses – enhancing your knowledge and skills and adding another level to the user experience. For the latest updated training schedules please visit our website: www.theacademybydhi.com/training.

Find out what's new in MIKE 2016 by visiting www.mikepoweredbydhi.com/release2016

SERVICE AND MAINTENANCE AGREEMENT

Unlock the full potential of your MIKE Powered by DHI software with a Service and Maintenance Agreement (SMA). With the SMA, you:

- receive indispensable technical support – access to online support in your time zone and in your language
- ensure your software stays up to date – get the latest releases and service packs
- enhance your modelling skills – participate in training courses at discounted prices

The SMA is also a prerequisite for access to additional products and services, such as:

- Software as a Service (SaaS) portal – discounted access to additional MIKE software and hardware in the cloud
- DHI WaterData – discounted access to our online data portal
- user conferences – meet our experts and fellow MIKE software users and share knowledge

DATA MANAGEMENT AND DECISION SUPPORT

The latest addition to MIKE Powered by DHI's software family traverses water environments, complementing existing MIKE technologies in areas such as oceans and coastlines, rivers and reservoirs, ecology, groundwater, water distribution, wastewater, and many more.

- MIKE INFO – enables data management, integration, and reporting
- MIKE PLANNING – enables scenario analysis and decision making (*available soon)
- MIKE OPERATIONS – enables real-time forecasting and operational control

Each of our data management and decision support software builds on a common technology framework. They are fully compatible and complementary products that have been tuned for real-life applications on a global scale, across different disciplines and industries.

Visit www.mikepoweredbydhi.com for more about our new products

CITIES

MIKE URBAN – GREEN IS THE NEW BLACK

Green infrastructure is crucial to combating climate change, creating healthy built environments, and improving quality of life. The new features of MIKE URBAN Release 2016 make it even easier to properly build and implement water sensitive urban design practices:

- detailed hydraulic modelling tools support design, construction, and maintenance of green roofs, rain gardens, permeable surfaces, and subsurface detention on screening level (catchments)
- state-of-the-art Water Quality modelling product MIKE ECO Lab linked with MIKE URBAN, enabling you to model biological processes in urban water systems
- seamless modelling of hydraulic and water quality parameters in collection systems combined with overland flow and/or receiving waters in MIKE FLOOD
- significant speed improvement of MIKE 1D numerical simulation engine, the heart of MIKE URBAN

WATER RESOURCES

MIKE HYDRO RIVER – NEXT GENERATION RIVER MODELLING

Release 2016 continues the transformation of water resources products into our state-of-art Graphical User Interface (GUI) platform: MIKE HYDRO. MIKE HYDRO River is a new and redesigned map-centric GUI for MIKE 11. It includes two unique calculation modules:

- unlimited river modelling
- river basin management and planning

MIKE 21 and MIKE FLOOD have also been extended with:

- infiltration and leakage dynamics with 2D surface flow modelling
- the Flood Screening Tool (FST) – simpler and faster numerical solutions enable more rapid flood screening outputs

Our new flood modelling toolbox, which allows for additional processing tools developed by you, includes:

- a new map-based toolbox for post-processing of 1D and 2D flood modelling results
- flood mapping and hazards calculations
- extended result processing and extraction

COAST & SEA

MIKE 21 – 2D SHORELINE EVOLUTION MODELLING

Long-term shoreline morphology modelling in 2D environments poses a serious challenge in coastal engineering. To address this, we're launching a new module in Release 2016: MIKE 21 Shoreline Morphology (SM):

- combines detailed 2D modelling of currents and waves with a constrained morphological model
- possible to conduct stable and robust modelling of shoreline evolution in 2D environments
- possible to perform previously unfeasible coastal engineer applications

We've enhanced Graphical Processor Units (GPUs) support to include MIKE 3:

- easy and economical way of enhancing calculation speed – speed-up factors in the range of 5-10, compared to quad-core computers
- straight-forward GPU application – MIKE 3 will automatically recognise it and give you the option to use it

GROUNDWATER & POROUS MEDIA

FEFLOW – UNPRECEDENTED GEOMETRICAL FLEXIBILITY

By giving you the ability to use layered, partially unstructured, or fully unstructured meshes in 3D, FEFLOW provides a new level of geometrical flexibility:

- easier setup for groundwater models in demanding geological settings
- new meshing options especially helpful for precisely mapping inclined boreholes or other underground structures
- more computationally efficient solutions due to lower total number of calculation nodes

FEFLOW now also allows you to:

- calculate and graphically display descriptive statistics for all parameters, either for a subset or the entire mesh
- consider both flow direction and bedding direction when it comes to dispersivity
- use the Control-Volume Finite Elements (CVFE) method for more stability, faster convergence, and a better mass balance – especially for unsaturated and variably saturated conditions