MIKE
Powered by DHI

Why FEFLOW?

10 reasons to rely on the market leader

Advanced technologies. Sustainable solutions. Fuelled by knowledge.

All over the world, water professionals know MIKE Powered by DHI technologies are the gold standard. Whether you need software solutions or access to online services, our flexible technologies work seamlessly together for the best user experience.

We develop unique solutions for your specific challenges and make them directly accessible to you. With unparalleled client care from offices in over 30 countries, our users never stand alone.

The foundation of MIKE Powered by DHI encapsulates years of knowledge and experience. With our advanced and customisable technologies, YOU become the expert in water environments.

The expert in **WATER ENVIRONMENTS**

MIKE
Powered by **DHI**

FEFLOW is the most intuitive and comprehensive software package for groundwater and porous media modelling. It can simulate a multitude of processes involving fluid flow, groundwater age, contaminant and heat transport under fully or variably saturated conditions - from local to regional scale. The efficient user interface and unmatched range of functionality for groundwater modelling make FEFLOW the tool of choice.

1. ALL-IN-ONE SOLUTION

With FEFLOW, handling individual packages by a multitude of providers is ancient history. FEFLOW has the proper tools for all typical modelling tasks. The convenient user interface is the modeller's continuous companion - from initial model setup to creation of high-quality graphics for the final report. If you only need part of FEFLOW's extensive offer, you can licence a subset of functionality – and even if your focus changes in the future, you do not need to invest in additional software and training.

2. FLEXIBLE MESH - OUR STANDARD SINCE 1979

Based on the finite element technique, FEFLOW is designed to use flexible meshing - a must whenever highly accurate and spatially detailed results are required. Unstructured meshing allows for complex geological settings and fits hydrogeological features, such as fault lines or rivers as well as man-made structures, such as tunnels and wells. FEFLOW supports deactivation and reactivation of mesh elements to account for temporal changes of the model domain.

3. COMPUTATIONAL PERFORMANCE

FEFLOW is fast and designed to handle small and extremely large models alike. There are no limits on model size, and FEFLOW employs parallel execution on multicore systems. Matrix solvers include the fast algebraic multigrid solver SAMG and the PARDISO parallel direct solver.

4. UNCERTAINTY ANALYSIS

All FEFLOW packages include FePEST - a convenient graphical interface for using PEST by John Doherty with FEFLOW models. It facilitates the setup process and gives immediate graphical feedback on the simulation progress. Also, parameter estimation or uncertainty analysis tasks can be executed in parallel on many computers.

5. GROUNDWATER AGE CALCULATION

Only FEFLOW provides a unique set of tools for calculating groundwater age, lifetime expectancy and exit probability. This enables you to easily and precisely answer vital questions in aquifer and well-field analysis.
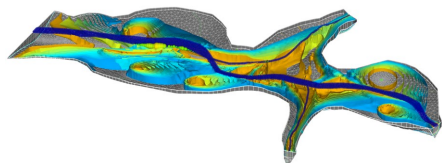
6. UNIQUE MAP SUPPORT

FEFLOW supports a broad variety of 2D and 3D map data formats for visualisation and data import. In addition to quasi-standard file formats, such as text and MS Excel files, dxf and shp, it also includes live connections to local or remote spatial database systems.
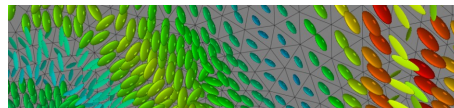
7. CUTTING EDGE VISUALISATION

Elaborate, state-of-the-art visualisation has become essential to represent complex hydrogeologic conditions. FEFLOW easily accommodates this need with its built-in highly flexible planar, cross-sectional and 3D visualisation features with Oculus Virtual Reality technology support. They benefit the interactive work and encompass all model parameters and modelling results.

8. EXTENSIBILITY

FEFLOW covers a broad variety of processes in the subsurface. It is coupled with the 1D river solver MIKE11 and the 2D overland solver MIKE21 FM. For very specific applications, where the user may wish to extend of modify parts of the system, FEFLOW provides an easy-to-use open programming interface (C/C++) and a Python scripting interface.

9. RELIABILITY

Today, FEFLOW is the world-leading tool for high-end groundwater modelling in complex environments. Over decades, it has proven its applicability, reliability and efficiency. All parts of the software fit seamlessly and the code has been tested in rigorous, fully documented benchmark tests. FEFLOW's physical basis and internally used methods are transparently described in extensive documentation. You can trust FEFLOW!

10. MORE THAN SOFTWARE

Supplying FEFLOW as a high-level professional software is only one part of our mission. We provide technical and modelling support, scalable project consulting services and organise all kinds of software and topical training courses, workshops, user meetings and conferences through THE ACADEMY by DHI.
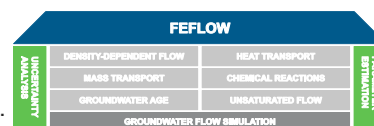
Contact us: MIKE Powered by DHI Client Care - mike@dhigroup.com
For more information, visit: www.mikepoweredbydhi.com

The expert in **WATER ENVIRONMENTS**

DHI