

FEFLOW

Advanced groundwater and porous media modelling

FEFLOW is the all-in-one solution for all kinds of groundwater modelling projects - a sophisticated simulation engine supported by an intuitive and outstandingly efficient graphical user interface and best-in-class visualisation tools

UNSTRUCTURED 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, a plus also for approximate analyses. At the same time, unstructured meshing allows for the most 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.

ALL-IN-ONE SOLUTION

With FEFLOW, handling individual packages developed by a multitude of commercial and noncommercial providers

For all typical modelling challenges, FEFLOW features the proper tools, and its convenient user interface is the modeller's continuous companion - starting with the first steps of model setup and continue beyond the provision of high-quality graphics for the final report. During the simulation run, the interface remains fully interactive and allows a close monitoring of progress and intermediate results.

FEFLOW DENSITY-DEPENDENT FLOW HEAT TRANSPORT MASS TRANSPORT CHEMICAL REACTIONS GROUNDWATER AGE UNSATURATED FLOW GROUNDWATER FLOW SIMULATION

GROUNDWATER MANAGEMENT

- Groundwater allocation
- · Well-head protection
- · Groundwater/surface water interaction

CONTAMINATION

- Risk analysis
- · Remediation planning

MINE-WATER MANAGEMENT

- · Dewatering optimisation
- Mine-closure planning

GEOTHERMAL

- Risk analysis
- · Installation optimisation
- · Life of installation analysis

GEOTECHNICS

- Seepage calculation
- Dewatering optimisation

INDUSTRIAL POROUS MEDIA

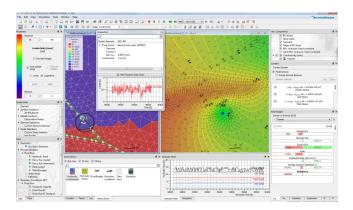
- · Infiltration calculation
- · Production optimisation



UP-TO-DATE VISUALISATION TOOLS

FEFLOW provides you with excellent planar, cross sectional and 3D visualisation features. Present your modelling results easily as high-quality images or in video sequences.

Stereoscopic visualisation and image/video export provide a level of insight into simulation models that has never been reached before. And - as an added benefit - they may help impress your client when presenting simulation results.



FEPEST - A GRAPHICAL USER INTERFACE TO PEST

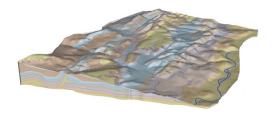
Parameter estimation and uncertainty analysis become much easier with FePEST, a graphical interface for applying the freeware PEST (developed by John Doherty) with your FEFLOW models. The convenient tools in FePEST guide you through the steps required for a certain task. For increased efficiency, the simulations can be executed in parallel on multiple computers.

ADVANCED NUMERICAL METHODS

3D groundwater models may be computationally demanding. Hence, FEFLOW employs optimised numerical solvers and make use of parallel computing on multiprocessor and/or multicore machines.

OPEN PROGRAMMING INTERFACE

Your needs go beyond FEFLOW's already extensive range of functionality? No problem: FEFLOW is designed to handle plug-ins, and its convenient programming interface makes plug-in development a manageable task, even for less experienced coders. A number of plug-ins for specific needs is readily available.



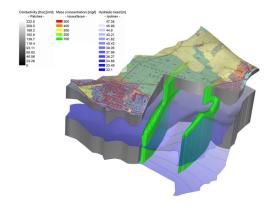
RELIABILITY

Serious groundwater modelling requires software that is reliable, accurate and efficient.

All parts of the FEFLOW simulation engine have passed extensive benchmark testing against analytical solutions, physical laboratory test results and results from other well known simulation systems. FEFLOW, you can use with confidence.

FREE VIEWER

All the advanced visualisation and postprocessing capabilities come for free: The FEFLOW Viewer mode allows model reviewers and clients to evaluate input data and simulation results without a software licence.



BENEFITS

Are you looking for groundwater modelling software that is easy to use yet comprehensive, reliable, accepted and well established?

FEFLOW is the answer.

Thousands of users around the world trust FEFLOW, not least because they know that highly qualified support is only an email or a phone call away.

The high quality software design is complemented by competent and experienced user support, frequent open enrolment and in-house training courses on various levels, regular local and international user conferences and a lively online user community at forum.mikepoweredbydhi.com.

Contact us: MIKE Powered by DHI Client Care - mike@dhigroup.com For more information visit: www.mikepoweredbydhi.com

