

## Description

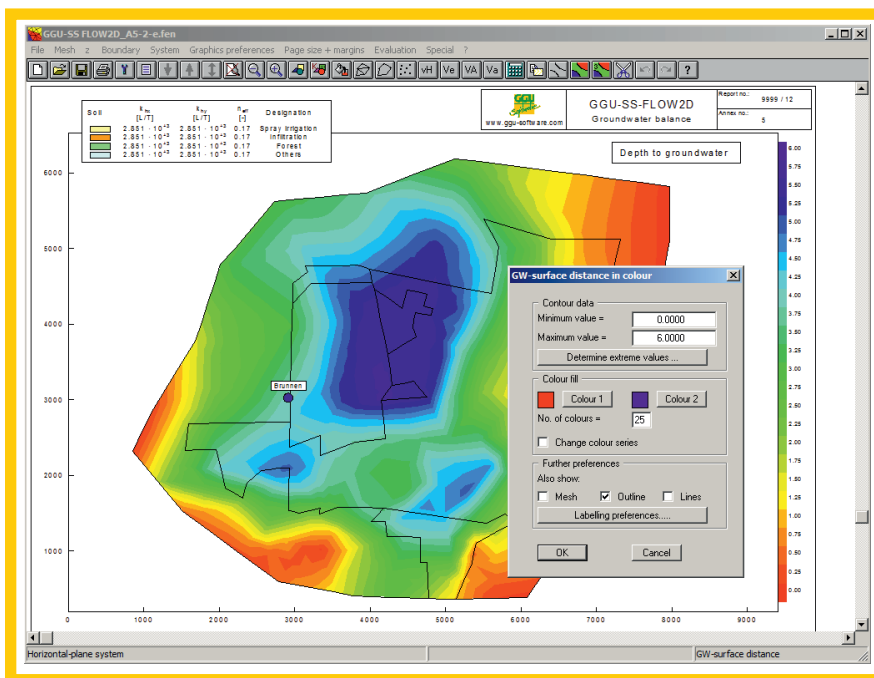
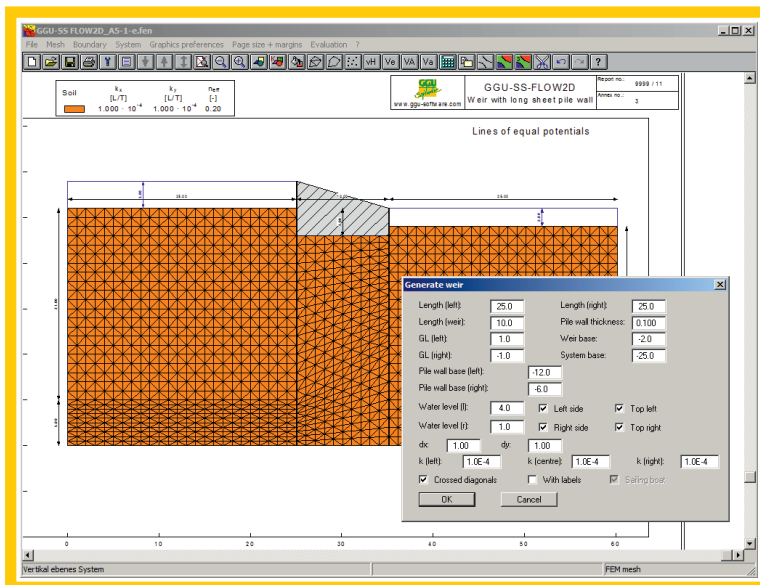
**GGU-SS-FLOW2D** – Modelling of steady-state groundwater flow in

- horizontal-plane,
- vertical-plane,
- axis-symmetrical,

two-dimensional groundwater systems using the finite-element method.

## Capabilities:

- Powerful mesh generator with mesh refinement and mesh optimisation
- Mesh import, e.g. from SMS program (Surface-Water Modeling System)
- Import of ASCII data
- FEM mesh coordinates can be imported from a table via the Windows clipboard
- Consideration of leaky aquifer, seepage lines and unsaturated zones
- Definition of layer boundaries using fixed values or an interpolation mesh (ASCII data import from the GGU-GEO-GRAPH program)
- Graphically oriented data input and editor for fixed boundary conditions such as potentials and point, linear or area sources
- Adopts standard values for  $k_r = f(u)$  and visualisation as contours
- Easy-to-use evaluation routines
- Dynamic damping
- Colour supported presentation of results such as normal, coloured or 3-dimensional contour lines, tables or circle diagrams
- Evaluation and presentation of potentials, velocities  $v_x$ ,  $v_y$  and discharge in user-defined sections
- Evaluation and coloured presentation of seepage velocities and gradients
- Evaluation and presentation of groundwater thickness, groundwater-surface distance, confined areas and “dry” areas
- Evaluation and presentation of flow lines with distance and time increment
- Calculates a differential contour diagram from two existing groundwater models and visualises them as normal, colour-filled or 3D contours
- Automatic transfer of steady-state data to the GGU-TRANSIENT and GGU-CONTAM-FE/-RW programs for transient analysis
- Interface for the program GGU-3D-SSFLOW (3-dimensional groundwater systems)
- Autosave function
- User-defined design of output sheet



- Print or copy screen sections, e.g. for transfer to a word processor
- Integrated Mini-CAD system for additional annotation of graphics

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GGU-SS-FLOW2D  
Steady state groundwater flow

Vertical-plane groundwater system  
Lines of equal water levels along dam section

