



Program Details

ART.-No.

ggu-01-106

OPERATING SYSTEM

Windows 95/98/ME, NT/2000/XP

Description

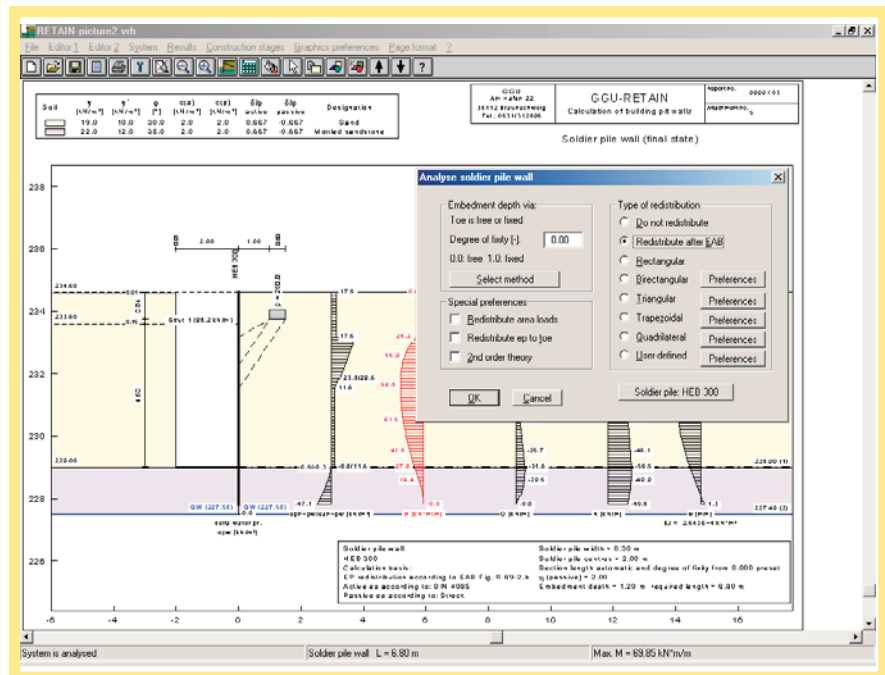
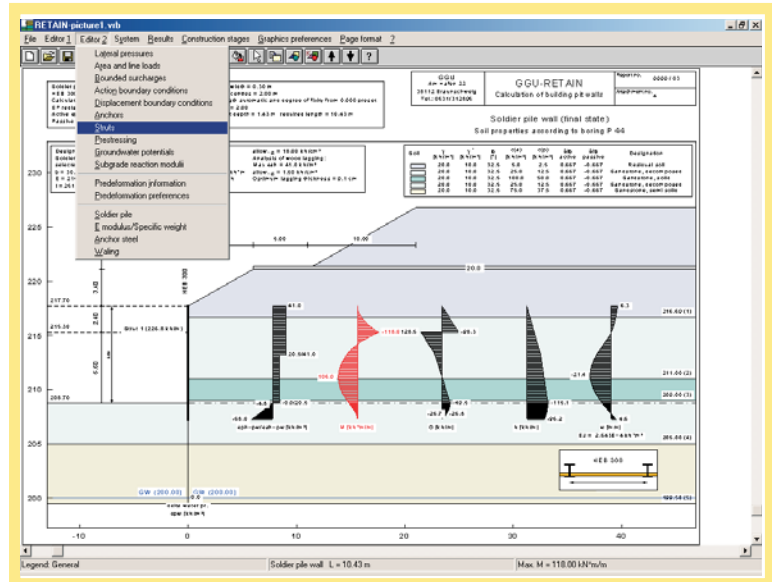
GGU-RETAIN - Analysis of retaining walls based on the Recommendations of the Working Group for Excavations and for Waterfront Structures (EAB + EAU 2004).

The following retaining walls can be designed with this software:

- Sheet pile wall
- Soldier pile wall
- In-situ concrete wall (diaphragm wall, bored pile wall, contiguous wall)

Capabilities:

- Both the global safety factor concept to DIN 1054 (old) and the new partial safety factor concept to DIN 1054 (new) are supported.
- Berms on the active and the passive sides
- Analysis using active earth pressure, at-rest earth pressure and increased active earth pressure
- Active earth pressure coefficients to DIN 4085, Mohr/Coulomb, user-defined values
- Passive earth pressure coefficients to DIN 4085, Mohr/Coulomb, Streck, Caquot/Kerisel, DIN 4085 (new), user-defined values
- Consideration of horizontal seismic acceleration
- Choice of hydraulic gradient consideration on the active and the passive sides
- Verification of safety against hydraulic heave, buoyancy safety and base heave
- Deep-seated stability with optimisation of anchor lengths
- Input of displacement boundary conditions, action boundary conditions, anchor and strut locations, deformations and much more
- Automatic search for the earth pressure redistributions proposed by the EAB + EAU
- Continuous elastic support in the toe area with any profile
- Expandable database using standard profiles for soldier piles and sheet piles
- Anchor steel design
- Reinforced concrete design to DIN 1045 (old) + DIN 1045 (new) for circular and rectangular cross-sections
- Design of infill for soldier pile walls
- Choice of visualisation of earth pressure, water pressure, moments, shear force, normal force and bending line
- Graphical visualisation summarising various advancing and retreating stages
- Retaining wall as legend



- Interface to the GGU-STABILITY (slope stability analysis) and GGU-UNDERPIN (underpinning) programs
- User-defined design of output sheet
- Copying of screen sections, e.g. for transferring to a word processor
- MiniCAD system for additional annotation of graphics

PROGRAM GGU-RETAIN GEOTECHNICAL COMPUTATION

