

Program Details

ARTICLE NUMBER

ggu-01-107

OPERATION SYSTEM

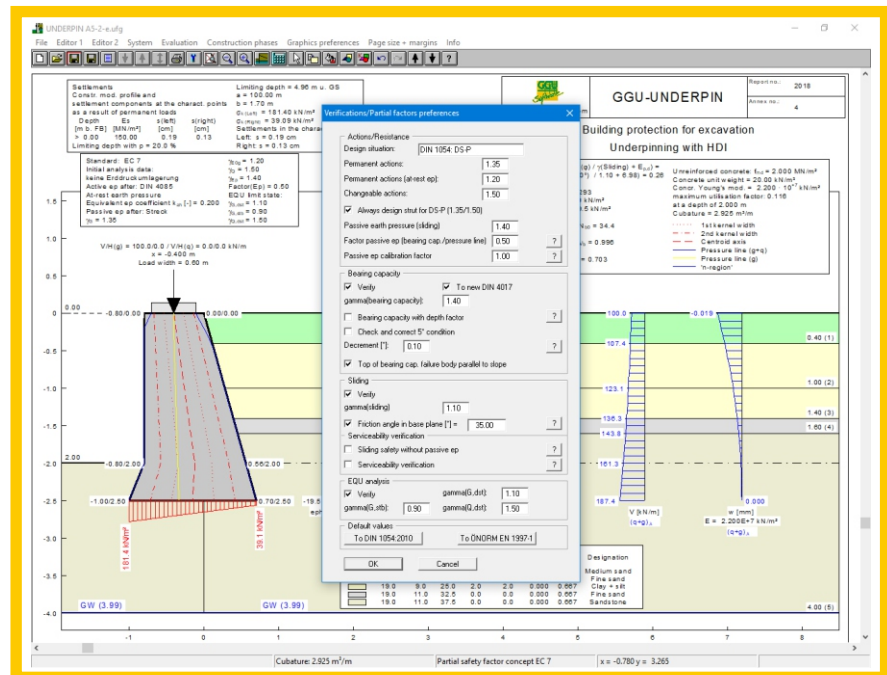
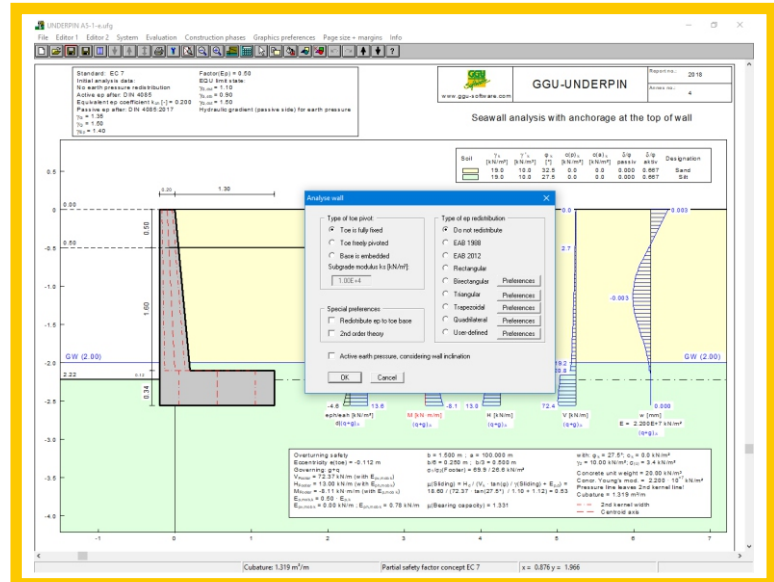
Windows 7/8/10

Description

GGU-UNDERPIN – Analysis and design of underpinning bodies.

Capabilities:

- Choice of analysis using either partial safety factors to DIN 1054:2010, EC 7, Austrian Standard ÖNORM EN 1997-1 or global safety factors (DIN 1054 old)
- Bearing capacity safety and settlement analysis to DIN 4017 and DIN 4019
- Verification of sliding safety, hydraulic heave and buoyancy safety
- EQU analysis
- Inner stability analysis to DIN 4093
- Unreinforced concrete analysis
- System input using absolute heights
- Soil properties can be selected from an expandable database of common soils
- Consideration of active and passive berms
- Analysis using active earth pressure, at-rest earth pressure or increased active earth pr.
- Active earth pressure coeff. to DIN 4085
- Passive earth pressure coefficients to DIN 4085:2017, Streck, Caquot/Kerisel
- Consideration of hydraulic gradients on the active and the passive side
- Seismic effects via additional horizontal loads and/or altered earth pressure coefficients to EC 8
- Consideration of displacement and action boundary conditions, anchors and struts etc.
- Consideration of active and passive bounded and double-bounded surcharges
- 2D area loads at any depth
- Consideration of prestressing of anchors and struts possible
- Verification of deep-seated stability with optimisation of anchor lengths
- Anchor steel design
- State variables can be selected for struts under load
- "5°" condition check to DIN 4017
- Limiting depth analysis using different methods
- Automatic search for earth pressure redistributions proposed by EAB
- 50 additional earth pressure distributions
- Interface to the GGU-STABILITY (slope stability analysis)
- Choice of result presentation for earth pressure, water pressure, moment, shear force, normal force and bending line



- Graphical visualisation summarising various advancing and retreating stages
- Adopted standard, program name and version can be included in the General legend
- Freely definable positioning and sizing of graphical elements and legends
- Print or copy screen sections, e.g. for transfer to a word processor
- Integrated Mini-CAD system for additional annotation of graphics

