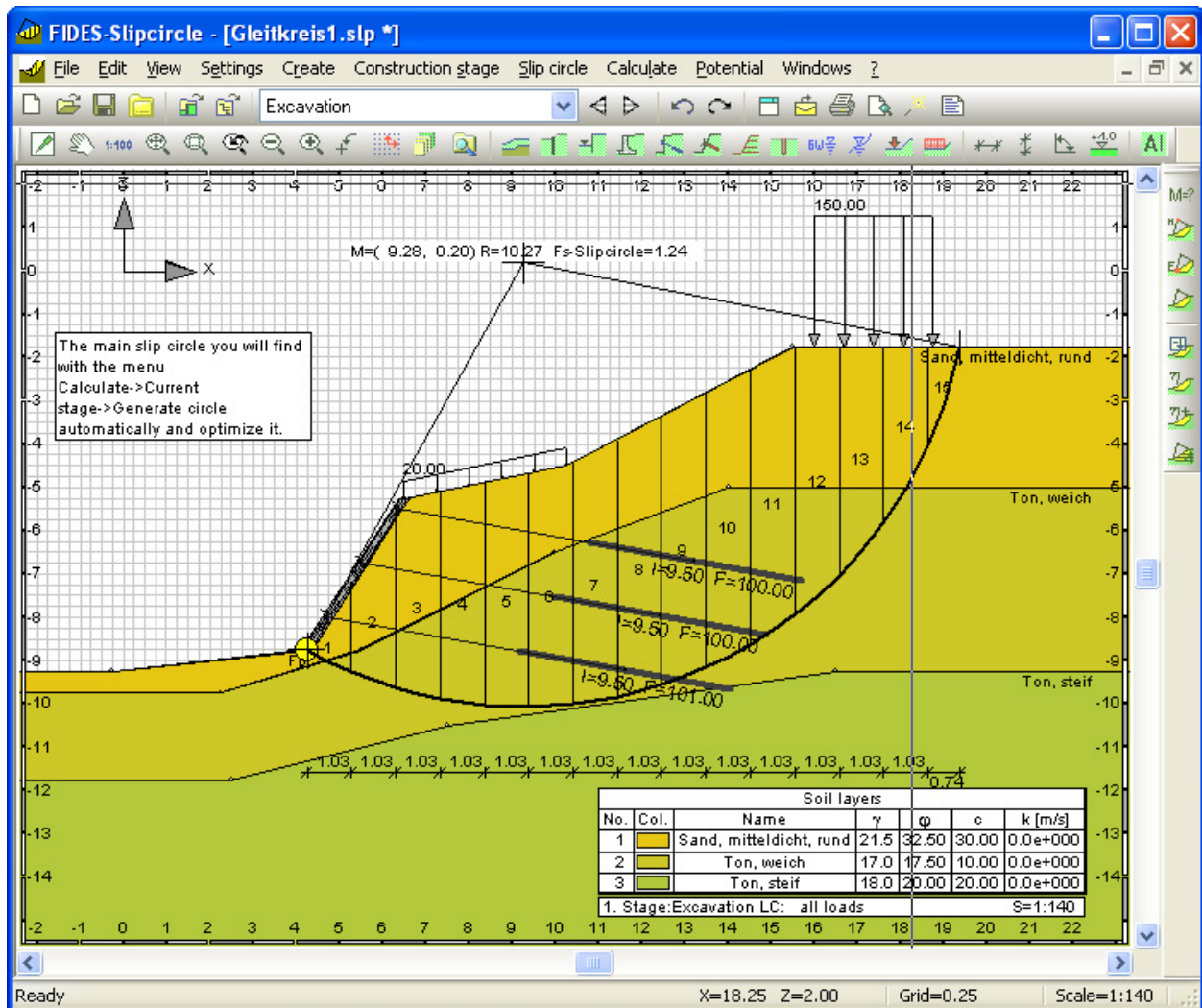


# FIDES-SlipCircle

## Stability of slopes according to Krey-Bishop / DIN 4084

The program makes it possible to compute slope failure mechanisms due to DIN 4084. The proofs demanded therein are performed for general soil-structure systems, which may include an arbitrary number of various elements and supporting components, e.g. anchors, nails, piles, loads, soil layers, construction stages etc. FIDES SlipCircle is compatible and uses the same data with other programs of the FIDES Geotechnics series.



## Performance characteristics

### User Interface

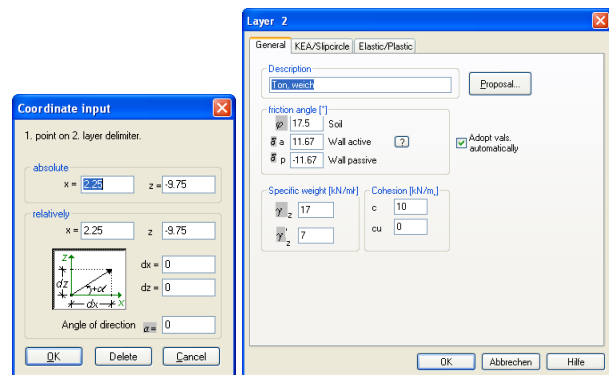
- Object oriented graphical user interface
- CAD like input functionality
- Arbitrary number of polygonally outlined soil layers. Material properties of soils are stored in a layer data base which can be expanded by the user. Access to the extended soil layer data base which is common to all FIDES geotechnics programs
- Common document format for all FIDES Geotechnics programs
- Import and export functions for data exchange with other FIDES Geotechnics programs
- Detailed on-line assistance with exact explanation of the computing method
- Windows standard like for example Undo und Redo for all actions, Copy & Paste, context menue, System explorer, ...

### Computation

- With optimization algorithm by Professor Dr.-Ing. Th. Euringer for the approved sliding circle method due to Krey /Bishop
- Full automatic search of the most unfavorable slip circle without any geometry input radius or center
- Semiautomatic search by drawing a starting circle with the mouse and fine optimization: the program calculates simultaneously online. In the status line you can see the safety of the current circle. So it is very fast to find a suitable starting circle by hand for a following automatic fine optimization.
- Determination of the necessary length of anchors or nails
- Transparent optimization by concurrent drawing of the sliding circle
- Consideration of the given water free surface or a computed water free surface from the program FIDES flow
- Check of hydraulic ground failure, systems with several groundwater storeys
- Easy generation of construction stages

### Results

- Safety of stability due to Fellenius for the determined sliding circle
- Extensive graphical output like forces, loadings and construction plots
- Forces of anchors and struts
- Direct printer output mixed with text and graphics. Printed output with user defined lettering, dimensioning
- Extensive output of the results in RTF-format or directly as word-document with configurable ZTVK-frame or even as plain text
- Numerous export formats like HPGL, EMF, DOC, RTF



### Application range

- Ground failure computation can be performed also for complicated geometries and structural parts

### Program options

#### FIDES-Flow

- Calculation of ground water flows
- Determination of ground water table, water pressure, seepage and ground water flow