

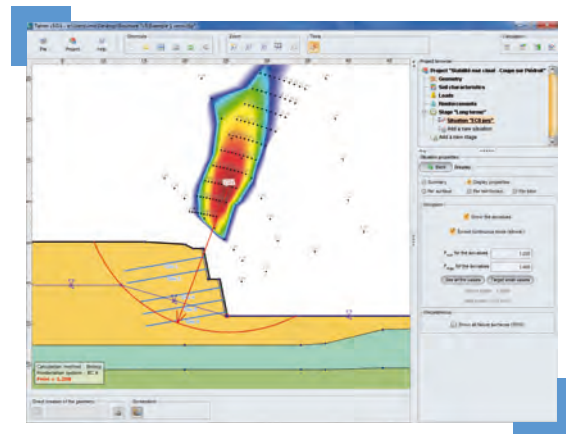


Talren v5

Talren v5 is a software for checking the stability of **natural slopes, cut or fill slopes, earth dams and dikes**. It takes into account various **types of reinforcements**, such as: anchors and soil nails, piles and micropiles, geotextiles and geogrids, steel and polymer strips.

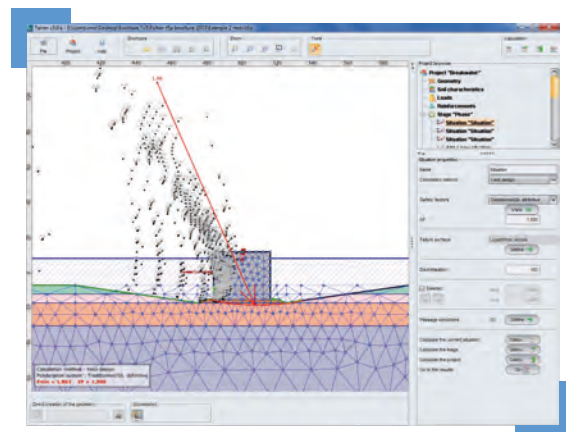
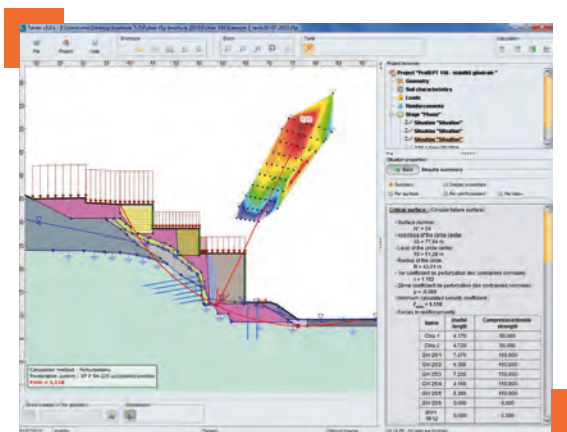
A user-friendly and interactive interface

- **Permanent graphical display, definition of the profile using a mouse, Undo function, rulers and grid, zoom options, choice of the soil colour.**
- **Several construction stages and calculation alternatives** can be handled in the same file.
- Display of all input data in the main window, through a **global tree**, including general data (geometry, soil properties, loads, reinforcements) and phases data.
- Ability to load **background drawings** (.jpg and .gif formats) and adjust them to scale.
- **Various output options for graphical display and results** (shadings, forces in reinforcements, detailed results for each failure surface, etc).
- **Wizards and databases**, predefined partial safety factors (including those according to the French application standards of Eurocode 7).



Links with other software

- Ability to load Plaxis 2D: loading of the geometry, soil properties and mesh of pore pressures.
- Ability to import geometries defined with **AutoCAD®** (dxf files).





Talren v5

STABILITY OF SLOPES AND ANCHORED WALLS

Calculation features

Extensively used methods

- Limit equilibrium calculation along potential failure surfaces using **the Fellenius, Bishop or perturbations methods** (with automatic search option for circular failure surfaces).
- Possibility to take into account **hydraulic conditions**.
- Possibility to take into account **seismic loads**.

The benefits of the yield design method

- This calculation method, based on limit analysis theory (J. Salençon) with logarithmic spirals, allows for numerous extended applications: **stability of gabions, accounting for rigid inclusions, evaluation of active/passive earth pressures**, etc.

A specific treatment for each type of reinforcement

- Each inclusion can work in: **tension, compression, shear, bending**.
- **Ability to use a combination of different failure criteria** for the reinforcements and the soil to accurately model all the mobilised forces (principle of maximum plastic work).

Standards and recommendations

The part of the Clouterre report dealing with the design of soil nailed walls is largely based on the theories used in the development of Talren, which is recognised as one of the best design tools for reinforced soils. Moreover, predefined sets of partial safety factors are provided with Talren v5: **Clouterre, Eurocode 7...**



MINIMUM HARDWARE REQUIREMENTS

PC-compatible computer with:

- processor compatible Intel® Core Duo
- 2 Gb RAM
- resolution 1280x720 minimum
- USB port
- 500 Mb free hard-disk space
- Windows® 7/8, 32- or 64-bit

