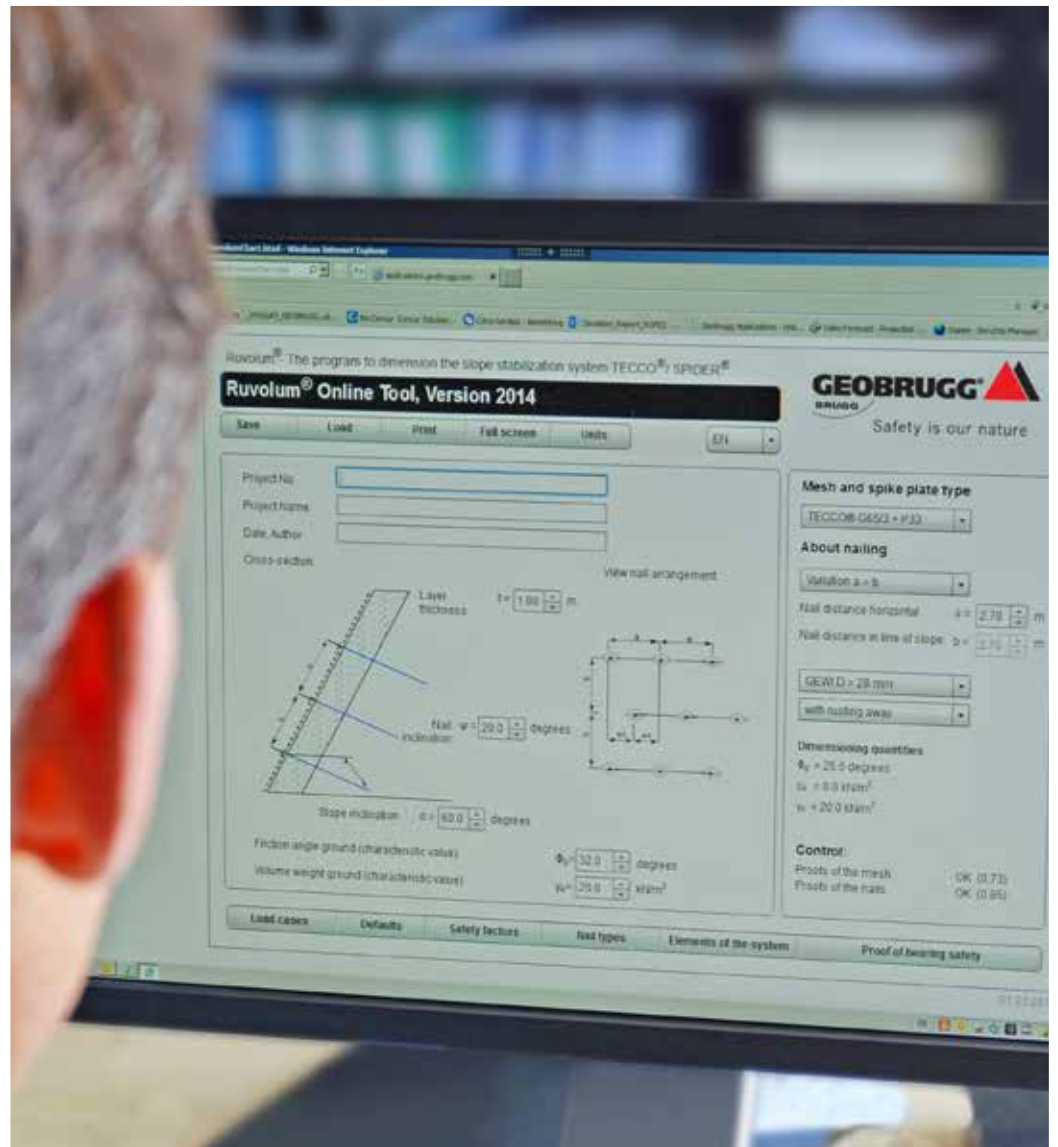


RUVOLUM® quickly dimensions our **TECCO® SYSTEM³** and **SPIDER®** slope stabilization systems. This tool determines which forces and loads are acting on the mesh and at anchor points. Geotechnical parameters are easily input and define the **RUVOLUM®** results. Verification of the overall solution can give the designer confidence proven by full-scale testing used to calibrate **RUVOLUM®**.



RUVOLUM® dimensioning tool

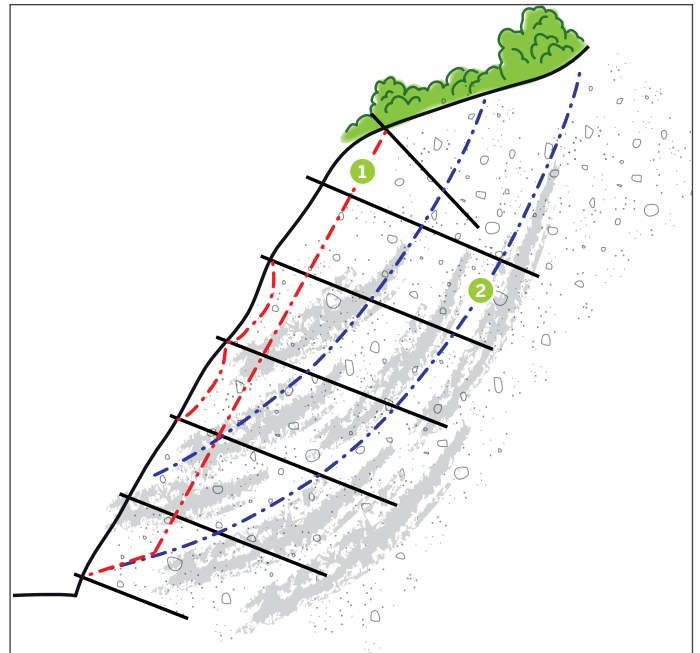
FOR TECCO® SYSTEM³ AND SPIDER® SYSTEM

RUVOLUM® DIMENSIONING CONCEPT: SIMPLE PLANNING FOR INCREASED SAFETY.

For determining the forces acting within a stabilization system, Geobrugg developed the RUVOLUM® online tool to assist engineers and planners.

RUVOLUM® provides the static verification of the system:

- ▶ Puncturing of the mesh
- ▶ Combined loads on the nails or anchors
- ▶ Shearing of the mesh on the edge of the spike plate



1 Instabilities near the surface

2 Global instability

Applying high-tensile steel wire mesh to stabilize slope surfaces, can also be used to tackle global stability problems. In this application longer nails are required for deep seated slope failures. Conventional slope stability methods can be utilized and the results compared with RUVOLUM® results.

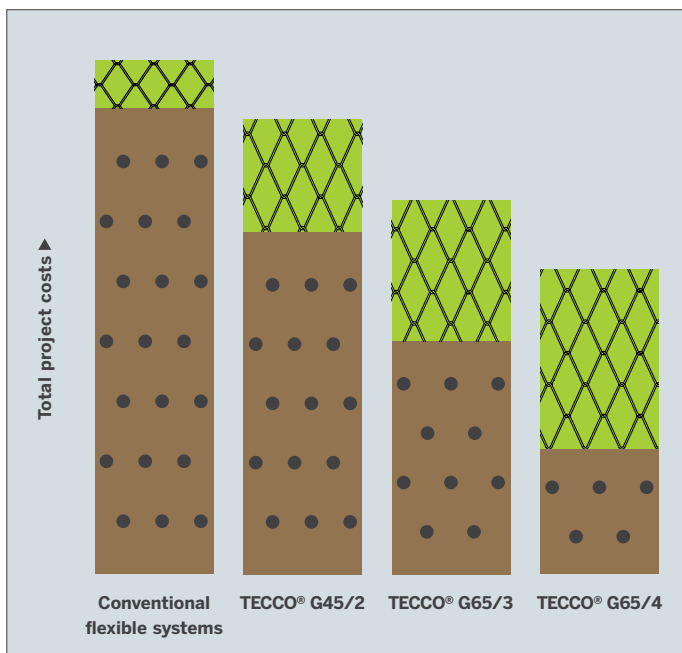
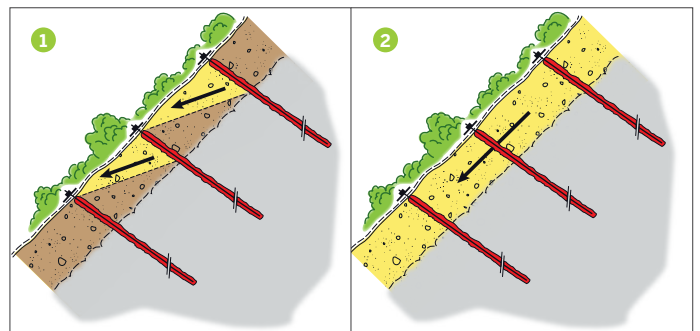
The dimensioning basis underlying the RUVOLUM® model.

1 Local instabilities between the nails

Where local slope instabilities occur between the soil nails, RUVOLUM® calculates the ability of the high-tensile steel mesh to resist shearing-off at the spike plate interface.

2 Instabilities near the surface and parallel to the slope

The nails must resist the material from mobilizing. The number and layout of the nails need to be dimensioned according to the forces calculated based on soil properties, slope angle, seismic loading and streaming pressure.



Mesh costs
 Nailing costs

A cost-effective solution

The TECCO® SYSTEM³ and SPIDER® system provide the same level of protection as conventional protective covering, but using only half as many nails. This can significantly reduce the total project costs and the installation time.

RUVOLUM® is available free of charge at <http://applications.geobrugg.com>



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