

TECHNICAL NOTE 004

On-Line Information & Analysis Software: IHS, Slope/W, Frew, Robot



• We excel through experience and learning •

Version 02, Jul 2013

Keywords

IHS, SLOPE/W, FREW, ROBOT

Synopsis

Subscription has been made recently to enable Chun Wo to access on-line information and to use the analysis software outlined below. The software is currently maintained by the Technical Department. Upon request, the Technical Department can perform analysis and design to support projects in the construction phase. Brief description of each of the software is given below.

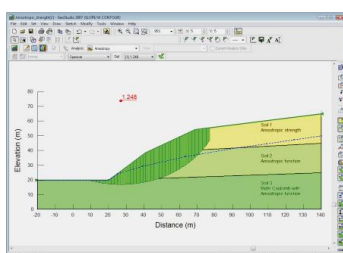


1.0 IHS

This is an on-line library powered by IHS, and is 'the source of critical information and insight'. Our subscription allows us instant access to the publications produced by more than 250 organisations and institutions, including BSI, SCI, IStructE, just to name a few. Please contact TechD for login details.

2.0 SLOPE/W

SLOPE/W is a slope stability software for computing the factor of safety of earth and rock slopes. With SLOPE/W, we can analyse both simple and complex problems for a variety of slip surface shapes, pore-water pressure conditions, soil properties, analysis methods and loading conditions. Using limit equilibrium, SLOPE/W can model heterogeneous soil types, complex stratigraphic and slip surface geometry, and variable pore-water pressure conditions using a large selection of soil models. Slope stability analyses can be performed using



deterministic or probabilistic input parameters. Stresses computed by a finite element stress analysis may be used in addition to the limit equilibrium computations, for the most complete slope stability analysis available.

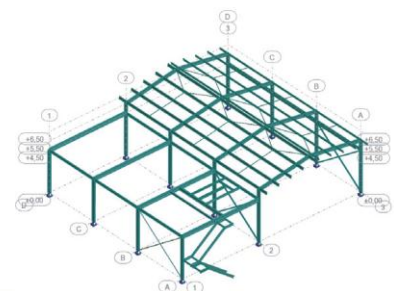
3.0 FREW

FREW is a program used to analyse the behaviour of flexible retaining walls. It predicts the displacement, shear forces, and bending moments of the wall and the earth pressures each side of the wall resulting from a series of actions. These actions include excavation, filling, dewatering, changing soil or wall properties and applying or removing struts, anchors or surcharges. The program models the soil as an elastic continuum and allows for soil failure by restricting the earth pressures to lie within the active or passive limits and also includes the effect of arching.



4.0 ROBOT

Autodesk Robot Structural Analysis Professional is a powerful, easier-to-use, and efficient tool for general linear static analysis. In addition, it equips structural engineers with the ability to go beyond the traditional analysis capabilities of other software programs. Engineers can better explore design alternatives and investigate the linear and true nonlinear behavior of a structure. The software enables the simple and effective analysis of many types of nonlinearity, including P-delta analysis, tension/compression members and supports, cables, and plastic hinges, just to name a few.



- End -

This technical note is for internal circulation only.
For enquiry, please contact

Gary Chou
KMS / Technical Manager
Technical Department
Chun Wo Construction & Engineering Co Ltd
E gary.chou@chunwo.com
T 3758 8379
F 2744 6937