



The easy way to analyse the soil structure interaction of a laterally-loaded pile

When it comes to laterally-loaded pile design software, Alp makes things simple. The software models soil shear failure and non-linear soil behaviour, calculating deflection down the pile together with moments and shear forces within the pile.

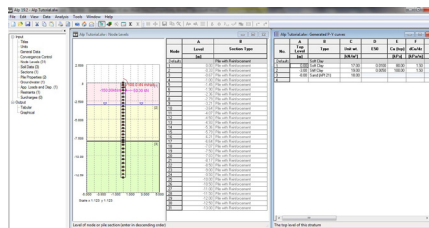


Obtain critical load effects along a pile

Alp software is designed for demanding piling projects. Users can tailor their options to obtain and share results in a clear graphical output.

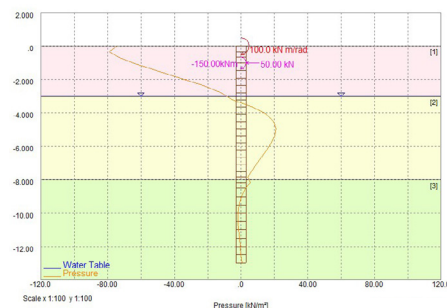
How Alp works

Alp represents the pile as a series of elastic beam elements and the soil as a series of independent springs. It handles soil properties varying with depth, and users can specify water pressures as hydrostatic or piezometric. They can also apply lateral loads or bending moments at any location down the pile.



Alp input

The same goes for full, lateral or bending moment restraint. Displacements can be imposed in the body of soil surrounding the pile, the top of which can be above ground level.



Alp output

To calculate the bending moments and deflections of lateral loads, why not consider our Alp software?

Contact oasys@arup.com for more information.

Benefits

- Accurate simulation of problems involving lateral and moment loading on piles.
- Calculates the stiffness of a section and applies partial factors, including EC7.
- Quick analysis method and extensive output capabilities.
- Model non-linear behaviour using P-Y curves.