

Geotechnical Engineering Software

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 behavior, calculating deflection down the pile together with moments and shear forces within the pile.



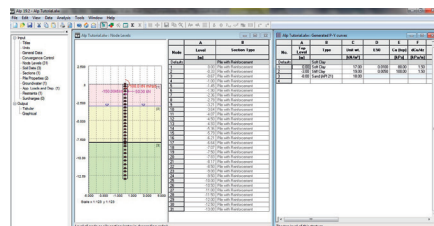
Obtain critical load effects along a pile

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

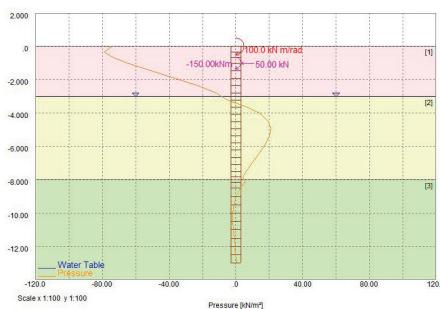
Alp represents the pile as a series of elastic

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

For vertical capacity and settlement analysis on piles, take a look at Pile or contact our team for further 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



Download your free 30 day trial version from our site today

London Office
13 Fitzroy Street
London
W1T 4BQ
United Kingdom
T: +44 (0) 20 7636 1531
E: oasys@arup.com

Newcastle Office
Central Square
Forth Street
Newcastle-Upon-Tyne
NE1 3PL
United Kingdom
T: +44 (0) 191 238 7559
E: oasys@arup.com

Toronto Office
2 Bloor St, East Suite 2400
Toronto, ON
M4W 1A8
Canada
T: +1 416 515 0915
E: oasys@arup.com

Brisbane Office
Level 4
108 Wickham Street
Fortitude Valley
QLD 4006
Australia
T: +61 (0) 7 3023 6000
E: oasys@arup.com

India Office
Arup India
Ananth Info Park
HiTec City
Hyderabad - 500081
India
T: +91 (0) 40 44369797 / 8
E: oasys.india@arup.com