

OmikronKappa
Consulting



IN-HOUSE
ENGINEERING
SOFTWARE

ENGINEERING
TOMORROW

Engineering our own solutions for **a stronger future.**

New in-house engineering
software for geotechnical
and structural design.



OUR KNOWLEDGE
INTO TOOLS



REAL PROJECTS
REAL IMPACT



A STRONGER
TOMORROW

Built by Engineers.
For Real Engineering Challenges.

*Reliable Engineering.
Real Impact.*

EasyCalc Pile

Axially Loaded Bored Pile Design
& Pile Group Analysis



Single-pile resistance

Settlement-dependent base and shaft resistance (DIN 1054).



Pile-group effects

Group reduction and directional factors.



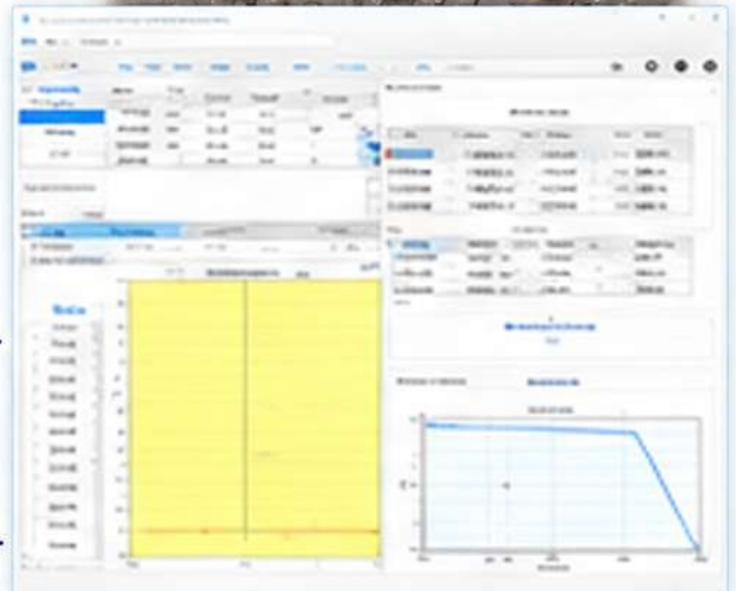
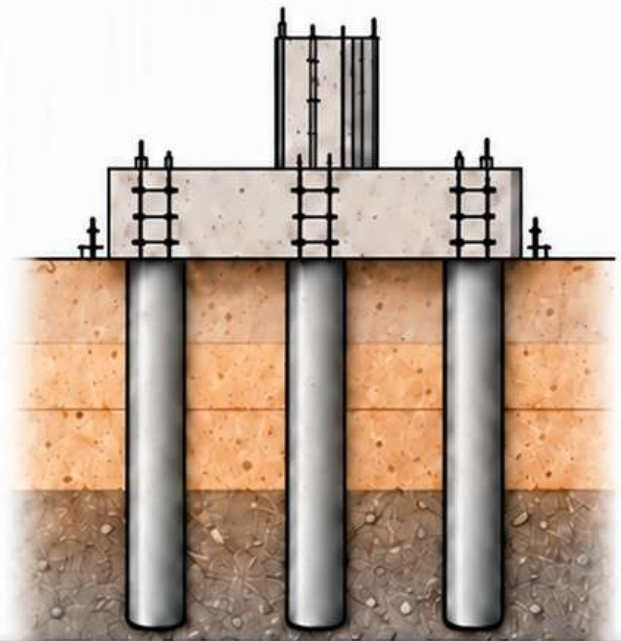
Parametric analysis

Sensitivity studies for pile length, diameter, spacing and soil parameters.



Automated report

Project data, results tables, charts and plans in an editable report.



GEOTECHNICAL SOLUTIONS. LASTING STRUCTURES.

EasyCalc

Shallow Foundations

Bearing Capacity • Settlements
Footing Checks & Reinforcement



Multiple methods

Hansen, DIN 4017, Vesic and Meyerhof formulations.



Settlements

Stress increase, excavation relief and numerical integration with DIN 4019-style output.



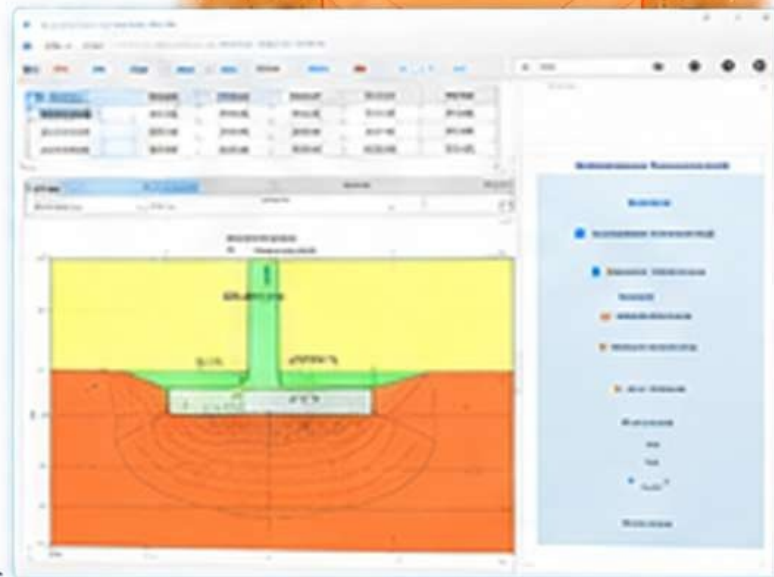
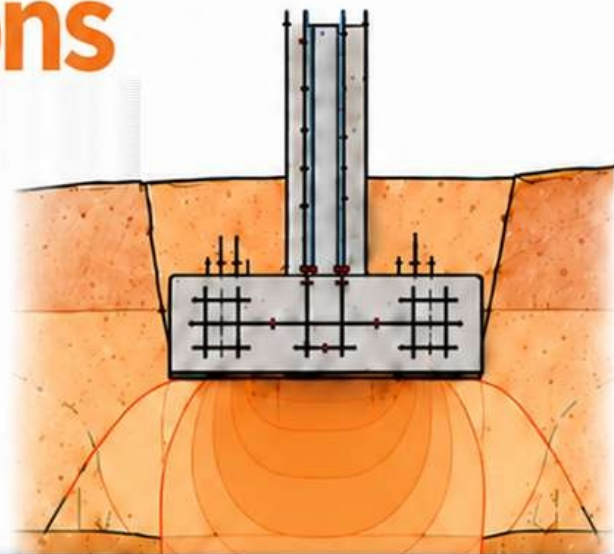
Foundation checks

Sliding, overturning, uplift, eccentricity and base-stress verification.



RC footing design

Preliminary RC2 reinforcement, one-way shear and punching checks with plan / section sketches.



FROM SOIL BEHAVIOUR TO A SAFE FOUNDATION.

EasyCalc Wall

Cantilever Retaining Wall
Geotechnical & Structural Design



Earth pressures

Coulomb-based active/passive actions, surcharge, groundwater and seismic increments.



EC7 stability

DA1C1, DA1C2, DA2, DA3 and user factors with traceable design-action generation.



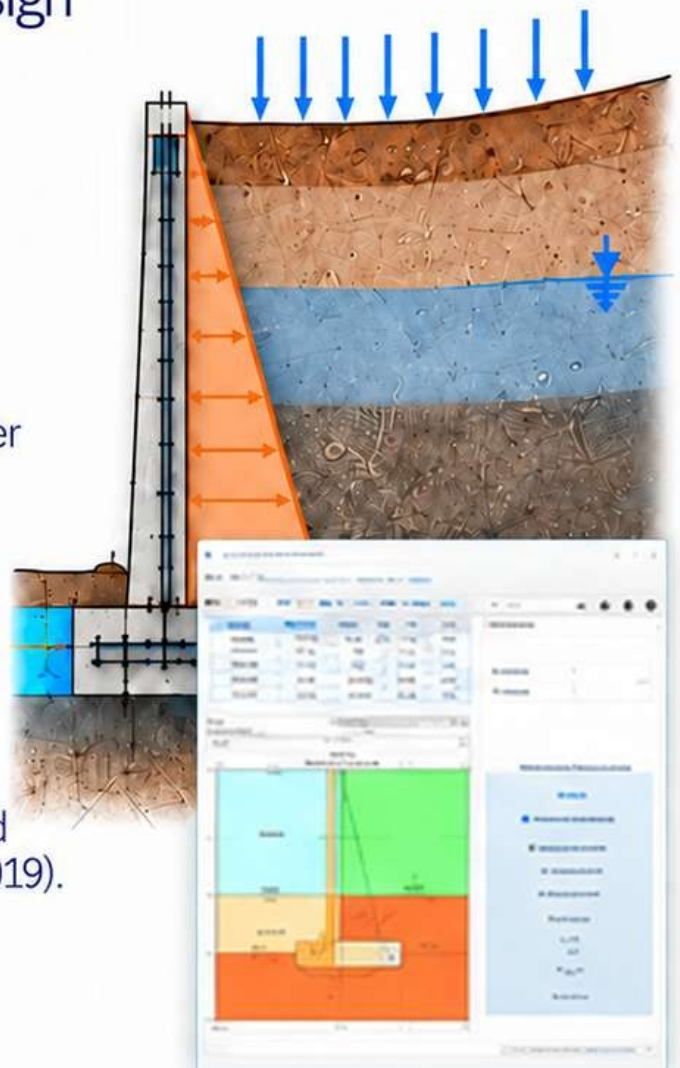
Foundation response

Sliding, overturning, bearing and settlement assessment (DIN 4019).



RC wall design

Stem, heel and toe envelopes, EC2 checks and reinforcement visualization.



STABILITY BELOW GROUND. CONFIDENCE ABOVE IT.

ProCalc FEM Shallow Foundations

2D Finite Element Analysis

Layered Soil • Nonlinear Response • Full-Field Results



Layered soil model

Per-layer ϕ , c , E and ν with direct tabular input.



Constitutive response

Elastic or Drucker-Prager material selection.



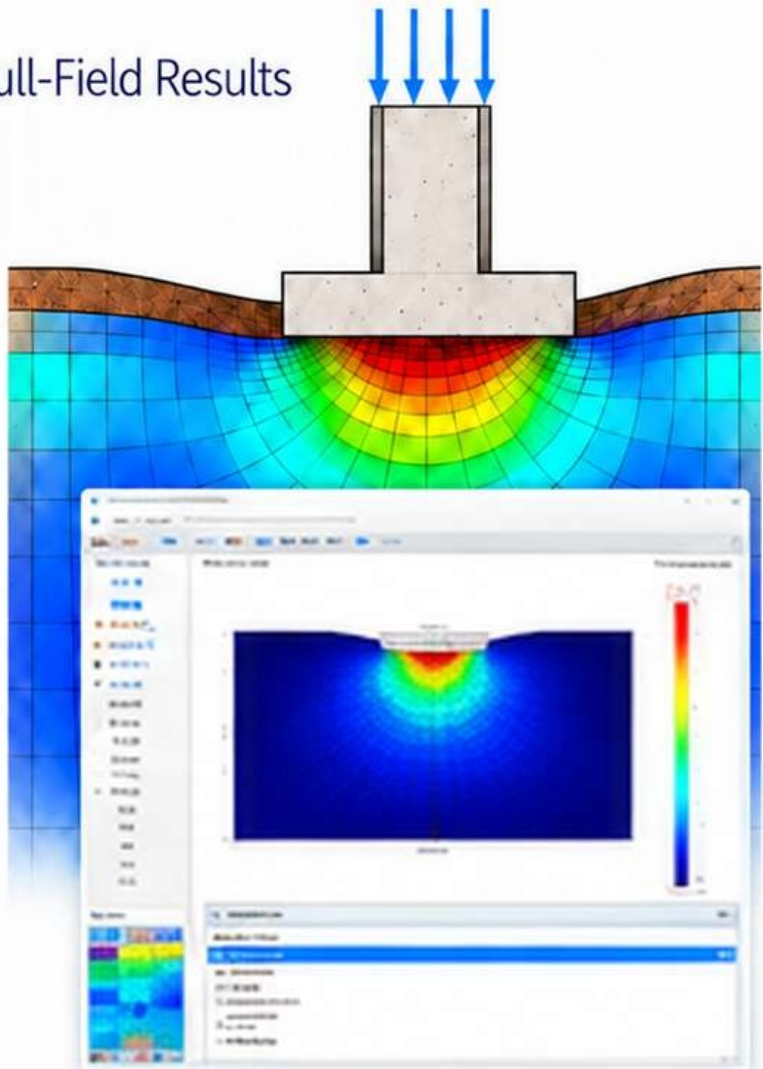
Adaptive mesh

Graded finite-element mesh with local refinement.



Full-field results

Settlements, displacements, stresses, plastic strain and yielded zones.



SEE THE GROUND. UNDERSTAND THE RESPONSE.

A growing software ecosystem for the challenges ahead.



More tools in development

Expanding the EasyCalc / ProCalc series over the coming months.



Driven by real projects

Built on our engineering experience.



For our people

Increasing efficiency, consistency and technical capability.



For a stronger tomorrow

Investing in knowledge, innovation and sustainable growth.

*More
to come...*

OmikronKappa Consulting S.A.

Reliable Engineering. Real Impact.