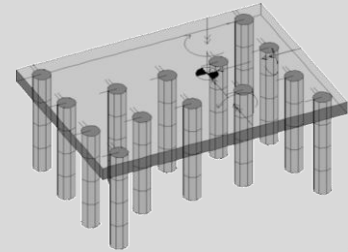


RTpile

11.10.331 Spatial Pile Structures

Analysis and design of spatial pile structures

- **Reliable calculation and design approach for new and previous standards**
- **Efficient spatial editing with optimal graphical control of all changes**
- **Fast and reliable application via sensitive elements and dimension chains**
- **Direct specification of the spatial pile bedding**
- **Integrated report of results featuring configurable lists and graphics**

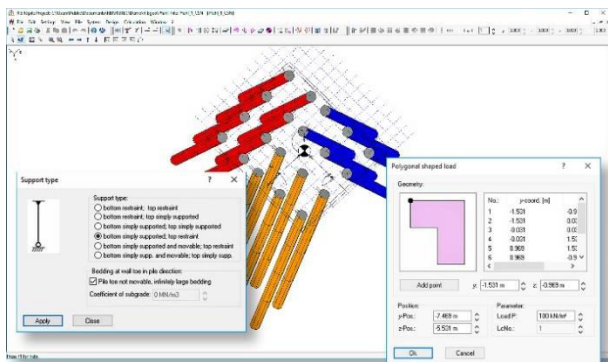


RTpile supports spatial pile structures with rigid pile caps in a graphically interactive working environment. The spatial pile structures can be easily defined, analysed and designed. The program application is adapted to the requirements of the new standards and supports the fast and efficient processing of simple and complex engineering tasks.



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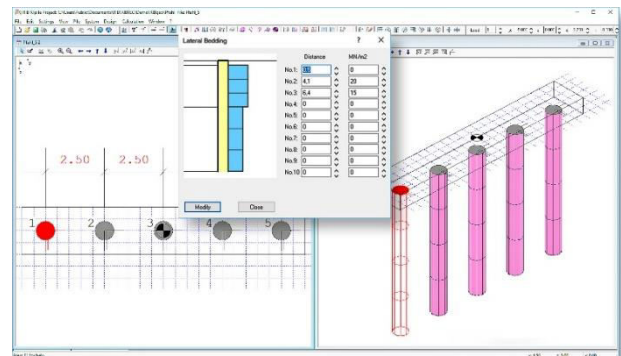


RTpile Features

RTpile is a Windows® programme with graphically interactive working environment for the input, calculation and design of planar and spatial pile structures with a rigid pile cap. The program application is adopted to the requirements of the actual codes, supports the fast treatment of spatial engineering problems by an efficient user environment and supports the following individual functions:

- Multi-Document-Technique (MDI), e.g. several projects can be treated by the application at the same time
- arrangement of piles can be selected, copied and processed at a time
- arrangement of piles can be transferred from one to another project
- well-established orientation of piles can be activated fast and easily
- graphically interactive construction environment for spatial pile groups with 3D-viewer

- working with different views and windows
- constant cross section of piles
- consideration of layered transverse bedding and loading of piles
- evaluation of soil stresses due to transverse bedding of piles

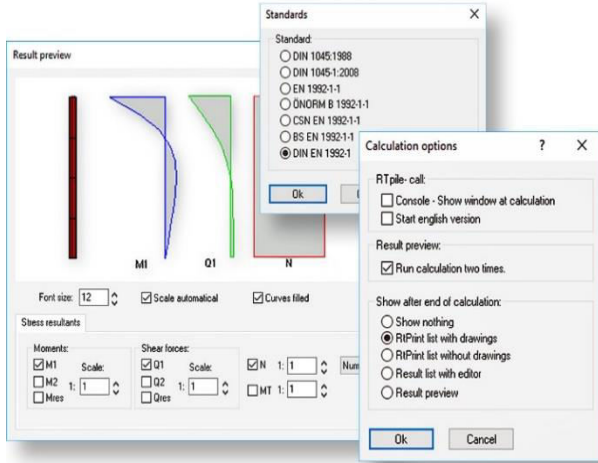


- hinged and rigid connection of pile to pile cap
- hinged and clamped supported base of pile, alternatively rigid or elastic in direction of pile axis
- input of resultant loading on pile cap
- alternative input of point-, line- and area-loads on pile cap
- efficient evaluation method with automatic investigation for cinematic mechanisms
- definition of load combination
- design of pile for biaxial bending and normal forces under consideration of shaft friction selectively according to DIN 1045, DIN 1045-1 as well as EC2 and

Product Information

EN 1992 with national annexes for DE, UK, CZ/SK, AT

- report of results with graphical representation of system and loading

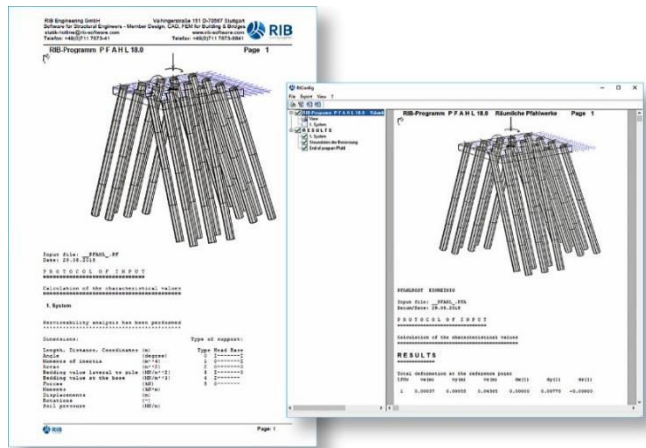


Configurable Output

- The following results can be displayed:
- Displacements and rotations of the foundation and pile cap
- Eigenvalues and eigenvectors of the system
- Internal forces at 10 points of each individual pile ($N, M_1, M_2, Q_1, Q_2, M_t, M_{res}, Q_{res}$)
- Resulting soil pressure on piles
- Reinforcements at design sections with internal normal force and internal moment including elongations

All results and verifications are clearly organised with sketches and graphics in a document. This document can be edited and displayed via RTprint. The graphics and texts can also be transferred to other Windows® applications.

- Using the Preview window, the internal forces of the individual piles can be displayed graphically as a diagram. Additionally, there is the possibility of generating a plot output in different views for the geometry of the pile system.



Manual and Online-Help

- Appropriate information and tips are available on all topics. The guided tour with the first steps makes it particularly easy to familiarise yourself with the program.