With this presentation we would like to introduce the new program version RTwalls V19 to you.

What's new?
- Customizable program environment
- Intuitive user guidance
- Enhancement of functionality
- Configurable result output
A new module concept allows an application-related use of RTwalls, e.g. different wall types can now be combined with the basic solution.

**Advantages**
- High-quality starter packages
- Customer-oriented extensions
- Possibility of supplementing design combinations

**Basic module**
- Sheet piling wall
- Soldier pile wall
- Bored pile wall
- Diaphragm wall

**Functional enhancements**
- e.g. KEM

**Design combinations**

**Table:**

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Situation</th>
<th>Grenznull</th>
<th>Vollast</th>
<th>Lastfälle</th>
<th>Bezugslinke</th>
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<td>alle</td>
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</table>
New possibilities for product configuration

<table>
<thead>
<tr>
<th>module / product packages</th>
<th>RTwalls basic version</th>
<th>RTwalls full version</th>
<th>RTwalls sheet pile wall</th>
<th>RTwalls soldier pile wall</th>
<th>RTwalls diaphragm wall</th>
<th>RTwalls bored pile wall</th>
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<tbody>
<tr>
<td>basic module</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>

**Advantages:**
- High-quality application packages (X)
- Simple entry options (X)
- Option to add LF combination (X)

The previous application packages will be maintained. In the future, it will also be possible to start with individual wall types.
One program for different applications

During input, the user can specify a special wall type and RTwalls remains focused on this task. It is also possible to model staggered walls.

possible wall types:
- soldier pile wall
- sheet pile wall
- bored pile wall
- diaphragm wall
or
- staggered walls from different wall types
Easy to start via standard application cases

Depending on the type of wall, different retaining walls can be defined efficiently and reliably using a quick input function.

Consideration of:
- Specific wall properties
- Excavation phases
- Deconstruction states
- Terrain profile in front of and behind the wall
- Water levels
- Various anchor positions
- Anchor angles and lengths
Even for demanding tasks, the RTWalls user interface remains clear at all times and you can keep an eye on all inputs and settings at any time.

Overview of all processes
- Program control via menu band
- Graphical component input with tree view & tables
- Dimensioning settings via property grid
- Tabular load input
- Configurable result output

Intuitive program application for complex engineering tasks
Clear and comprehensible user guidance

The program application is guided through the menu bands from left to right. Objects, load cases, load combinations and construction stages are managed from top to bottom in the tree view.

More overview through menu ribbons for:
- project information
- system input
- load input
- computation and results
For an economical wall design it is often necessary to combine the different load cases via the respective load case attributes deliberately for each design situation.
Consistent definition and consideration of loads, load cases and load combinations

Versatile possibilities for the specification of stress states using:
- Load case attributes
- Assignment of construction stage
- Combination coefficients
- Combination rules

The stress of the retaining wall can be assigned to the construction stages / load combinations by an arbitrary assignment of loads to load cases with corresponding load case attributes.
Clear evaluation and program settings

Various menu ribbons for:
- evaluation
- Coefficients for partial safety factors and load combinations
- settings
- program help and documentation

For the optimisation of retaining walls, the results can be viewed directly on the screen and compared with the verification overview.
Visual control of results from analysis and design

Overview of results
- Earth pressure and earth resistance
- Characteristic internal forces
- Design forces
- Bedding forces
- Deformations
- Slip circle proofs
- Design results

The results can be displayed graphically interactive directly as a diagram or in a value table.
Ergonomic working with two monitors

If there is too little space on one screen for editing the project, you can distribute the application over 2 screens for a better overview.

Swapped out screen content, for example, for:
- load combination
- verification overview
- results list

load combination
verification overview
results list
Customizable program environment

Setting options:
- Change
- Shifting
- Delete and recovery from views
- Sizes
- Colors
- Linewidths

The program environment can be set and saved user-specifically
Quick to launch!

With the new type-specific rapid input or user-defined templates, the input of a retaining wall can be considerably accelerated.

- System dimension
- Wall type
- Material setting
- Pre- & Reconstruction states
- Basic load for G and Q
- Anchoring system

Alternatively detailed custom template can be used.
Prepare projects efficiently with user templates

You can make repeating tasks in projects more efficient by supporting them with templates and using them to systematically prepare your work.

Working with templates:
- Storing Files as Templates for Specific Projects
- Transfer of all parameter settings
- Transfer of the list configuration
- Activation: "New from template"
Clear control of analysis and design

Before design and result output, the scope and display of the design can be adjusted

Advantages:

- Individual specification of the scope of results
- Activation of the verification overview
- Independent language setting for program interface and list output
Clear plot output via CAD component

Advantages

- Individual specification of the plot scope
- Overview graphics for system information and wall dimensioning
- Possible additions for measurements and comments
- Export via DXF and DWG

With the CAD tool RTviewer it is possible to plot the results in the desired way or to pass them on to other CAD systems.
Configurable result output

The result list including graphics can be configured and stored project, user and office specific. So you always will get exactly in the report what is important and desired.

advantages
- Clear preview function
- Results output can be edited and filtered interactively
- Wall optimization via "verification overview"
- Verifiable output as short, long and detail list
The best comes at the end!

Representative graphics are always output for design relevant results.

The verification overview supports simple and fast optimization of the retaining wall.

Advantages:

- Verification overview with all relevant design information
- Graphical output of the existing / permissible values
- Specification of material consumption for cost determination
The results can be generated via RTreport as a short or long list for the static analysis list. An output with all details can be provided for the scope of inspection engineering.

advantages

- Simple and efficient assembly of the result output
- Settings per project or user-/office-specific
- All list masks can be extended or reduced later if desired.

Short List: 13 pages

Long List: 54 pages

Detailed List: 173 pp
Filtering and Exporting of Table Content

Table content can also be post-processed with filter and sort functions for a more compact result output, e.g. only utilization rates > 85%.

advantages

▪ Clear table output with description and dimension data
▪ All table contents are explained in a legend on request.
▪ Complex table contents are supplemented by graphics
Versatile options for results output

RTreport offers various target formats such as PDF, XPS, DOCX or RTF for further processing. The results can also be transferred via T2W directly to VCmaster or BauText.

advantages

▪ Direct result configuration in the object tree
▪ Various import options for text, images & XPS documents
▪ Layout management with project-specific field functions
▪ Individual control of page numbering
RTwalls 19 – Consequently optimized for practical use!

RTwalls can be used to solve simple and complex geotechnical problems. Even with complicated wall systems, processing remains simple and output efficient.

Highlights of RTwalls:
- compact input and output
- Meaningful result graphics
- Verifiable results
- Linear and non-linear FEM technology
- Application for all wall types
- material-saving, economical design results!