

# Basic Operating Instructions PLUS-Solutions

FRILO Software GmbH

www.friilo.com

info@friilo.eu

As of 11/12/2020

The screenshot shows the FRILO software interface with several key components highlighted by red arrows and labels:

- Quick Access Toolbar:** Located at the top left, containing icons for Save, Undo, and Redo.
- Menu bar:** Located at the top, with tabs for File, Start, and Results.
- Input area:** A vertical panel on the left containing various input parameters such as Steel, System dimensions, and Roof shape.
- View selection:** A box pointing to the 'View selection' button in the ribbon.
- Input-graphic/Output document:** A box pointing to the central workspace showing a structural model of a portal frame.
- Graphic views:** A box pointing to the 'Graphic views' button in the ribbon.
- Interactive graphic: directly editable values:** A box pointing to numerical values (e.g., 24.4, 12.50) on the structural model.
- Interactive graphic context menu (right mouse button):** A box pointing to a context menu that appears over the model, listing options like 'Change cross-section', 'Add support', and 'Add load'.
- Input area - Input of data - Selection options:** A box pointing to the input area on the left.
- help area / info:** A box pointing to the bottom left corner of the interface.
- Tabs for table display:** A box pointing to tabs at the bottom of the interface, such as 'Supports', 'Standard load cases', and 'Additional Load Cases'.

# Basic operating instructions PLUS-Solutions

This manual describes the general basic operation of the new "PLUS" programs of FRILO.  
The PLUS programs are characterized by a "+" - in character after the program code (eg S9+).

## Contents

User interface	3
Menu bar: Selection area and Input area	3
Hide / Show the left menu bar	4
Interactive graphic area	4
Ribbon bar	4
Wizard	4
Interactive-Graphic – Input options	5
Direct links / Text links	5
Context menu	5
Context menu of single elements	5
Tooltips	5
Entry of values	5
Zoom, move, 3D-rotation	5
Graphics / Document – the view selection	6
Ribbon bar	7
File tab	8
Start tab	9
Results tab	9
Data entry via tables - alternatives	10
Remarks Editor	11

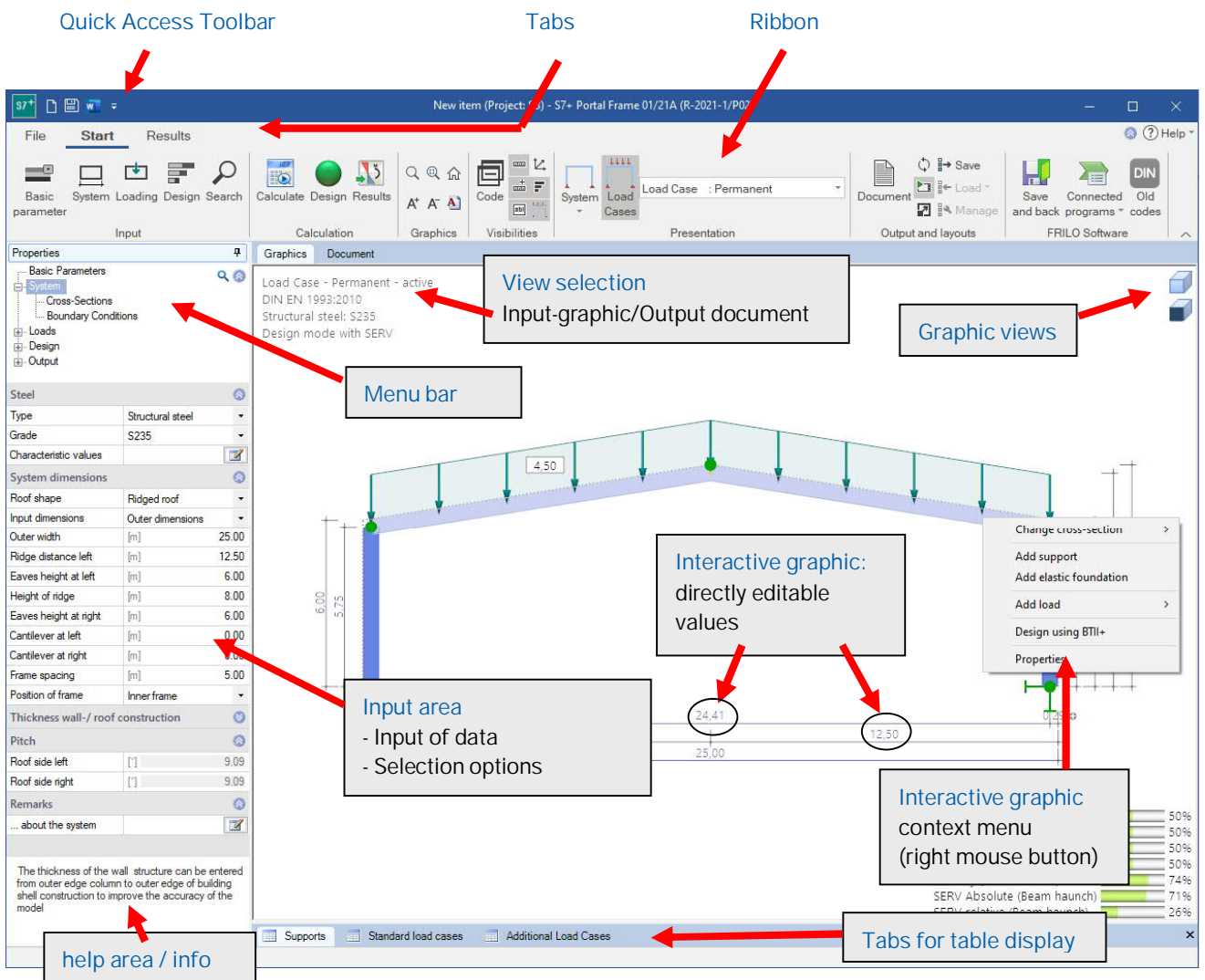
## Basic Documentation – Overview

In addition to the individual program manuals, you will find basic explanations on the operation of the programs on our homepage [www.friilo.com](http://www.friilo.com) ▶ Support ▶ Articles/Information ▶ Basic operating instructions.

## User interface

The central elements of the new PLUS programs are:

- Menu bar and input area (left side beneath Properties): can be faded [in and out](#) using the pin-needle symbol.
- Interactive graphic area
- Wizard
- Ribbon (multi-function toolbar)
- Output document (View selection)



### Menu bar: Selection area and Input area

If the menu is not displayed on the left side (standard setting for newer program versions), it can be displayed via the "Properties" tab.

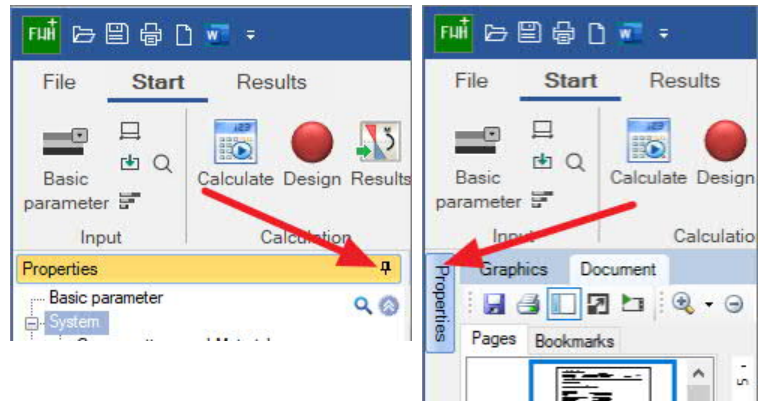
See the following section "[Hide / Show menu bar](#)".

All entries are divided into useful areas in the menu, e.g. Basic Parameters, System, Loads, Design and Output. By clicking on a menu item, the corresponding input areas or the individual input parameters are displayed.

## Hide / Show the left menu bar

If the menu on the left is not displayed and you want it to show, click on the "Properties" tab on the left side. If you want to hide the fixed menu bar again, click on the pin symbol.

FRILO recommends interactive input in the graphics window as the usual input type.



## Interactive graphic area

In addition to the customary definition options in the menu/input area, you can also enter particular values in the graphical user interface and edit them there. The GUI allows you to edit data on the spot by simply clicking onto the corresponding value or by use of the context menu (right mousebutton).

See also [Interactive-Grafic – Input options](#).

## Ribbon bar

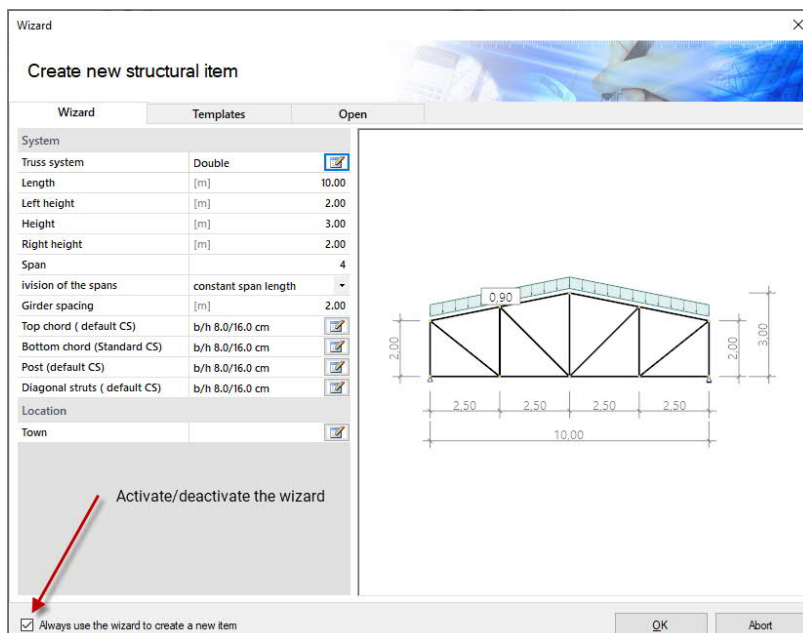
The so-called [Ribbon bar](#) is a graphic operating concept known from modern applications (Microsoft Office / Autocad ...) that connects menu control, toolbars and dialogs with one another.

## Wizard

If the default settings are unchanged, the wizard dialog appears automatically when the program starts.

The use of the wizard is the fastest way for the initial input of an item. Only the most important, basic system data is queried in a compact form. Then you can compute this basic system and afterwards you can set up the details.

How to disable the wizard: option in the wizard window or ▶ File ▶ [Program options](#).



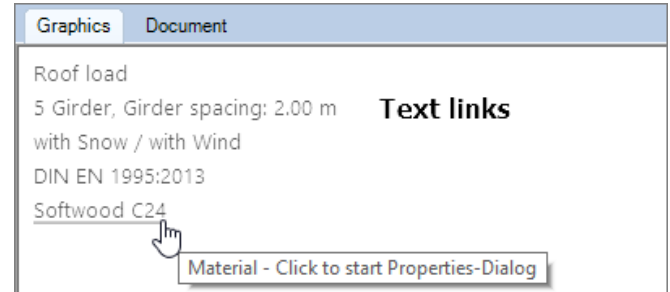
## Interactive-Graphic – Input options

The interactive graphic is the usual type of input with newer program versions.

### Direct links / Text links

For the most important general information, click on the text links. The corresponding dialog is then displayed. These links also provide information about the essential defined parameters - e.g. the selected standard is displayed - the dialog behind it usually has additional parameters.

This gives you an overview of the selected values at a glance.



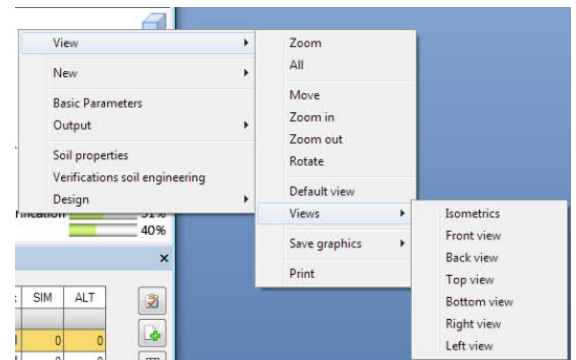
### Context menu

The context-menu (see right) offers a number of useful program-specific auxiliary functions. Click with the right mouse button in the graphics window.

### Context menu of single elements

When moving the mouse over the different elements in the drawing the mouse pointer changes his style and the element will be marked in a different color.

When right-clicking the appropriate context menu appears - or a "Properties" button. With the "Properties" button you can display the corresponding input fields as popup.



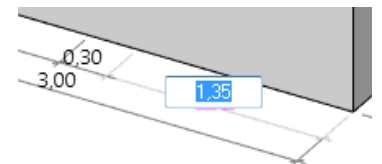
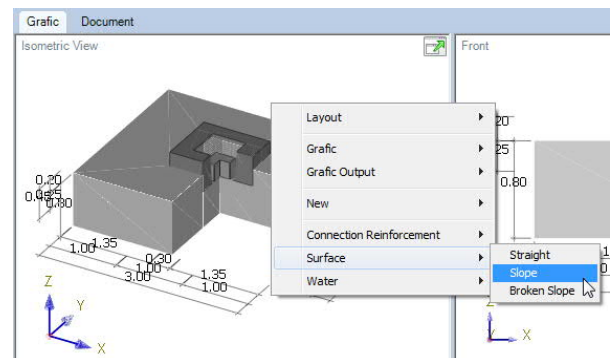
### Tooltips

When holding the mouse cursor over individual graphical elements tooltips will show up.

### Entry of values

Input fields are activated by clicking on the respective value.

Example: The dimension is interactive, that is you can click on a measure and then change the value. The change is also visible in the leftsided input area.



### Zoom, move, 3D-rotation

Use the mouse wheel for zooming in and out.

Move the picture by pressing the right and left mouse button and moving the mouse.

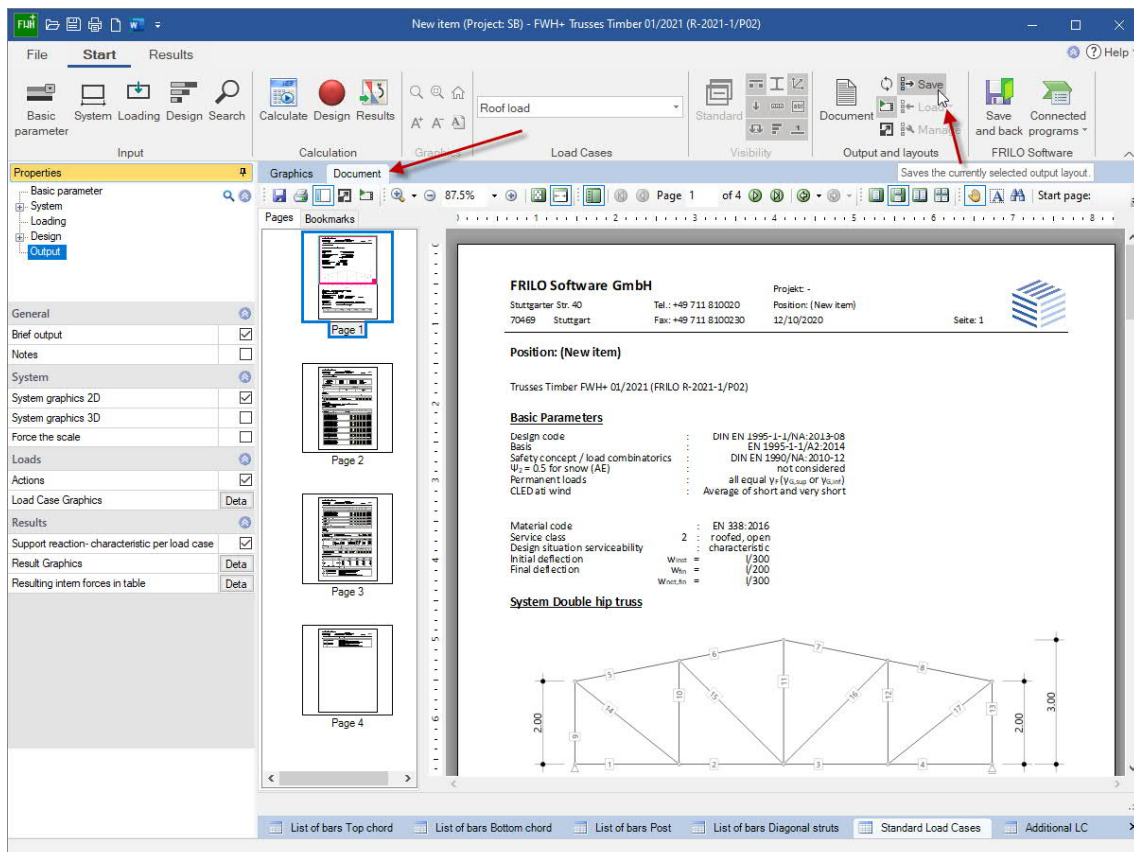
For 3D-rotation hold down the right mouse button and move the mouse.

## Graphics / Document – the view selection

Graphics /Document tab: switch between input mode (graphic window) and the output preview (PDF).

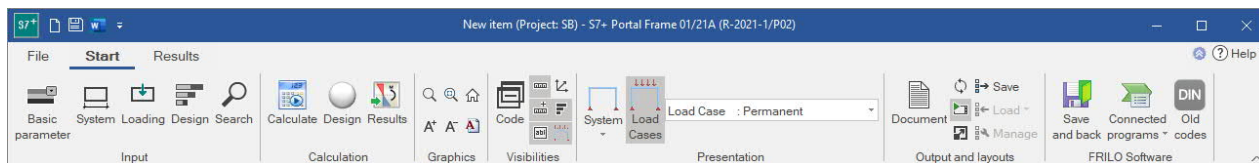
Document If you click on this tab, the recalculation of the system is automatically started and the output document will be displayed (PDF).

The functions of the symbols for saving, printing, navigating in the document, searching PDF etc. can be shown using tooltips. According to the usual functions of PDF display programs such as Acrobat Reader etc.





## Ribbon bar



The multi-function toolbar referred to as ribbon was introduced by Microsoft in the Microsoft Office 2007 version.

It is characterised by an operating concept that combines the control via menu items with buttons of a toolbar.

Instead of menu items or menu bars, tabs such as

- [File](#),
- [Start](#) or
- [Results](#)

are available.

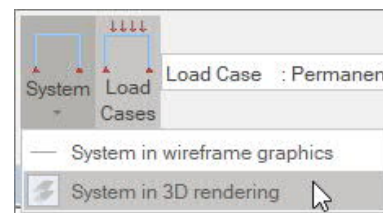
A click on one of these tab options displays the associated function buttons (below), which are arranged in command groups in view of the task to be accomplished.

### Split Buttons

By clicking on the small buttons with the ▼ symbol, you can display additional functions.

*This is a typical control of new Microsoft interfaces, but in FRILO Programs it is only used in a few cases.*

If you click on the upper half of the symbol, the standard function is called up. The lower half of the icon will become a selection list with more functions displayed.

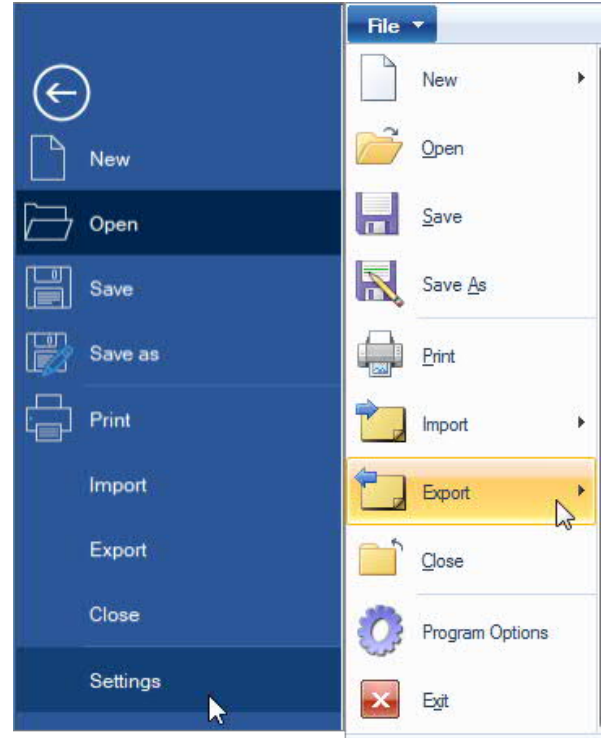


## File tab

Usual standard functions.

*Ill. right: File tabs in newer / former presentation*

<a href="#">New</a>	Create a new item. You usually use this function. already in the <a href="#">FRILO.Control.Center</a> .
<a href="#">Open</a>	Open an existing item. Projects and items of the project folder last used in the <a href="#">FRILO.Control.Center</a> are displayed.
<a href="#">Save</a>	Save the opened item under the existing item name. If the item has not yet been named, "Save as" is carried out.
<a href="#">Save as</a>	Like "Save", but with explicit specification of an item name and - if necessary - selection of a project.
<a href="#">Print</a>	Printout of the output document on the set printer. If the calculation has not yet taken place, you will receive a corresponding message from the program.
<a href="#">Import</a>	Import of e.g. ASCII data sets or Frilo XML.
<a href="#">Export</a>	Export of items as e.g. ASCII data sets, Frilo XML
<a href="#">Close</a>	The item is closed.



## Settings / Program options

Windows Layout	resets the window settings and restores the default state.
New Item	when setting up a new item, a <a href="#">wizard</a> supporting the user in the basic definition is launched by default. You can optionally disable the wizard. You can also disable the automatic computation which is launched each time you enter or edit a value. Disabling is recommended when you are using a slow computer.
Graphics	allows you select a colour setting (light / dark).
Units	allows you to configure/edit the units/measures (mm, cm, m, kg, kN ...) used in the software.



## Start tab

### Input

The available functions correspond to the menu items in the left sided menu bar.

### Search / Magnifying glass

Input fields can be searched for using the magnifying glass symbol or the F3 key.

Example: Where is the input field for the roof load?

Click on the magnifying glass, enter "roof" and all input fields that contain the word "roof" in their designation are listed. A click on one of the listed entries and the corresponding entry is displayed.

### Calculation

You can start the calculation explicitly with "Calculate".

The status of the verification is displayed via a sort of traffic light.

Under "Results" you will find program-dependent functions for the graphic display of the results.

### Design button

The button in the ribbon bar (calculation group) indicates with different traffic light colours whether the verifications have been successful.



- Gray indicates that the system is "not yet calculated".
- Green indicates that all verifications have been successful.
- Yellow indicates that permissible values have been exceeded or constructive problems have occurred.
- Red indicates that the verifications of the bearing capacity are not met.

By moving the mouse cursor over the traffic light button, a tool tip with the most important utilizations is displayed. Clicking on the button displays a window that shows tips concerning exceeded limits and warning notes in the corresponding situations.

### Graphical representation

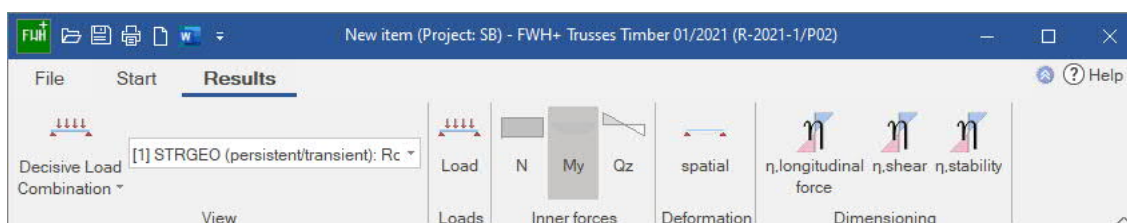
The options for the graphical representations are explained by the tool tips (move the mouse cursor over a button and wait a short time until the tip is displayed).

### Visibility

Various program-dependent options for displaying the system, dimensional chains, loads, etc. If these are not self-explanatory, they are explained in more detail in the relevant manual.

## Results tab

The Results tab displays the functions for displaying the result graphics. You can display the explanation of the individual functions as a tooltip (briefly persisting with the mouse). If separate explanations are necessary, they are described in the manual for the respective program.



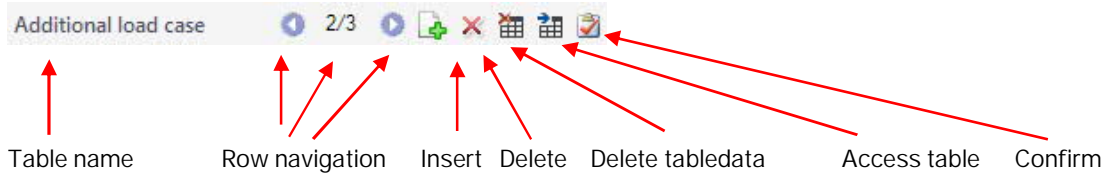
## Data entry via tables - alternatives









For the entry of data represented in tables, the following options are available. The load case table is taken as an example to demonstrate the options.

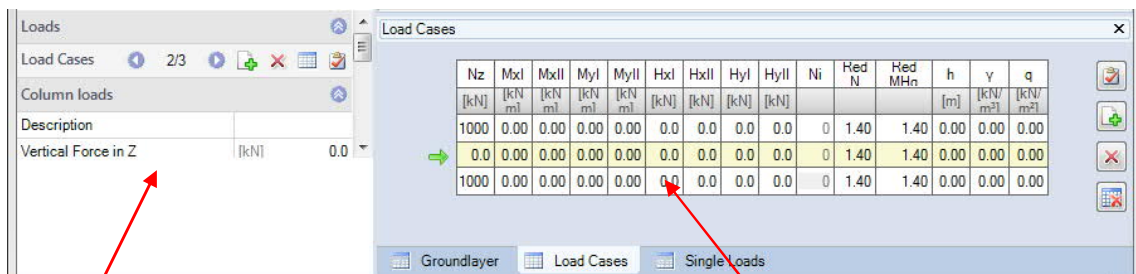
1. Accessing tables via the table button (or the corresponding tab in the graphic window) and entering data directly in the table cells.
2. Entering data in input fields in the FDC area by accessing the individual rows of a table via the table toolbar.

*Note: You can also alternate between the two methods of entering your data.*

The functions of the table toolbar demonstrated by the example of the load case table:



-  indicates the row number: The first number indicates the currently active row, the second one the total number of rows.
-  jumps to the next row upwards: the previous row is enabled and the values are displayed in the corresponding cells.
-  jumps to the next row downwards: the following row is enabled and the values are displayed in the corresponding cells.
-  inserts a new (empty) row below the currently active one.
-  deletes the currently active row.
-  delete the entire table contents.
-  accesses the table, which is displayed in a traditional way and you can enter values directly in the cells.
-  confirms the entered values.



## Remarks Editor

Up to the 2020-1 release, remarks on positions, loads, etc. could only be saved as text.

Starting with Release 2020-2, the Remarks Editor can now also be used to carry out various formatting or insert graphics and tables or special characters.

The remarks are inserted in the output document.

The operation is intuitive and takes place as it is usual in word processing programs.

