



Q-DAS Product Line

Application bars

Basic handling



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1 Application bars - functionality

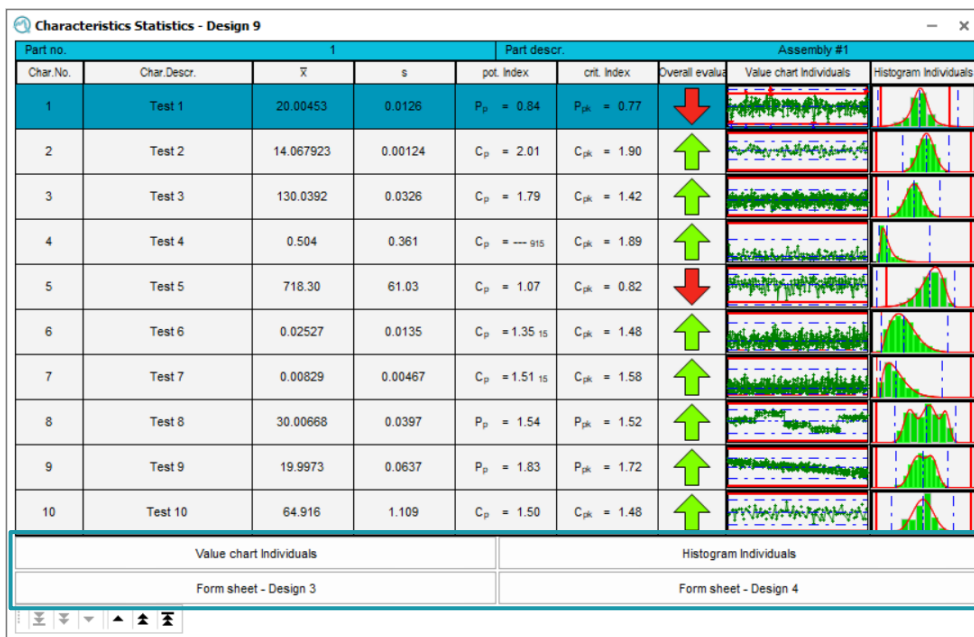
One of the tools for a simplified handling in the Q-DAS applications are the application bars. These are so-called toolbars for easy access within the Q-DAS elements such as graphics, masks or "Summary/input" windows.

The buttons within the application bar are individually configurable. They can be used to call up additional graphics, frequently used functions or to automatically execute a sequence of commands.

2 Preliminary consideration for managing and configuring the application bars

The configuration of the application bar can be called up after an element has been activated. This indicates that the configuration of the application bars is saved for the active element. The saving as well as the distribution follow the inheritance of the configuration management.

The following example shows the graphic "Characteristics Statistics - 9". In the standard delivery, the application bar is configured for the graphic and activated for the user "ConfigurationUser".



The configuration of the application bars is only available to users with the user right "System configuration".

3 Application bars - Handling

Each Q-DAS element such as a graphic, mask or the "Summary/input" window has the buttons for handling the application bars. These can be found for the active element in the "Graphical settings" tab in the ribbon.



The dialogue for configuring the application bar is called up.



The user does not have the right to call up the dialogue for configuring the application bar.



Shows the application bar in the active element. The button is only shown if the configuration already exists.



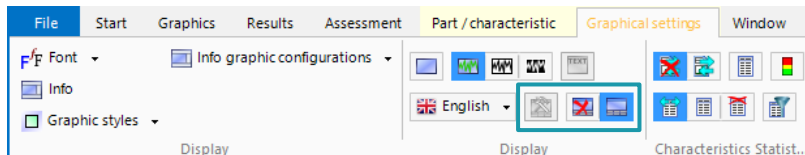
Hides the application bar in the active element. The button is only displayed if the configuration already exists.

Different combinations of buttons are displayed according to the user right and the existing control bar configuration.

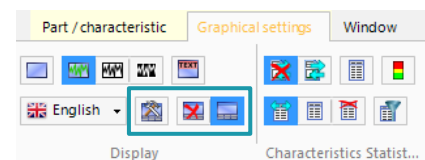
In the standard delivery, an application bar is configured for the "Characteristics Statistics - 9" graphic. The graphic "Characteristics Statistics - 1" does not have a preconfigured application bar in the standard delivery.

Graphical settings of "Characteristics Statistics - 9"

The user "Operator" may show or hide the existing application bar, but not adjust the configuration.

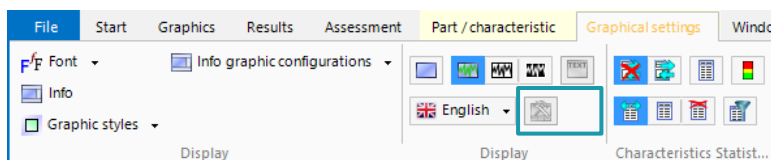


The user "SuperUser" may adjust the configuration.

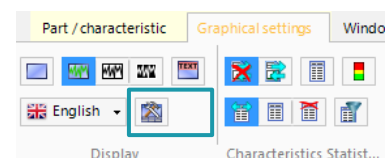


Graphical settings of "Characteristics Statistics - 1"

The user "Operator" is not allowed to create a new configuration. The missing buttons to show or hide the application bar are an indication of the missing configuration.



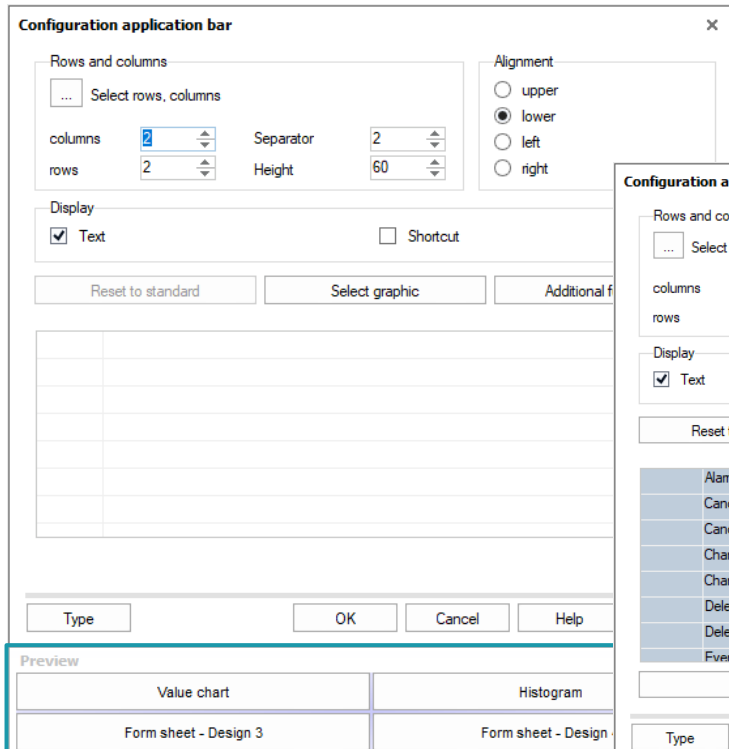
The user "SuperUser" may create the configuration of the application bar.



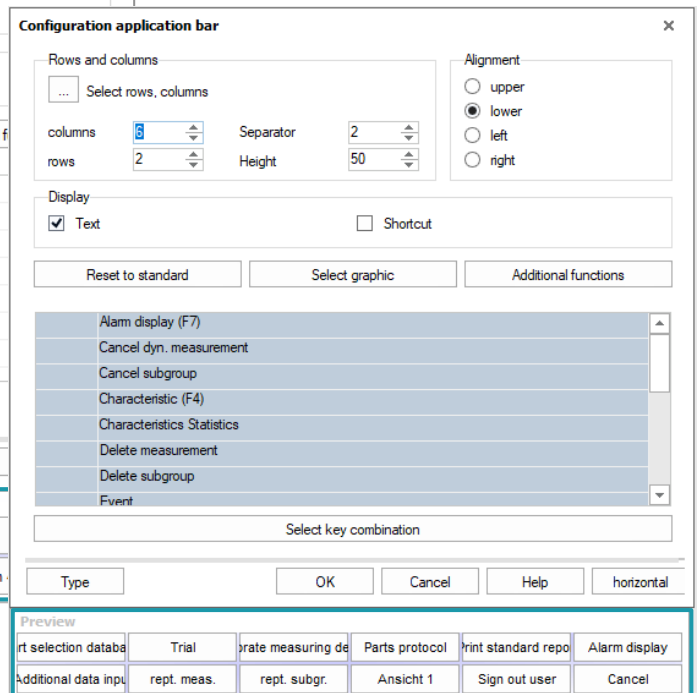
4 Application bars - Configuration

The "Configuration application bar" dialogue is a dynamic dialogue. The functions and options provided in the dialogue depend on the module or product used and the previously activated element.

"Configuration application bar" dialogue for the graphic "Characteristics Statistics - Design 9" in qs-STAT.



"Configuration application bar" dialogue for the "Summary/input 1" window in procella.

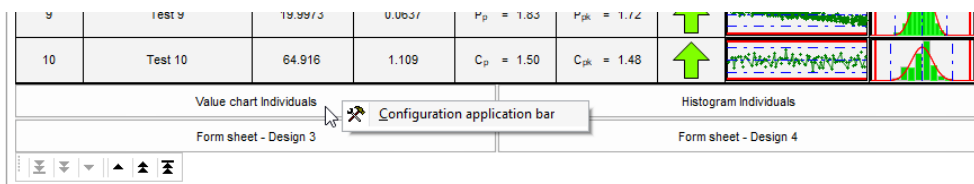


The "Preview" window area is a component of the dialogue. It allows a preview of the summary of the individual configuration even before saving.

The dialogue "Configuration application bar" is called up via the following fixed icon in the "Graphical settings" of the active element.



If a configuration exists and the application bar is displayed, it can also be called up via the context menu of the application bar.





4.1 Display of the application bars

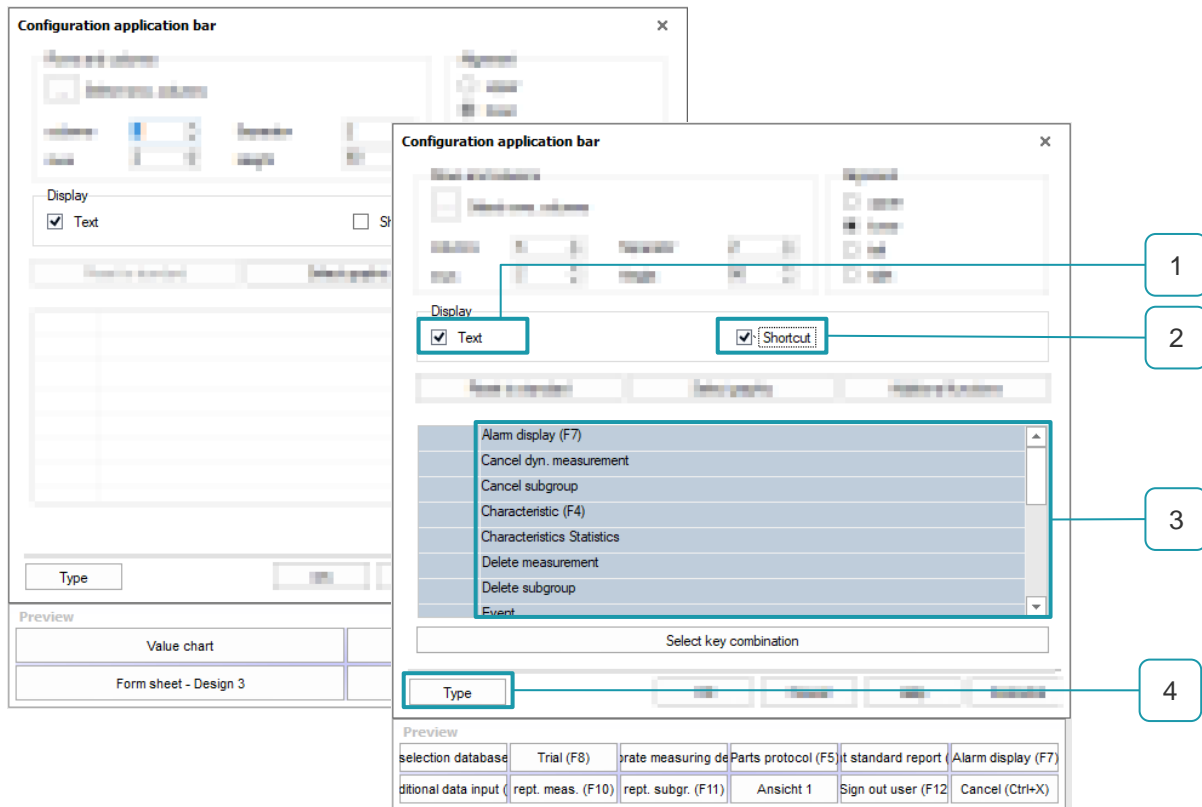
The basic display of the application bar is defined in these window areas.



1	<p>Graphic area "Alignment"</p> <p>These options define the position of the application bar in an element. If the alignment "right" or "left" is selected, the height of the application bar is automatically adjusted to the height of the element. The width of the application bar is defined by the default width of the buttons (2). If the alignment is "upper" or "lower", the width of the application bar is automatically adapted to the width of an element, and the height is defined via the default height of the buttons (2).</p>
2	<p>Graphic area "Number and size of buttons"</p> <p>The number of buttons available in the application bar is defined by the default settings under "Columns" and "Rows". The distance between the individual buttons within the application bar is configured via "Separator". The height or width of the buttons can be configured depending on the selected alignment.</p>
3	<p>Graphic area "Reduce number of buttons"</p> <p>This function provides an assistant for reducing the buttons. When this function is called up, a grid is displayed according to the specifications under "Columns" and "Rows". The grid tiles selected with the mouse are taken over as defaults under "Columns" and "Rows".</p>
4	<p>The configuration of the number and arrangement of buttons within the application bar is done via "Horizontal" and "Vertical". In principle, the buttons are used to swap the settings under "Columns" and "Rows". For example, with one row and three columns, choosing "Vertical" arranges the buttons one below the other. With the selection "Horizontal" they are arranged next to each other.</p>

4.2 Labelling of the buttons

In these window areas, the activation as well as the display of the button labelling is defined. The function designation (3) is automatically assigned to the buttons as the label content.

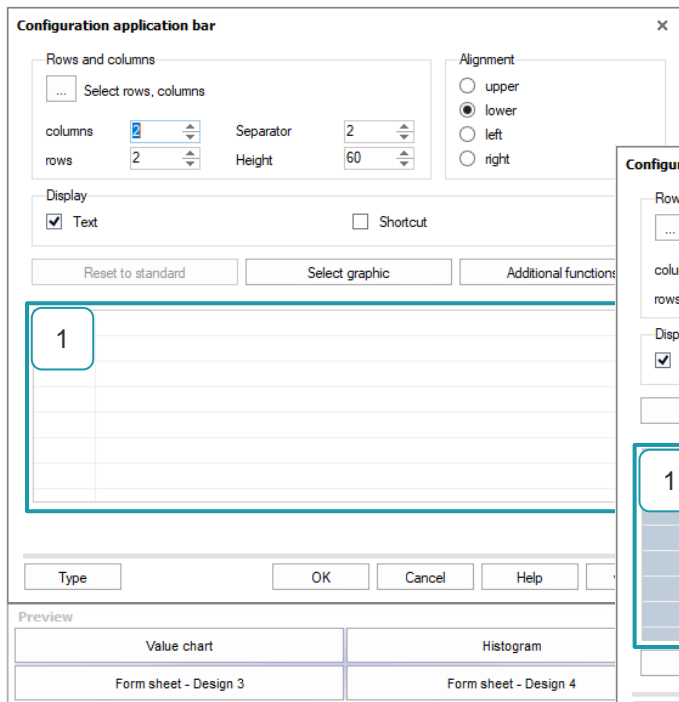


1	<p>"Text"</p> <p>Enabling this option assigns the function designation (3) as label content to the buttons on the application bar.</p>
2	<p>"Shortcut" (extension to the "Text" option)</p> <p>If the option "Text" is active, the additional activation of the option "Shortcut" will show the configured key combination as label content in addition to the function designation.</p> <p>Assigning a key combination to a function to trigger the function via the keyboard is only available in the "Summary/input" elements. The option "Shortcut" has no effect in the elements "Graphics" and "Masks".</p>
4	<p>"Type"</p> <p>Opens the dialogue for adjusting the font, size, and colour.</p>

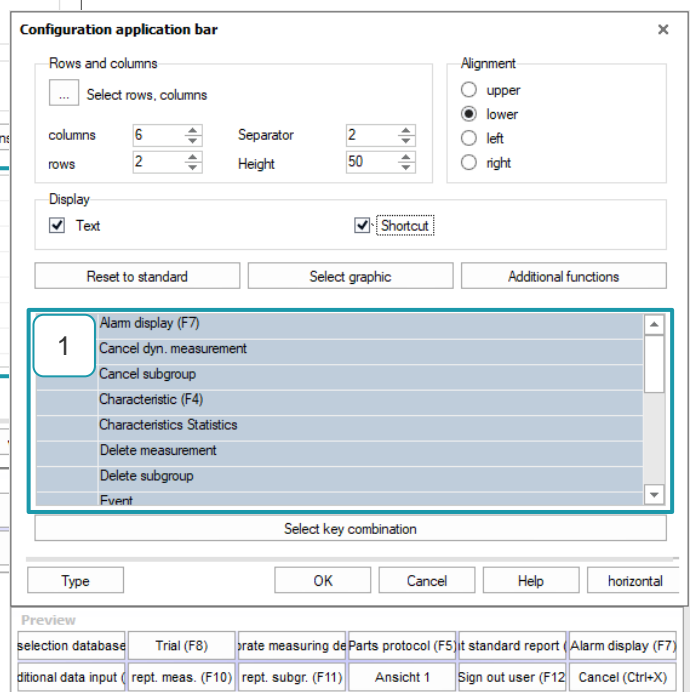
4.3 Button function

In order to assign a function to a button, the required function must be listed in the function list (1). While the elements graphics and masks do not contain any entries in the standard delivery, the function list in the elements "Summary/input" contains the frequently used functions. The function list can be configured individually.

"Configuration application bar" dialogue for the graphic "Characteristics Statistics - Design 9" in qs-STAT.



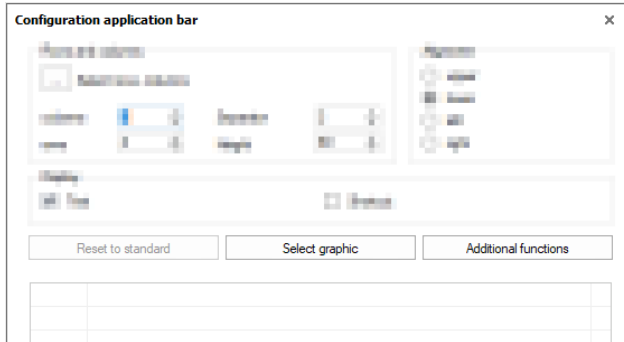
"Configuration application bar" dialogue for the "Summary/input 1" window in procella.



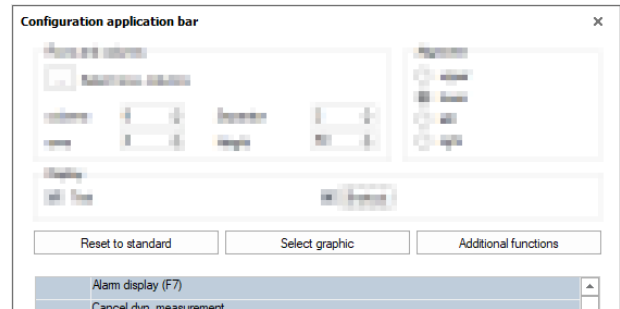
4.3.1 Edit function list

The context menu of the function list and the following buttons are available for editing the function list.

Dialogue "Configuration application bar" for the graphic "Characteristics Statistics - Design 9" in qs-STAT.



“Configuration application bar” dialogue for the "Summary/input 1" window in procella.



“Reset to standard” button

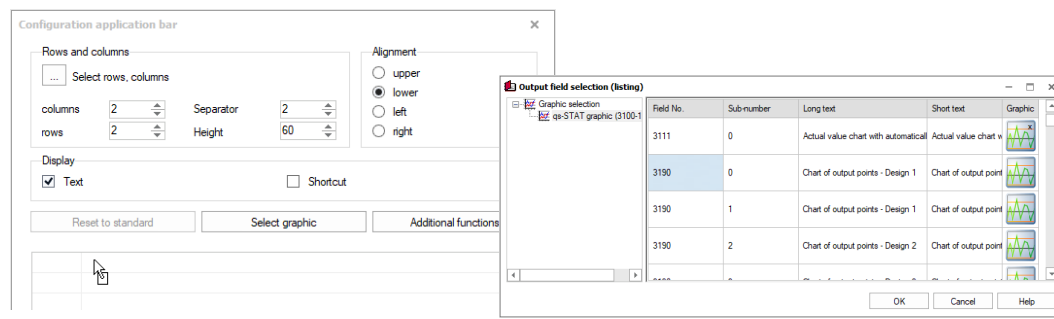
Selecting this button resets the function list to the default defined in the application.

In the standard delivery there are no entries for the element’s graphics and masks. Selecting "Reset to standard" would only lead to deleting the individually configured listing. Therefore, the button in the elements Graphics and Masks is greyed out.

For the elements "Summary/input", the standard delivery contains a listing of the frequently used functions. Selecting "Reset to standard" overwrites the individual listing with the standard listing. The listed standard functions may differ depending on the version used.

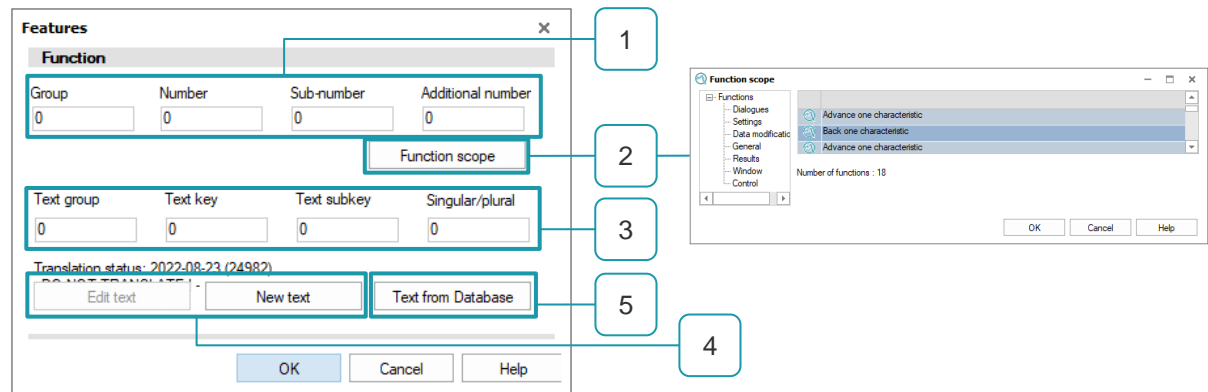
Button "Select graphic"

This button allows you to add functions to call up any qs-STAT graphic. Clicking on the "Select graphic" button opens the "Output point selection (list)" dialogue. Adding is done by drag & drop, i.e., by dragging the required graphic from the "Output point selection (list)" and dropping it into the function list. The designation and the function code combination needed to call up the graphic are added automatically.



“Additional functions” button

Opens the dialogue for adding a function and the function designation.



Various combinations of function codes are available in the Q-DAS applications for executing commands such as changing the database connections, opening a test plan, or to open another application. Each function code combination consists of an instruction block with four key elements. The most common combinations of function codes in the Q-DAS applications are described in a separate document.

Adding a function code combination can be done by manual input (1) or by selecting it from the "Function scope" dialogue (2).

If a function is added from the "Function scope" dialogue, the function designation is also automatically adopted. An individual specification of a function designation can be made by manually entering the text code combination (3), by adding new texts (4) or by selecting an entry from the text database (5).

Context menu of the function list

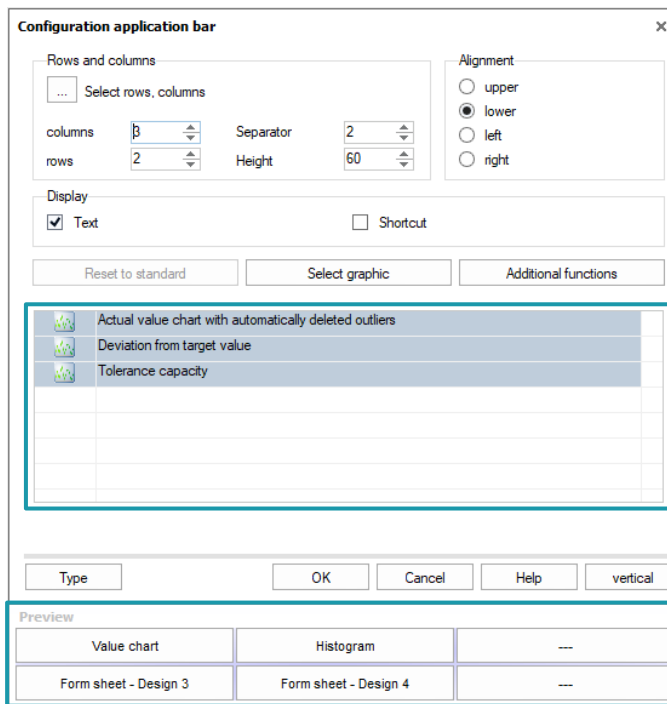
In addition to the possibility of adding new functions and viewing existing ones, the context menu allows functions to be removed from the listing.

Selecting "Delete" removes the previously marked function entries from the list. Multiple selections are made using the [CTRL] or [SHIFT] key and the left mouse button.

4.3.2 Function assignment

Assigning a function to a button or cancelling an assignment is done via the window areas "Function list" (1) and "Preview" (2).

"Configuration application bar" dialogue for the graphic "Characteristics Statistics - Design 9" in qs-STAT.



The application bar from the standard delivery is customised.

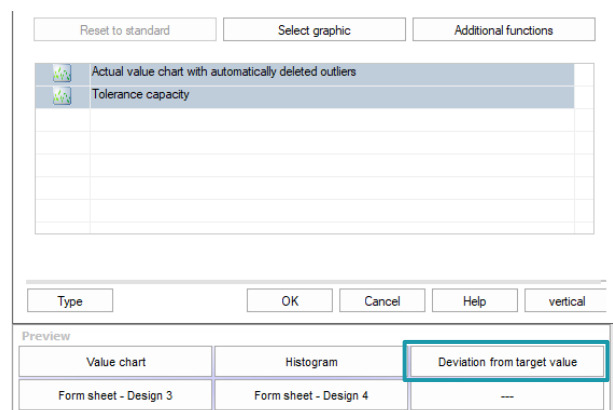
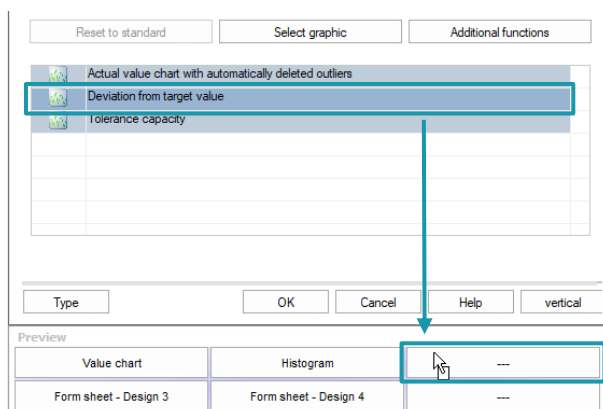
By increasing the number of columns to three, two more buttons are made available.

The function list is extended by the function code combinations for calling up three additional graphics.

A function is assigned to a button by use of drag & drop. This is done by dragging the required function from the list to a free button in the "Preview" window area.

To assign the function code combination for calling up the "Deviation from target value" graphic to a free button.

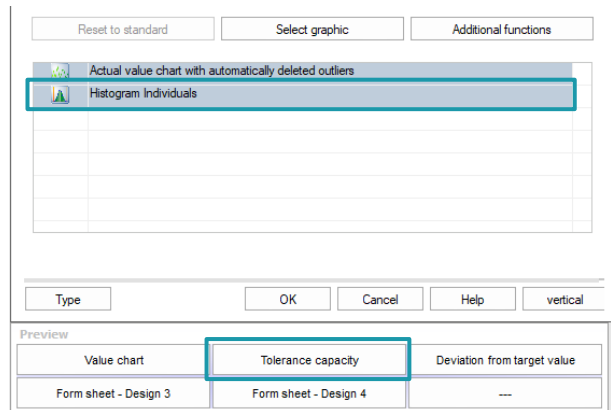
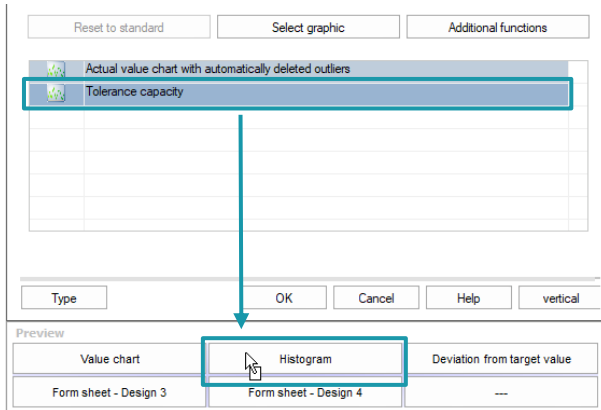
Within an element, a function can only be assigned to one button. If a function is assigned to a button, the function is removed from the function listing.



If a button already has a function assignment, the function code combinations are swapped between the window areas "Function list" and "Preview".

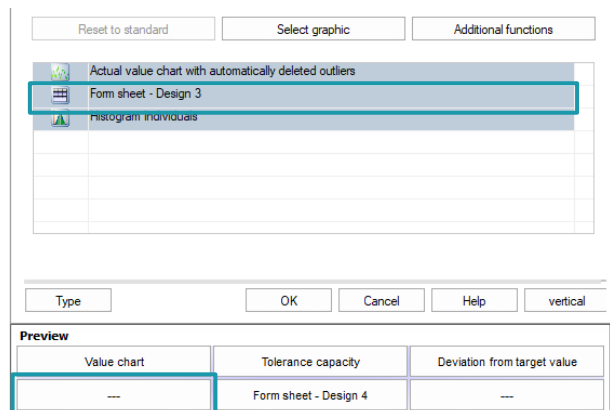
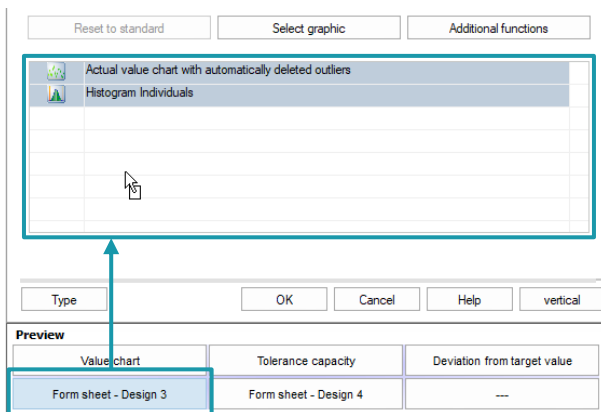
Function code combination for calling up the "Tolerance capacity" graphic is swapped with the button for calling up the "Histogram" graphic.

After the swap, the function for calling up the "Histogram" graphic is available for a new assignment.



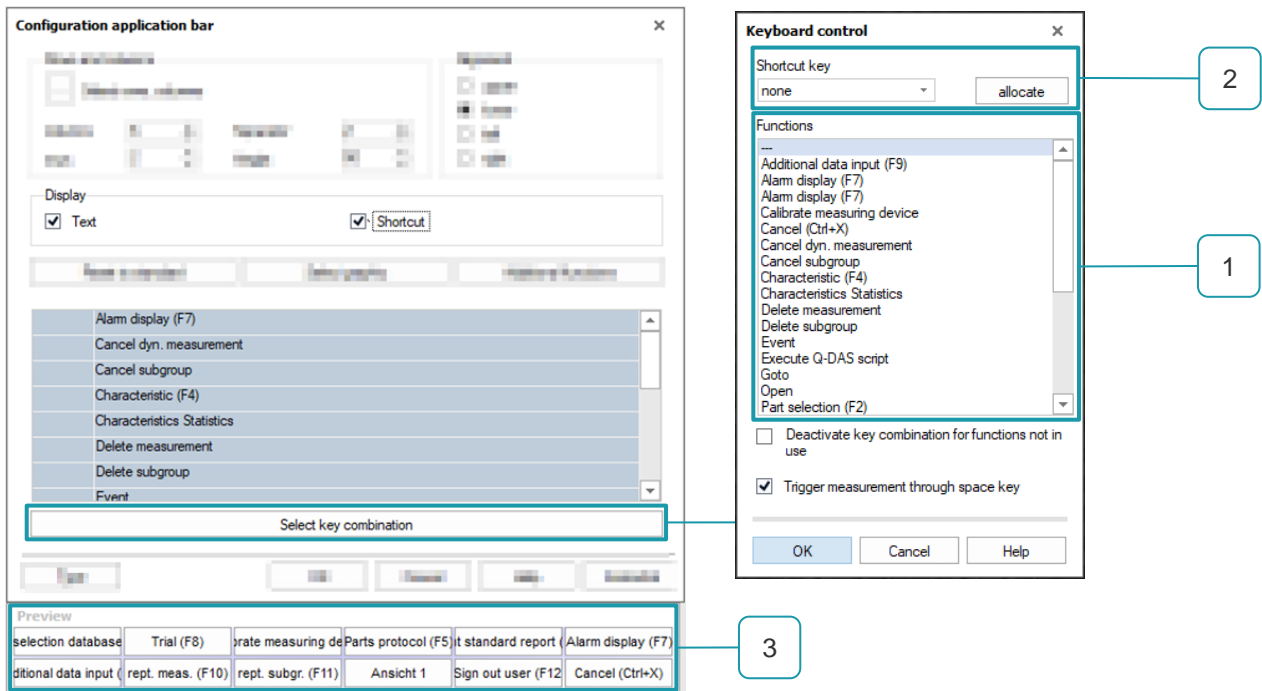
Removing the function assignment of a button is also done by drag & drop. To remove, the content of the required button is dragged from the "Preview" window area and dropped into the "Function listing" window area.

After the assignment has been removed, the function for calling up the graphic "Form sheet - Design 3" as well as the button itself are available for a new assignment.



4.3.3 Assign key combination to function

In the "Summary/input" elements, it is also possible to trigger a function via the keyboard. For this purpose, a shortcut key is assigned to a function.



Clicking on the "Select graphic" button opens the "Keyboard control" dialogue. All functions available in the "Configuration application bar" dialogue are listed (1). The shortcut key can only be used for functions that are assigned to a button, i.e., the functions from the "Preview" window area in the "Configuration application bar" dialogue (3).

To assign a shortcut key to a function, first mark the required function in the list (1) and select the required shortcut key (2). The assignment is completed after clicking on the "Allocate" button (2).

The option "Deactivate key combination for functions not in use" no longer has any meaning, as in the meantime only those functions can be executed which are assigned to a button in the application bar.

Provided that measurement value recording is configured via an Interface, the option "Trigger measurement through space key" enables triggering a measurement via the space key, even if the "Measurement" function is not assigned to a button.

4.4 Saving the configuration of the application bar

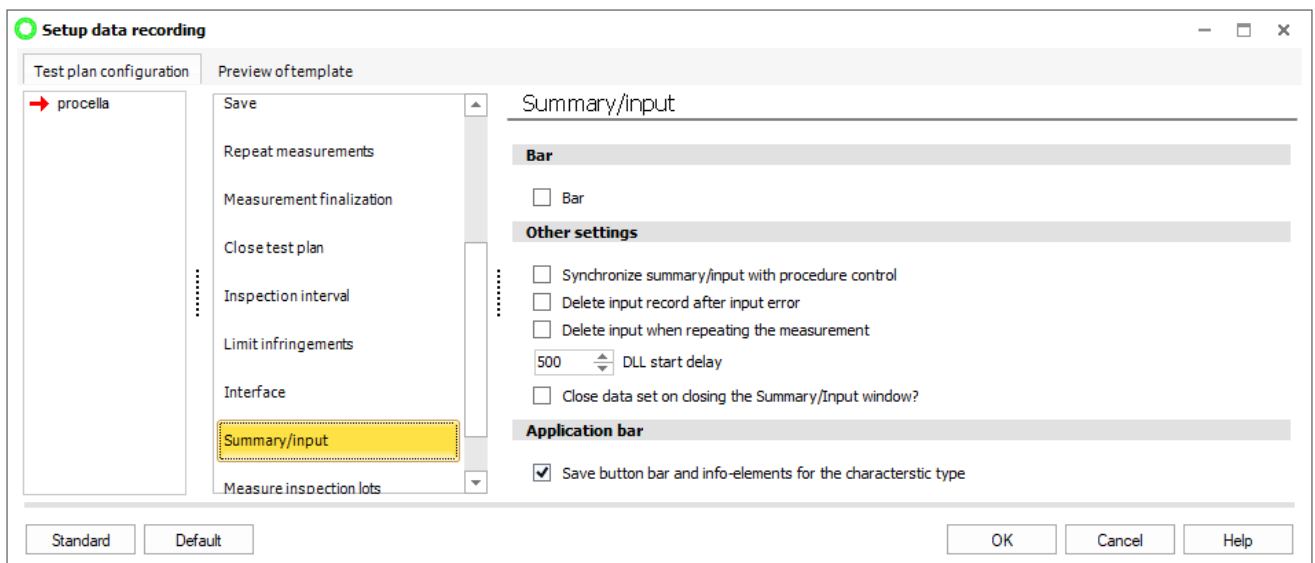
The display, the function listing, the key combinations, and the assignment of the functions to the buttons, in principle all configurations in the "Configuration application bar" dialogue, belong to the active element. To permanently save the control bar configuration, it is necessary to save the element, the qs-STAT graphic or the "Summary/input" window. Saving and distribution follow the inheritance of the configuration management.

4.5 Same application bars for different characteristic types

The option "Save button bar and info-elements for the characteristic type" defines whether the info-bars (top / middle / bottom) shown in the "Summary/input" window and the application bar are saved for each characteristic type. This means that whenever changes are made to the info bars or the application bar, the configuration must be modified and saved for each characteristic type.

When different characteristic types are recorded, but the content of the application bar and the info elements is the same for all characteristics, a more efficient configuration is achieved by deactivating this option.

The option "Save button bar and info-elements for the characteristic type" can be found in the menu group "Summary/input" in the dialogue "Setup data recording".



5 Functions in the "Summary/input" element - Standard

The following describes the frequently used standard functions in the "Summary/input" window of the Q-DAS application procella.

5.1 Functions for loading data sets

Function	Description
Open file	Call up the "Open file" dialogue.
Read from database	Calling up the dialogue "Read from database".
Quick filter	Call up the dialogue for loading the saved quick filters.
Part selection	Call up the "Part selection" dialogue.
Part selection database	Call up the "Part selection database" dialogue.

5.2 Basic handling functions

Function	Description
Save	All changes to the open data set are saved.
Sign out user	Closes the data set and logs off the current user. If there are unsaved changes to the data set, the user receives a corresponding prompt. The "Change user" dialogue is displayed. If no other user is logged in, it is then only possible to exit the Q-DAS application.
Cancel	Closes the data set and closes the Q-DAS application. If changes are not saved to the data set, the user receives a corresponding query.
Evaluation	This function can only be used in the O-QIS procella application. It is used for a preliminary insight into the quality control charts (QRKs) in case of occurring alarms. When executed, the quality control charts are recalculated.

5.3 Functions for changing the view levels in the "Summary/input" windows

To switch view layers manually within a "Summary/input" window, the names of the view layer are listed as function names.

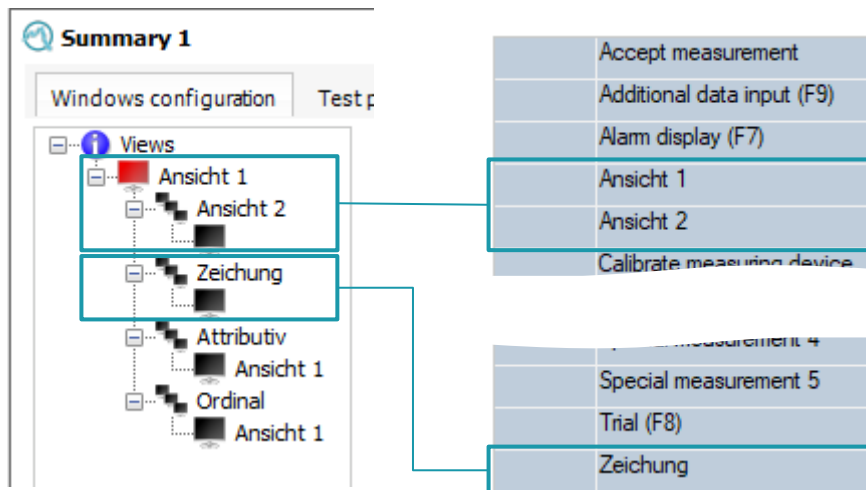
Each "Summary/input" window can consist of two view layers. A main layer and one or more sub-layers. Each view layer with the activated setting "View not depending on data" is listed as a callable function. The function name corresponds to the view name. In the standard delivery, the view designations are in German, e.g., "Ansicht 1".

The listing of functions for changing the view layers within a "Summary/input" window is therefore dynamic.

In the standard delivery, the "Summary/input 1" window contains various preconfigured views. The view layer "Attributive" and "Ordinal" depend on data and are therefore not included in the function list.

Window configuration

Function list



5.4 Functions related to data recording

5.4.1 Basic functions for recording the measured values

In the following, the functions marked with (1) have a reference to the measurement quantity defined in the data recording. Depending on the selected function, this can be a measurement, subgroup, subgroup inspection or subgroup cycle. The execution of the function is unaffected by the measurement direction.

Function	Description
Input help	The operating aid for entering measured values. The dialogue represents a virtual numeric keypad and thus enables the input of the measured value, e.g., with a touchscreen.
Cancel single measured value	Within a measurement, the recording of the current measured value is skipped. In this case, the measured value "0" is recorded for variable characteristics and "0 error" for discrete characteristics. In addition, the automatically recorded measured values are marked with the attribute "255". The procedure control jumps to the next measured value to be recorded.
Characteristics	Calling up the "Characteristic selection" dialogue. The dialogue provides an overview of all parts and characteristics of the loaded data set in a tree structure. Switching to the desired characteristic is done with a double click.
Reset measurement procedure	The stored position of the procedure control is reset to the start of measurement. The input memory is thus deleted.
Measurement	If characteristics are recorded via the RS232 interface, this function is used to trigger measurement value recording.
Cancel measurement (1)	This function skips the values of a measurement that have not been recorded. The function can be executed even if an incomplete measurement is not allowed. The values that have not been recorded remain empty but are marked with the attribute "255". The procedure control jumps to the next measurement to be recorded.
Delete measurement (1)	Deletes permanently all measured values of the last recorded measurement. After deletion, the jump to the previously recorded measurement takes place. This means that it is also possible to delete this measurement.
Accept measurement	This function is a manual measurement acceptance. The "Accept measurement" function can only be used with the "Confirm measurement finalization" option activated. The actual behaviour, e.g., filling up measured values that have not been recorded, is defined via the options of the "Measurement finalization" menu group in the "Setup data recording" dialogue. This function is only to be used for data sets with horizontal measurement procedure, for measurement value recording per test object.



Function	Description
Rept. meas. (1)	To trigger a repeat measurement manually. The behaviour and handling of already recorded measured values is defined in the "Repeat measurements" menu group in the "Setup data recording" dialogue.
Cancel subgroup (1)	This function skips the values of a subgroup that have not been recorded. The unrecorded values remain empty but are marked with the attribute "255". The procedure control jumps to the next subgroup to be recorded.
Delete subgroup (1)	Deletes permanently all measured values of the last recorded subgroup. After deletion, a jump to the previously recorded subgroup takes place. This means that it is also possible to delete this subgroup.
rept. Subgr. (1)	Triggers a new recording of the last subgroup or of a subgroup that has been started. The behaviour and handling for already recorded values is defined in the "Repeat measurements" menu group in the "Setup data recording" dialogue.
Cancel subgroup inspection (1)	This function skips the values of a subgroup inspection that have not been recorded. The function can be executed even if an incomplete measurement is not allowed. The values that have not been recorded remain empty but are marked with the attribute "255". The procedure control jumps to the next subgroup inspection to be recorded.
Delete subgroup inspection (1)	Deletes permanently all measured values of the last recorded subgroup inspection. After deletion, the jump to the previously recorded subgroup inspection takes place. This means that it is also possible to delete this subgroup inspection.
Rep. subgroup inspection (1)	Triggers a new recording of the last subgroup inspection or of a subgroup inspection that has been started. The behaviour and handling for already recorded values is defined in the "Repeat measurements" menu group in the "Setup data recording" dialogue.
Rep. subgroup cycle (1)	Triggers a new recording of the last subgroup cycle or a started subgroup cycle. The behaviour and handling for already recorded values is defined in the "Repeat measurements" menu group in the "Setup data recording" dialogue.



5.4.2 Additional information on the measured value or measurement

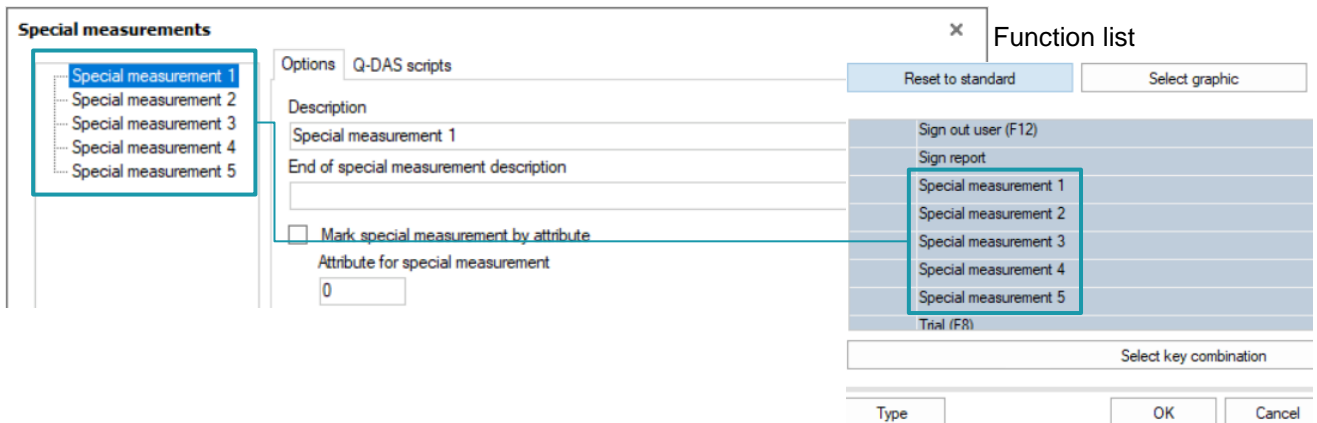
Function	Description
Alarm display	Manual call of the "Alarm display" dialogue.
Event	Manual call of the dialogue for entering events, measures, and causes.
Additional data input	Manual call of the "Record additional data" dialogue. The entered additional data is added to the subsequent recorded values.
Save additional data of last measurement	Manual call the "Record additional data" dialogue. The additional data is added to the last recorded measurement.

5.4.3 Data recording during a special measurement

To start a special measurement manually, it is necessary to assign the required special measurement to the application bar of the "Summary/input" window. Each configured special measurement is listed as a possible function to be called up. The name of the configuration of a special measurement corresponds to the listed function name.

Five configurations of the special measurement are included in the standard delivery. These are created when the "Special measurements" dialogue is called up for the first time.

Dialogue for configuring the special measurements



Function	Description
Repeat special measurement	Triggers a new recording of the last recorded special measurement in the currently loaded data set. The behaviour and handling of the already recorded values is defined in the "Repeat measurements" menu group in the "Setup data recording" dialogue.

5.5 Functions for calling up the Q-DAS graphics

In the standard delivery, few functions for calling up the Q-DAS graphics are preconfigured. However, any Q-DAS graphic can be added to the function list via the "Other functions" button.

Function	Description
Characteristics Statistics	Manual call of the "Characteristics Statistics - Design 1" graphic.
Parts protocol	Manual call of the "Parts protocol" (graphic number 7410/1) graphic.

5.6 Functions related to report creation

With the following functions, reports can be created for the loaded data pool.

Function	Description
Report preview	Screen output according to the selected report template. The report selection dialogue appears. After manually selecting a report, the report view is displayed within the Q-DAS application.
Print report	Printer output according to the selected report template. The report selection dialogue is displayed. After manually selecting a report, it is printed on the standard printer.
Sign report	The report selection dialogue is displayed. After manually selecting a report, the dialogue for signing the report is called up.
Show standard report	Screen output of the report template defined as standard. Under <i>File Configuration Paths</i> , a report template can be defined as the default. If no report template is defined as the default, the report selection dialogue is displayed.
Print standard Report	The report template defined as default is printed on the defined default printer.

5.7 Functions for execute the Q-DAS scripts and external files

Function	Description
Q-DAS script	Execute Q-DAS script Execute the Q-DAS script that is stored in the "External Files" dialogue. According to the configuration, the function name can be replaced by the script designation.
Execute external file	Open a file Enables the opening of an external file or the execution of a command file which is stored in the "External Files" dialogue. According to the configuration, the function name can be replaced by the file designation. <ul style="list-style-type: none">• Open external file The configured file is opened with the Windows linked standard application.• Executing a command file If the use of a Windows script is required, this is to be worked out in a workshop with the Q-DAS project team, for which a fee is charged. Contact e-mail: info.qdas.mi@hexagon.com.