

User Manual

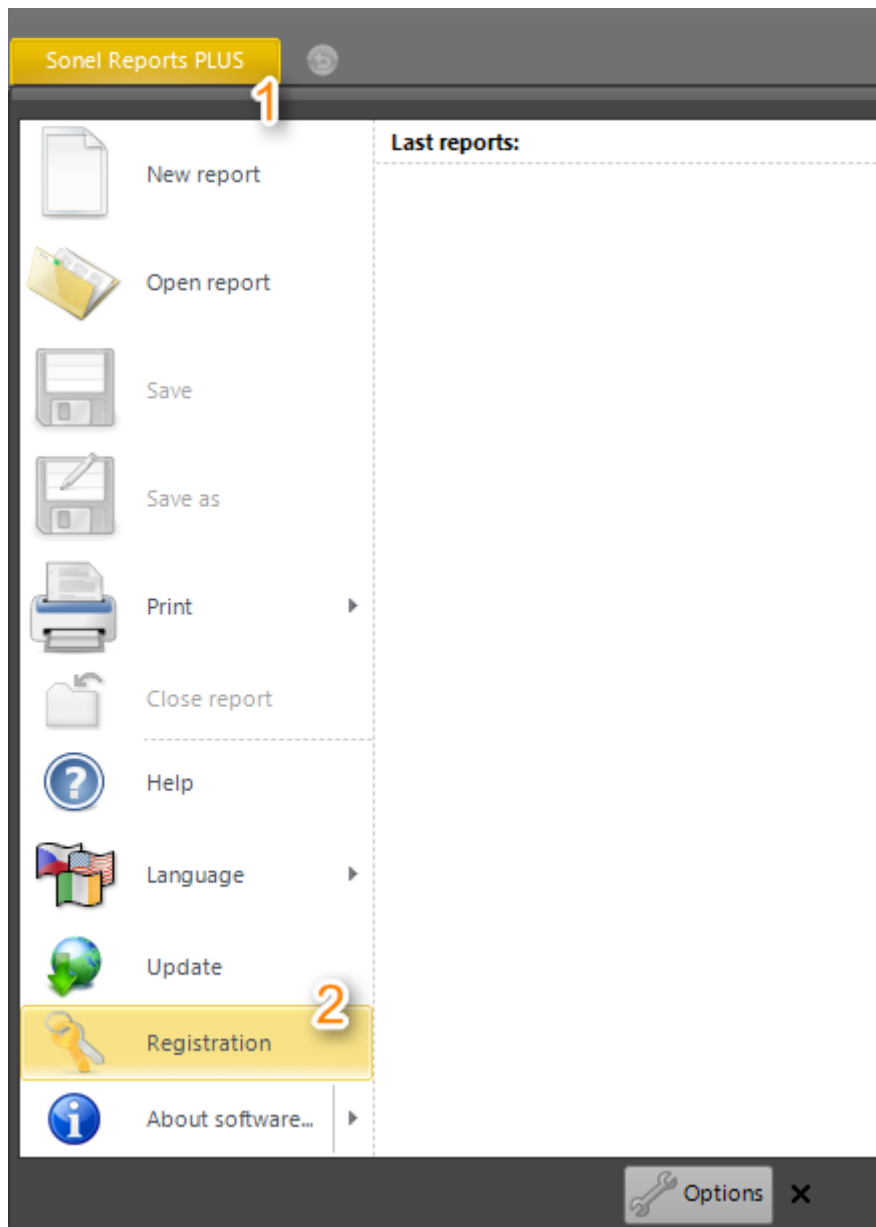


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1. SOFTWARE REGISTRATION

Run software from CD. Select from main toolbar (1) Sonel Reports PLUS; (2) Register

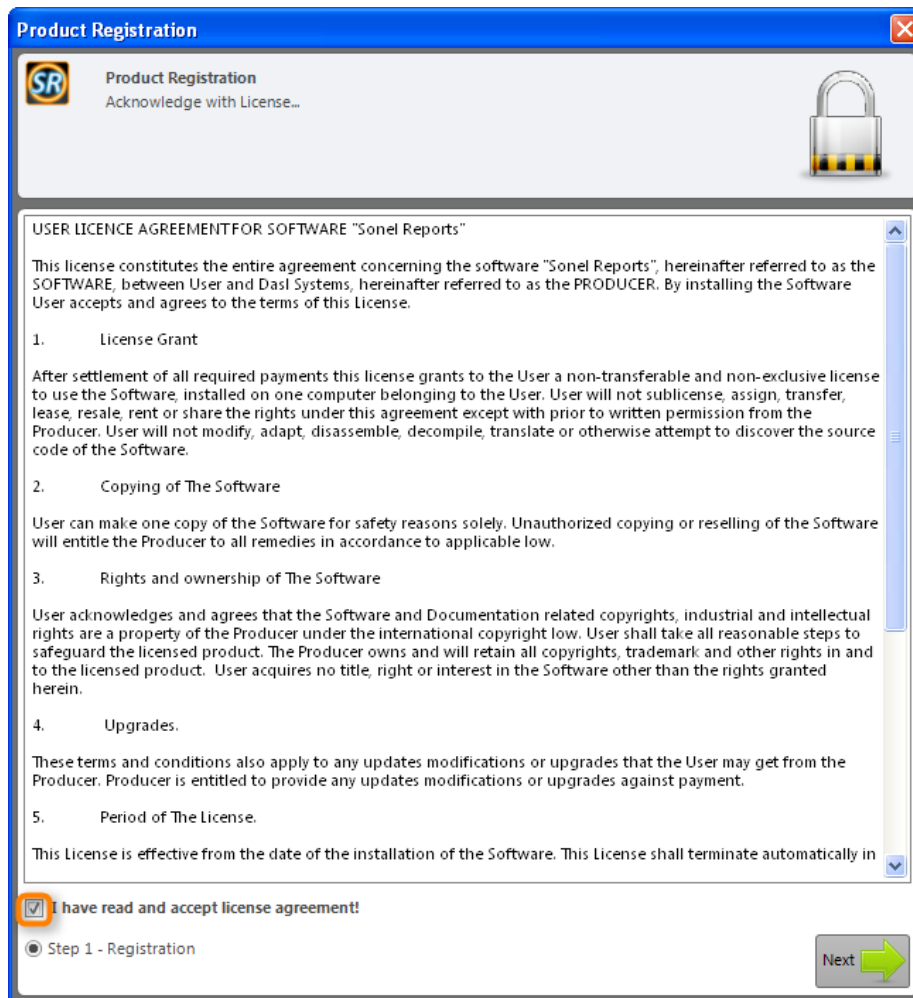


In case the software has been installed on operating system, with developed functions (e.g. MS Windows Vista, MS Windows 7) software should be started up from administrator level, otherwise you will get below comment:



Following above comment please click right button on software shortcut and select from menu „Start as Administrator“. If user does not have proper authorities, please contact administrator of operating system.

Afterwards follow the steps of registration process.



Enter product key and click **Next**

Product Registration

Product Registration
Enter product key received together with the software on registration card

Give product key

091

Entered key enables to register following software:

SR
SonelReportsPlus

Warning!!!
This registration enables use of the software
only on this work station!

Back Next

Enter company details and click **Next**

Product Registration

Product Registration
Fill in the blank field your company name and address.
IMPORTANT! This data will be printed out on final reports,
so please fill in this data carefully.

Name: DASL Systems
Entered name will be also information about executor of reports!

Address: Wadowicka 8a

City: Kraków **Code:** 30-415

Country: Poland

E-mail: biuro@dasl.pl
It is necessary to inform e-mail address if you want to register by Internet!

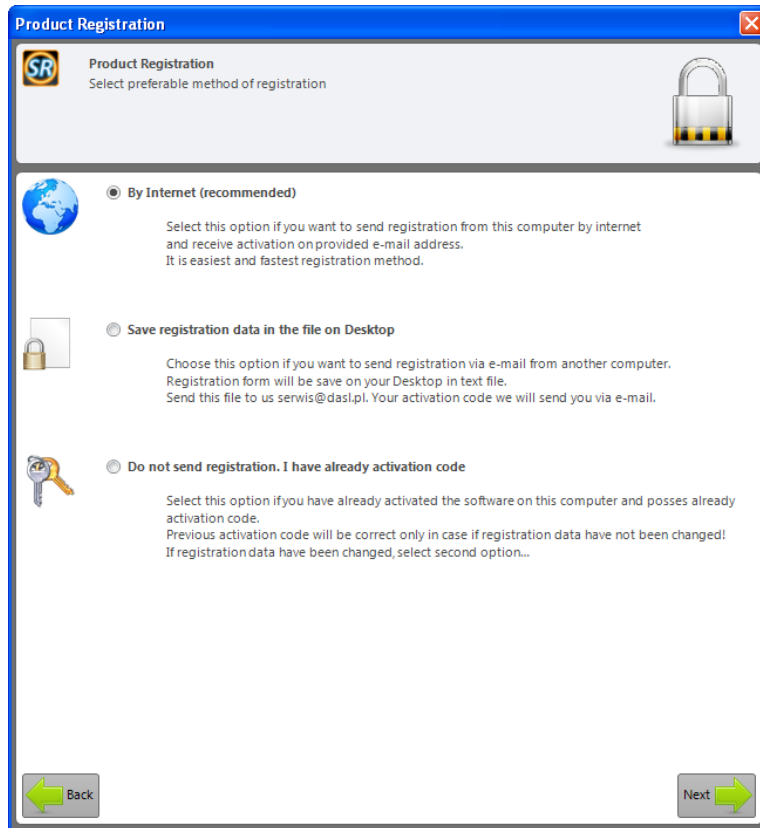
Fax:

Phone:

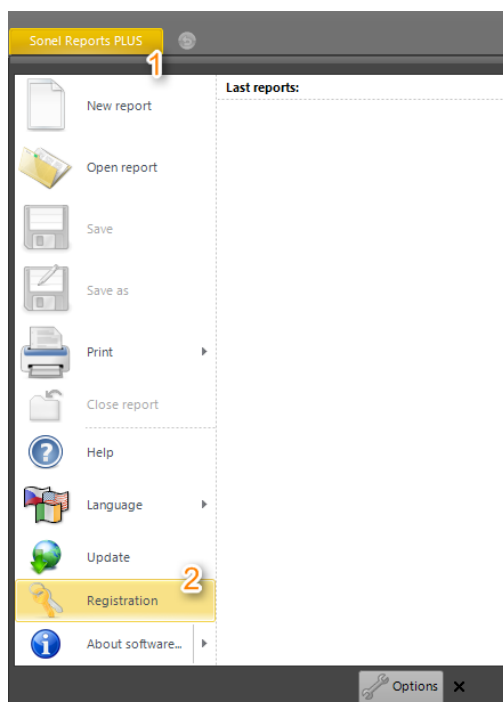
☒ I accept to receive information about updates.
☒ I accept to receive commercial information

Back Next

Select the way of registration and click **Next**.



Within 2 working days you will receive activation key. After receiving activation key start the software and go through steps (1), (2), (3), as per below:



USER LICENCE AGREEMENT FOR SOFTWARE "Sonel PAT™"

This license constitutes the entire agreement concerning the software Sonel PAT™, hereinafter referred to as the SOFTWARE, between User and Dasl Systems, hereinafter referred to as the PRODUCER. By installing the Software User accepts and agrees to the terms of this License.

- 1. License Grant**
After settlement of all required payments this license grants to the User a non-transferable and non-exclusive license to use the Software, installed on one computer belonging to the User. User will not sublicense, assign, transfer, lease, resale, rent or share the rights under this agreement except with prior to written permission from the Producer. User will not modify, adapt, disassemble, decompile, translate or otherwise attempt to discover the source code of the Software.
- 2. Copying of The Software**
User can make one copy of the Software for safety reasons solely. Unauthorized copying or reselling of the Software will entitle the Producer to all remedies in accordance to applicable law.
- 3. Rights and ownership of The Software**
User acknowledges and agrees that the Software and Documentation related copyrights, industrial and intellectual rights are a property of the Producer under the international copyright law. User shall take all reasonable steps to safeguard the licensed product. The Producer owns and will retain all copyrights, trademark and other rights in and to the licensed product. User acquires no title, right or interest in the Software other than the rights granted herein.
- 4. Upgrades.**
These terms and conditions also apply to any updates modifications or upgrades that the User may get from the Producer. Producer is entitled to provide any updates modifications or upgrades against payment.

☒ I have read and accept license agreement!

☐ Step 1 - Registration

☒ Step 2 - Activation

Next 

Enter activation key and click **Next**

Product Registration

 **Product Registration**
Write in activation number, which you received by e-mail or fax.
Afterwards click "Next".



Name:

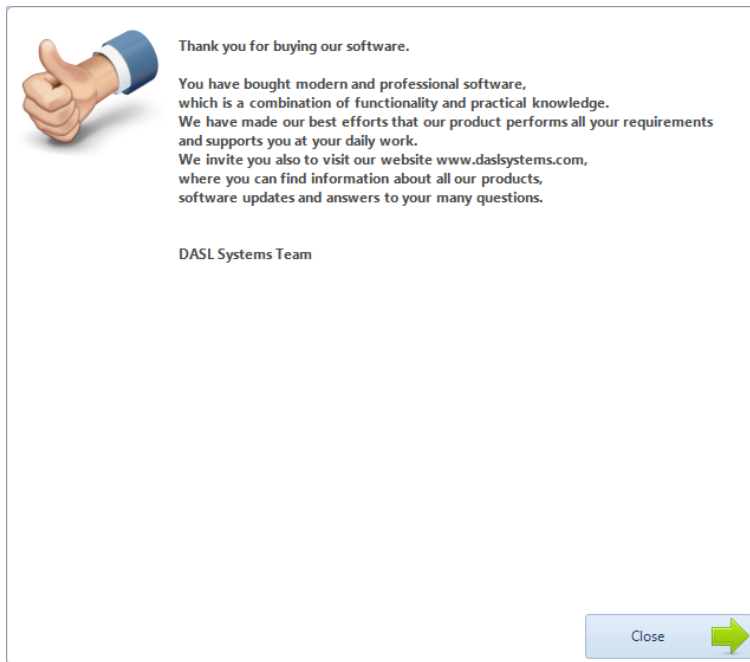
Product key: 

Activated software:

 SonelReportsPlus

Activation key: 

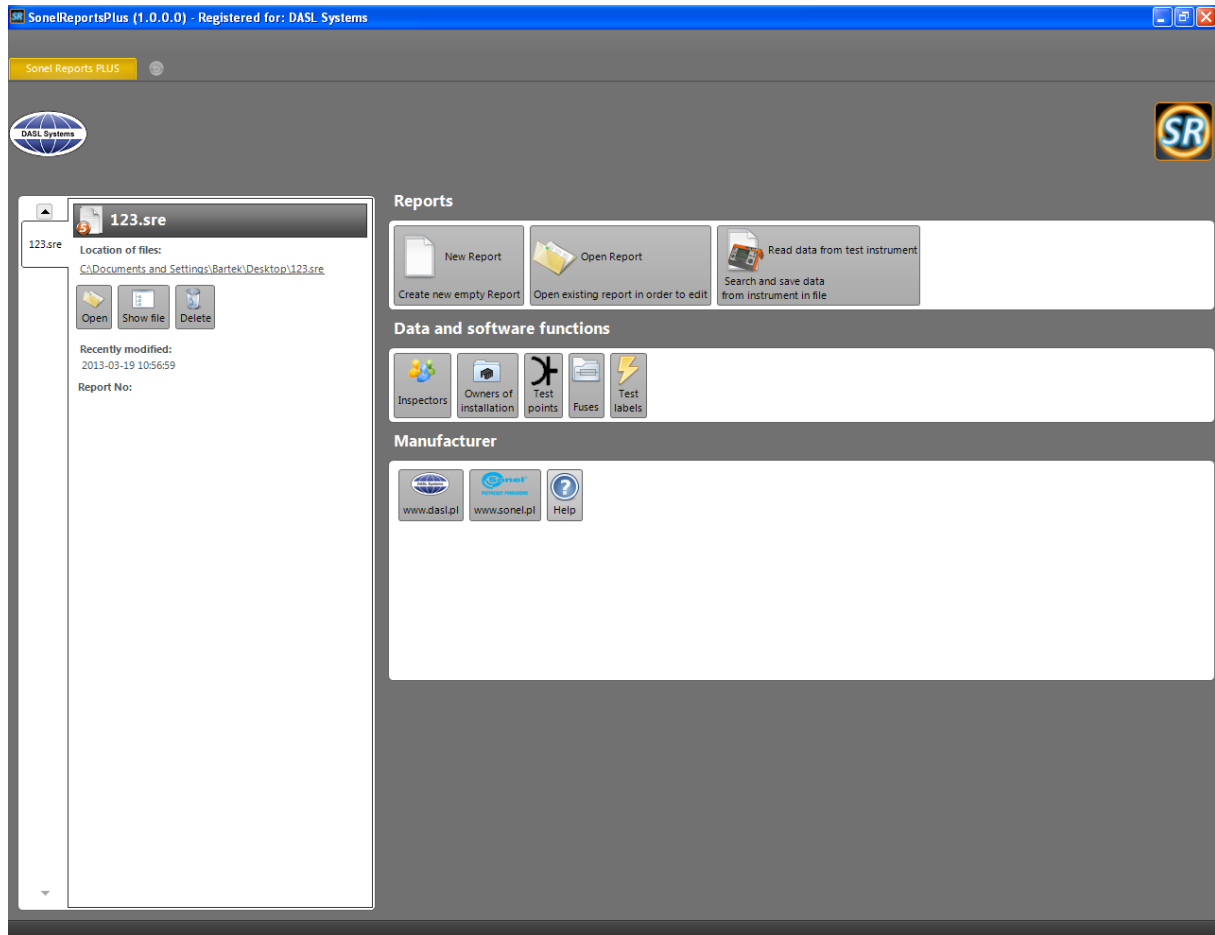
  

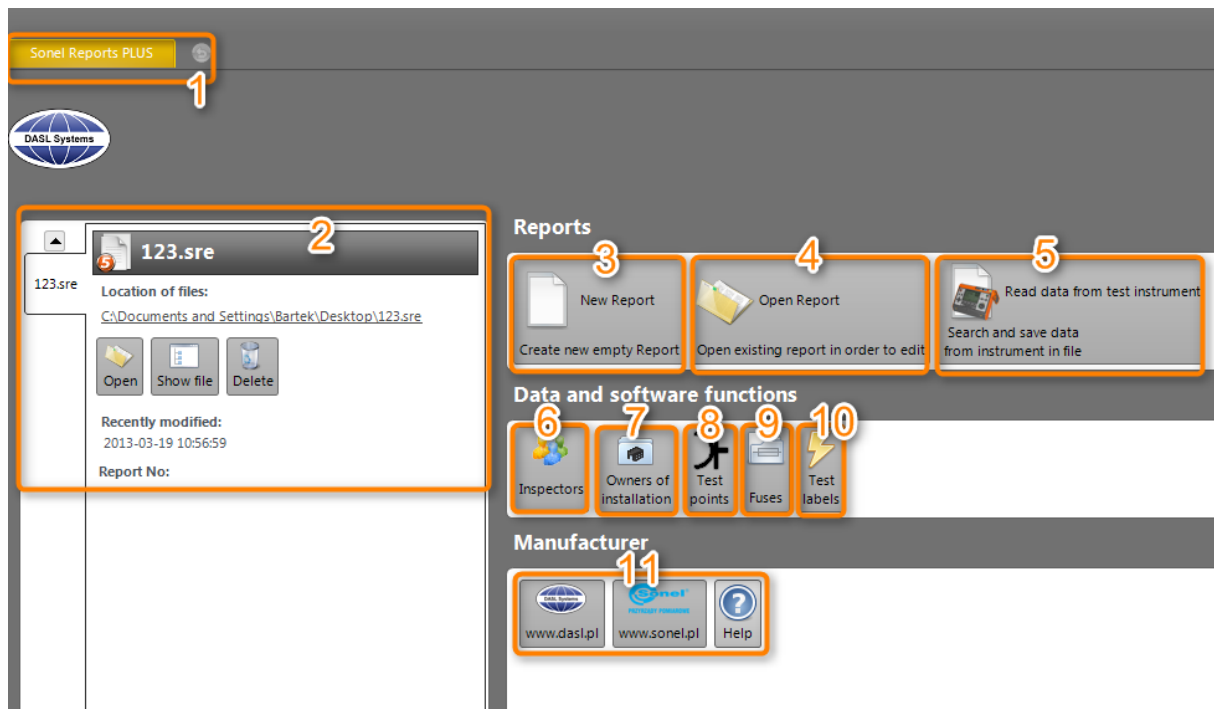


Registration completed successfully!

2. Main window

After software start up main window opens:





1. Main Menu (2.1)
2. History of recently opened reports (2.2)
3. Creation of new report (2.3)
4. Opening of report (2.4)
5. Data transfer from test instrument (4.2)
6. Inspectors (2.5)
7. Installations (objects) (2.6)
8. Test points (2.7)
9. Fuses (2.8)
10. Test labels (2.9)
11. Information about software vendor and help

2.1. Main Menu



1. Creation of new report (2.3)

2. Opening of report (2.4)

3. Saving changes

Saving changes implemented in currently opened report.

4. Saving report under new name or in new location

Saving of opened report in new location and under new name.

5. Printing of report (3.1.1)

6. Closing of currently opened report

7. Help

8. Software language

9. Software updates

Following, newer versions of Sonel Reports PLUS are free of charge and could be downloaded from software vendor website. It is recommended to use always latest software version.

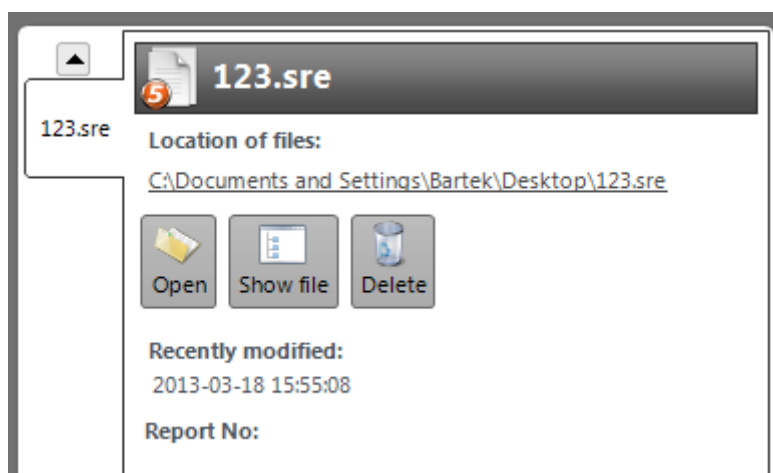
10. Software registration (1)

11. Information about software

12. Software options (4.1)

13. Software closing

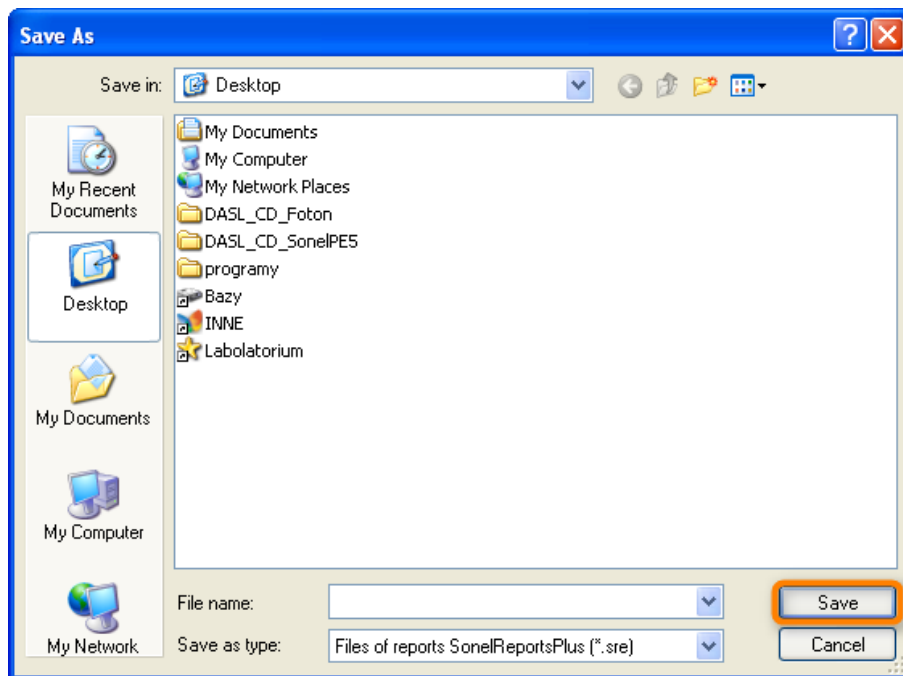
2.2. History of recently opened reports



This windows displays recently opened reports. **Open** - report, **Show file** opens location of saved report. **Delete** – report from the list and PC memory. Change of report's location will cause that report will not be available on the list of recently opened reports.

2.3. Creation of new report

This function creates new report. After clicking on this function system window opens, where user select location to save report.

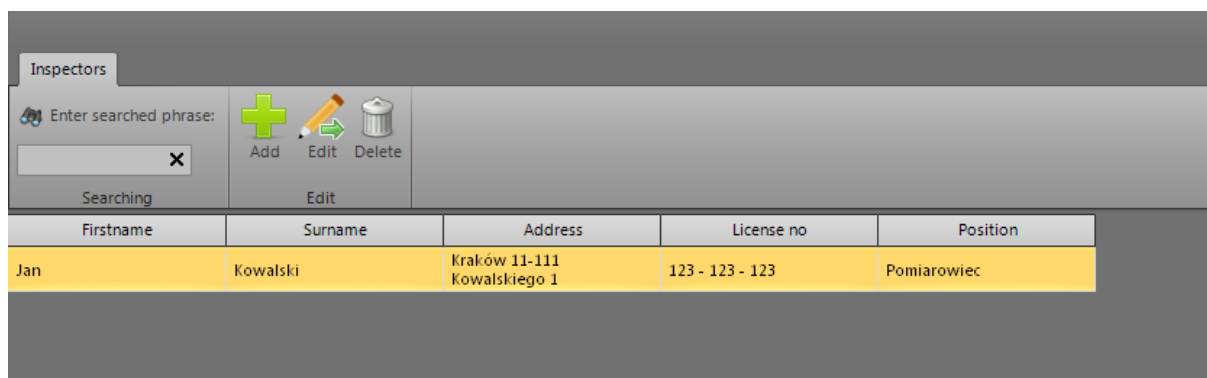


Saved report will be automatically opened (details in chapter 3)

2.4. Opening of report

This option enables to open saved reports. Window opens where user select location of saved reports to be opened (chapter 3).

2.4. Inspectors



In this window user creates data base of inspectors. Function „searching“ enables quick finding of proper inspector. Function Edit enables to **Add**, **Edit** or **Delete** inspectors. Selecting Add or Edit opens the window where user enters information about inspectors.

Inspector ✕

Enter data of new inspector

First name:

Surname:

Address:

License no

Default position or function:

✕ Cancel
✚ Add person

2.6. Installations (objects)

Owner of installation

Searched phrase: Search

✚ Add
✎ Edit
🗑 Delete
✚ Add
✎ Edit
🗑 Delete

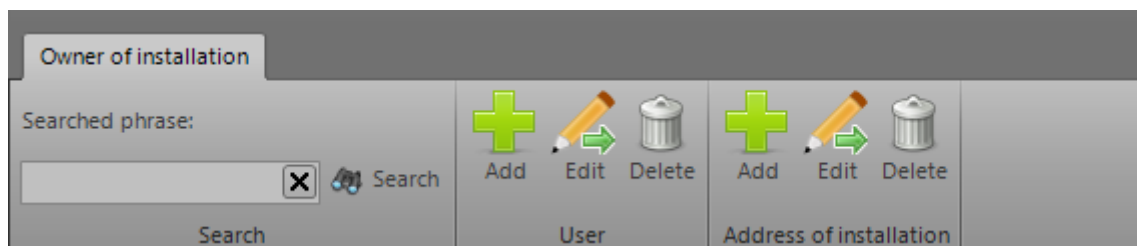
Search User Address of installation

Name	Abbreviation	Address	City and zip code	Phone	Fax	e-mail	Website WWW	Additional information	TAX ID...
DASL	1	Wadowicka	30-415 Kraków	123456456					123

Customers

Name	Abbreviation	Address	City and zip code	Phone	Fax	e-mail	Website WWW	Additional information
DASL								

Objects



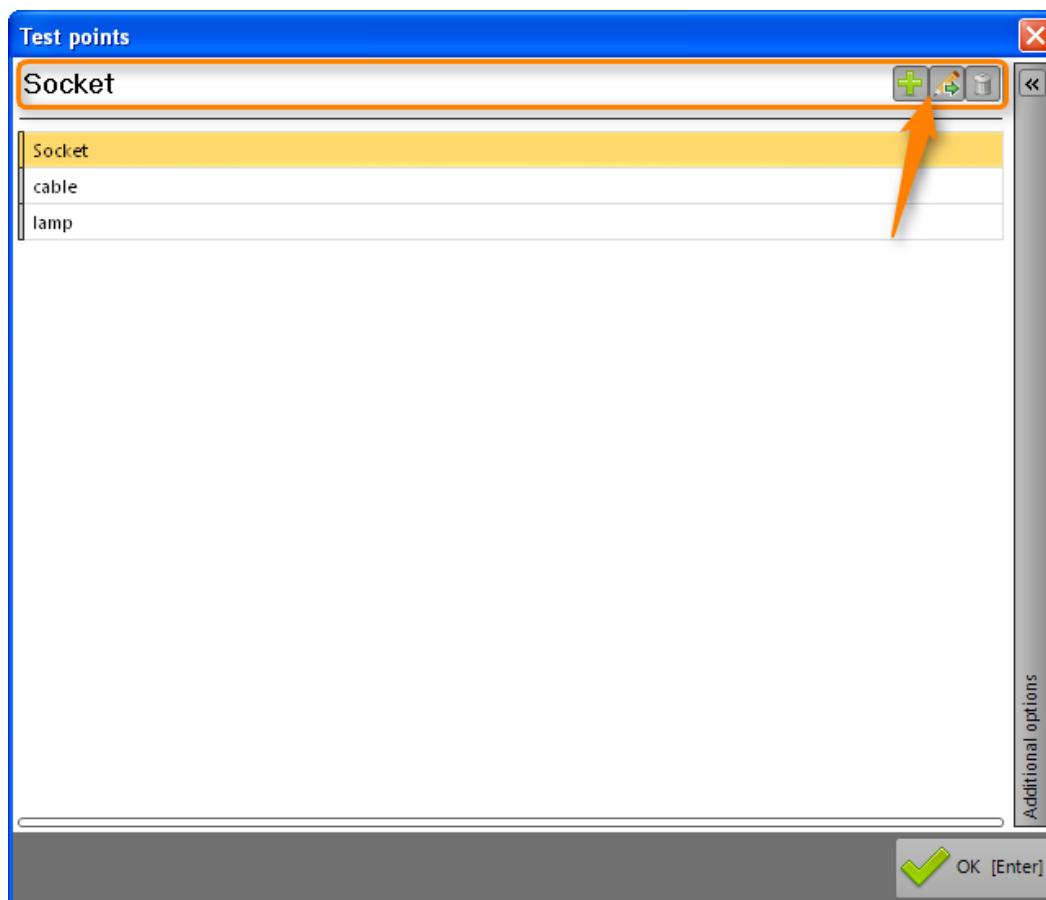
This option enables to create data base of all installations (objects) where measurements have been done so far. Thanks to this option, in case of re-test, user can select installation or objects from the list, instead of writing again manually.

Function **Search** enables to find proper object or installation. **User** enables adding (delete, edit) new user of installations (Customers) and function **Address of installation** enables to add (delete, edit) addresses of installations.

REMARKS!!!

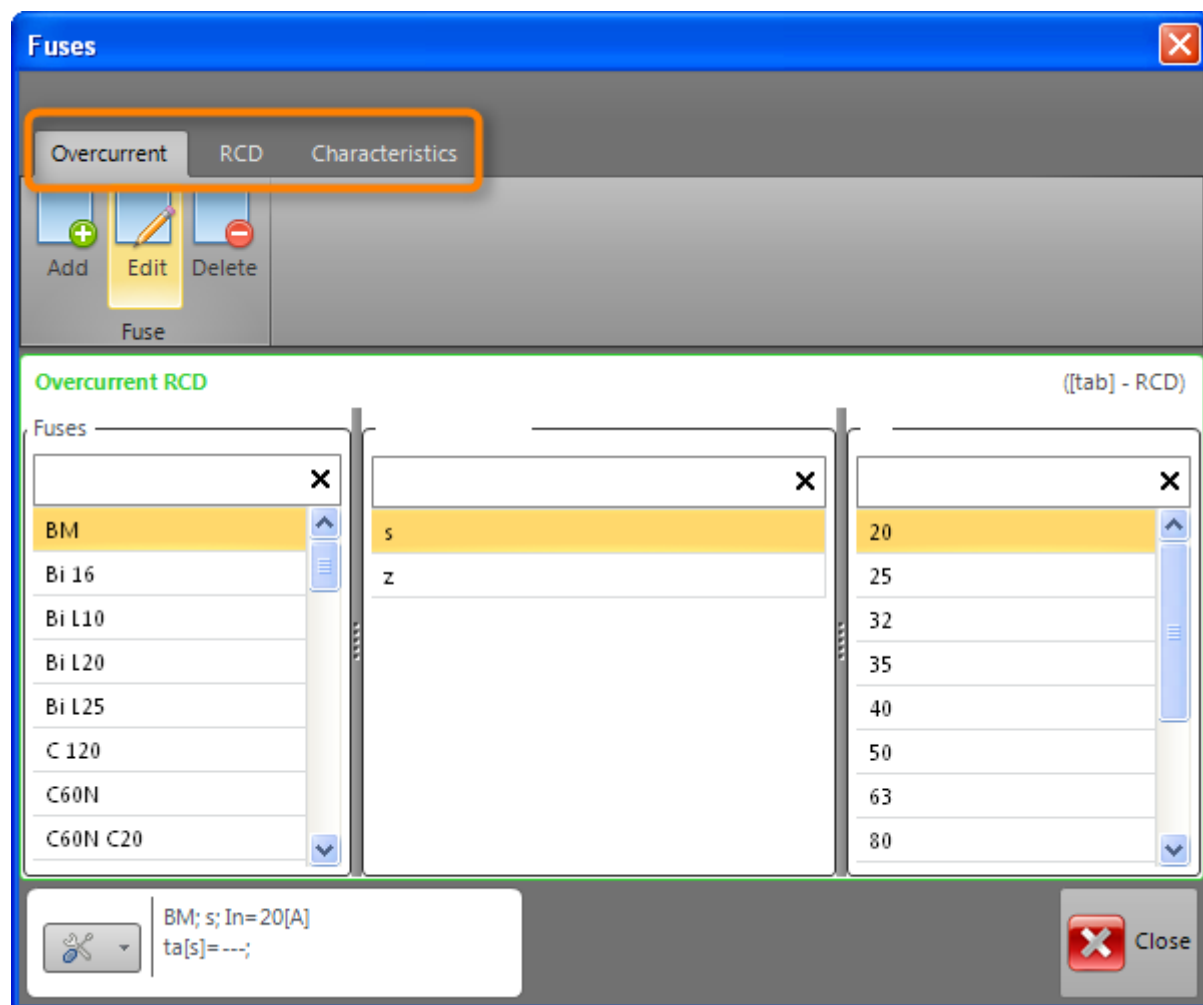
Address of installation (Objects) is associated with customers (one customer can posses few addresses of installation). In order to enter address, first please select user of installation.

2.7. Test points

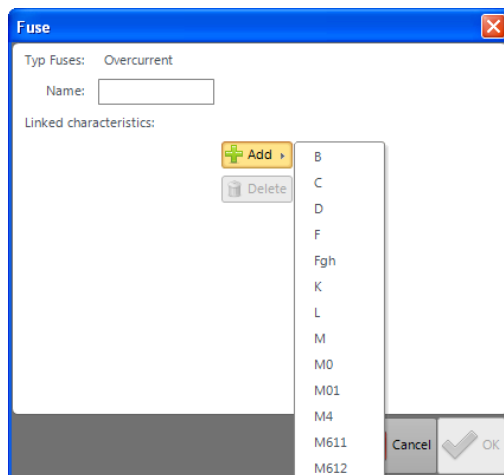


Creating reports very often we are using the same test points. Therefore, you can enter all used test points in one data base. The field in upper part of the windows, enables to find searched test point. If we do not find searched test point, we can add this name to data base by using buttons in from right upper corner. It is also possible to edit or delete test points from data base.

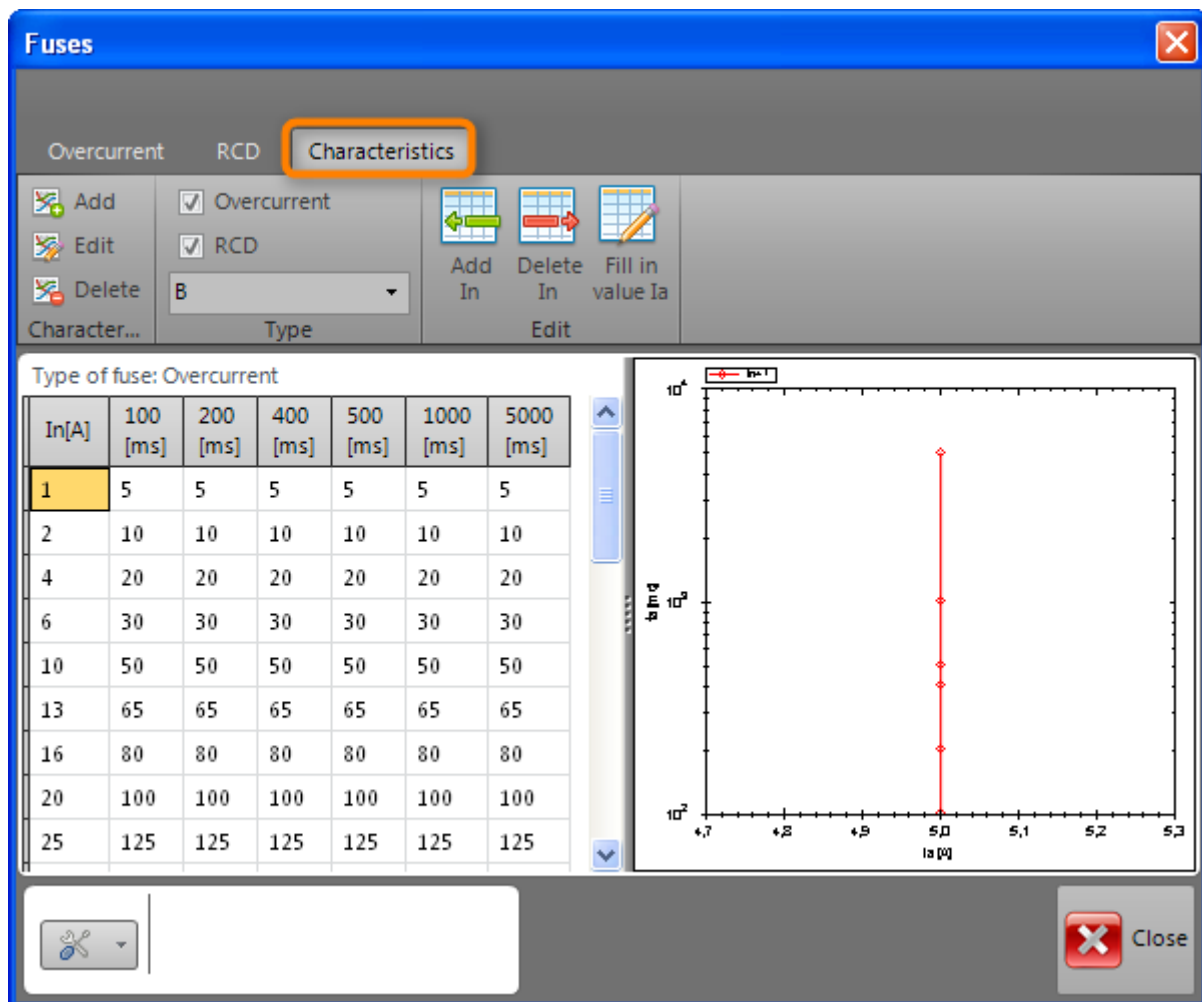
2.8. Fuses



Software possesses also data base of over-current fuses and RCD. User can select from the list proper fuse or RCD as per above screen shot. It is also possible to add, edit or delete items from the list. Selecting function **Add** opens window where name new characteristics of new fuse should be entered:



By clicking on button Characteristics we can edit and add new fuse characteristics.



2.9. Test labels

Software enables to print test labels.

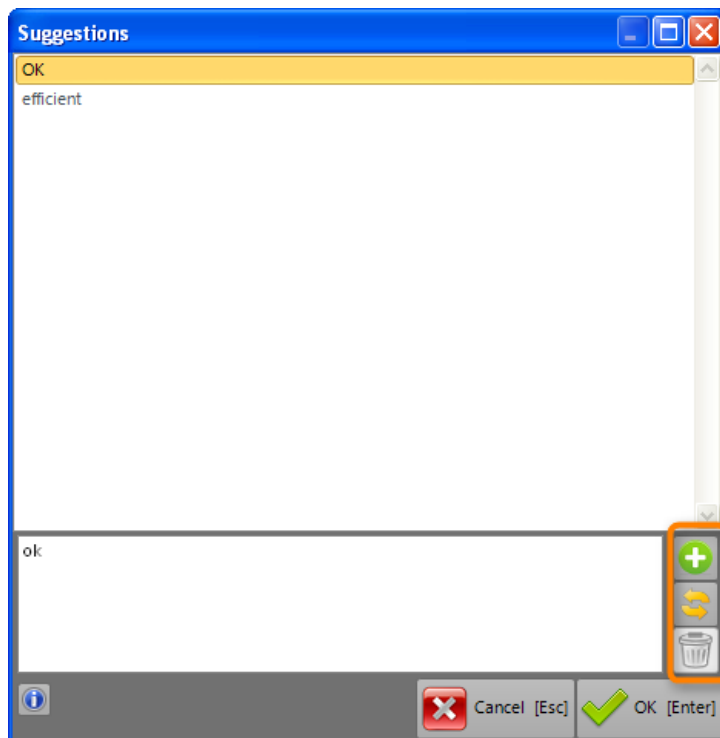
The 'Test labels' window contains the following elements:

- Title Bar:** 'Test labels' with a close button (X).
- Done:** A text input field with a list icon and a yellow lightning bolt warning icon.
- Report No:** A text input field.
- Made by:** A text input field containing 'DASL Systems', 'Wadowicka 8a', '30-415 Kraków', and 'e-mail:biuro@dasl.pl'.
- Test date:** A date input field.
- Next test date:** A date input field.
- Qty of labels:** A numeric input field set to '1'.
- Start from:** A numeric input field set to '1'.
- Buttons:** 'Paper settings' (highlighted with an orange box and labeled '2') and 'Color of background' (a dropdown menu).
- Bottom Right:** 'Print preview' and 'Cancel' buttons.

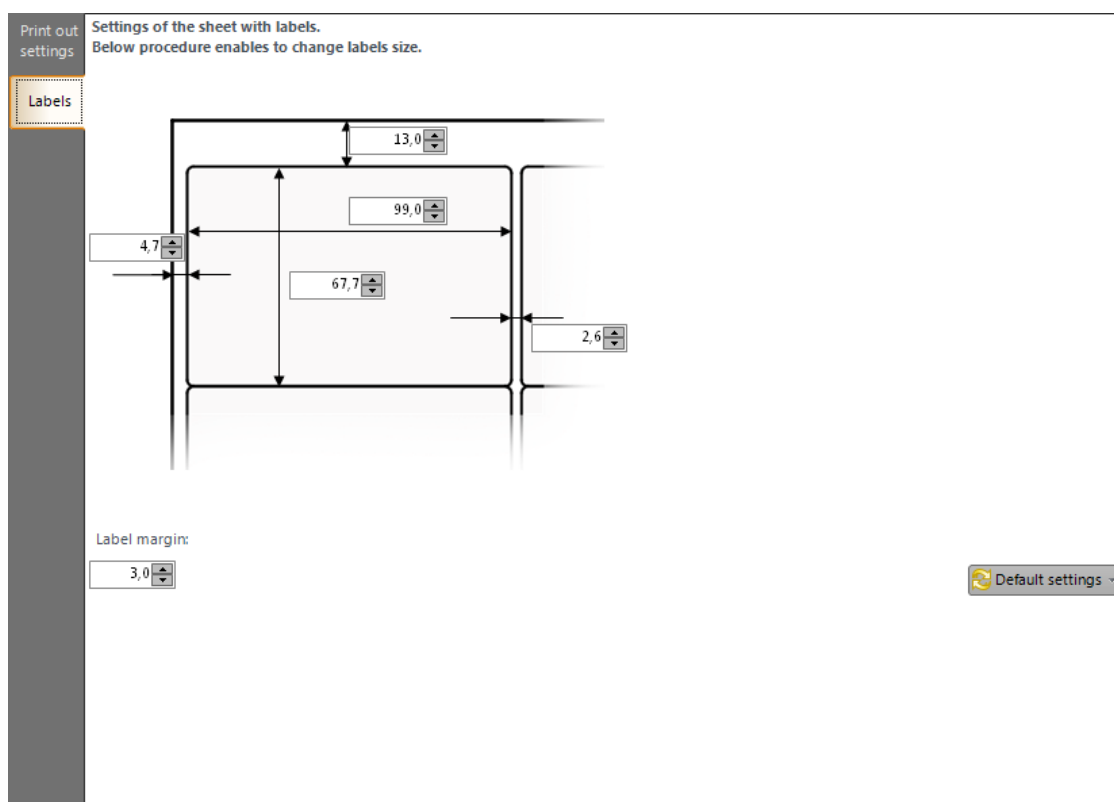
Each label provide such information like; evaluation of test results, data of inspector, test date and date of the next test. There is a list of issued evaluations (1) where we can save and later quickly find most frequently issued evaluations. Before printing labels it is necessary to select, using option (2). size of label, quantity of labels and umber of first label.

Data base of evaluations (1):

Using data base of evaluations first please enter in the window the evaluation and if this evaluation is not available, it is possible to add new description, using buttons showed on below window.

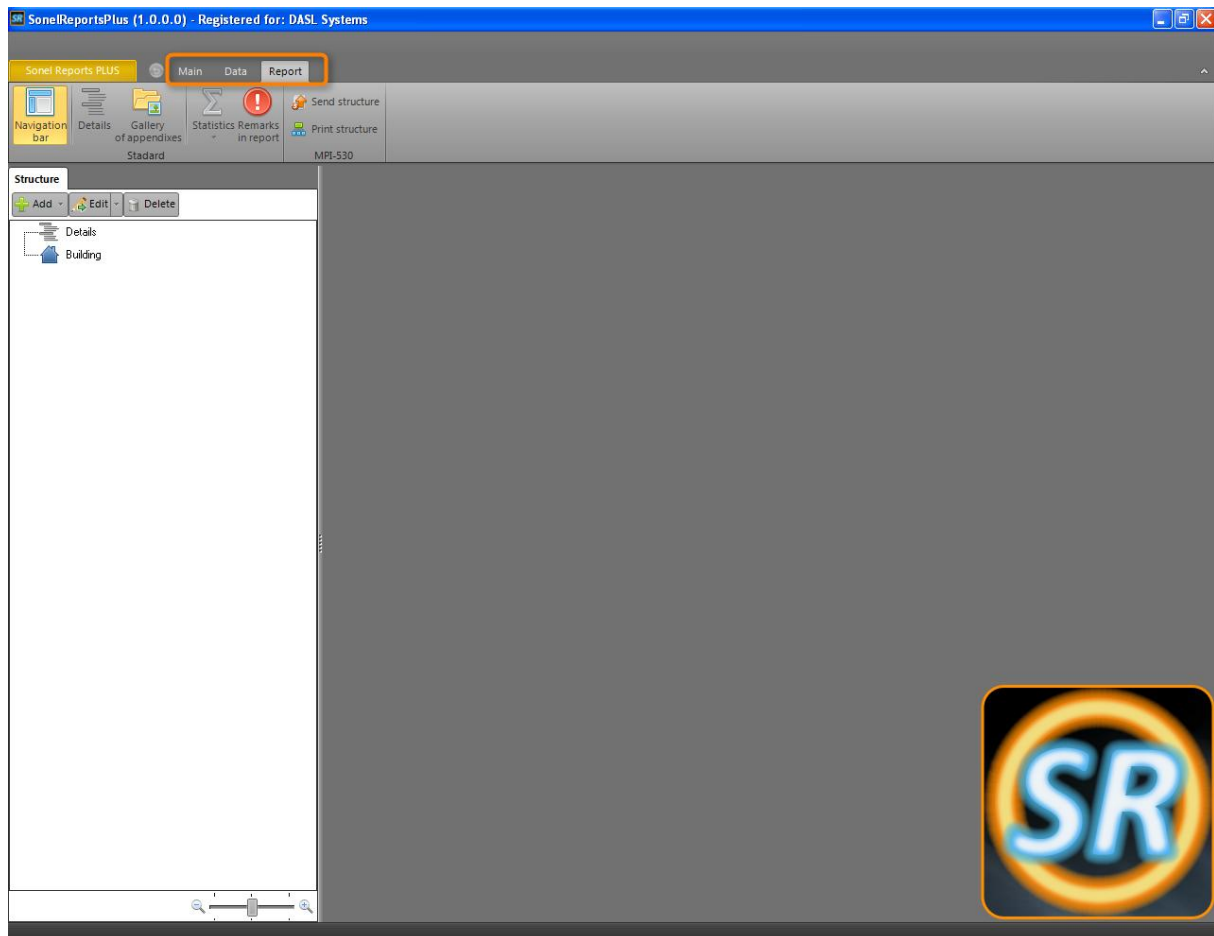


Change of label size (2):
Enter all label dimensions.



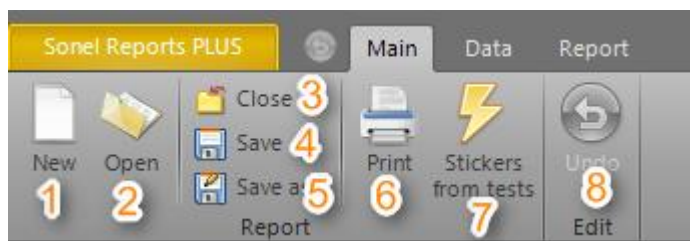
3. Edit of report

By opening the report opens the window to edit reports.



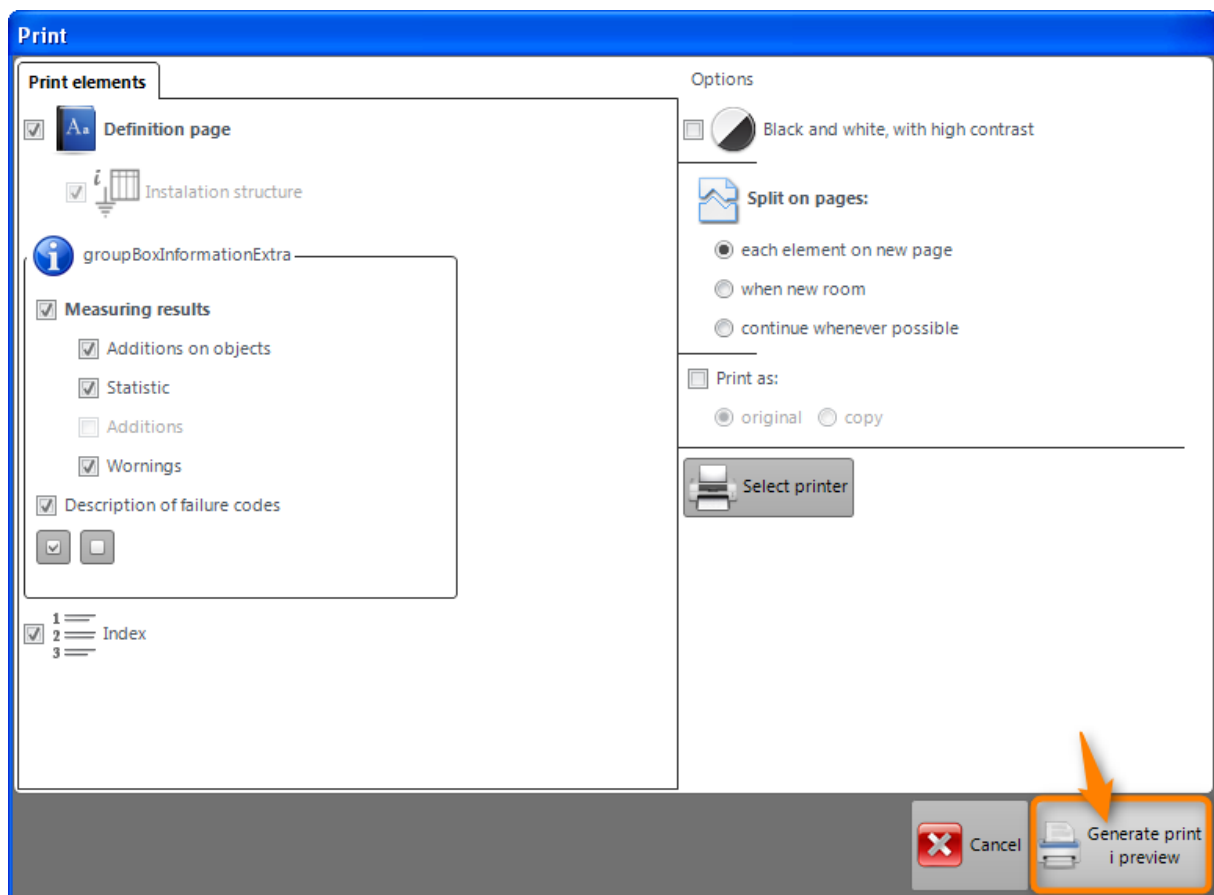
There are 3 main Overlaps: **Main, Data, Report**.

3.1. Main Menu



1. Creation of new report (2.3)
2. Opening of report (2.4)
3. Closing of currently opened report
4. Saving changes (2.1)
5. Saving report under new name or in new location (2.1)
6. Printing of report (3.1.1)
7. Test labels (2.9)
8. Undo last steps

3.1.1. Printing of report and saving to PDF



Before printing (saving to PDF) check if all options have been set in proper configuration and next generate print preview. There are 2 options **Print (1)**, **Save PDF (2)**:

Print preview

1 2

Print Save PDF Change settings 100% Full page Zoom in Auto Zoom out Zoom

Page: 1 / 2 Cancel printing Review

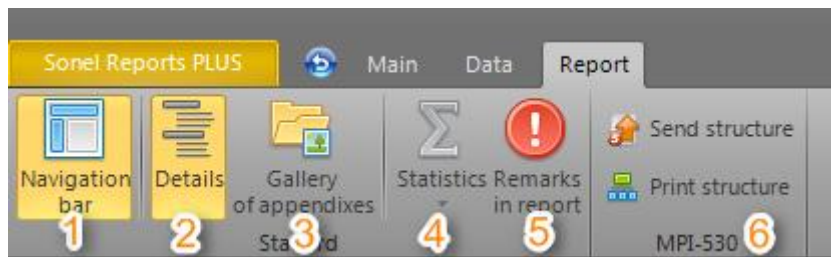
Test of electrical installation			
Test report		Page 1W Customer no.	
No.		Order No. Contractor:	
Customer:		DASL Systems ul. Wolności 33 30-415 Kraków e-mail: biuro@dasl.pl	
Testing acc: DIN VDE 0100-600 ☐ DIN VDE 0105-100 ☐ BGV A3 ☐ .../... BSV ☐ E-CHECK ☐			
New installation ☐ Development ☐ Changing ☐ Repair ☐ Re-test ☐			
Start of test:		Customer's representative: Inspector:	
End of test:		Grid type: TN-C ☐ TN-S ☐ TN-C-S ☐ TT ☐ IT ☐	
Grid: ---/---V		Grid operator:	
Visual check	OK ☐ Not OK ☐	OK ☐ Not OK ☐	OK ☐ Not OK ☐
Selection of equipment	☐	Making of circuits, Appliances	☐
Switching devices and switchgears	☐	Making of N- and PE wires	☐
Fire protection	☐	Cable connections	☐
Building control	☐	Protection devices	☐
Cable, wires, powerails	☐	Base protection, Protection against direct touch	☐
Accessibility	☐	Protection equipotential bonding	☐
Add, equipotential bonding	☐	Documentation	☐
see attachments	☐		☐
Testing			
Function test	☐	Functionality of protection devices	☐
RCD	☐	Engine rotation direction	☐
Measurements	☐	Clockwise rotating field of socket	☐
Switchboard No.:	☐	Building control	☐
Continuity of protection conductor $\leq 1 \Omega$		Earthing resistance $R_e(\Omega)$ ---	
Continuity of equipotential bonding ($\leq 1 \Omega$ proved)			
Concrete footing	☐	Main waterpipe	☐
Main earthing rail	☐	Main fuse	☐
Water meter	☐	Main gas pipe	☐
EDV-system	☐	Heating system	☐
Antenna/BK	☐	Air condition	☐
Building structure	☐	Phone installation	☐
Lighting rod	☐	Lift	☐
Test instruments used acc. to VDE	Type:---	Type:---	Type:---
Test result: No defects detected	☐	Test label correct	yes ☐ no ☐
Defects detected	☐	Next test date:	---

3.2. Menu Data



1. Data transfer from test instrument (file) (4.2)
2. Inspectors (2.5)
3. Installations (objects) (2.6)
4. Test points (2.7)
5. Fuses (2.8)

3.3. Menu Report



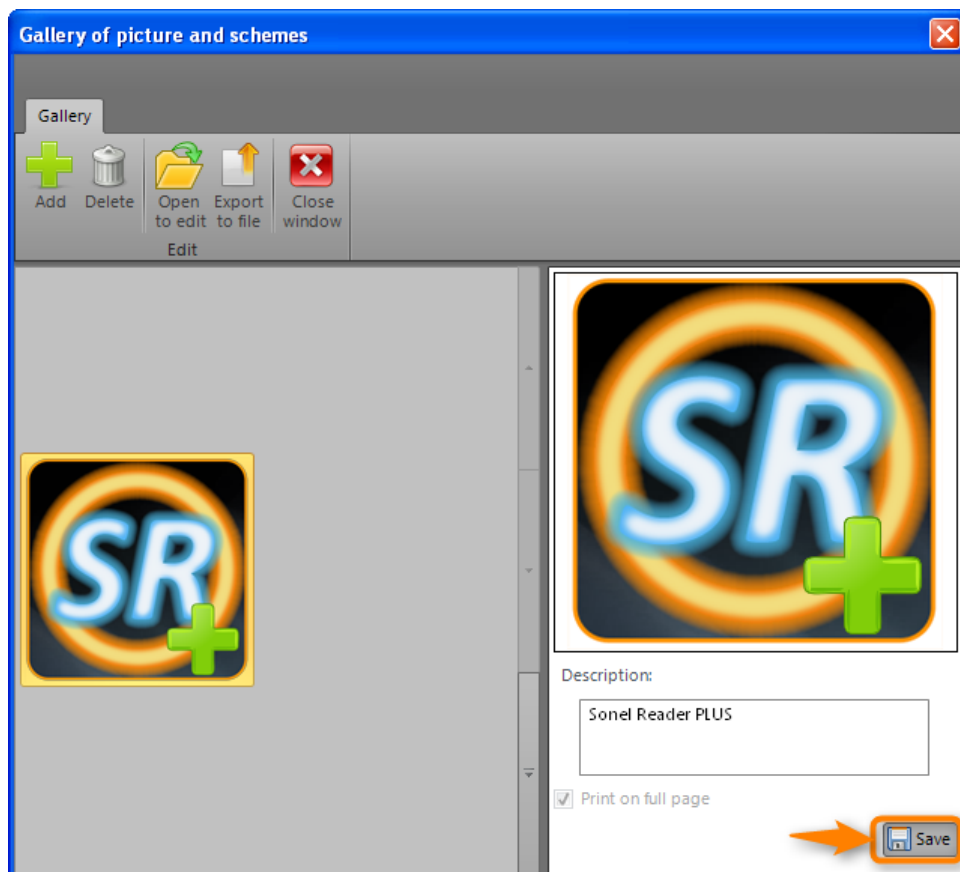
1. Report tree structure (3.4)
2. Definition of report (3.4.1)
3. Attachments to report (3.3.1)
4. Report statistics
5. List of all remarks
6. Printing structure and sending structure to MPI-530 (4.3)

REMARK!!!

If above options are not displayed please check if communication with MPI-530 is on (4.1)

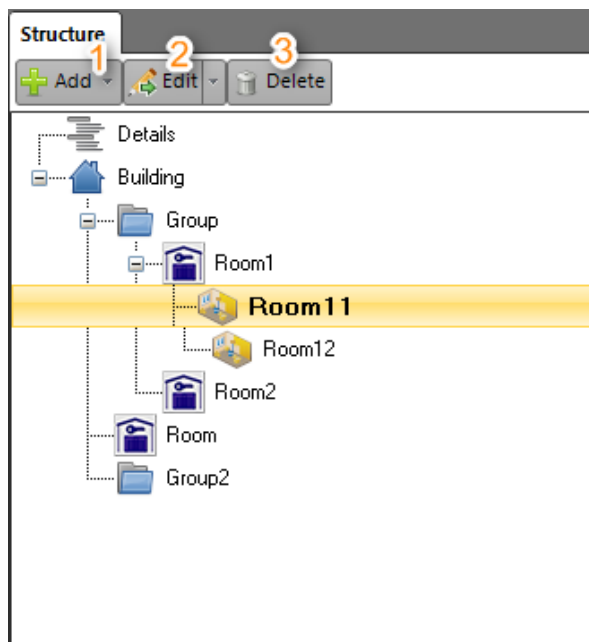
3.3.1. Attachments to report

It is possible to attach to report any number of attachments (schemes , photos):



After opening the gallery it is possible to add or delete attachments (Add, Delete), also it is possible make changes, edit (Open to edit). To every attachment it is possible to add description. All attachments will be added to print preview of report (select proper print option 3.1.1).

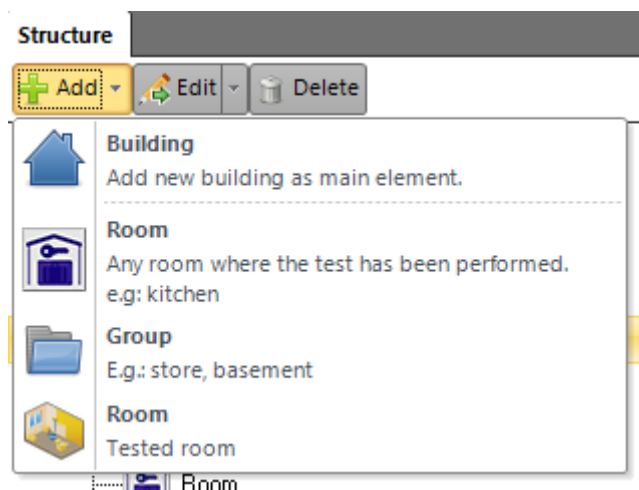
3.4. Report tree structure



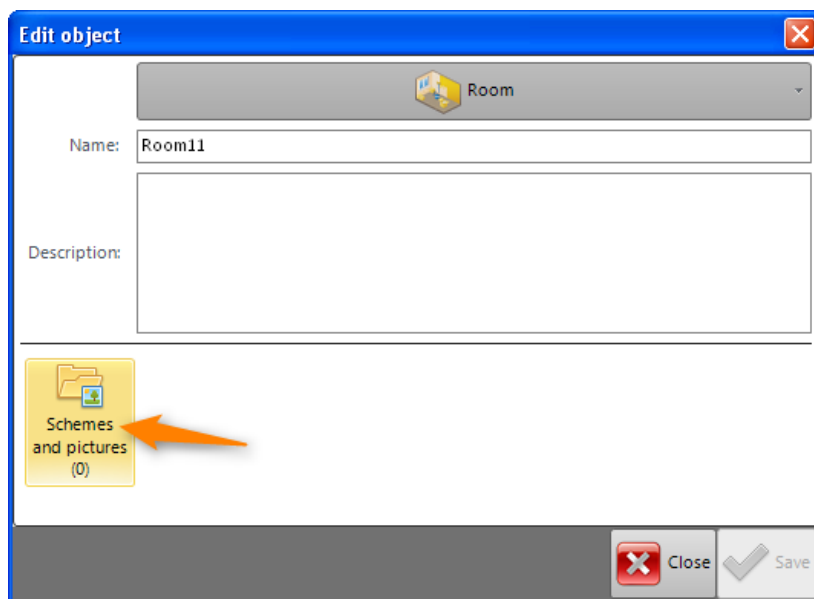
In Sonel Reports PLUS structure of tested object has tree structure, as per above screen. Any element can be added to the structure by button **Add** (1).

REMARK!!!

New element will be added to the selected object.



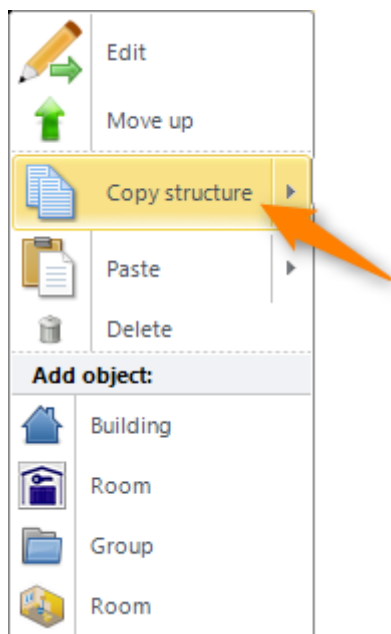
Element of structure can be edited by clicking on button **Edit** (2).



Software enables to add attachment to every object of the structure (photos, schemes) by using option marked on above screen. Adding attachments to the objects is same as in case of adding attachments to report (3.3.1).

Each element of the structure can be deleted by button **Delete** (3).

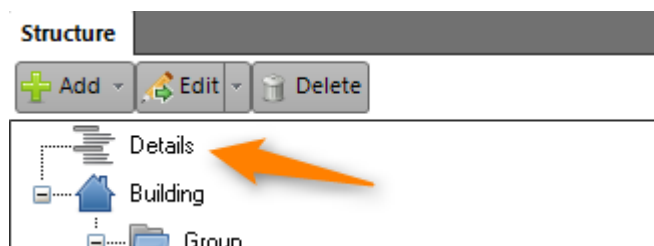
By right mouse click opens the sub-menu, where you can also find copy function of structure.



In order to copy structure select „Copy structure“ and next select the place where you want to copy element and click on button „Paste“

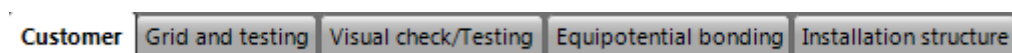
3.4.1. Details

As first element of structure always appear Details.



By clicking on Details opens window as shown above.

There are 5 Overlaps as per below:



Customer:

 A screenshot of a software window titled 'Customer'. At the top, there is a tab bar with four tabs: 'Grid and testing', 'Visual check/Testing', 'Equipotential bonding', and 'Installation structure'. The 'Grid and testing' tab is selected. Below the tabs, on the left, is a large square area containing a logo with the letters 'SR' in blue and a green plus sign. To the right of the logo is a text box containing the following information: 'DASL Systems', 'Wadowicka 8a', '30-415 Kraków', and 'e-mail:biuro@dasl.pl'. Below this, there are three input fields labeled 'Customer no.', 'Order No.', and 'Contractor:'. At the bottom, there are two large text areas with vertical scrollbars. Above the right text area is a button labeled 'labelObiekt' with a small icon of a document with a grid. An orange arrow points from the right towards this button.

By entering objects it is possible to use data base of installation (objects). In order to use this function click on button, marked by arrow (see above screen). Afterwards opens the window with data base (chapter 2.6) and after selecting proper data, confirm by button „Select“.

Grid and testing:

Customer	Grid and testing	Visual check/Testing	Equipotential bonding	Installation structure
Testing acc: DIN VDE 0100-600 ☐ DIN VDE 0105-100 ☐ BGV A3 ☐ / BSV ☐ E-CHECK ☐ New installation ☐ Development ☐ Changing ☐ Repair ☐ Re-test ☐				
Select inspector				
Start of test: Customers representative: Inspector: End of test:				
Grid: / V Grid type: TN-C ☐ TN-S ☐ TN-C-S ☐ TT ☐ IT ☐				
Grid operator:				

Button „Select inspector“ enables to select inspector from the list of inspectors, save in the software (2.5).

Visual check/Testing:

Customer	Grid and testing	Visual check/Testing	Equipotential bonding	Installation structure																																																						
Visual check																																																										
<table border="0"> <thead> <tr> <th></th> <th>OK</th> <th>Not OK</th> <th></th> <th>OK</th> <th>Not OK</th> <th></th> <th>OK</th> <th>Not OK</th> </tr> </thead> <tbody> <tr> <td>Selection of equipment</td> <td>☐</td> <td>☐</td> <td>Marking of circuits, Appliances</td> <td>☐</td> <td>☐</td> <td>Accessibility</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Switching devices and switchgears</td> <td>☐</td> <td>☐</td> <td>Marking of N-and PE wires</td> <td>☐</td> <td>☐</td> <td>Protection equipotential bonding</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Fire protection</td> <td>☐</td> <td>☐</td> <td>Cable connections</td> <td>☐</td> <td>☐</td> <td>Add, equipotential bonding</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Building control</td> <td>☐</td> <td>☐</td> <td>Protection devices</td> <td>☐</td> <td>☐</td> <td>Documentation</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Cable, wires, power rails</td> <td>☐</td> <td>☐</td> <td>Base protection, Protection against direct touch</td> <td>☐</td> <td>☐</td> <td>see attachments</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>						OK	Not OK		OK	Not OK		OK	Not OK	Selection of equipment	☐	☐	Marking of circuits, Appliances	☐	☐	Accessibility	☐	☐	Switching devices and switchgears	☐	☐	Marking of N-and PE wires	☐	☐	Protection equipotential bonding	☐	☐	Fire protection	☐	☐	Cable connections	☐	☐	Add, equipotential bonding	☐	☐	Building control	☐	☐	Protection devices	☐	☐	Documentation	☐	☐	Cable, wires, power rails	☐	☐	Base protection, Protection against direct touch	☐	☐	see attachments	☐	☐
	OK	Not OK		OK	Not OK		OK	Not OK																																																		
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Cable, wires, power rails	☐	☐	Base protection, Protection against direct touch	☐	☐	see attachments	☐	☐																																																		
Testing																																																										
<table border="0"> <tbody> <tr> <td>Function test</td> <td>☐</td> <td>☐</td> <td>Functionality of protection devices</td> <td>☐</td> <td>☐</td> <td>Clockwise rotating field of socket</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>RCD</td> <td>☐</td> <td>☐</td> <td>Engine rotation direction</td> <td>☐</td> <td>☐</td> <td>Building control</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>					Function test	☐	☐	Functionality of protection devices	☐	☐	Clockwise rotating field of socket	☐	☐	RCD	☐	☐	Engine rotation direction	☐	☐	Building control	☐	☐																																				
Function test	☐	☐	Functionality of protection devices	☐	☐	Clockwise rotating field of socket	☐	☐																																																		
RCD	☐	☐	Engine rotation direction	☐	☐	Building control	☐	☐																																																		
Measurements Switchboard No.: 																																																										

Check proper fields.

Equipotential bonding:

Customer	Grid and testing	Visual check/Testing	Equipotential bonding	Installation structure
Equipotential bonding				
Continuity of protection conductor $\leq 1 \Omega$ ☐		Earthing resistance $R_e[\Omega]$:		
Continuity of equipotential bonding ($\leq 1 \Omega$ proved)				
Concrete footing ☐	Main water pipe ☐	Heating system ☐	EDV-system ☐	Antenna/BK ☐
Main earthing rail ☐	Main fuse ☐	Air condition ☐	Phone installation ☐	Building structure ☐
Water meter ☐	Main gas pipe ☐	Lift ☐	Lighting rod ☐	☐
Test instruments used acc. to VDE	Manufacturer:	Manufacturer:	Manufacturer:	
	Type:	Type:	Type:	
Test result:		Test label correct:		
☐ No defects detected		☐ yes		
☐ Defects detected		☐ no		
		Next test date:		

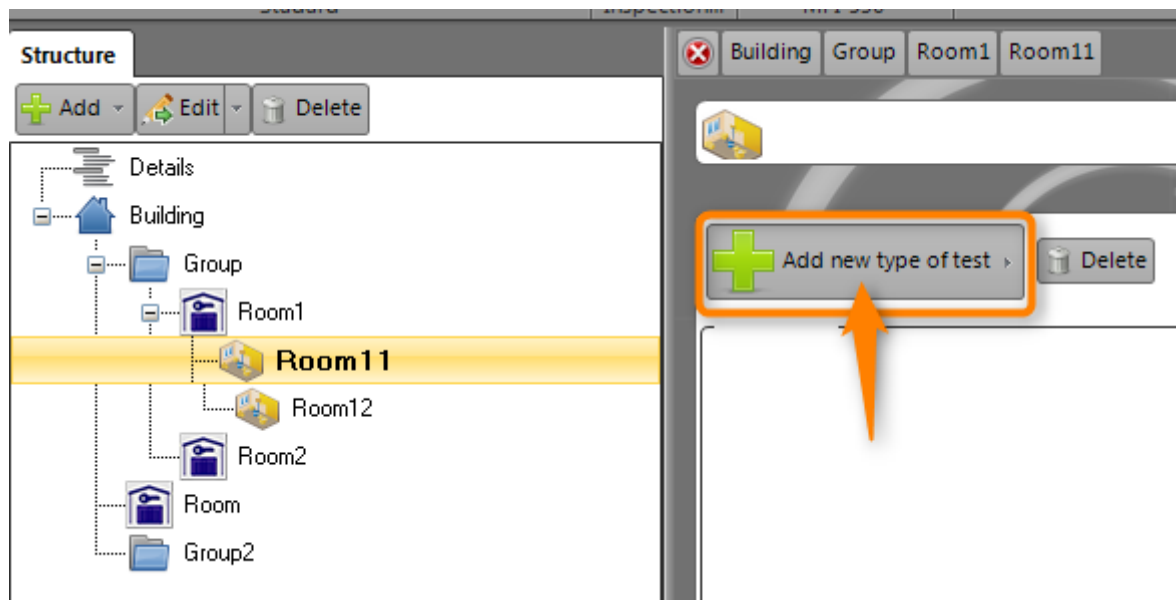
Check proper fields

Installation structure:

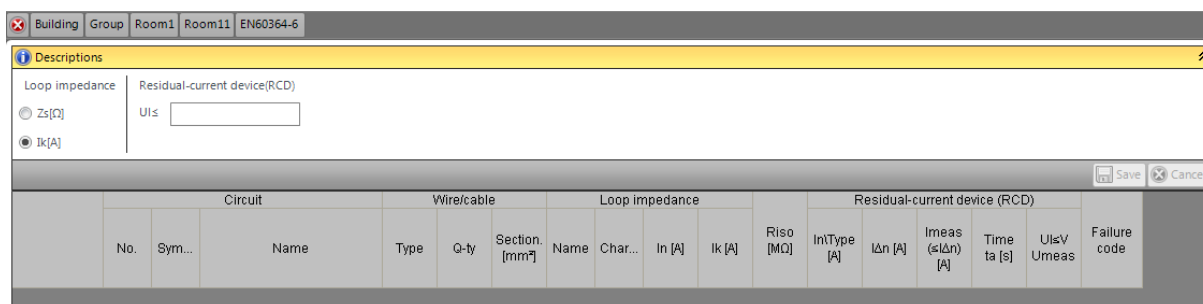
Customer	Grid and testing	Visual check/Testing	Equipotential bonding	Installation structure																																																		
Installation structure																																																						
Quantity		Energy meter No.:																																																				
☐ Appliance		State of energy meter[kWh]:																																																				
☐ Failure-Code																																																						
Add new row Add new column		Delete selected row Delete selected column Clear table																																																				
Place/Installation																																																						
Electrical installation appliances	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </table>																																																					

3.4.2. Table of test report

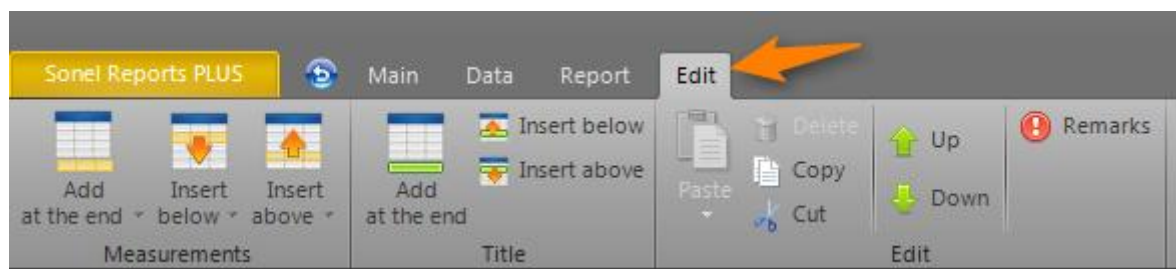
In order to fill in table of test report (acc. to standard) first select object in tree structure where you want to add table and following select: **Add new type of test**



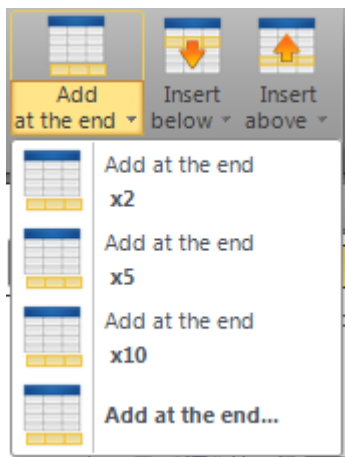
Afterwards opens below window:



At the same time, in the upper Overlaps, activates Menu to edit table:

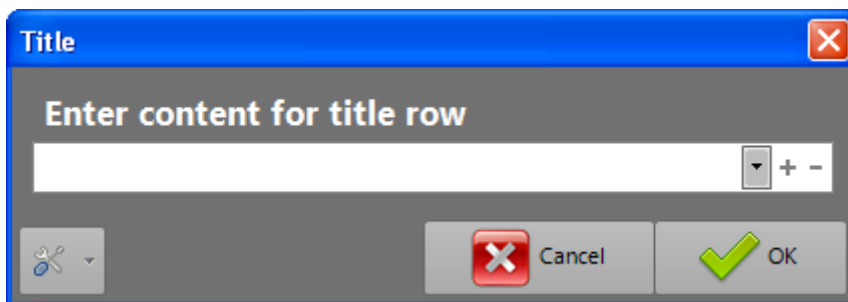


Option of **Measurements** enables to add new test rows in table. It is possible to add few rows in the same time:

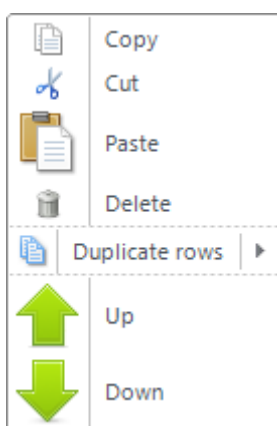


Selecting: **Add at the end** new rows will be added at the end of the table, **Insert below** new rows will be added below currently selected row, **Insert above** new rows will be added above currently selected row.

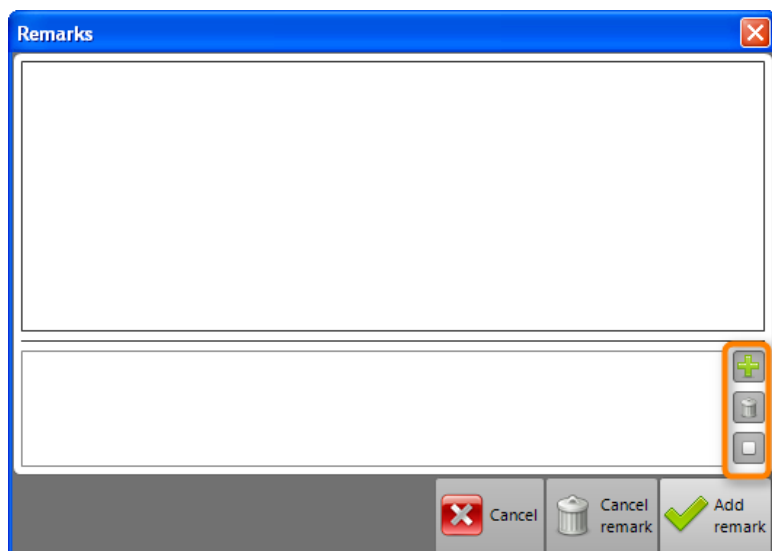
Title options enable to add title rows in any place of the table:



Edit options enables to edit rows in the table and adding remarks to selected measurement. This Menu can be also opened by right mouse click:

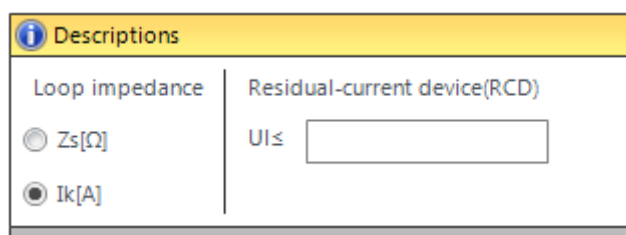


In order to add remark to selected measurement, mark proper row and click on **Remarks**. Each remark can be added (deleted) to data base by below options:



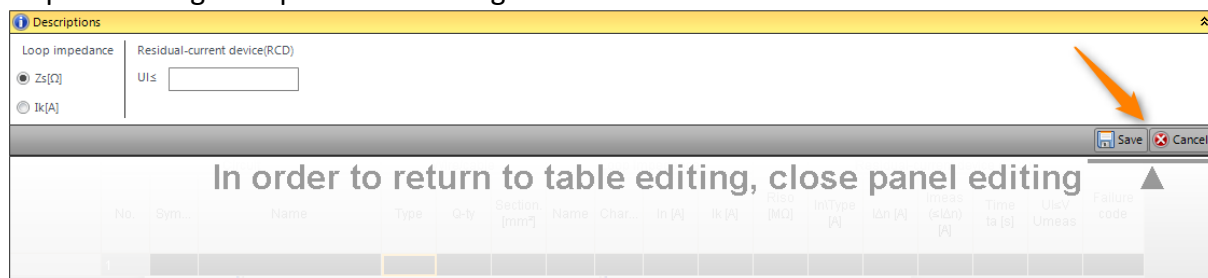
A dialog box titled "Remarks" with a blue title bar and a close button (X) in the top right corner. The main area is a large empty text box. Below it is a smaller empty text box. To the right of the smaller text box is a vertical toolbar with three icons: a green plus sign, a trash can, and a square. At the bottom of the dialog are three buttons: "Cancel" (with a red X icon), "Cancel remark" (with a trash can icon), and "Add remark" (with a green checkmark icon).

Table of test report consists of two parts **Zs** and **Ik**



A panel titled "Descriptions" with a yellow header. It contains two sections: "Loop impedance" and "Residual-current device(RCD)". Under "Loop impedance", there are two radio buttons: $Z_s[\Omega]$ (unselected) and $I_k[A]$ (selected). Under "Residual-current device(RCD)", there is a label $U_{I\leq}$ followed by an empty text input field.

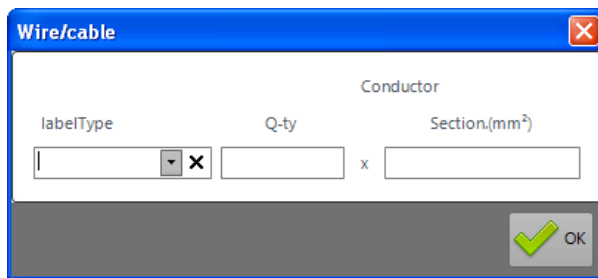
Display of one of parts follows by selecting options located above the table. Every change requires saving of implemented changes:



The main interface shows the "Descriptions" panel on the left, which is the same as the one in the previous image. To its right is a large table. Above the table, there is a text overlay: "In order to return to table editing, close panel editing". An orange arrow points to the "Save" button in the bottom right corner of the descriptions panel. The table has a header row with the following columns: No., Sym..., Name, Type, Q-tv, Section [mm²], Name, Char..., In [A], Ik [A], Riso [MΩ], InType [A], IΔn [A], Imeas (sΔIn) [A], Time ta [s], Umeas, and Failure code. The table body is currently empty.

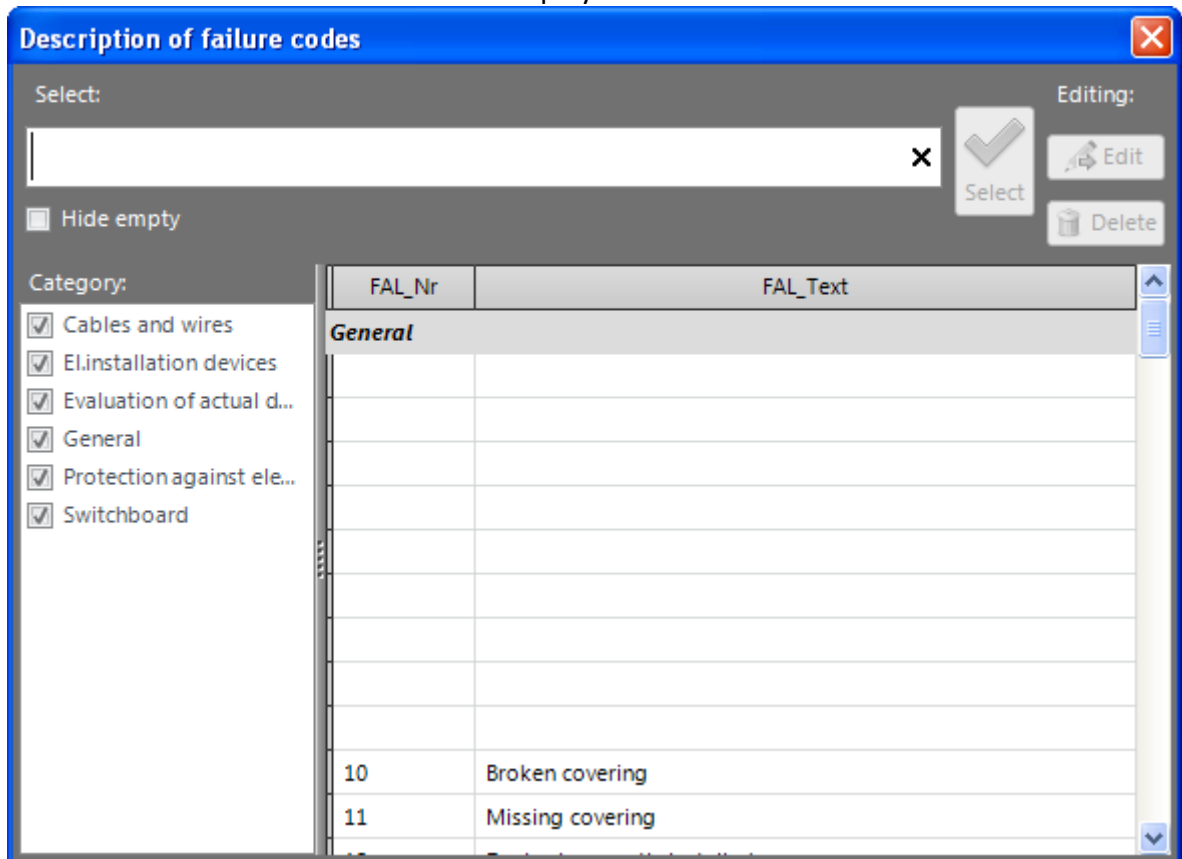
3.4.2.1. Description of select table columns

- Name- double click on this field displays list of test points (2.7)
- Type- double click on this field displays window enabling settings of cable parameters:



A dialog box titled "Wire/cable" with a close button (X) in the top right corner. It contains three input fields: "labelType" with a dropdown arrow and a small 'x' button, "Q-ty" with a text input field, and "Section,(mm²)" with a text input field. These fields are separated by a multiplication sign 'x'. Below the input fields is a green checkmark icon and an "OK" button.

- Name, characteristic, In- double click on this field displays list of fuses (2.8)
- Failure code- double click on this field displays list of Failure codes:



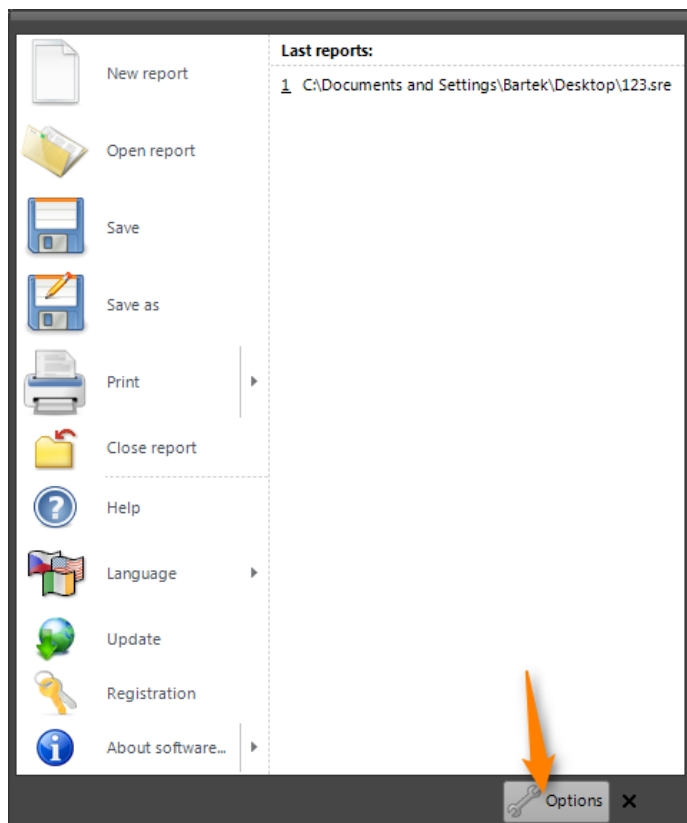
A dialog box titled "Description of failure codes" with a close button (X) in the top right corner. It features a "Select:" text box with a small 'x' button and a "Select" button with a checkmark icon. Below the text box is a "Hide empty" checkbox. To the right of the text box are "Edit" and "Delete" buttons. On the left, under "Category:", there is a list of categories with checkboxes: "Cables and wires", "El.installation devices", "Evaluation of actual d...", "General", "Protection against ele...", and "Switchboard". The main area is a table with two columns: "FAL_Nr" and "FAL_Text". The table has a "General" header row and several data rows. The visible data rows are:

FAL_Nr	FAL_Text
10	Broken covering
11	Missing covering

4. Software functions

4.1. Software options

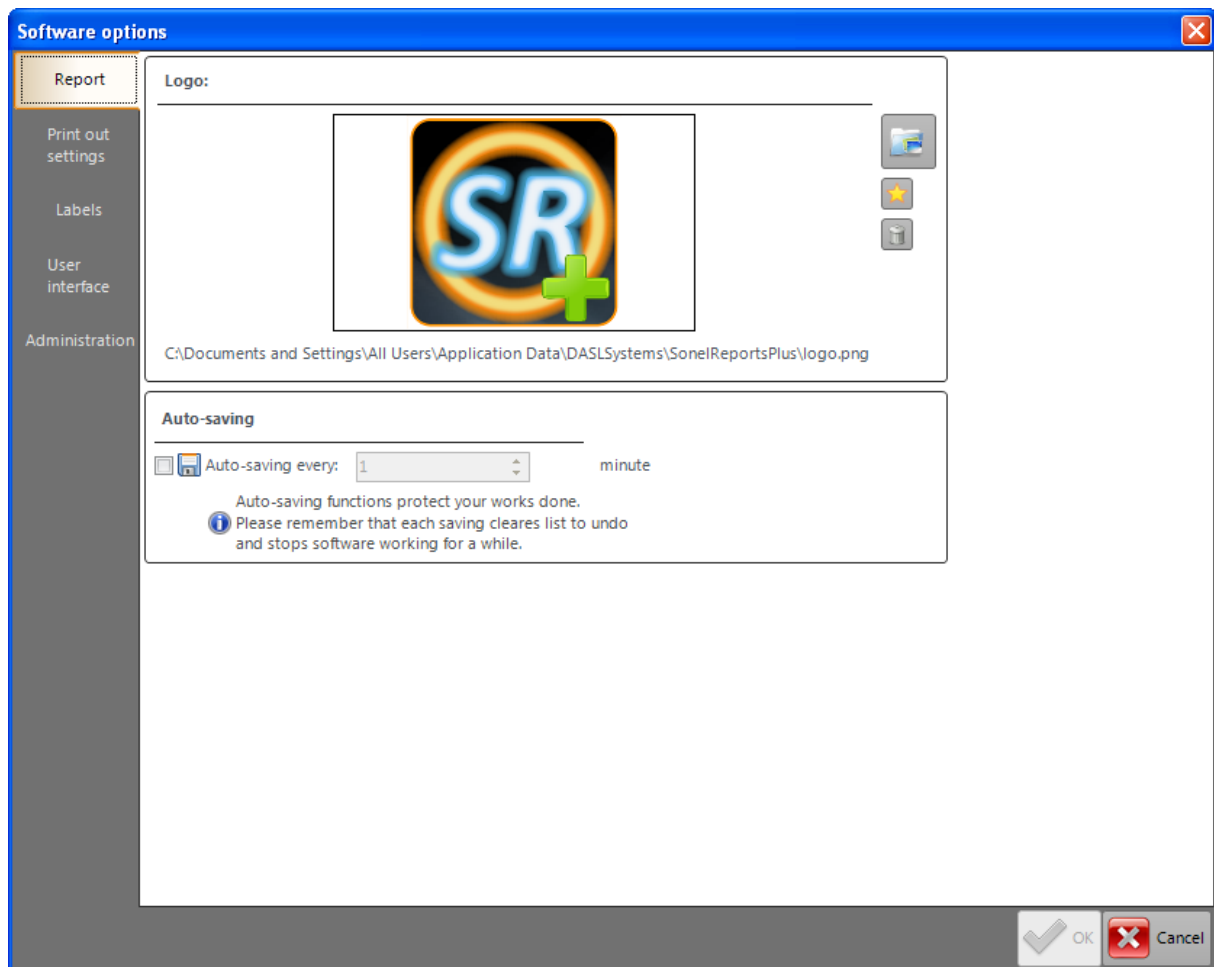
Button to open software option is located in main software menu, as show below.



Software options:

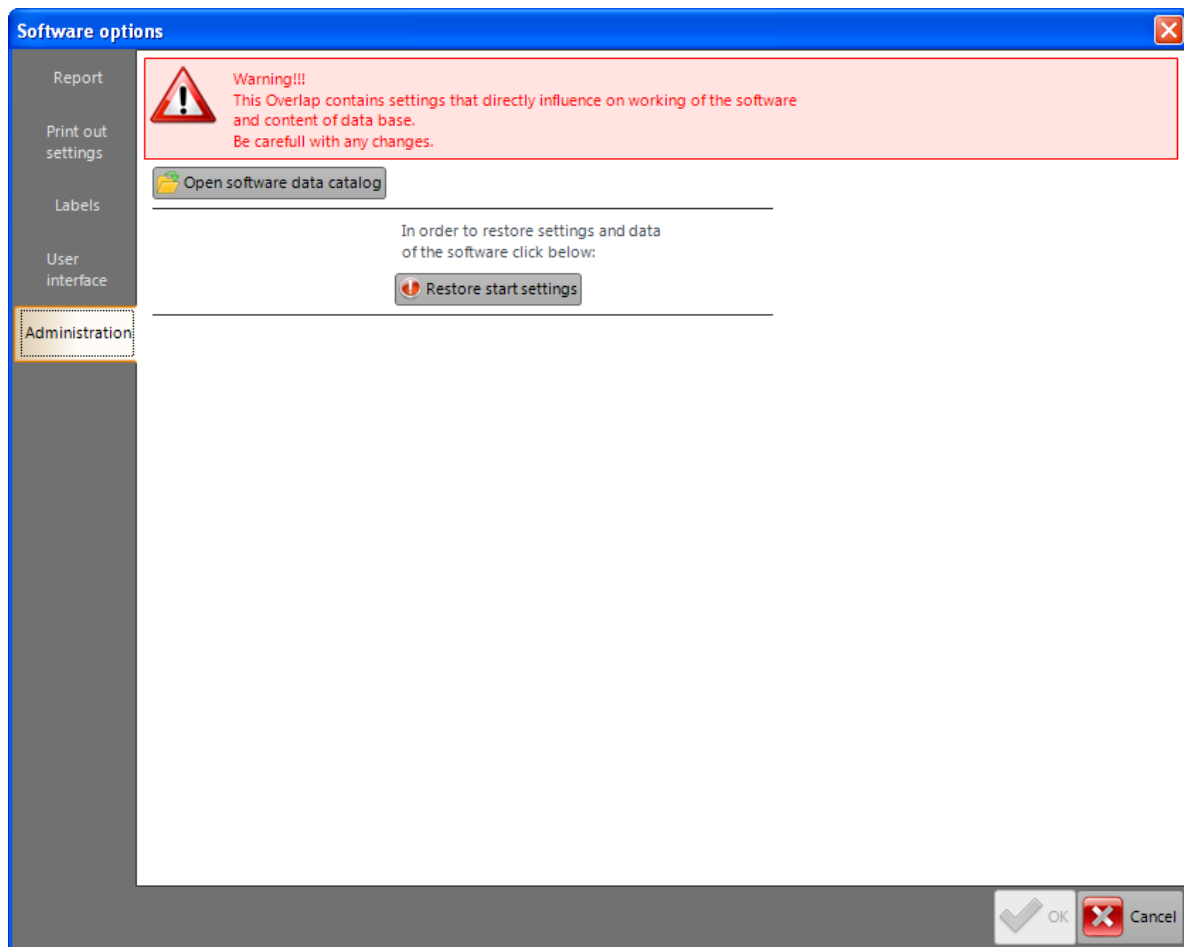
- **Report** – main options and report settings,
- **Print out settings** – settings of print out,
- **Labels** – options of test label print out (2.1)
- **User interface** – settings of menu and latest software versions
- **Administration** – main options of data location.

Report – displays logo, that will be pirinted on test reports. Logo can be loaded from any of graphic file JPG, JPEG, PNG, BMP or GIF. Here it is also possible to set **Auto-saving** function (please remember that auto-saving clears list of previous actions and it is not possible to undo changes).



- **Administration** enables to set default settings.
- **Open software data catalogue** – opens catalogue with default software data.
- **Restore start settings** – restore start data base and delete implemented changes for fuses, test instruments, inspectors etc.

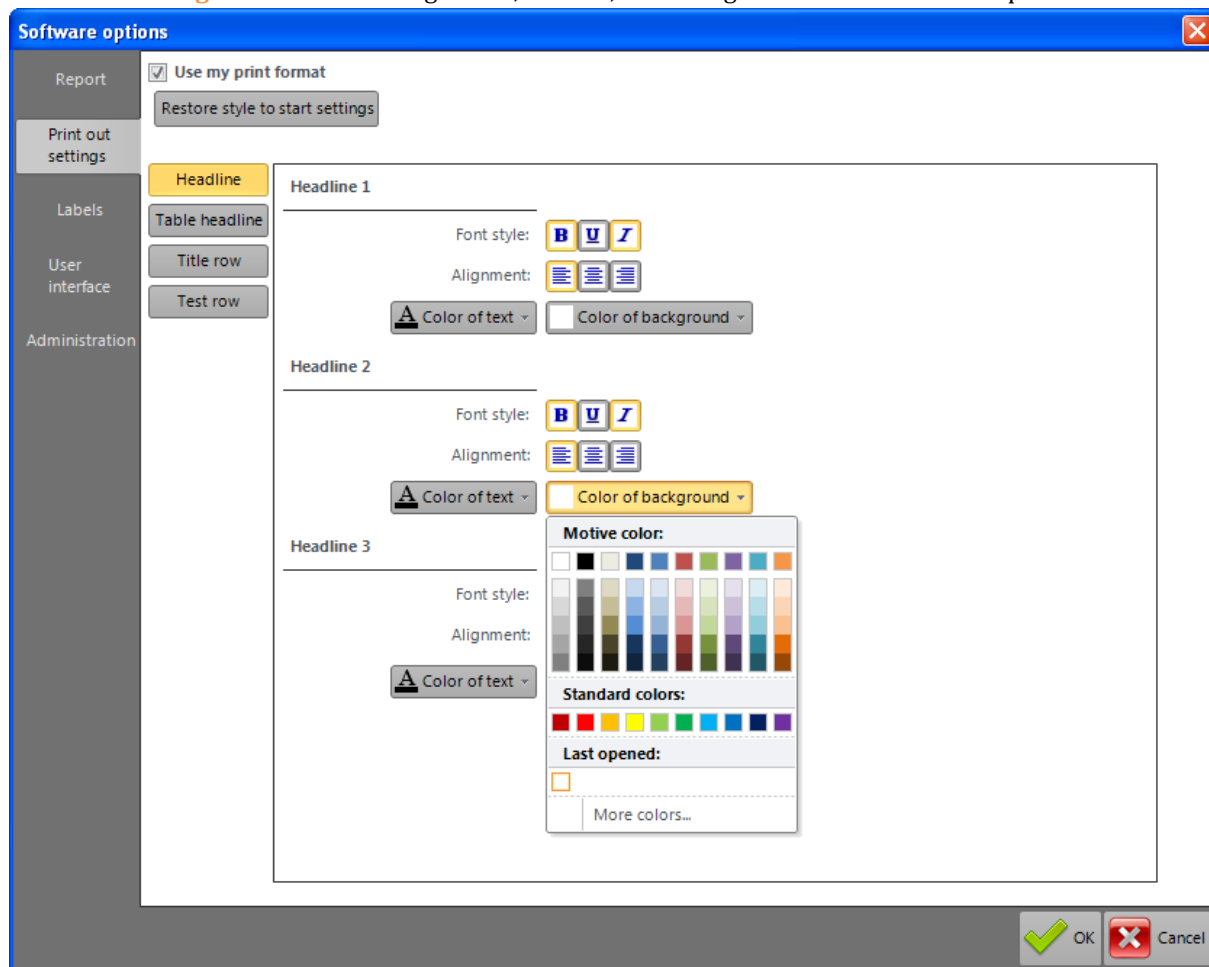
Clicking on **Restore start settings** causes restoring en tire software settings and data basis to start mode, just after first installation.



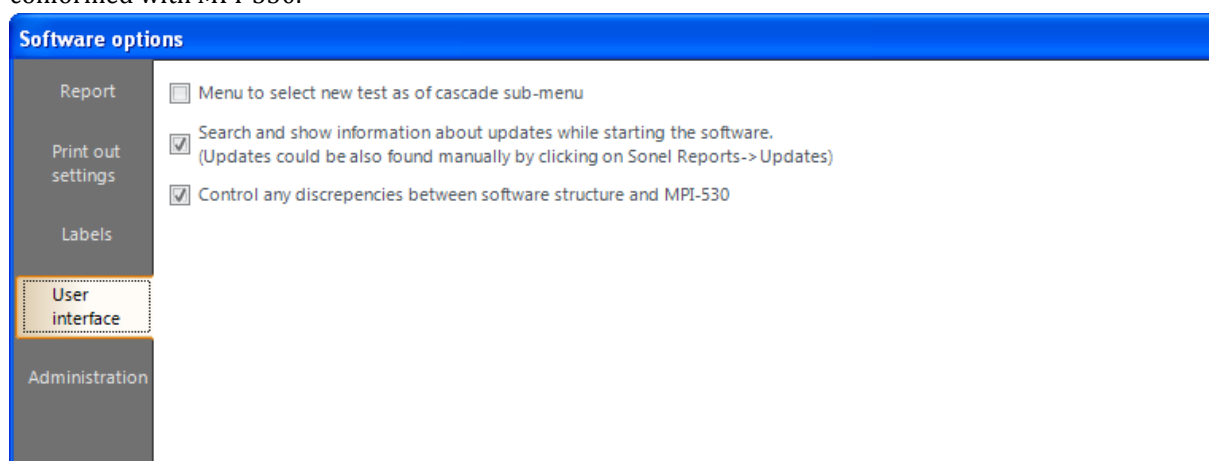
Remark!

Each change in overlap **Administration** can cause looping of all data therefore it is required to save all changes in opened reports, before performing any changes in this overlap.

Print out settings - enables to change fonts, colours, and backgrounds for individual reports.



User interface enables to switch off information about updates showing up while starting up the software, selection of menu to display available tests and switching on the software in the mode, conformed with MPI-530.

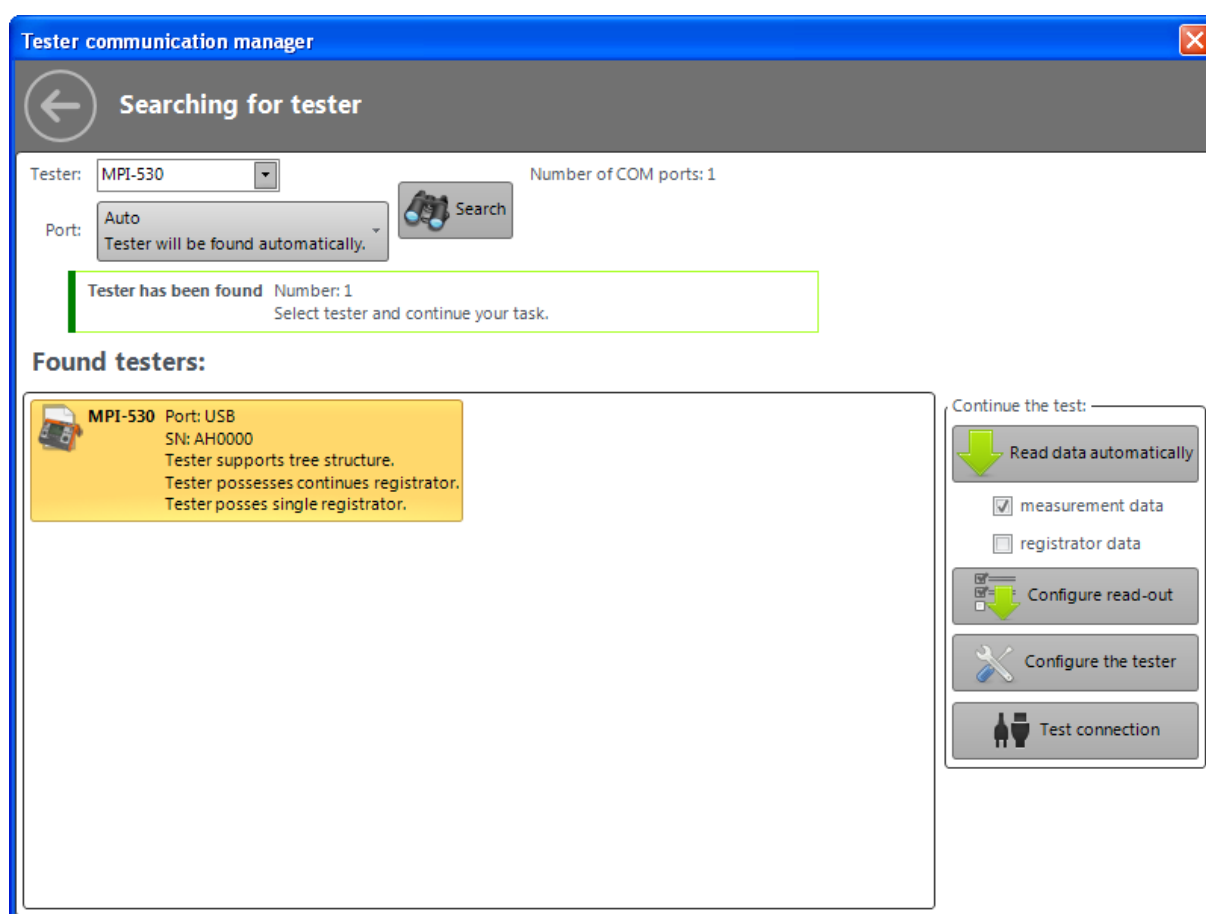


4.2. Data transfer from test instrument

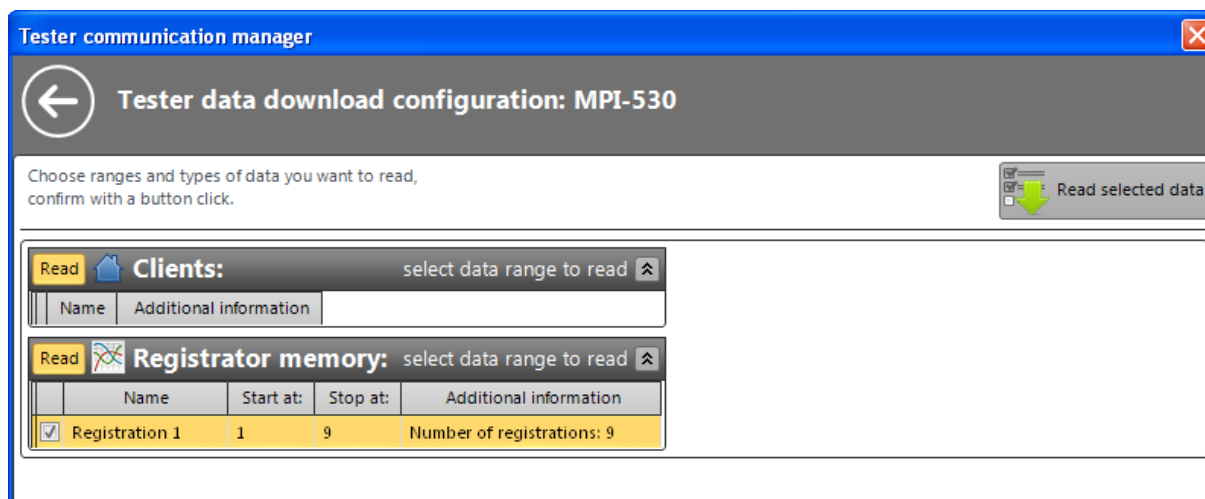
Software Sonel Reports PLUS communicates with test instrument MPI-530. All test results are being saved in report automatically.

In order to start downloading data from test instrument or from file, please click on button **Test Instrument** in toolbar **DATA** (or in main Menu).

User can select manual or automatic selection of port and test instrument. Configuration of port and test instrument should be confirmed by clicking on button **Search**. After software finds test instrument, displays information about test instrument, port and also option **Read data automatically** or **Configure read-out**.

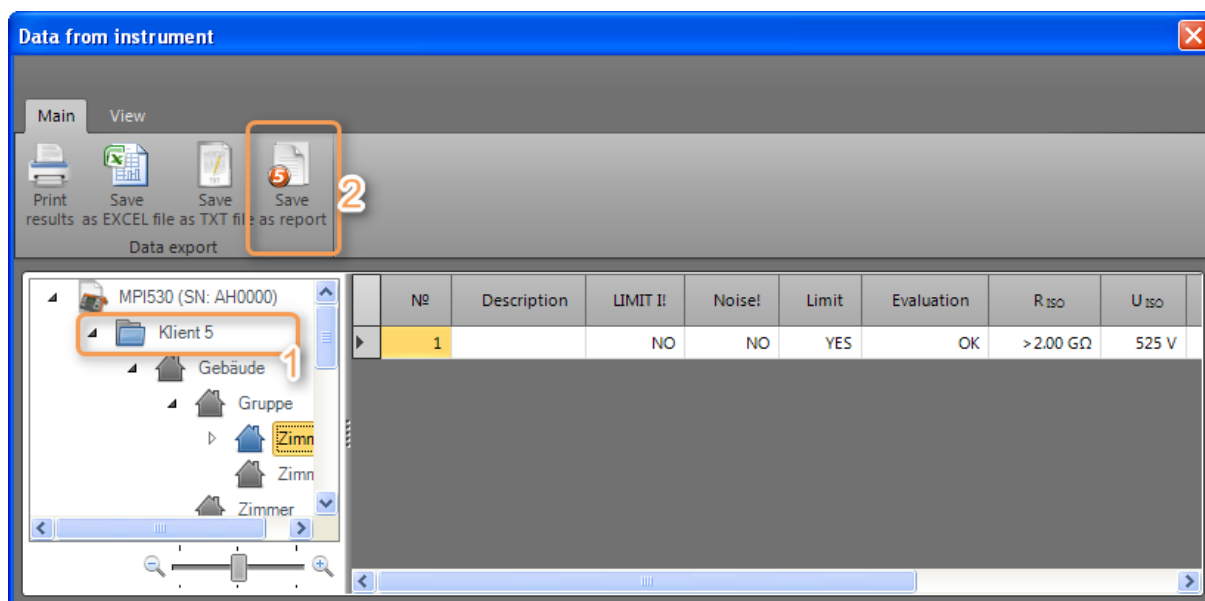


Selecting automatic data read out, software read data from all bank and cells, except data from logger (in order to get logger data, please select additionally logger data), Configuration of data transfer enables to download data only from selected bank and cells). After selecting range of data to be downloaded, confirm selection by button **Read selected data**. Button Back („←”) returning user to the main window with options of communication with test instrument.



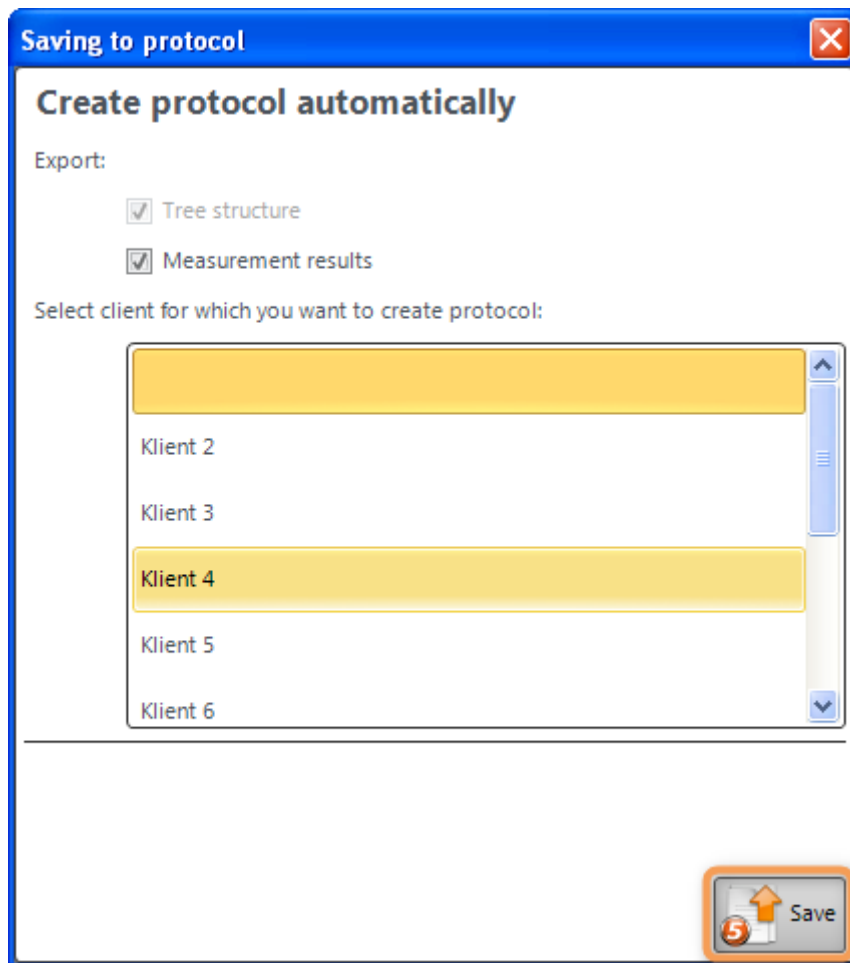
After downloading data from test instrument and saving to file, user can create test report manually (selecting only necessary test points and adding to table) or use automatic function of creation of test report. Saving data, downloaded from test instrument has been described in chapter 3.2.

After saving data, below window will be displayed, where first please select customer and afterwards select from upper menu *Save as report*.



- **Print results** – print test results displayed in window,
- **Save as EXCEL file** – data export to MS Excel,
- **Save as TXT file** – data export to text file,
- **Save as report** – creates test report (option with MPI-530, see 4.3).

Afterwards new window will be displayed where user check if the correct customer has been selected and select an option to create new report (only tree structure, tree structure with test results, table according to HD60364-4-41).



After clicking on **Save** please select location and name of the file. Saved report will be opened in Sonel Reports+.

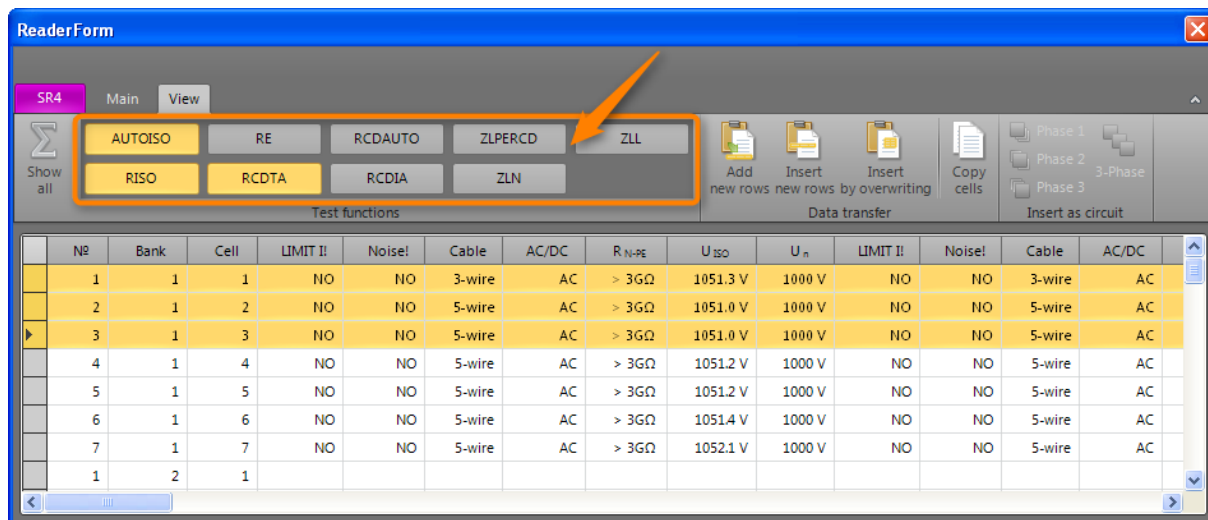
The screenshot displays the SONEL Reports PLUS software interface. At the top, a navigation bar includes 'Building 1', 'Group', 'Room', and 'EN60364-6'. Below this is a 'Descriptions' section with radio buttons for 'Zs[Ω]' and 'Ik[A]', and a text field for 'Residual-current device(RCD)'. A table with columns 'Circuit', 'Wire/cable', and 'Loop impedance' is visible. A 'ReaderForm' window is open, showing a tree view of the project structure (Building 1, Group, Room) and a table with columns '№' and 'Description'. The table contains data for 'EN60364-6' and 'Ttitle1'. Annotations 'title1', 'title2', and 'Ttitle1' are present on the screenshot.

Configuration can be only done for test instruments, that have such option e.g MPI-520. After data have be downloaded, all data are displayed in table, where can be edited, saved to file, exported to MS Excel. Downloaded data can be also entered directly to test report.

Above the table are located buttons that enable to identify test results (see below screen). Software sort data by type of measurement. Window displays selected data (right mouse click select type of measurement).

In order to create report automatically for next customer, please click on button Test Instrument in toolbar DATA. Afterwards select customer and select Save as report (here software asks for the name of new report).

It is also possible to create report manually. In order to do it, please switch in communications window to bookmark View.



In order to enter data to test report, first please open report and go to window “Data from test instrument” (above). Find data to be entered.

Afterwards select rows with data, that we want to enter (e.g using mouse) and using one of the options **Add new rows**, **Insert new rows**, **Insert by overwriting** add it to report.

Option **Add new rows** add new rows at the bottom of the table and inserts there test results.

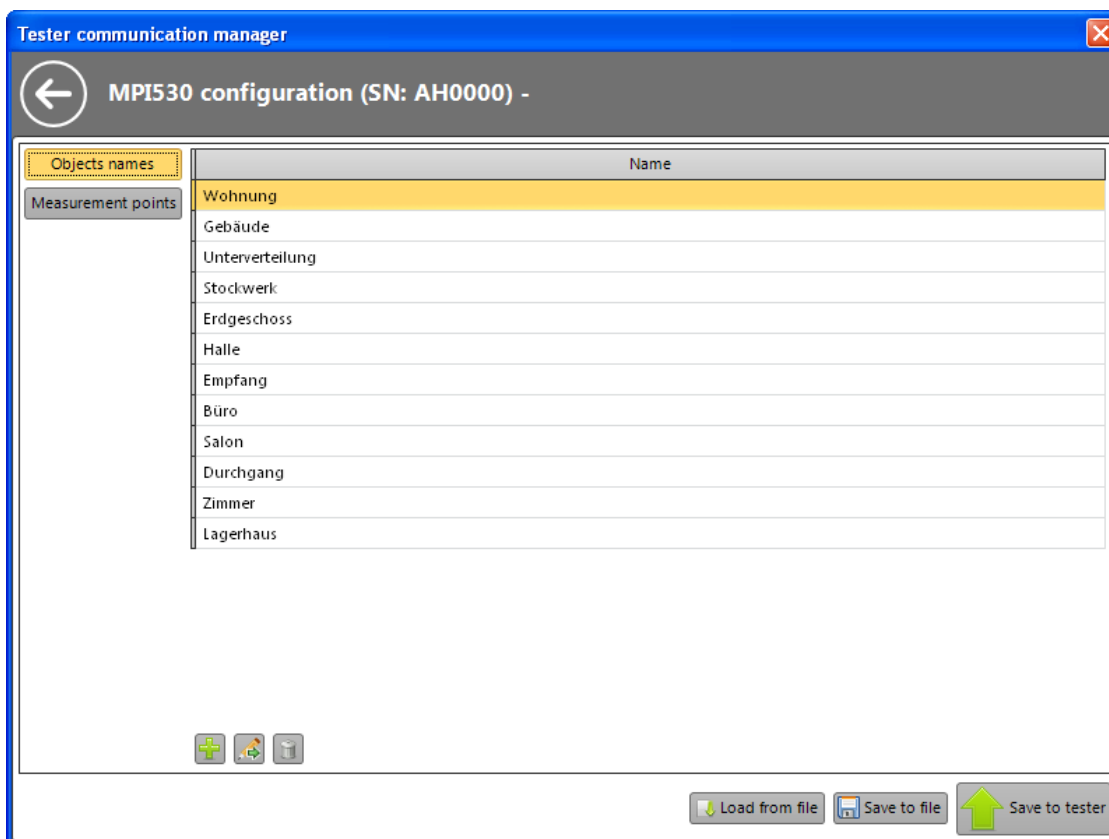
Option **Insert new rows** add new rows, starting from the selected row and inserts test results.

Option **Insert by over-writing** overwrites test results in the table, starting from selected row.

In case of first two options, software add number of rows that equals number of selected rows in the table. In the above example 3 rows will be added to test report. In case of overwriting, software overwrites number of rows that equals number of rows selected in the table. If there were created less rows in test report, software add rows at the bottom of the table.

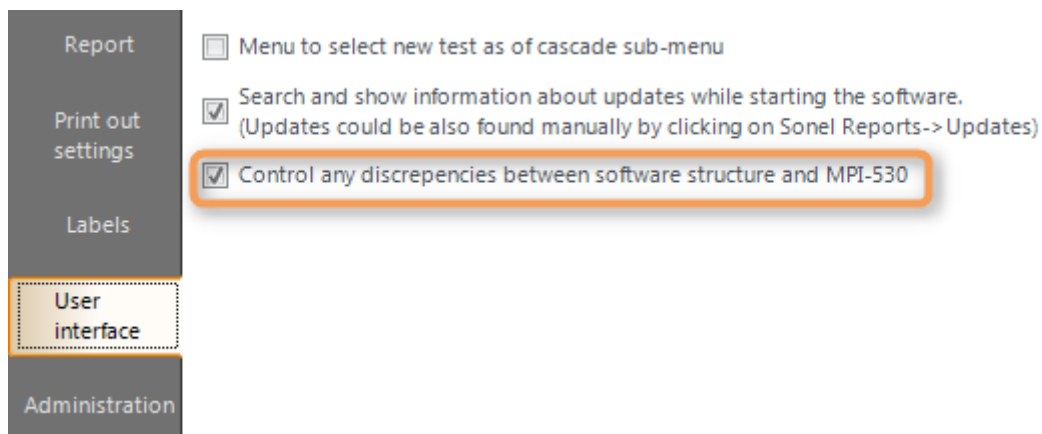
4.2.1. Configuration of MPI-530

Using the software user can modify settings of MPI-530. In order to configure test instrument settings open window with data download and find test instrument (4.2), afterwards, in the right side select option **Configure the tester**. New window will be displayed.



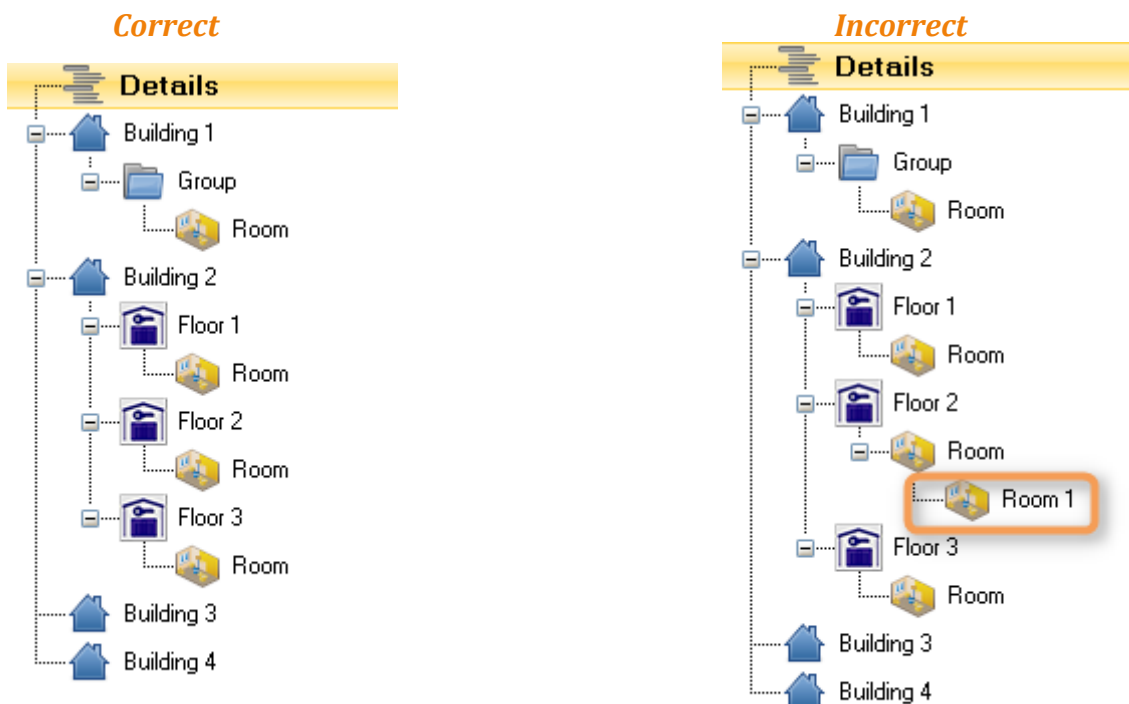
4.2.2. Uploading tree structure to test instrument

Software enables to upload to test instrument tree structure with objects and test points. Before starting this operations, please make sure that software is in Communications mode with MPI-530. Opens software options (see 4.1), open **User interface** and check if option **Control any discrepancies between software structure and MPI-530** has been selected.

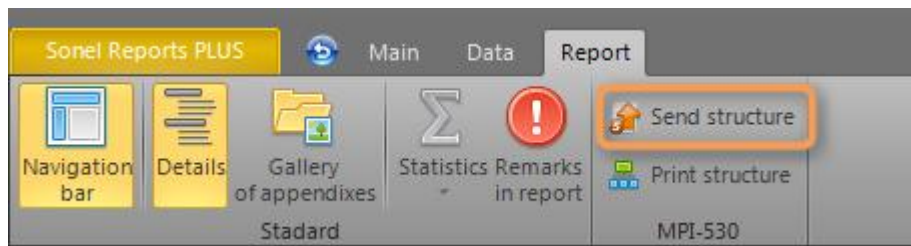


REMARK!!!

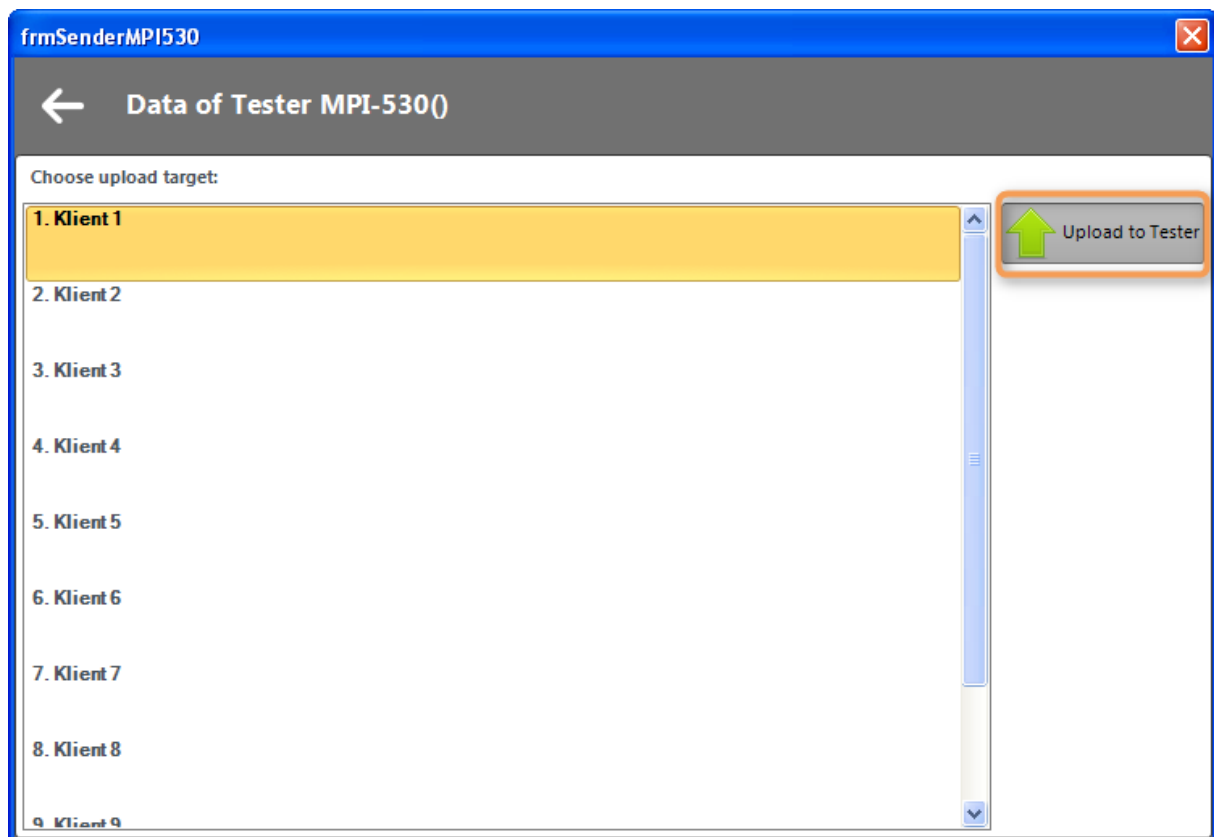
Please remember that software can create maxim up to second level of sub-objects. Below please see example of tree structure conformed with MPI-530.



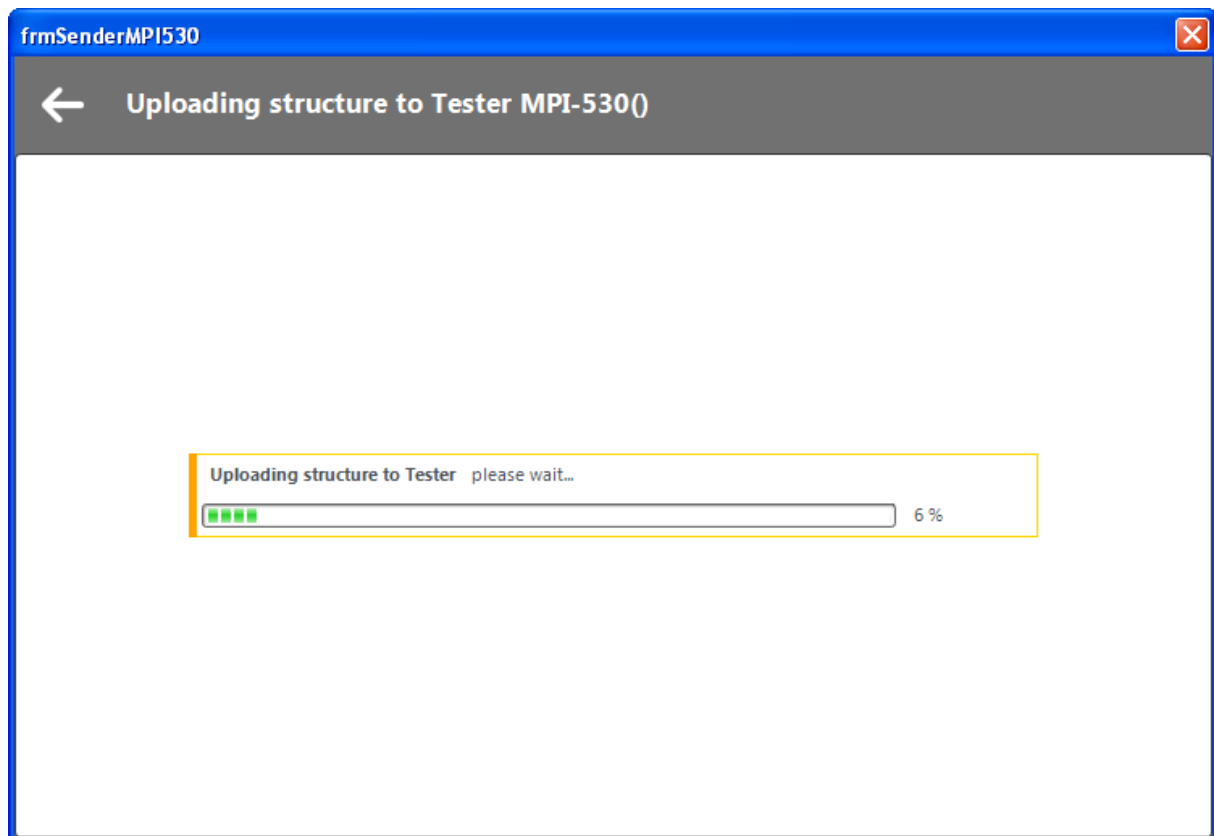
After the tree structure is ready to be uploaded to MPI-530, please go to Report and select option **Send Structure**. Window with searching of test instrument will be displayed, where please select MPI-530.



After selecting test instrument, opens window to please select customer, whom test report will be associated. MPI-530 possesses data base of 10 customers, whom user can send 10 different tree structure.

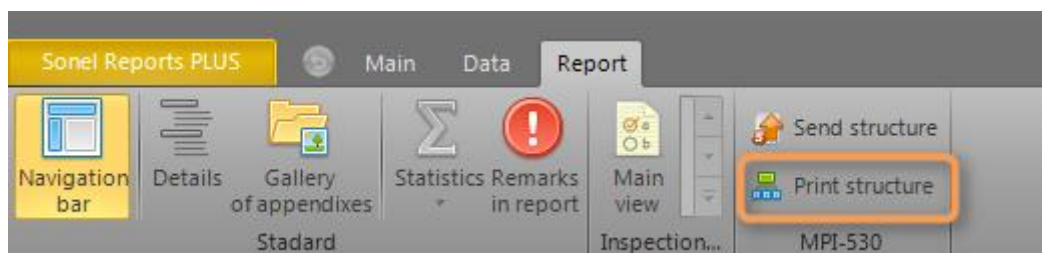


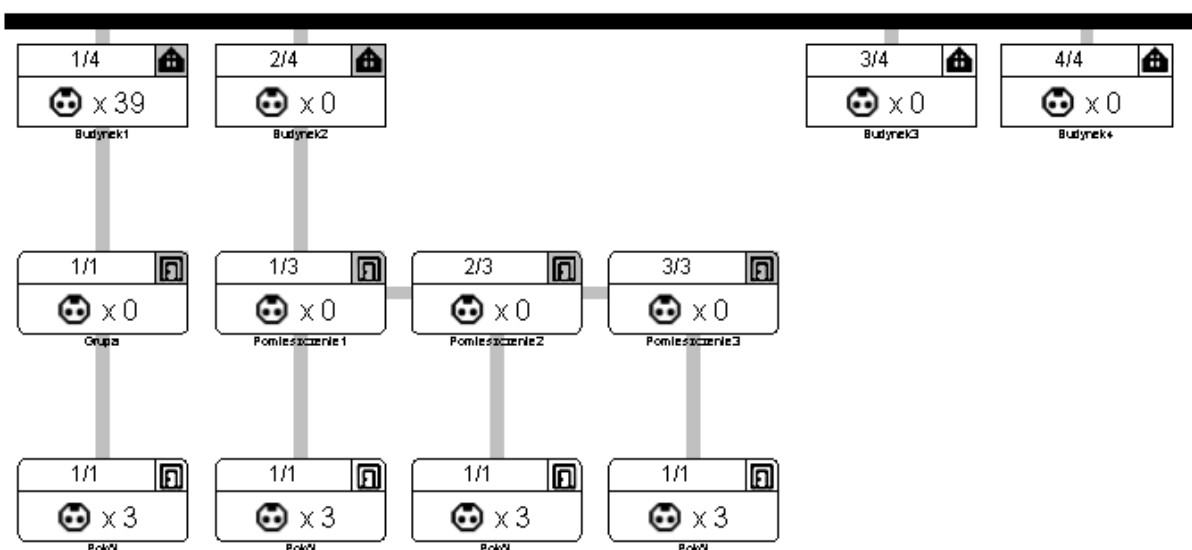
Click on **Upload to Tester** in order to upload tree structure to test instrument.



4.2.3. Printing tree structure

Software enables to print tree structure, that has been sent to test instrument. Icons on the print out reflect tree structure/icons saved in test instrument.





5. Creating of test report

5.1. Measurements performed by MPI-530

Test results can be stored in MPI-530 in two ways:

- one by one without creating tree structure
- creating tree structure, associating test results with proper rooms or test location. This chapter describes second method.

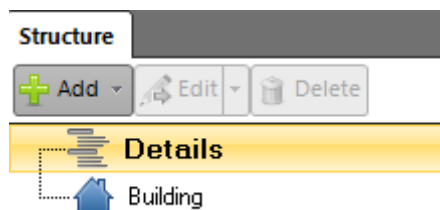
Steps to create test report:

1. After starting up the software select window with data read out, (4.2) and start new download (select MPI-530).
2. After data read out and saving opens the window with test results. In this window please select customer and select option **Save as report** (4.3.4)
3. In automatic mode, report will be saved in the same file where data from tester have been saved.
4. After report has been created, please fill in all bookmarks **Details** (3.4.1)
5. Afterwards please check all tables with test results in appropriate buildings and start printing report. (3.1.1)

5.2. Measurements performed by all other Sonel test instruments (except MPI-530)

Steps to create test report:

1. After starting the software create new report and save to file (2.3)
2. Afterwards window with report opens and on the left side you will find basic structure of the building. Next click on **Details**



3. In the main part of the screen find 5 bookmarks with information that must be filled in accordingly (3.4.1)
 4. Next move to start creating tree structure of the object (3.4)
 5. After the structure is ready go to tables with test results for appropriate rooms (3.4.2)
- IMPORTANT!!!
- Tables with test results can be added to every element of tree structure.
6. Please add to enter table the number of rows that equal number of test points for proper room. Rows with test results can be separated by title rows. (3.4.2)
 7. Every row with test results must be filled in accordingly:

Circuit:

- Symbol – to be entered manually
- Name – can be entered manually or by double click opens the list with Test Points (list of Test Points described in chapter 2.7)

Wire/Cable:

- Type, Q-ty, Section – double click opens list of data that automatically can be entered in all 3 fields (3.4.2.1).

Loop Impedance:

- Name, Characteristic, In – double click opens list of fuses and after selecting one of them all 3 fields will be filled in (list of fuses described in chapter 2.8)
- Ik (Zs)– can be entered automatically or downloaded from test instrument.

R iso:

- R iso - can be entered automatically or downloaded from test instrument.

RCD:

- All fields to be filled in manually

Failure Code:

- Failure Code – double click opens list of code and please select one of them (3.4.2.1).
8. If you want to add remark to test result please double click on selected row and select option (3.4.2)
 9. After all options are filled in you can start printing report (3.1)