GOnsite

v1.2

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FOREWORD

General

Congratulations on your purchase of GOnsite! This program enables you to register the test results acquired with an A.P. van den Berg data acquisition system. If you have any questions, remarks or suggestions regarding the functioning of GOnsite! please contact:

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Helpful hints

- Each function in GOnsite! is described in a chapter. The chapters are indicated by means of a dark grey bar along the width of the page.
- The sections within the chapter are divided in paragraphs. The paragraphs are indicated by means of a light grey bar along the width of the page.
- The name of a function is mentioned on the paragraph bars. On the right side you find how to select this function.
- In the description of a function in a paragraph it is assumed that the selection of the functions as indicated in the previous chapter and paragraph bars has already been done. A review of the steps taken is given at the right side of the paragraph bar so that a function can be found quickly.
- The manual gives a description of how to perform a function. The procedure for returning to a previous menu or the main menu is always the same. Therefore this procedure is not mentioned each time unless it is necessary for a correct functioning.
- The description in the manual is based on functional processes. This means that all functions are described in the context of the processes that occur within GOnsite!
- The standard Windows mouse control is used for selecting items.
- Basic concepts in the text will be shown in bold. *Example*: **Test**.

☞ *This symbol is followed by a tip that simplifies the use of GOnsite! The corresponding text is in italic.*

💣 *This symbol indicates actions which are absolutely necessary or which can lead to undesirable situations. The corresponding text is in italic.*

1 GOnsite BASICS

v1.2

GOnsite! is a software program used to register test results. The test results are acquired through suitable equipment supplied by A.P. van den Berg.

In order to store the test results in an orderly manner a project structure is used. Several tests can be performed within a project. The tests can be easily selected. In general a project is performed for a client. This kind of information is attached to the tests, together with a project description.

The test results are shown on screen while testing. Depending on the selected screen layout, the test results are shown in digits, bar diagrams or graphs.

Within GOnsite! the standard Windows controls are used. Printing options are set by means of the standard print options of Windows, enabling an easy use of several printer types. Also other peripherals can be installed by means of Windows.

System requirements

Minimum system requirements Laptop

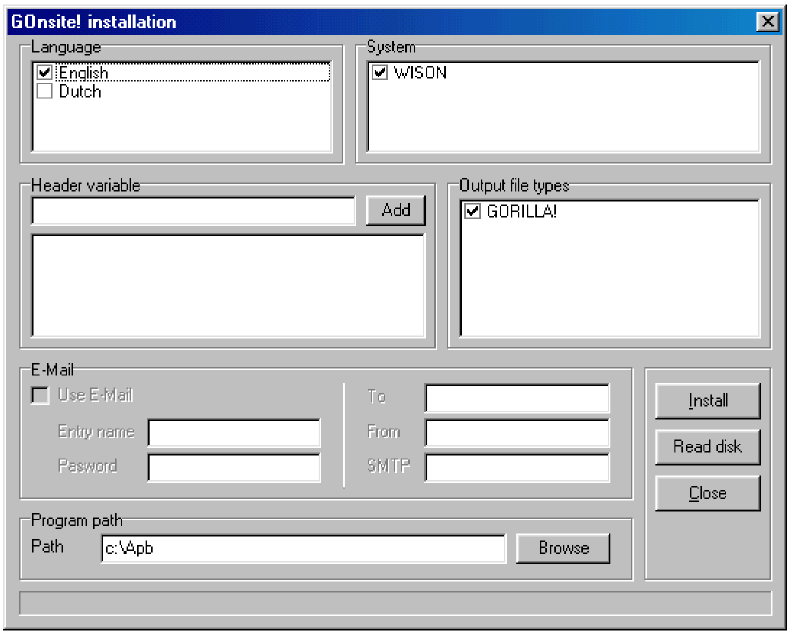
Processor	: Pentium II, 400 MHz (Celeron)
Internal memory	: 64 MB
Hard disk	: 20 MB free available for software
	: 10-100 MB free available for data storage
Screen resolution	: 640 x 480 (800 x 600 recommended)
Communication	: serial connection for the data acquisition system

Additional system requirements depending on the functions used:

Printing	: parallel- or USB connections.
E-mail	: serial connections/ PC-card slot depending on the applied GSM module

Installation procedure

When the installation procedure is started, the following screen is shown:



Before installing the program a number of settings have to be selected. The available options are shown below:

Language
Select the required language by means of the mouse. A checkmark indicates your selection.

System
Select the data acquisition system you want to use.

Header variable
Apart from the standard variables that are available in GOnsite! it is possible to add variables. These variables can be defined as you wish and are added to the general information.

Output file types
The GORILLA!-format is the standard format.

E-mail
To be filled out if the test results are to be sent by e-mail directly from the construction site. This is an optional function which only works if the necessary hardware is installed.

Program path
Select the required directory. GOnsite! will be installed standard in the directory <program path>\GONSITE!
It is recommended to use the path C:\APB.

After filling out all options select INSTALL. GOnsite! will be installed automatically.

In a number of cases a disk will be supplied on which all necessary options, as mentioned above, are preset. If this is the case the installation procedure consists of two steps:

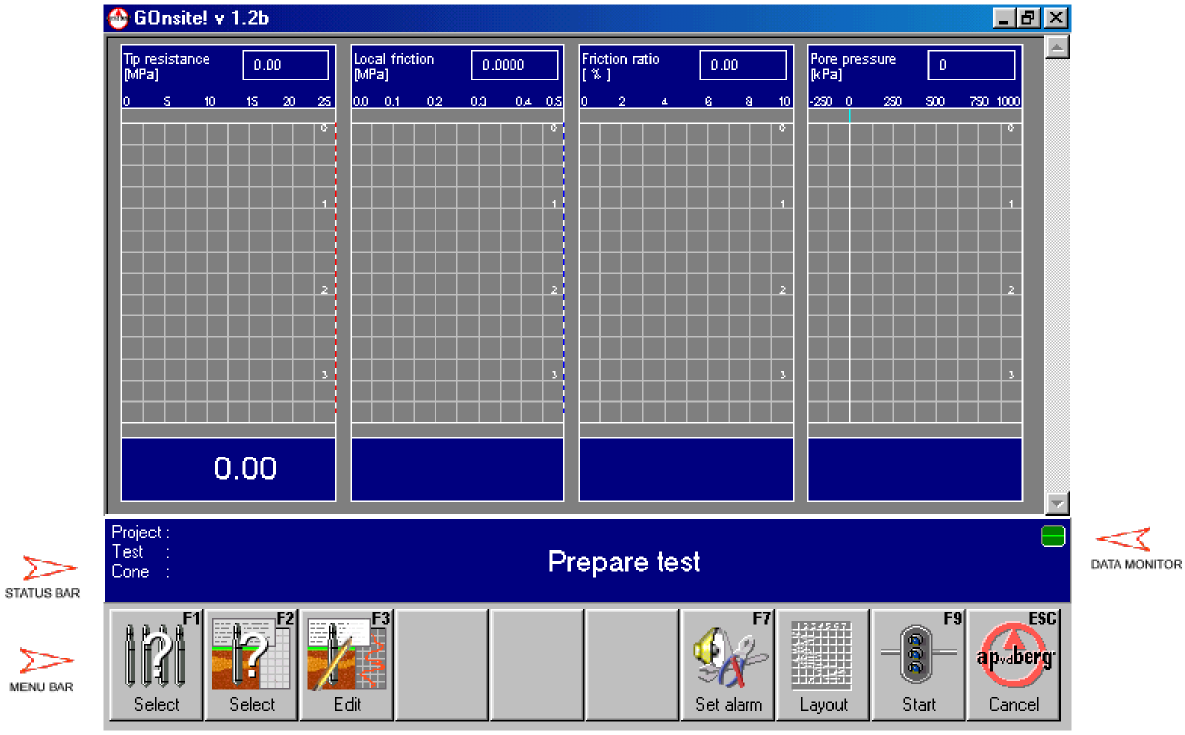
1. *Select Read disk,*
2. *Select Install*

Control

To run the program, the keyboard and mouse can be used. The functions on the menu bar can be selected by clicking on them with the mouse. They can also be selected by using the function keys F1 thru F10 or by using the cursor keys.

Screen information

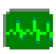
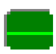
The functions in GOnsite can be found back in several menus. Each menu has a different menu bar definition and screen layout. In the illustration of the screen below, the standard items are shown the same way as they will be shown generally in the screen layout.



status bar
Shows information relating to the status of the test. It shows for instance the type of cone selected.

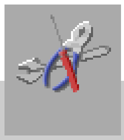
menu bar
Functions are selected by means of a button on the menu bar. By selecting a certain function the screen changes to a different menu with a corresponding screen layout. A new menu may have buttons different from the previous menu. In this way the control of the system is kept simple, with only those functions available on the menu bar that are applicable at that point.

data monitor
The data monitor shows communication between the GOLOG! data acquisition system and the laptop on which GOnsite! is installed. If for any reason there is no data communication this will show immediately:

 Communication OK  Communication bad or interrupted

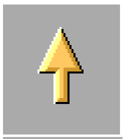
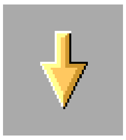
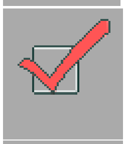
System settings

Before starting testing with GOnsite! it is advisable to fine-tune the several settings so that the wanted result will be obtained. Usually this needs to be done only once. Settings can be changed later on if they appear to be incorrect. Several settings directly influence the functioning of the system. These settings resort under system settings.

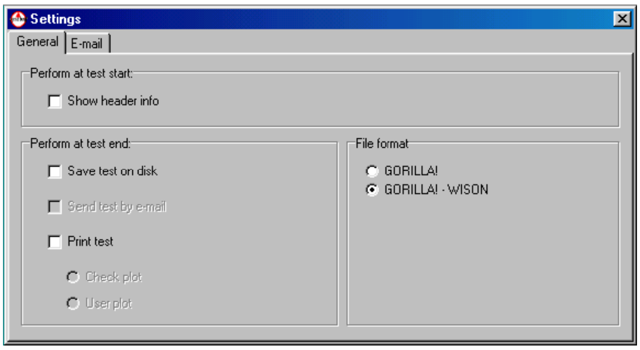
 

selecting system settings

On the screen a number of tab pages with options are shown. For a description see below:

 	Select the required option.	
	Click on the selected option.	*A check mark appears before the option.* *The check mark disappears by selecting the option again.*
	Confirm the selected settings.	*Return to the previous menu.*

general settings



Show header info

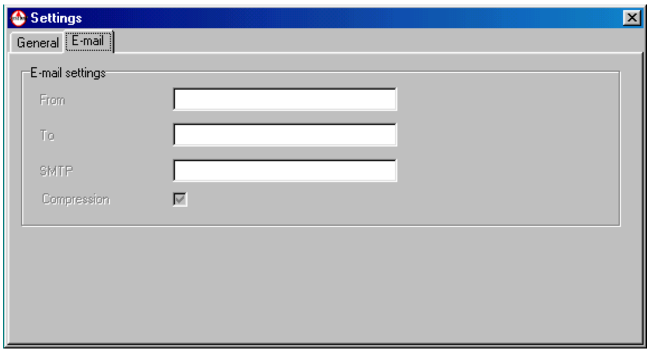
By selecting this option, the input screen for changing the additional information will automatically appear when you start a test. This way it is almost impossible to forget to fill out the additional information. We advice not to select this option if the additional information is known mostly only after testing.

Save test on disk
By selecting this option, the test results will be automatically stored on the floppy disk immediately upon completion of the test.

Send test by e-mail
By selecting this option, the test results will be sent automatically by e-mail immediately upon completion of the test. The settings necessary for sending data via e-mail are included on the tab page **e-mail**.

Print test
By selecting this option, the test results will be printed automatically immediately upon completion of the test. Depending on the selected sub option, a **check plot** or a **user plot** will be made. The check plot is printed according to a paper layout defined by A.P. van den Berg. The standard print is printed according to a paper layout defined by the user.

e-mail settings



These setting can be made if the necessary hardware to send test results by e-mail has been installed.

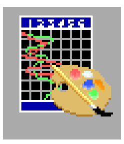
From
Fill out the e-mail address from which the data are sent.

To
Fill out the e-mail address to which the data are to be sent.

SMTP

Compress data
In the standard setting, the test data are compressed when sent by e-mail. This way files are made smaller, saving transmission time and expenses.

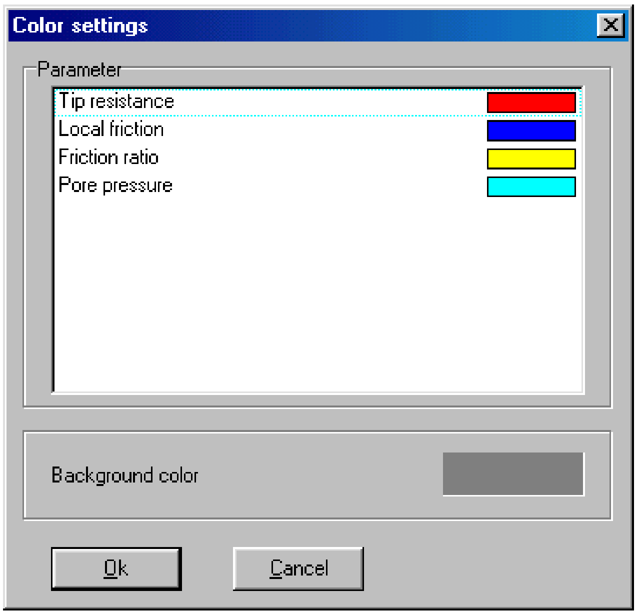
Compressed data must be decompressed after receipt for further processing.



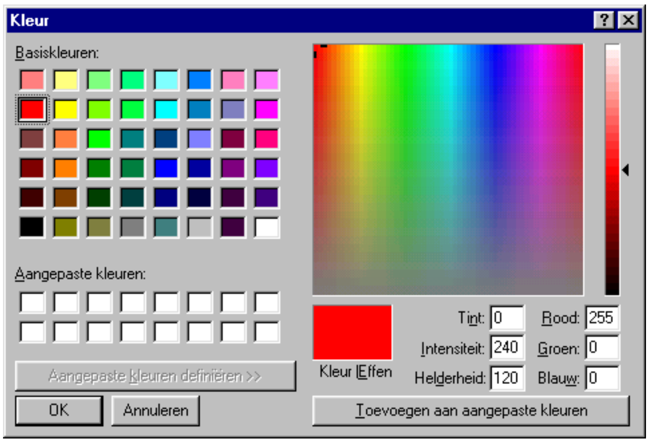
screen colours

This function is used to set the colours of the graphs and the background colour of the test screen. Usually these settings are made only once. Changes are carried through in all available screen layout definitions.

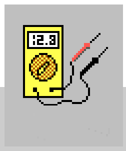
After selecting this function the following screen appears:



Select one of the parameters or the background colour to adjust the colour setting. The following standard Windows screen is shown:



Select the required colour and exit the function by clicking on **OK**. The previous screen reappears. Adjust the next colour and repeat the procedure or exit this function by clicking on **OK**.

System

Here the behaviour of the data acquisition system and the GOnsite! can be checked. This information is only consulted by one of A.P. van den Berg's technicians in case of failure.

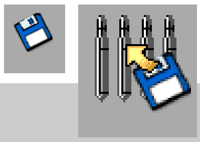
3 GOnsite v1.2 PREPARATIONS

Before testing some preparations are necessary. Most preparations can be made at the start of a working day.

Sometimes
For a correct interpretation of the test results it is necessary to indicate with which cone the parameters were obtained. Calibration data are coupled to each type of cone. These calibration data are supplied on a floppy disk, upon delivery or periodical calibration. These calibration data have to read in once-only in order to use them in the data acquisition system. See Chapter : **PREPARATIONS, *reading in cone calibration data***.

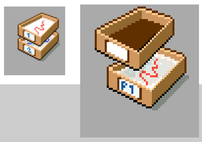
Daily
Before testing it is necessary to define the project to which the test results belong. Without a project definition it will not be known where a test belongs. See Chapter: **PREPARATIONS, *create a project***. Check if the cone data of the used cone(s) are available and up-to-date. Read in the calibration data if necessary. See Chapter : **PREPARATIONS, *reading in cone calibration data***.

Each test
Select the cone that is used for the test. The cone will remain selected until a different cone is selected. See Chapter: **TESTING, *cone selection.***



Reading in cone calibration data

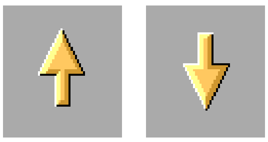
Insert the floppy disk containing the cone calibration data in the disk drive of the system. The screen shows the available cones. The calibration data will be automatically copied to the list of available cones.



Create a project

On the screen a list will appear with the existing projects. Below the project list is an extra screen in which the information of the new project can be entered.

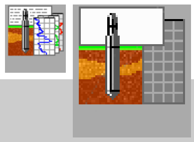
extra scherm zichtbaar waarin de gegevens van het nieuwe project ingevoerd kunnen worden.



Select the required field.

Use the keyboard to enter text.

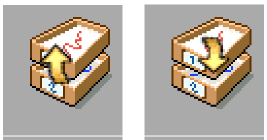
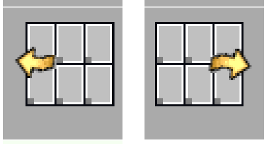
Repeat the procedure to create more projects.



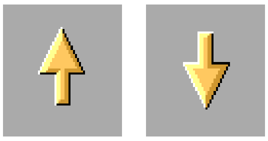
preparing a test

Sometimes it is useful to not only create a project but also the test numbers that go with the project. By preparing ahead it is clear right from the start of a project which tests need to be done.

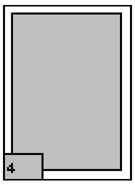
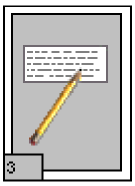
Before activating this function select the correct project as indicated below.

	Select the required project.	*The test numbers belonging to the project are listed. See below.*
	Select the required screen listing of test numbers.	
CLICK!	Select the required test number.	*The test number turns blue.*

Now select the function **preparing a test**

	Select the required field.
	Use the keyboard to enter text.

Possible test number designations.

	No test results are available and no additional information has been entered. This test number is therefore available for preparation.
	This test has not yet been performed. Additional information has been entered. The test has been prepared.

☞ *By double-clicking on an empty test number the screen for entering the data appears automatically.*

4 GOnsite TESTING

v1.2

General

Before testing it is necessary to select a cone and a test number of the project. (see Chapter : **PREPARATIONS**).

Cone selection

The cone selection menu appears. The screen lists the available cones. Available adapters are listed too. Data in the cone list contain, among other things, the cone calibration data. These data are necessary to process the test results correctly.

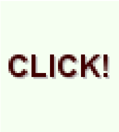
- *It is important to keep the cone calibration data up-to-date. This means that calibration data of new cones or newly calibrated cones must be copied to this list immediately after reception of the floppy disk. (see Chapter : **PREPARATIONS, reading in cone calibration data**).*

Select the required adapter or cone.	
Check the selected item.	*Use this option again to undo selection. Repeat the previous steps to select an adapter, for instance.*
Confirm the selection of the cone and possible adapters.	

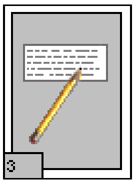
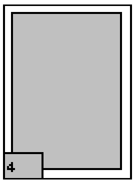
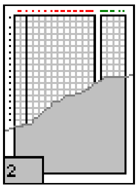
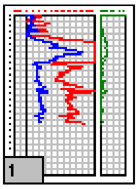
Test number selection

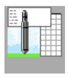
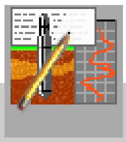
Before testing first select the required project:

Select the required project.
Select the required screen listing of test numbers.

	Select the number of the test to be performed.	*The box containing the test number turns blue.* ☞ *Check the summary below to select the correct number.*
	Confirm the selection of the test number.	*Follow the indications on the screen if any.* *The screen to perform a test reappears.*

Possible test number designations.

	The test has not yet been performed. Additional information has been entered. (See Chapter : **PREPARATIONS, *creating a test.***)	*Select this test number in those cases where the preparations for a test have been made.*
	No additional information has been entered and no test has been performed.	*Select this test number in those cases where additional information is not available or has not yet been entered.*
	The test was started but was aborted due to failure.	*Select this test number when the failure has been repaired and the aborted test can be continued.*
	The test was started and ended. In principle the test is complete.	*By selecting this test number you have two options:* - *the existing data are deleted and replaced by new data* - *the new data are added to the existing data.*

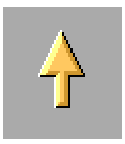
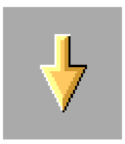



How to change additional information

Additional information that is available before starting the test, can be entered immediately. Sometimes additional information is available after completion of the test.

This function can only be used if a project and a test number have been selected. See Chapter , **TESTING, *test number selection***.

The screen lists the available fields. The list is divided in three sections: a general section, a section with fields relating to test standards and a section defined specifically for the user.

		Select the required field.

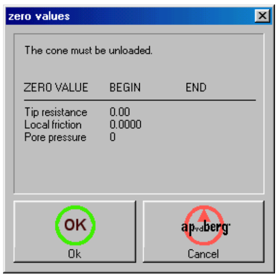
Use the keyboard to enter text.

If the option 'SHOW INPUT SCREEN' has been selected at system setting ', this function will automatically be selected upon starting a test.

This function can also be used after completing a test. The TEST menu does not need to be closed to do this.

starting a test

After selection of a cone and a test number the test can be performed. Take care that before starting the test the cone has to be placed above the ground level WITHOUT IT BEING LOADED. In this unloaded state the cone can be "zeroed". This means that the test results will be corrected for the values that the cone gives in its unloaded state. The window for measuring the zero values is shown on screen.

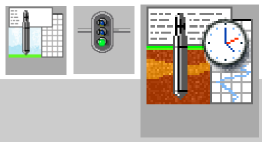


If the unloaded value differs more than 10% from the nominal value, the value will be shown in red.

5 GOnsite v1.2 DURING TESTING

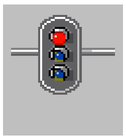
During testing a number of actions can be taken that do not directly impact on the test itself. These actions can be done at any moment during the test.

(☞ *For starting a test see Chapter : **TESTING, starting a test***)



dissipation test

When using a cone that can measure pore-water pressure, a dissipation test can be performed. A dissipation test is performed against time. It is divided in several time intervals. In the first interval measurements are made against the fastest possible time basis. In the subsequent intervals a slower time base is used.

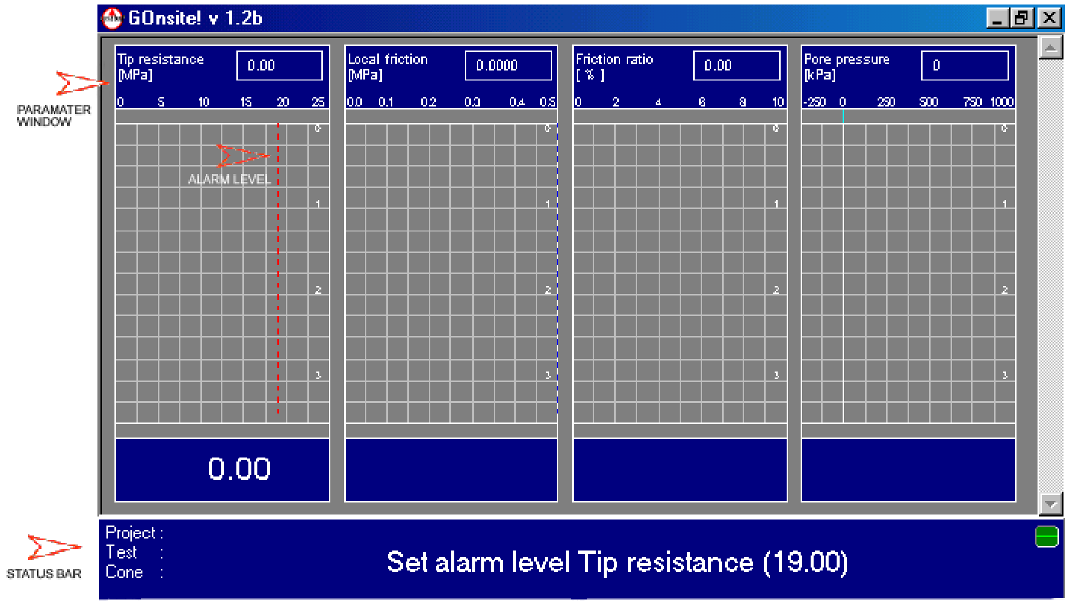
	The dissipation test starts as soon as the function is selected.	*The screen layout is automatically adapted for a reproduction of the test results against time.*
	End of dissipation test.	*The dissipation test window is closed. Registration against depth can be resumed. The screen layout for reproduction of test results against depth reappears.*

The registration of a dissipation test is divided in several periods. In the first period the interval is as small as possible. In the subsequent periods longer intervals are used (see table below).

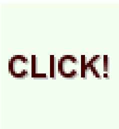
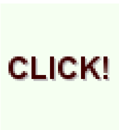
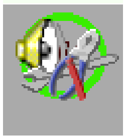
period [min]	registration interval [sec]
0 – 1	1
1 –10	10
10 – ∞	60

alarm level - how to set it

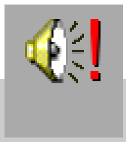
Select the window of the parameter for which the alarm level needs to be set.



The selected parameter appears in the status bar, together with the value already set. Now you can set values outside the range of the graph.

	Click on the area to the left of the middle of the graph.	*The alarm level is reduced.*
	Click on the area to the right of the middle of the graph.	*The alarm level is raised.*
	Confirm the setting.	

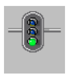
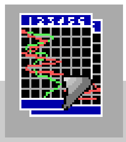




alarm signal - how to switch it off

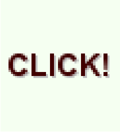
This function overrides the alarm and can be used when the alarm level is exceeded.
The acoustic signal is switched off and the automatic cut-off of the hydraulic system is cancelled.

Automatic cut-off of the hydraulic system is optional.

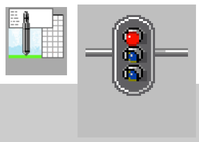
screen layout – selection

The screen shows a summary of the available screen layout definitions.

	Select the required screen layout.	*The selected layout is indicated by a red frame.*
	Confirm the selection.	*The test is shown in the selected layout.*

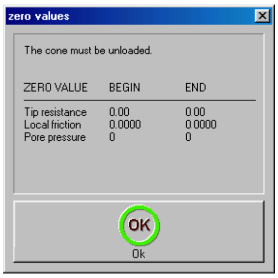
6 GOnsite v1.2 AFTER A TEST

A number of functions will generally be used after completion of a test. These functions will be explained in this chapter.



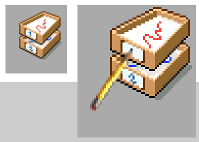
Completing a test

After completing a test the cone can be brought back above the ground level, where it can be "zeroed" again. This will happen automatically upon completion of the test. If there is a difference between the zero value registrations before and after the test, the cone may be damaged. In such cases further inspection is recommended.



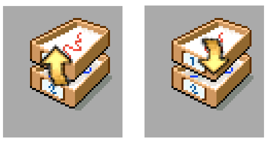
Both the results of the zero value registration before and after the test are shown.

If the unloaded value differs more than 10% from the nominal value, the value is shown in red.



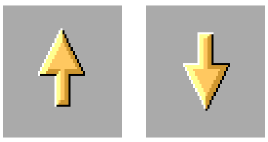
How to edit project data

In a number of cases it may be necessary to change the project data that have already been entered. First select the project that has to be changed.



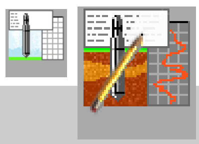
Select the required project.

Edit project data:



Select the required field.

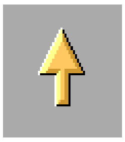
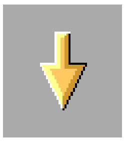
Use the keyboard to edit text.

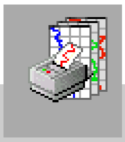


How to edit additional information

Sometimes additional information becomes available only after completion of the test. This function can only be used after selection of a project and test number. See Chapter : **TEST, *test number selection.***

The screen lists the available fields. This list is divided in three sections: a general section, a section with field relating to the test standards and a section defined per user.

		Select the required field.	
	Use the keyboard to enter text.		

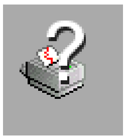
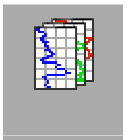
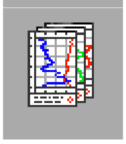
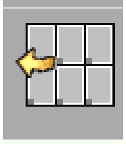
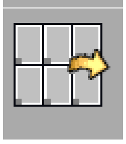
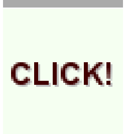
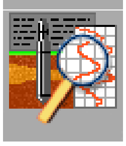


Printing

The test data can be printed using two options:

- **check plot**
  The raw test results are printed on a fixed page layout.

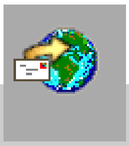
- **use plot**
  The test results are filtered and printed on a page layout defined by the user.

		Select printer.	*This option is only available if more than one printer was defined.*
		OPTION: Select check plot	
		OPTION: Select user plot.	
		Select the required project.	
		Select the required screen listing of test numbers.	
		Select the test that has to be printed. Several tests can be selected at the same time.	*The test is marked with a* √
		OPTION: Mark all tests of the selected project.	*All tests are marked with a* √
		OPTION: View the test results of the selected test.	*Use this option to view the test results before printing.*

Print all selected tests.

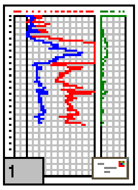
It is possible to select and print tests from several different projects all at the same time.

If the option 'TEST COMPLETION, print test' has been selected in the system settings, the test will automatically be printed upon completion.



e-mail

When sending the test data by e-mail, use the same selection procedure as for printing. Tests sent by e-mail are marked with in the test number list.

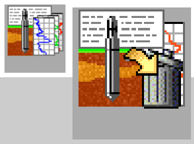


As indicated before the necessary hardware has to be installed in order to send test results by e-mail.

If the option 'TEST COMPLETION, send test by e-mail' has been selected in the system setting, the test will automatically be sent by e-mail upon completion.

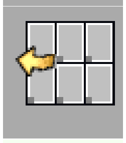
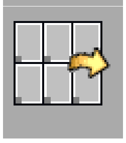
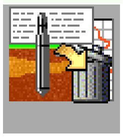
7 GOnsite v1.2 OTHER FUNCTIONS

This chapter explains the functions that are not directly involved in the testing process.



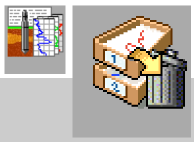
How to delete test results

To delete test results select first the relevant project and test number.

		Select the required project.	
		Select the required screen listing of test numbers.	
CLICK!	Select the test that has to be deleted.		
	Delete the selected test(s).	*Answer YES to the question if the test has to be deleted.*	

Repeat the procedure to delete more tests.

The test results can also be deleted by using the DEL key on the keyboard. In that case the same selection procedure applies.



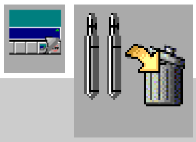
Delete a project

Before deleting select the project:

		Select the required project.	
	Delete the selected project.	*Answer YES to the question if the project has to be deleted.*	

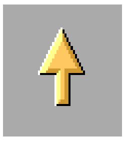
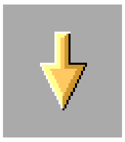
Repeat the procedure to delete more projects.

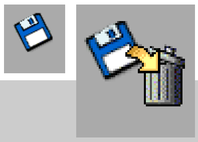
When deleting a project, all tests belonging to the project are deleted at the same time!. Therefore be careful using this function.



How to delete calibration data

The screen lists cone calibration data.

		Select the required cone.	*The section of the cone will automatically be selected and will turn blue.*
		Confirm the selection and delete the data from the list.	*The list is updated. Repeat the procedure to delete more calibration data.*



Format disk

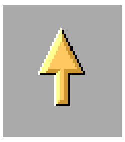
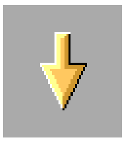
Insert the disk in the disk drive (A:)

Be careful using this function, as all data will be removed from the disk.

Archive

A copy of each test that is performed is stored in the archive. These test data can be copied to a floppy disk. Standard the last 400 tests are stored in the archive.

Insert an empty floppy disk in the disk drive. The tests in the archive are listed on the screen.

		Select the required field.	*The section of the test is automatically selected and turns blue.*
		Confirm the selection and copy the test to the floppy disk.	*Repeat the procedure to copy more tests.*

How to store test data

This function is used to store on a floppy disk all test results belonging to a project. Make sure that an empty floppy disk is placed in the disk drive.

	Select the required project.	
	Select the required screen listing of test numbers.	
CLICK!	Select the test that has to be copied.	*The test is marked with a √* ☞ *Repeat the procedure to copy more tests.*
	OPTION: Mark all tests of the selected project.	*All tests are marked with a √*
	OPTION: View the test results of the selected test.	*Use the option to look at the test results before storing the test.*
OK	Confirm selection and copy the test(s).	*Repeat the procedure to copy tests belonging to other projects before confirming.*

☞ *Sometimes floppy disks are used to exchange test data. In that case use the option to automatically store test data on floppy disk immediately upon completion of the test (see Chapter **SETTINGS, system settings**)*

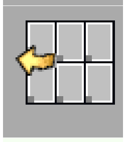
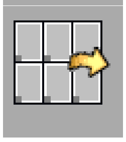
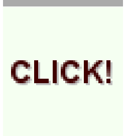
System information

This screen gives information about the computer system on which GOnsite! is installed and GOnsite! itself. This information is needed only in case of failures.

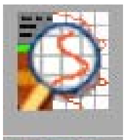
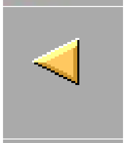
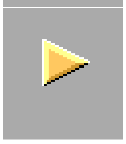
View test results

With this option you can look at the test results once again. Test data against depth as well as against time (dissipation test) are listed. In case of multiple dissipation tests, individual tests can be shown in an easy way.

First select the required project and test number.

 	Select the required project.	
 	Select the required screen listing of test numbers.	
	Select the test that you want to view.	

In case of dissipation tests a different menu bar appears. Maximum 5 of the same buttons enable you to view subsequent dissipation tests. Each button is numbered. By selecting the required button, the dissipation test is shown with the corresponding number. If more than 5 dissipation tests have been performed, buttons with arrows will appear, allowing you to select additional dissipation tests.

	Show the test results of the selected test against depth.	
	Show the test results of the selected test against time.	*Select the required dissipation test in case of multiple dissipation tests.*
	Select the previous dissipation test.	
	Select the next dissipation test.	

GLOSSARY

Additional information

Usually **test results** are completed with extra information that helps to further classify the **test results** or to add comments.

Dissipation test

A measurement against time during a test against depth is called a dissipation test. This type of test is made mainly with measuring equipment suitable for registering pore-water pressure. Additional information about the soil characteristics can be obtained from the change in water pressure measured against time.

Ground level

Usually the ground level is used as the level at which a test begins. At this level the depth is set at zero and registration against depth is started. Ground level is a relative indication of height. Therefore an indication is given of its relative position with respect to a certain reference system.

Tests

Tests are the total of measuring results and additional information taken together.

Test results

Test results are data acquired by means of measuring the different soil parameters during soil testing. They are usually stored against depth or time. They can be shown in a graph.

Project description

Projects generally contain several tests. Each project has its own project description. The project description is a short explanation of the project.

Project information

A project features a number of characteristics. These characteristics are stored per project, and are indicated as project information.

Reference level

The reference level indicates the absolute height at which a test has been performed. Usually the zero level of a test is set at ground level and then the position of the ground level is given with respect to a standardized reference level (for instance NAP in The Netherlands).

Starting depth

See pre-drillling, point 2.

Free variables

There is standard additional information and there is client-specific information. The latter is known as free variables which are different for every user.

Pre-drilling

If it is impossible to start testing from ground level because of a hard top layer (asphalt, stones etc.) a hole is made first by means of drilling or digging. This means that there is no ground level anymore. There are two ways to start the test:

1. **Start the test at the original ground level.**

The pre-drilled interval will not yield any measuring results, because the soil is disturbed there. By including the pre-drilled interval in the general information, GO4!® will not show the measuring results of this interval while presenting test results during the test.

2. **Start the test at the bottom of the pre-drilled hole.**
   The pre-drilled interval is skipped. It has to be indicated that the test started at the bottom of the hole instead of at ground level. GOnsite! indicates this level as the starting depth.

Water depth

With a test under water it is not possible to use the ground level as reference level. Usually the waterbed is entered at reference level. In order to also include the water depth in the graph, the variable **water depth** can be used.

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