TG omni1-Remote Manual

Contents

1 Why TG omni1-Remote?

TG omni1-Remote is a remote control and administration software for portable appliance testers. With this software you can generate individual test procedures for portable appliances, assign unique ID numbers to the appliances and perform the tests computer controlled.
Testing protocols with all test results values can be printed under MICROSOFT WORD. The software also allows an automated administration of inventory and test data.
For testers with built in memory the test data can be downloaded. It is also possible to transfer the inventory data to the testing device.
A test procedure consists of a series of test steps which are carried out one after another. For every step an upper and a lower limit can be entered. The measuring value is compared during the test and assessed with “OK” or “F”. The test procedure may contain remarks or images related to each test step.
A special function makes it possible to enter measuring values by hand, or to enter a Go-/ No go assessment as the result of a visible inspection. Loops and program jumps make compact testing procedures possible. A procedure is generated by copying the commands from a maser procedure and modifying them subsequently. This enables an easy and fast way to generate a new procedure.
All measurement results are saved in an ACCESS-data base and can be reloaded and printed at any time. Data of the TG omni1-Remote software can be imported on other computers.

2 System requirements

2.1 Hardware

- IBM-compatible PC Pentium 400MHz or above
- 64 MB RAM
- 1 free COM port or a USB/Com adapter
- 40 MB hard disk space

2.2 Software

- MS WINDOWS 2000 / XP /VISTA /7, with additional installation steps WINDOWS 98, Me, NT 4.0
- The UAC must be turned off
- MS WORD 2000, 2003, 2007
- System administrators should have ACCESS 2000/2003/2007 for individual data base administrative tasks.

3 Installing the program

Safety-Remote is installed from a CD.
Follow the installation instructions.
For Windows NT4 the Service Pack 6 must be installed.

3.1 Arranging your company logo

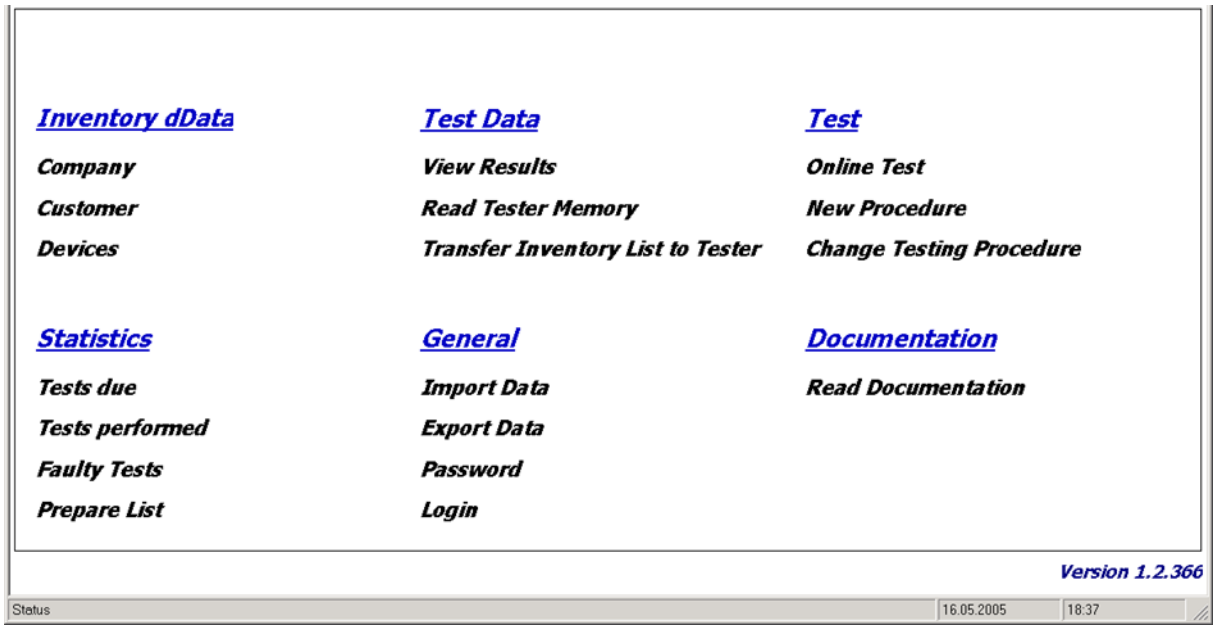
With the installation the directory c:\logo is inserted. Rename the file „logo.bmp“ and copy your logo into this place.

4 Starting the program

With the delivery of the software you get:

- A Master table with the list of all possible testing steps
- Procedure examples.
- Procedure examples for the test DIN VDE 0701-0702

When you start TG omni1-Remote you see the following screen:

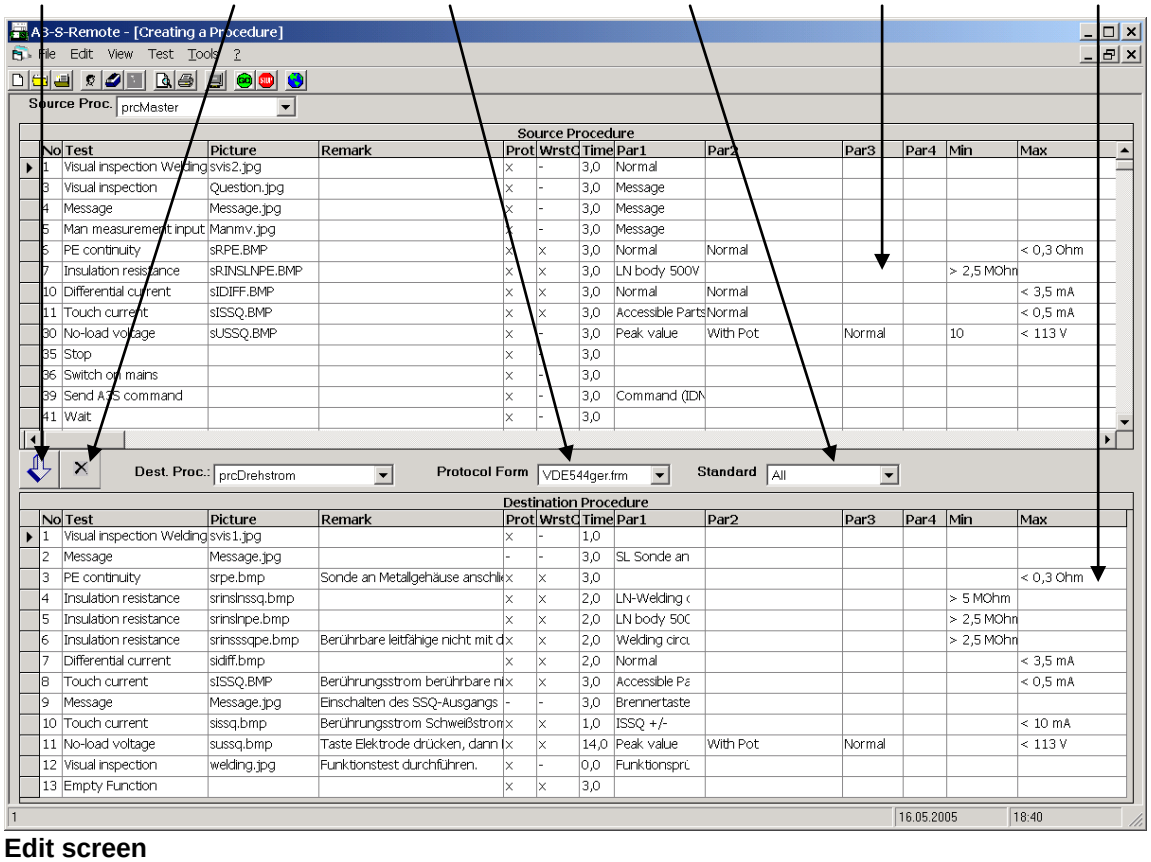


Start screen

Choose one of the shown options.

5 Generating a procedure

Copy	Delete	Protocol	Standard	Source	Destination



Edit screen

In the upper half of the screen there is the source procedure from which you can copy lines to the destination procedure in the lower half of the screen. The source procedure can be the procedure „prcMaster“ which contains all testing functions or any other procedure of the data base. Select the source procedure with the appropriate combo box. Similarly the destination procedure is selected. You

can choose a protocol form suitable to the destination procedure. The selection of the standard filters the procedures and form files fitting to the standard.
Mark one or several lines of the source procedure by:

- Using the menu „
- Click onto the left border
- Clicking the right mouse button when the mouse is above the field. Mark that line within the destination procedure in front of which you want to insert the line (Click onto the left border of the field)

Copy the procedure steps by click onto the blue arrow button.
Now the following fields can be edited

- **Picture**: here you can insert the name of an image to the testing step, which must be located in the subdirectory „Pictures“
  Note: It is possible to set animated files with the ending .avi. These are played repeatedly without sound
- Remark: during the testing step the remark is clearly visible for the tester in the upper screen
- Prot: with an “x” you decide whether the testing step shall appear in the protocol.
- WrstCse: this is a special field for the testing device. When it is ticked the intrinsic error of the testing is taken into consideration when calculating the measurement value. Note: in the master procedure those test steps are marked for which the worst case calculation is applicable. (a mains voltage measurement e.g. is not possible with worst-case calculation because there are no clear limits and the intrinsic error may be taken to the upper and the lower side.)
- Time: here, you enter the testing time. During this time the measurements are performed continually and min, max and worst case values calculated on each result. Note: If you set the time 0, the testing person must enter a key before the test is continued. This makes sense for measurements in which the probe is to be contacted on several test points.
- Par1…Par4: In these fields you enter the parameters to the measurement. There are measurements without parameter, with list parameters where you can choose a parameter from a option selection (e.g. “DC”) and parameters where you must enter a value (e.g. 500V for the insulation resistance test) or where you must enter a text (e.g. user notes)
  Note 1: to prevent an unnecessary switching on and off of the tester pay attention that all mains measurements are performed consecutively.
  Note 2: When entering a parameter you the possible entries in the status line below.
- Min, Max: These are the limits for the measurement. Note: limits can be entered with or without a unit. The normal units are interpreted as follows:
  n= 10^{-9}, u= 10^{-6}, m= 10^{-3}, k= 10^{3}, M= 10^{6}

The testing steps can be divided into the following categories:

- Measurement commands
- Questions or notes to the testing person
- Jumps and compare commands.

The testing procedure can be printed with WORD.

5.1 Jump commands

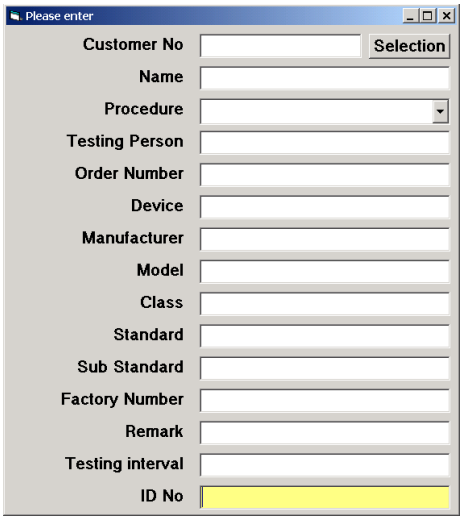
Jump commands are usually not needed. They mainly shorten the testing procedures by going through a routine several times.
The Jump commands always require a destination which is defined in a parameter. The Command “Jump on result” compares the test result with the value and jumps to the destination if the condition is true.

6 Connection of the unit under test

Connect the test instrument and the unit under test according to the instructions in the manual.
Connect the computer to the unit under test using a serial cable or via a USB/COM-converter.

7 Performing a test

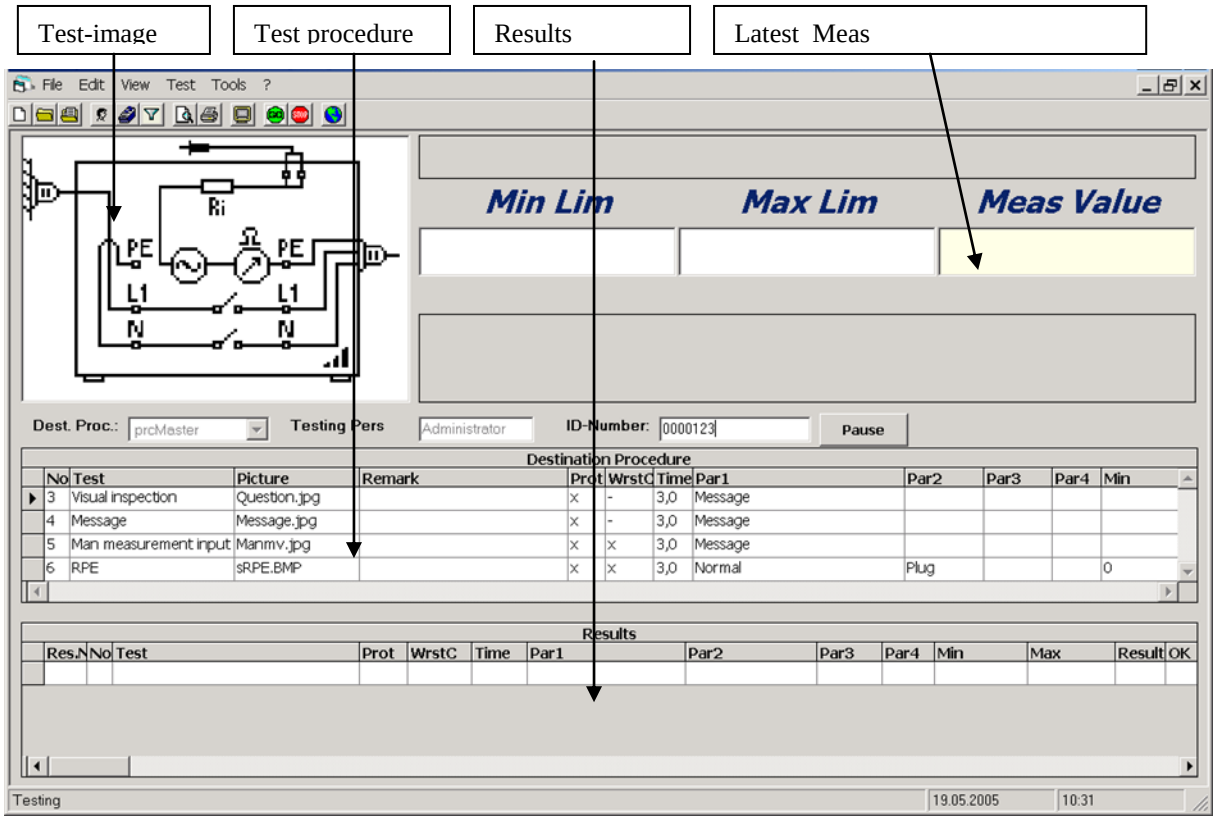
After having defined the test procedure, connect the test instrument with the computer. Start the test with click on the menu test/start or click the GO button.
Enter the ID number of the unit under test and its specifications.



ID number entry

The ID numbers can also be entered via a barcode reader connected in parallel to the computer keyboard.

After entering the ID number you get the following screen:

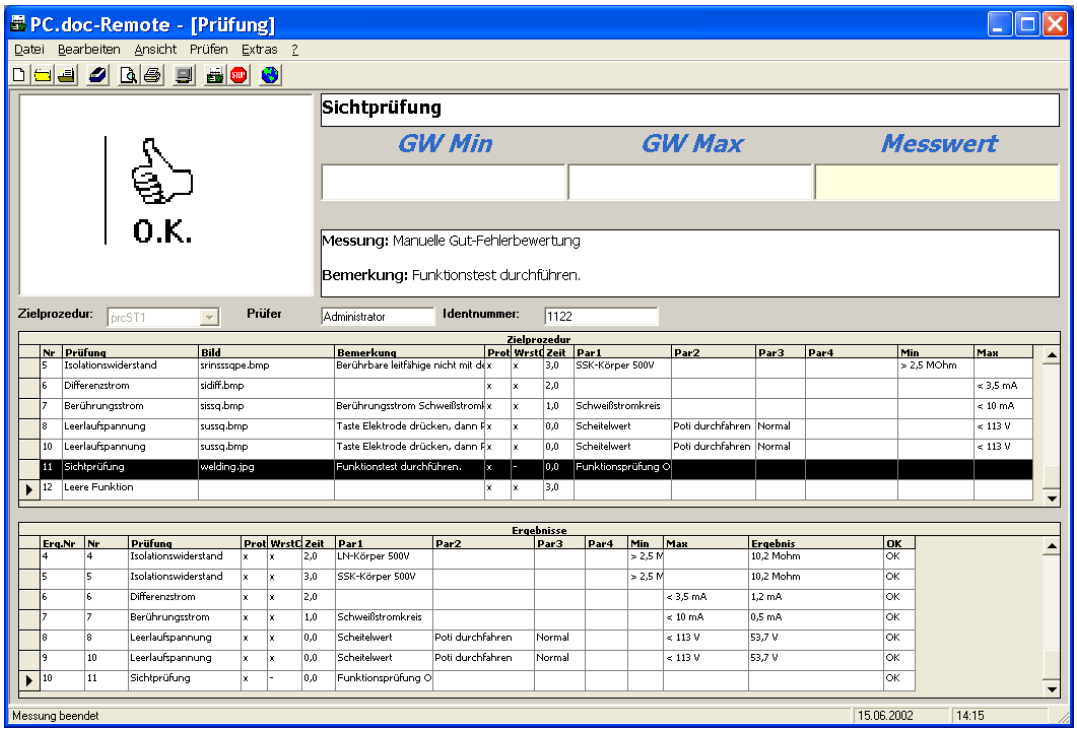


Test screen

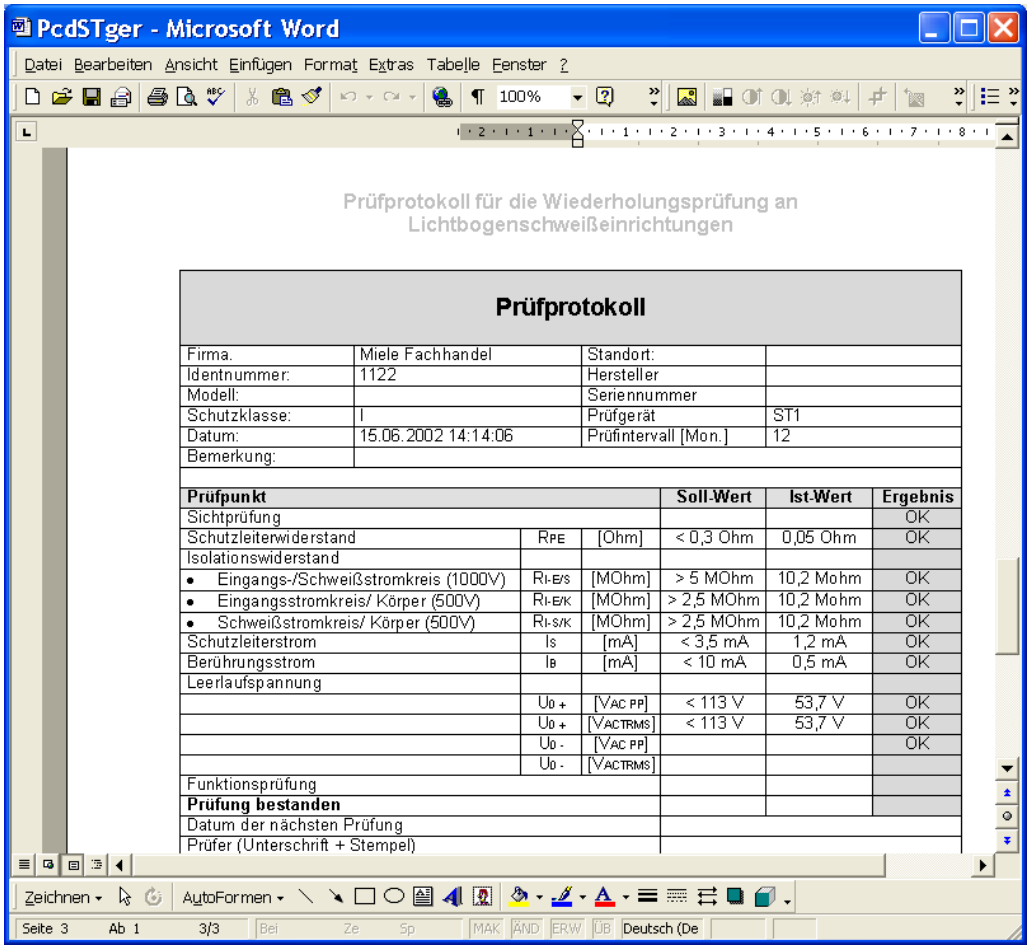
In the top of the picture an image shows how the unit under test is connected. You can enter any image fie to each step. Next to the picture the measured and the limit values and a remark to the test step are displayed. In the table on the bottom half of the screen below the results are recorded one after another. If it is needed the program asks the user to enter a value or press the enter key.

After performing a test sequence you can print the test protocol by the following means:

- Menu file/print
- Right mouse button
- Toolbar Button



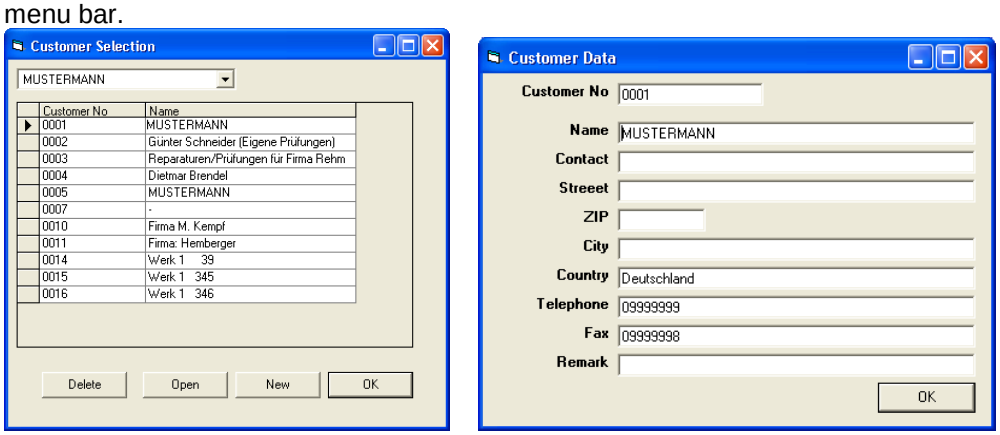
Successful test



Test protocol under WORD

8 Customer data

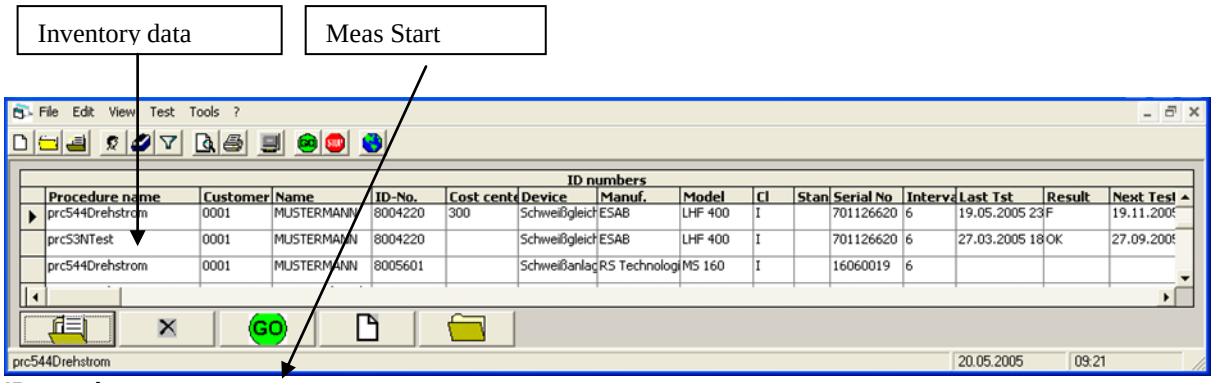
You get to the customer administration through the menu file/customer or through the button on the menu bar.



Customer selection and customer data entry

9 ID Numbers

The TG omni1-Remote database administers ID numbers and the inventory data as well as the accompanying inventory data. An Import function allows the inventory data to be imported from PC. Doc-Access.

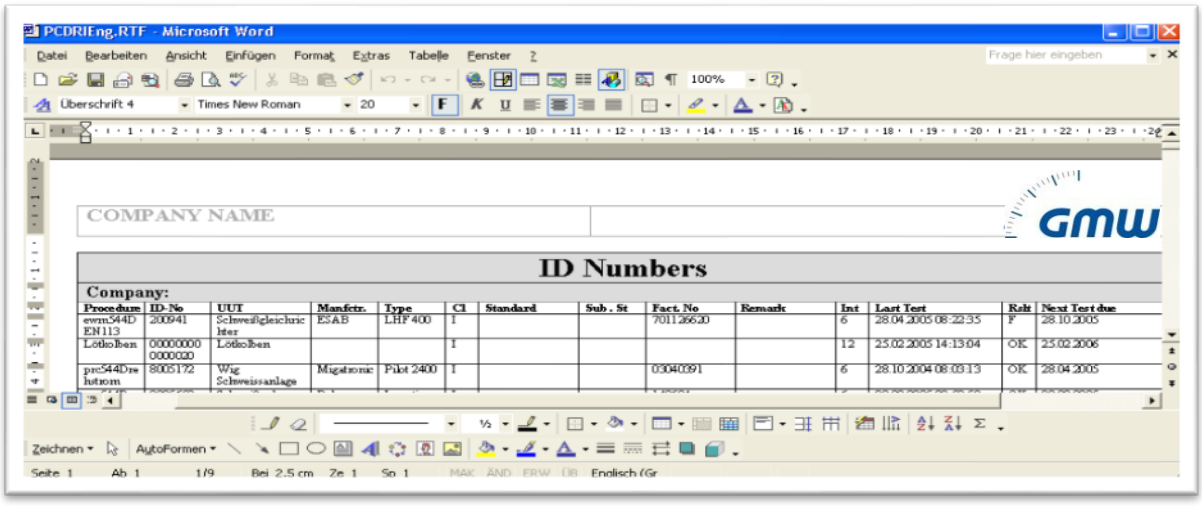


ID numbers

If you mark the ID number and then click the start button, the test procedure belonging to the ID number is automatically loaded and started. Besides the inventory data you also see the most important test details:

- Test interval
- Latest test
- Test result
- Next test date.

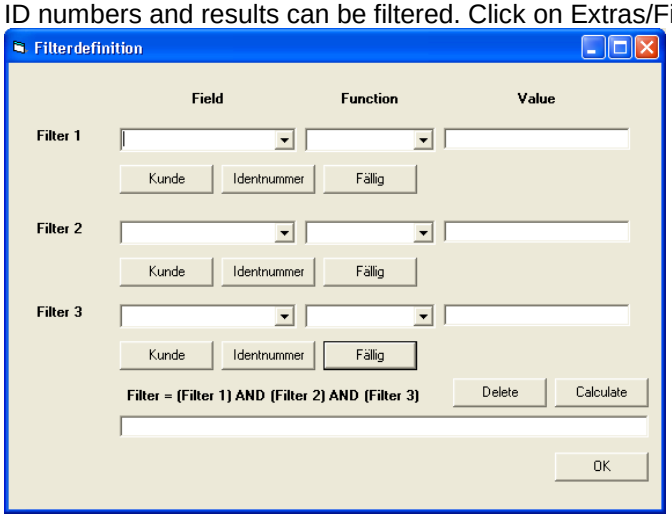
The list with the ID numbers can be printed through Word.



ID numbers under WORD

9.1 ID Number filter

ID numbers and results can be filtered. Click on Extras/Filter or on the according button of the menu.



Filter mask

The filter mask can has three possible entries. You can enter criteria for each field of the ID number table. The most important criteria are selectable via a button.

Meanings:

Customer: The currently selected customer, i.e. only the ID numbers of the selected customer are displayed.

ID-Number: The currently selected ID number. Only data of this ID number is displayed.

Due: The next test is in due. All data is shown for appliances of which the date for “next test” lies in the past.

The button "**Calculate**“ copies the Filter criteria into the line at the bottom of the window and applies them to the data in the ID number display.

The button „**Delete**“ deletes the filter criteria.

Example 1: You want to print all devices for the selected customer for which the testing date is due. In addition the appliances should be sorted by the field ID number.

In „Filter 1“ Click on customer.

In „Filter 2“ Click on Due.

Click on calculate. Only those ID number records are displayed which match the filter criteria.

Menu File /Print preview

Example 2: You want to print all devices which are tested with procedure „G400S“.

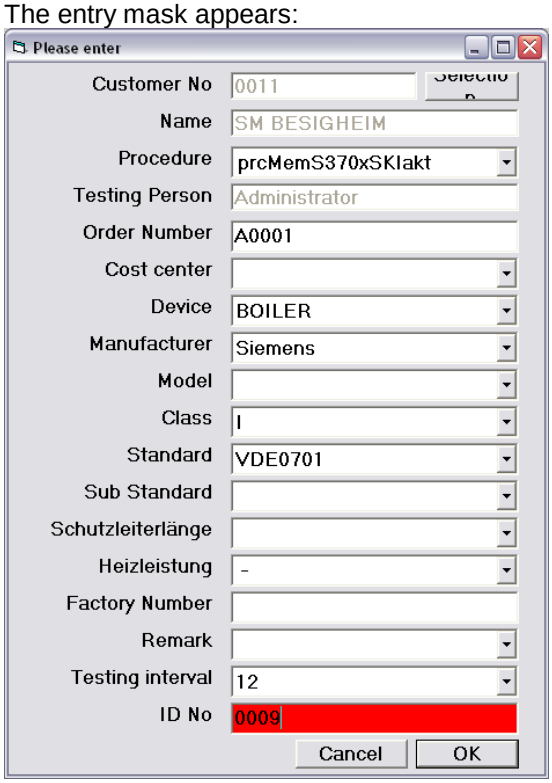
In Filter 1 you select the field „Procedure name“.

In function you select „= (equal to)“.

In value you enter G400S
Button „calculate“

9.2 Entering Inventory Data

In order to enter a new record click onto the key at the bottom of the window.
The entry mask appears:



Please enter the ID number at the bottom first. It is marked red if it exists already in the database.
Next select the customer and the testing procedure.
For tests performed by the tester itself (not in online mode) the following names are predefined:

Name	Meaning
prcMemS370XSKIakt	Class I, active measurement
prcMemS370XSKIIakt	Class II, active measurement
prcMemS370XSKIpas	Class I, passive measurement
prcMemS370XSKIIpas	Class II, passive measurement
prcMemS370XVerl	Extension lead
prcMemS370XSKIfest	Class I, permanent connection
prcMemS3544SKI	Class I, arc welding machine

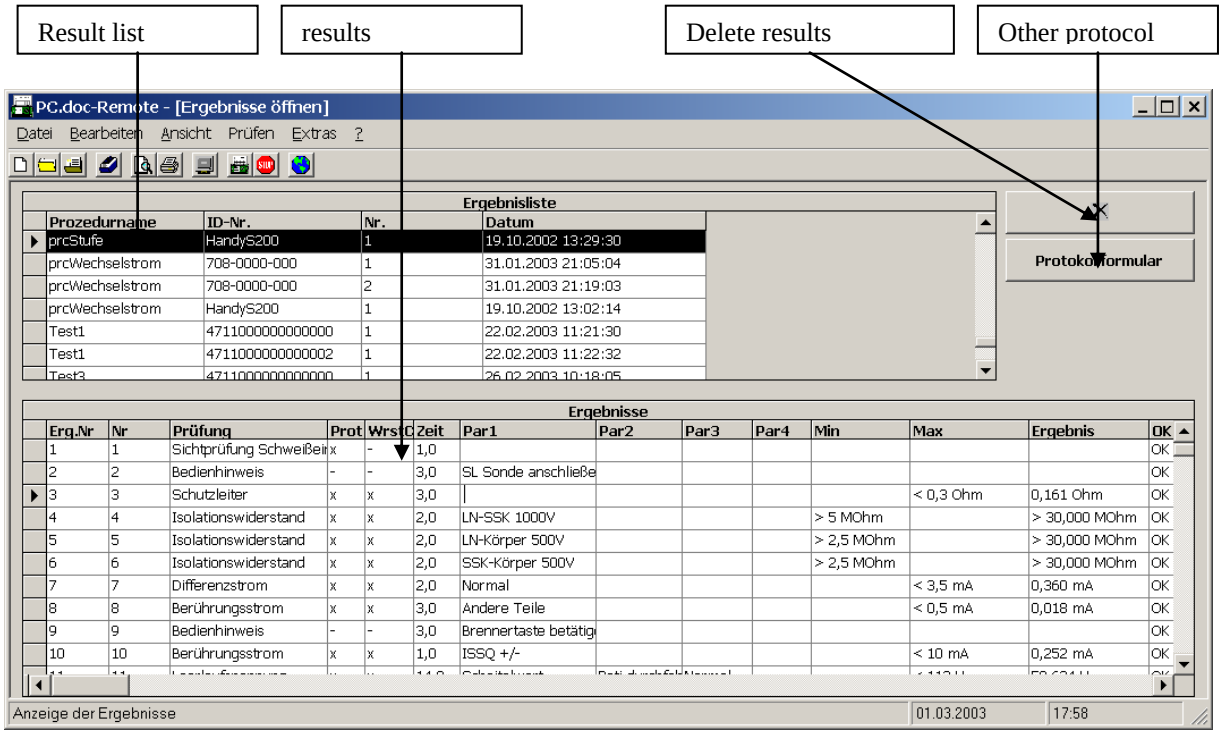
Enter other inventory data as well as the values for the length of the power cord and the heating power.

After entering the inventory data it may be transferred to the tester. Select the ID numbers to be transferred and select Menu/Transfer selected ID numbers.

Note: The procedures prcMem… are empty. The names are dummies for the procedures stored in the tester.
Procedures cannot be transferred to the tester. They can be performed only in online mode.

10 Administration of Results

All results are saved in an extra database. Click on file/results or on the toolbar button



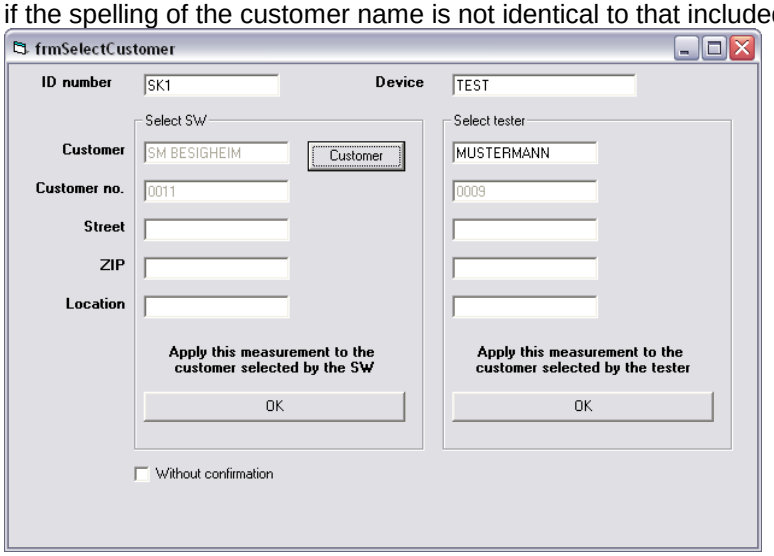
Screen results

For opening a result you mark it in the upper part oft the window and then click on the „open“ button. You can mark several results and delete them together.

Results may be filtered in a similar fashion as ID numbers.

11 Read Tester Memory

Click on “Read Tester Memory“ in the start mask.
All stored records are read. For each record the program asks you if you want to take the customer data from the tester memory or if you want to select the customer displayed in the combo box. If you select the customer from the tester memory then a new customer record will be added to the database if the spelling of the customer name is not identical to that included in the database.

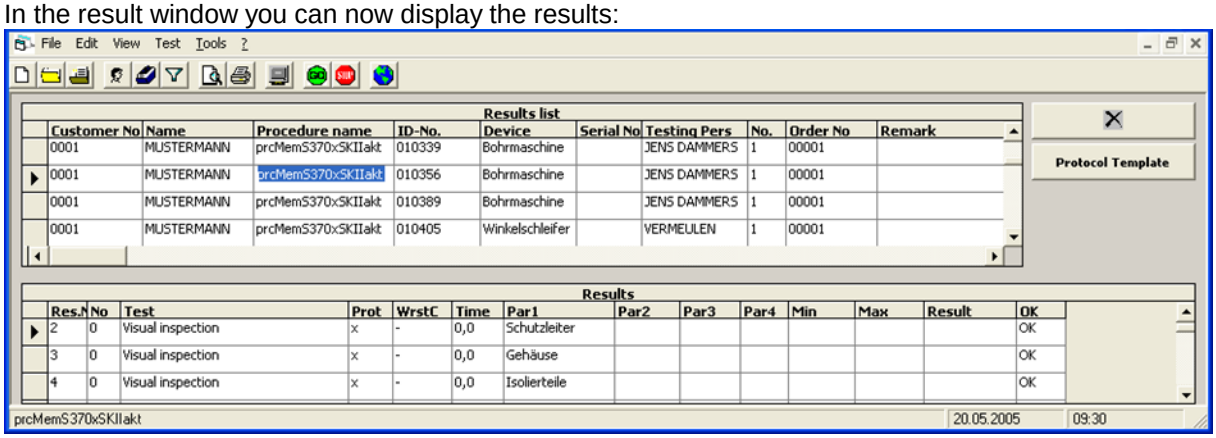


Assigning the test results to a customer

If you click on “Without confirmation“ all future data records of the same customer will be either assigned to the database selection or to the tester memory. If the menu Options/ Use department is selected the customer names of the tester entries are assigned to the departments.
In this case the name of the customer is always taken from the database.

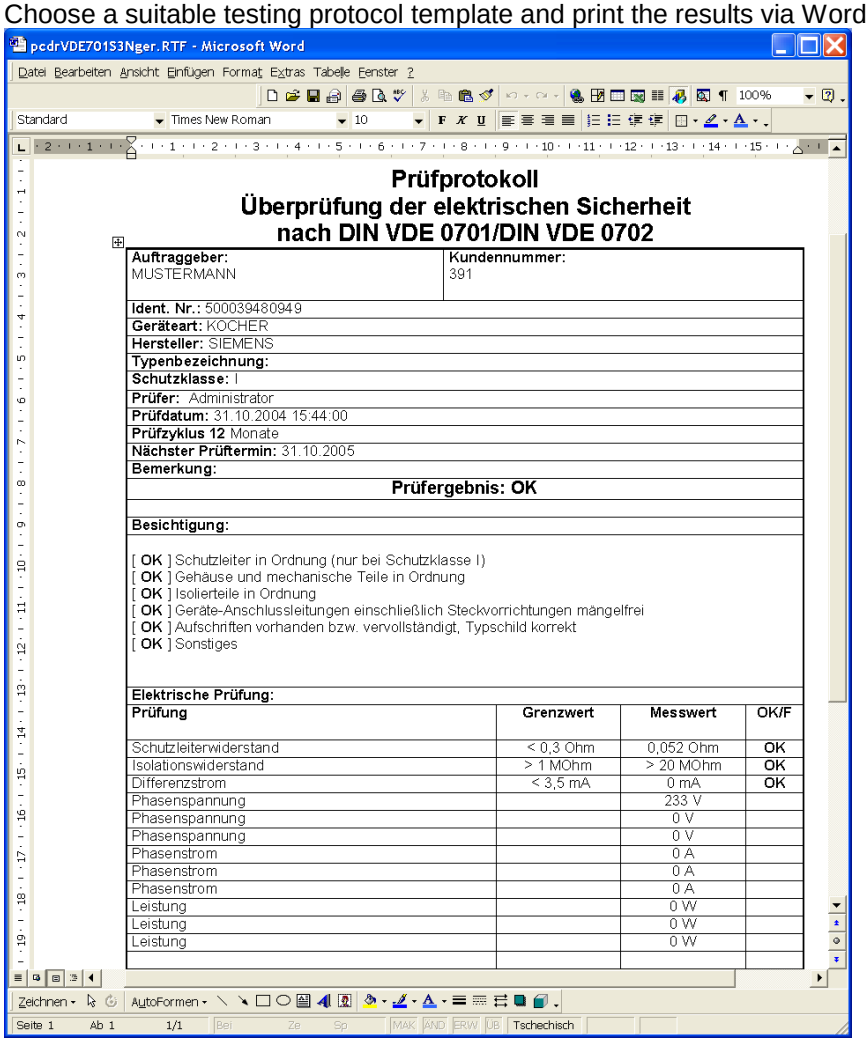
After the reading in you can either delete or keep the data in the tester memory.

In the result window you can now display the results:



Testing results

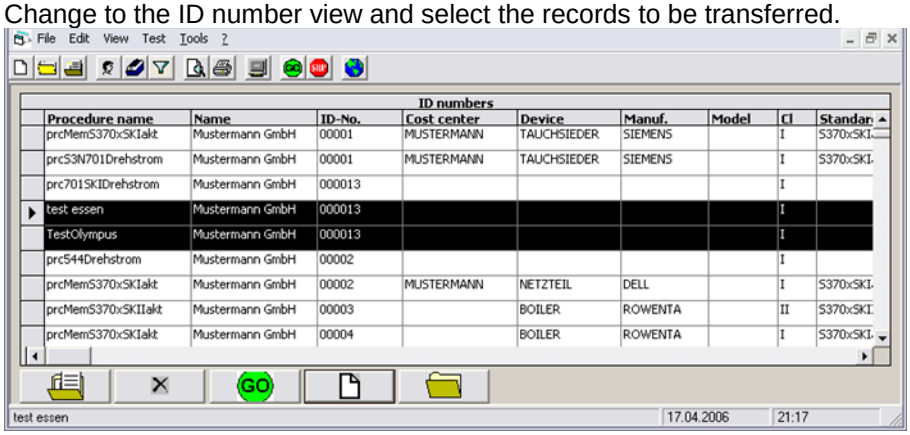
Choose a suitable testing protocol template and print the results via Word.



Test protocol

12 Transferring the Inventory Data to the Tester

Change to the ID number view and select the records to be transferred.



Transferring selected ID numbers

Select the menu File/Write the selected ID numbers to the tester memory. The records are transferred.

If the menu Tools Use cost center when reading memory has been selected then the cost centers instead of the customer names are transferred.

13 Working with a Password

The program supports a password login on the basis administrator and user. The administrator is not identical to the Windows administrator. After installing the program the password functionality is deactivated. You have all rights and the user name is “Administrator”. After logging in only the administrator may change procedures or delete records.

13.1 Installing the Password Functionality

Select the menu “**Tools/Password setup…**“.

Installing users

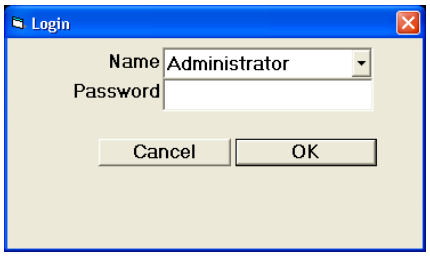
Activate the check boxes “**Administrator Password**“ or **“User Password**“. If “Administrator Password” is selected only then the users need not login. In order to do changes you have to login as Administrator, however. If the check box User Password is checked, the checkbox Administrator password will automatically be checked.

After activation you have to log in as Administrator. The initial password is empty.

Enter the users into the user list. The must enter their name when logging in. The initial password is empty. If the user has forgotten his password, delete him from the list and enter him again. He will then have an empty password again.

13.2 Entering a Password

The password menu is activated when the program starts or by the menu **“Tools/Login…”**.



Password entry

13.3 Changing the password

Select **„Tools/Change password…**“.

Change password

A password must contain at least 4 characters.

14 Installing a Network Version

Copy the files “Pcdrdata.mdb“, “Pcdrarc.mdb“, “Pcdrcal.mdb“, “Pcdrpw.mdb“, “Pcdrproc.mdb” to a shared network path. For each client setup the path via “**Tools/Network path...”** .
Note: Working on a network is slower than working on a private folder.
Note: The databases “PCDRtbl.mdb“ and “Pcdrlng.mdb“ stay inside the private folder.

The program uses several databases which are interlinked. Refer to the chapter “Databases”.

15 Rarely used Menus

15.1 File/Append a procedure…

Select **File/Append a procedure…**. Select the procedure which you want to append the currently selected procedure.

15.2 File/Save procedure as...

Select this command to duplicate a procedure.

15.3 File/Save procedure as file and File/Import procedure file...

This command stores a single procedure into a database of the same name as the procedure. Reversely a procedure may be imported

15.4 File/Import procedure...

This file imports a procedure from the original database containing all procedures, pcdrproc.mdb.

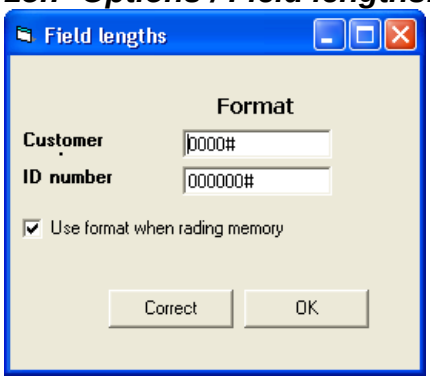
15.5 File/Import all procedures

This command imports all procedures from a database pcdrproc.mdb.

15.6 File/Import all data File/export all data

Test data is exported or imported.

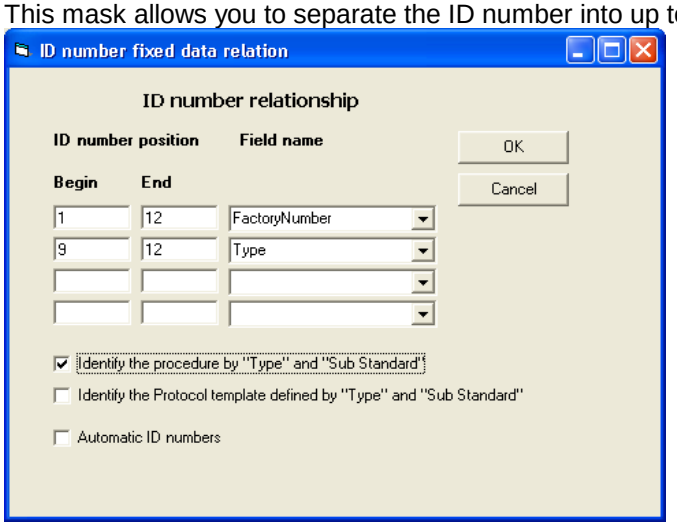
15.7 Options / Field lengths...



This menu defines the lengths of the customer number and the ID number. The entry is terminated with #. If “Use format when reading memory” is checked the numbers are padded with leading zeroes when reading in the tester data. The button “Correct” causes all data in the database to be corrected.

15.8 Tools / ID Number Conversion...

This mask allows you to separate the ID number into up to 4 inventory fields.



ID Number Conversion

In ID number position you enter which characters are to be ordered to which field name

If “Identify procedure by type and sub standard is checked the testing procedure is selected according to these parameters. Similarly for the protocol template.

15.9 Tools / ID Number Captions...

This menu allows you to change the captions of the inventory data fields.

15.10 View / Columns

The columns to be viewed in the ID number and result mask can be selected.

15.11 Tools / Start with Test

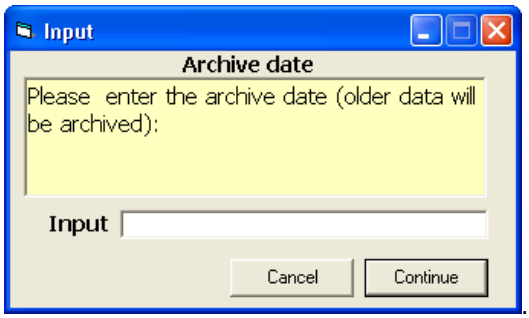
If this option is selected the program starts with Online Measurement directly after the start.

15.12 Tools / COM Port

The program automatically searches COM 1 to 16 and stores the COM port number. However, this menu allows you to tell the program to open a specific COM port first.

15.13 File /Store to Archive…, Read from Archive

This function allows you to archive old results in order to compact and speed up the database.

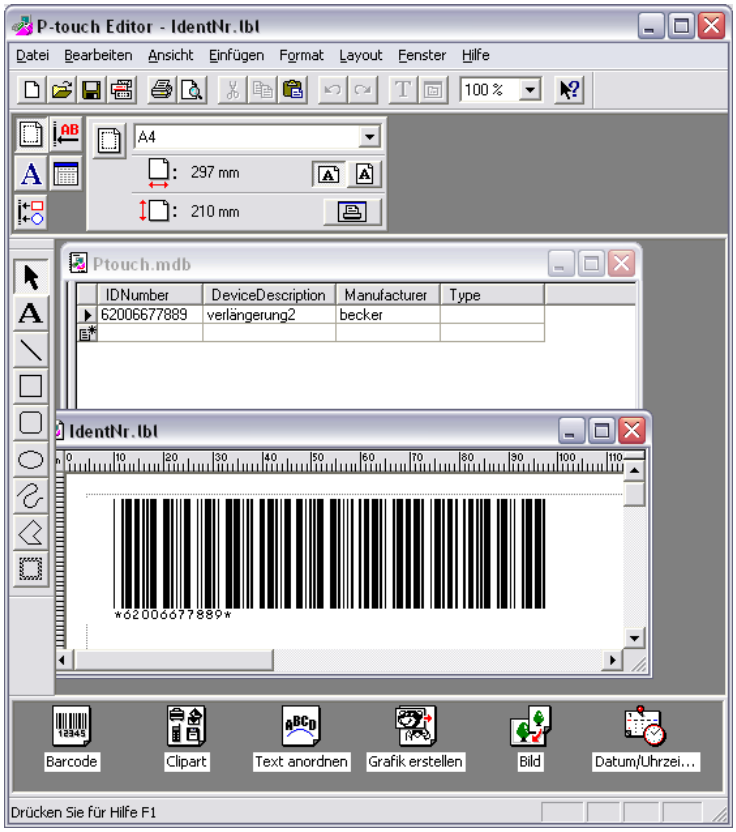


Store to Archive

Read from Archive.

15.14 File / Print Selected ID Numbers on Barcode

For Ptouch barcode printers the ID numbers may be exported to a Ptouch database.
The Ptouch editor has to be installed already.
Select the ID numbers and select the menu.

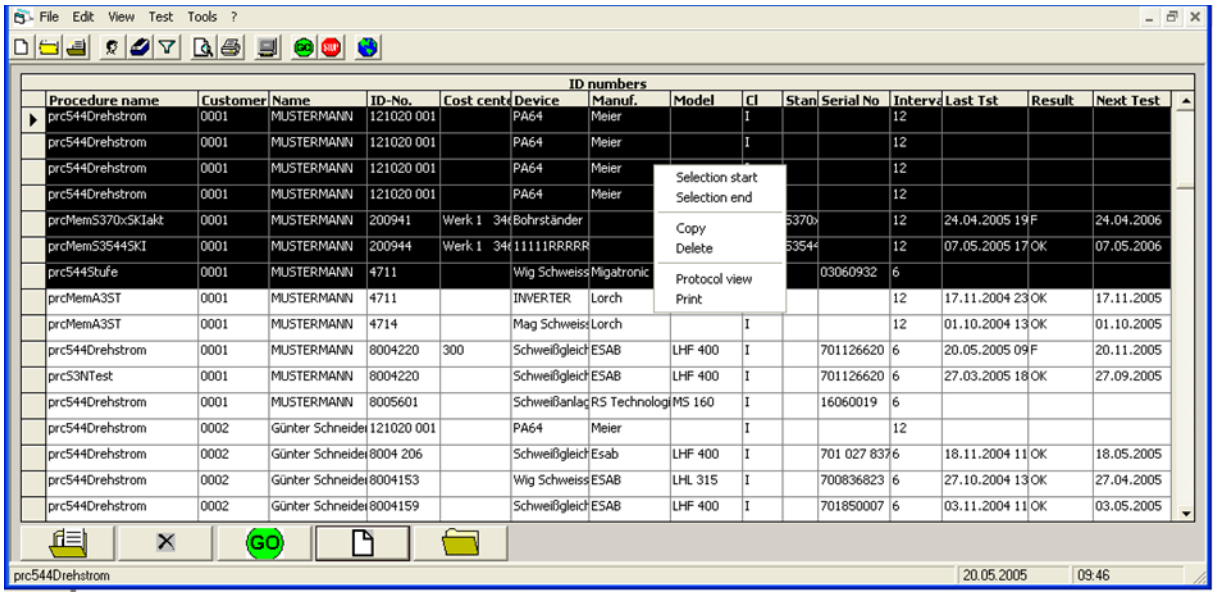


The ID numbers are exported to the database Ptouch.mdb and the Editor ptedit3.exe is started. The file Identnr.lbl contains the template fort he barcode. Now Id numbers may be selected and printed with the Ptouch Editor.

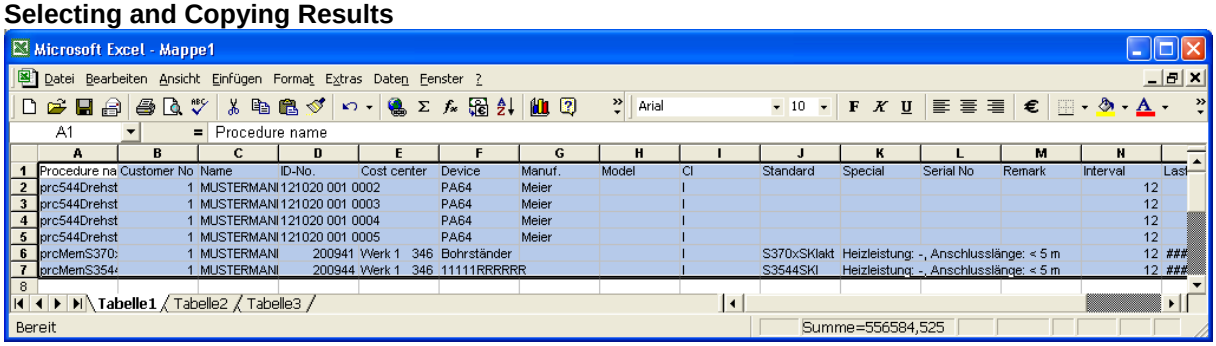
16 Select/Copy/ Right Hand Mouse Button / Using the Keyboard

16.1 Right hand mouse button

The right hand mouse button gives you the most important functions: print, select and copy. The Copy menu is active only if rows have been selected. The selected fields are copied to clipboard and may be inserted to other documents, e. g. Excel spread sheets.



Selecting and Copying Results



Inserting the results to Excel

16.2 Keyboard

The keys Shift and Ctl may be used together with clicking the mouse to select several rows.

16.3 Selecting a Table

Click onto the left hand top corner in order to select a complete table.

17 Changing the Protocol Templates

The protocol templates may be edited using WORD. Copy a form to be changed to a new name prior to editing it. The templates should bear the ending ".frm".

18 Inserting Your Company Logo

Follow the menu "Change Logo in Protocol Templates…"

19 Inserting Lines to the Protocol Template

The protocol template contains invisible control characters. Make the visible by selecting

¶

Each field has a number of the following format:
#@(59,32) @#
where:

#@	-	delimiter
59	-	Field number

32 - Maximum number of characters for the field
Space - Dummy character for the data. The format of the space character determines the output format (e.g. colour).

Several lines contain the same field numbers. A line is terminated by the “+” character after the field length., e. g.:
#@(66,32+) @#

Note: The field number 0 is requires to be present in each protocol.
The field numbers can be viewed by opening “pcdrtbl.mdb” and the table “tblProtocol” with Access.
Die Feldnummer 0 muss immer im Protokoll vorhanden sein.

20 Databases, Folders, Protocol Templates, Procedures

The software uses several databases for storing the data. The may be opened by Access 2000 or higher. Access itself contains the possibility to work with the same set of data from several client PCs.

20.1 Databases

Database	Function
Pcdrtbl.mdb	This is the main database. This database contains the connections to the other databases. Al user data is kept in this database.
Pcdrdata.mdb	This database contains the inventory and the test data. It is backed up when reinstalling the SW. When using a shared system, copy this database to the server. The management of the data is done automatically by Access. Refer to the linked under Access to see the hierarchy. If for example a customer is deleted, then all data of equipment belonging to the customer is deleted and also all test data belonging to the equipment.
Pcdrproc.mdb	This database contains the test procedures.
Pcdrarc.mdb	This database contains archived test and inventory data.
Pcdrpw.mdb	Here the password data is kept
Pcdrcal.mdb	Contains calibration data
Pcdrlng.mdb	Contains language information.

20.2 Directories

The program contains folders with specific names:

Directory	Contents
Forms	Contains the protocol templates.
Pictures	Contains all pictures used in the test sequence.
Doc	Contains the manual and other documents
Backup	Contains the backup data of the previous installation. Additionally the backup of the menu „File/Backup Databases“ is done into this folder. The sub folders are named by their dates of creation.

20.3 Protocol Templates

The following general templates are included.

Name	Usage
Pcdreng.frm	General protocol template
Pcdrpeng.frm	Template fort he testing procedure
Pcdrieng.frm	ID number protocol template
Pcdrceng.frm	Template for displaying the past 5 results

21 Solving Problems

21.1 Communication

Ensure that the tester is turned on. Close all programs using the COM port, e. g. Active Synch programs. When using the USB converter install the software from the disk.

21.2 Hardware Problems

Send an Email to info@g-mw.de

21.3 Problems when Installing

You need administrator rights for your PC. For WIN NT you need service pack 6. For WIN 98 you need MDAC_TYP.EXE. Email info@g-mw.de.

21.4 Software Problems

Load the latest version under www.g-mw.de downloads.

21.5 Importing Data

When the program is installed all old data is automatically read in after starting the program for the first time. Otherwise use the file menus “Import all Procedures” and “Import Test Data”.

21.6 Protocol Problems

Only those lines are printed which contain a – in the field “Prot”. When changing templates, ensure to have the identical number of lines in the protocol template as you have in the procedure.

22 Appendix Copyright Notice