

*Metrology*



# INSTRUCTION MANUAL

## **C200\_PC** Software

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**Messtechnik GmbH & Co. KG**



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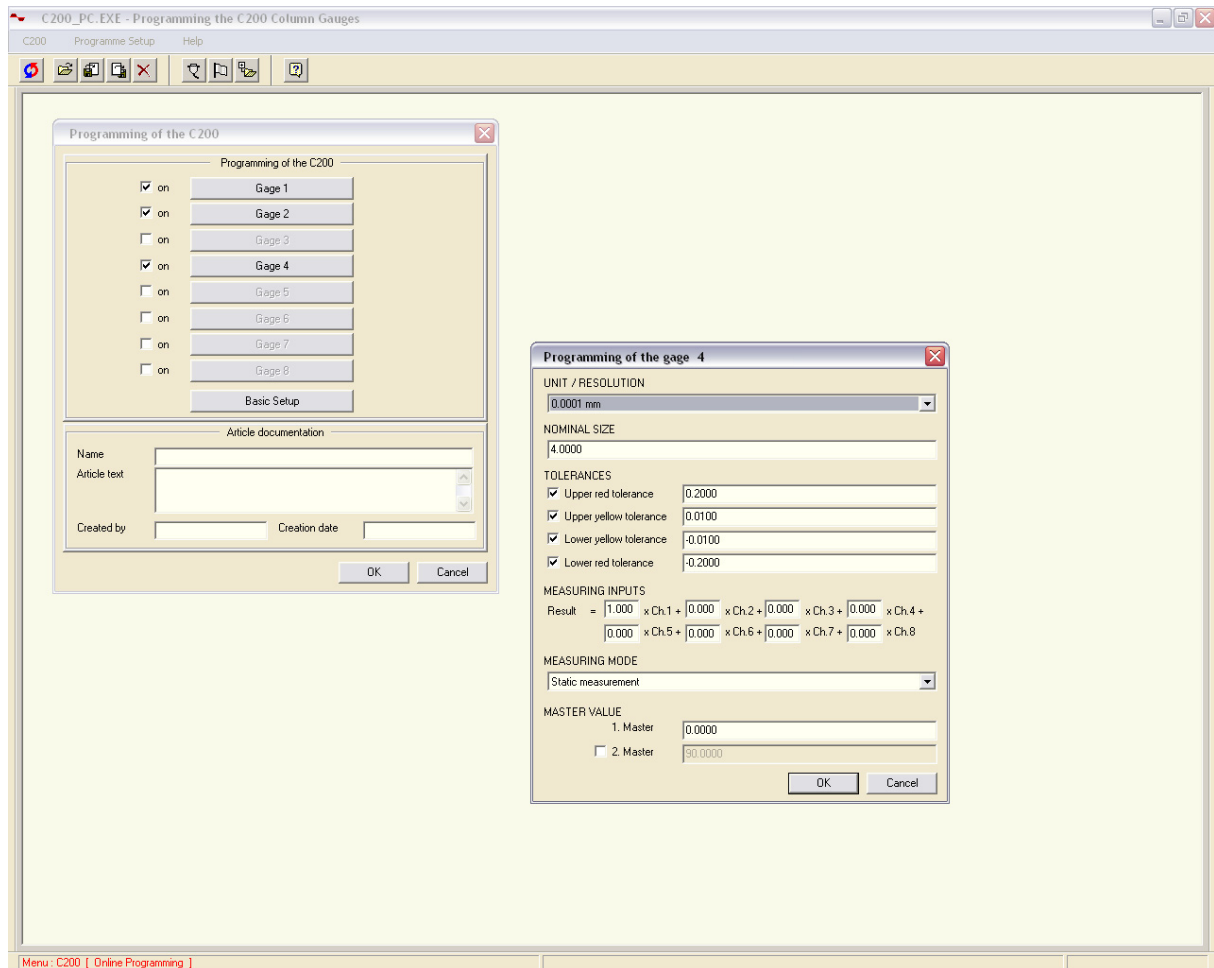
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## 1. Introduction

The software **C200\_PC** allows the programming of C200 column gauges by using a PC.



## 2. Features

- ◆ *Online programming of **C200 column gauges**.*
- ◆ *Definition of test schemes ( with free text for documentation of the test scheme ).*
- ◆ *Saving of test schemes from **C200 column gauges** to a file.*
- ◆ *Loading of test schemes from a file into **C200 column gauges**.*
- ◆ *The programming menus directly correspond to the **C200 Programming-Reference-Card** ( Document-No. : D6F232 001 ).*
- ◆ *Menu for performing firmware updates.*
- ◆ *Menu for programming of IMBus measuring modules*

## 3. Installation of C200\_PC

### Hardware requirements :

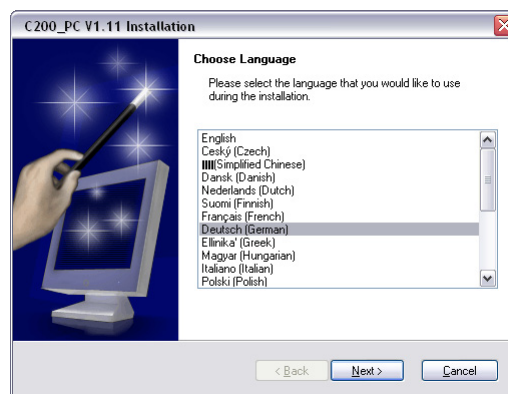
Pentium 500  
≥ 256 MB Ram  
≥ 10 MB Hard disk

### Software requirements :

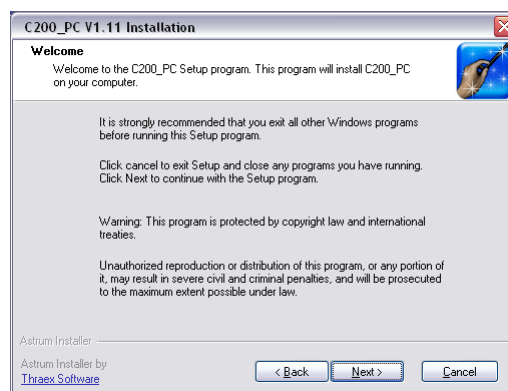
Windows 95 ... Windows 7

### 3.1 Installation after downloading from website *www.IBRit.com* :

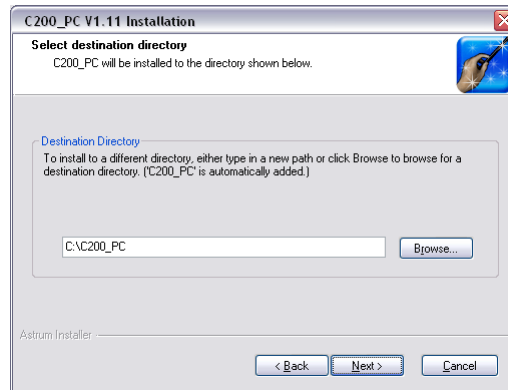
- 1.) Unzip the file **C200\_PC\_Inst.zip** by using your ZIP-programme.  
( If you don't have a ZIP-programme at your disposal, you can find a link to download a free ZIP-programme on our website **www.IBRit.com**. Go to **Downloads \ Software** in order to do so. )
- 2.) Start the unzipped file **C200\_PC\_Inst.exe**.
- 3.) Exit all other Windows programmes in order to ensure a faultless installation and follow the instructions displayed in the windows of the programme installer.
  - First of all, choose the language desired for the installation procedure.



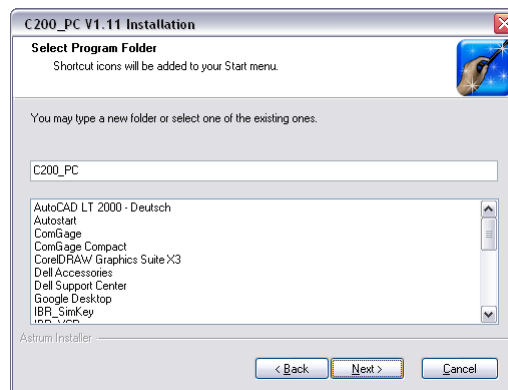
- Confirm installation by clicking the “Next” button.



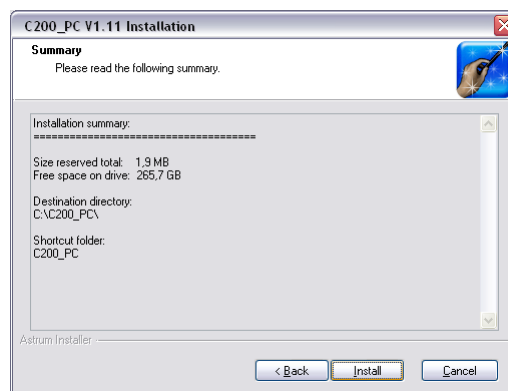
- Confirm the directory suggested for programme installation ( **destination directory** ) or type in the directory you desire. You can also browse for a destination directory by clicking the “**Browse**” button.



- Confirm the suggested programme folder or choose an other existing programme folder.



- Finally, verify the installation settings chosen. Start the installation by clicking the “**Install**” button.



*After the installation procedure is completed, you can start working with the **C200\_PC** Software.*



## 3.2 Installation from a CD :

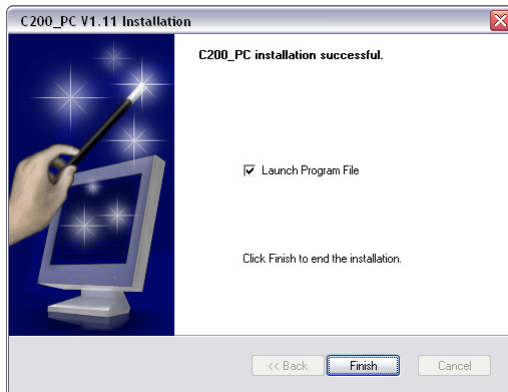
- 1.) Insert the installation CD in your drive.
- 2.) Go to **Start / Run** and enter **<Letter of CD drive>:\C200\C200\_PC\_Inst.**  
Start the installation by clicking the “**OK**” button.
- 3.) Follow the instructions displayed in the windows of the programme installer.  
The further installation procedure corresponds to the previous description  
( chapter 3.1 - from point 3 onwards ).

*After the installation procedure is completed, you can start working with the **C200\_PC** Software.*

## 4. Getting started

Starting the software :


Initial operation of the software can take place directly after completion of the installation procedure. In order to do so, leave the box **“Launch Program File”** checked and click the **“Finish”** button.



On principle the software can be started by double clicking its desktop symbol ( icon ). It is named “C200\_PC V...”. This desktop symbol is automatically created during installation of the software.

On initial operation of the **C200\_PC** software there are several important settings that have to be made within the programme. In order to do so, please refer to the following chapters 4.1 to 4.3.


### 4.1 Language selection

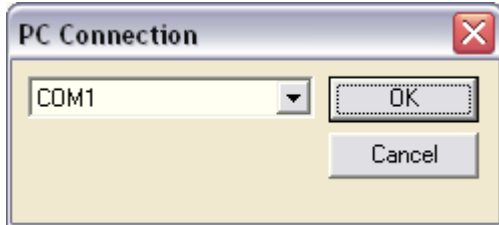
You can select the language by clicking the  button or by choosing the **Programme Setup / Language** menu. On language selection a window containing a list of the available languages is displayed.



Select your language and confirm by clicking the **“OK”** button.  
( Please note : On initial operation the default language setting is English )

## 4.2 PC connection


You can select a COM-port by clicking the  button or by choosing the **Programme Setup / PC Connection** menu. On port selection the window shown below is displayed.

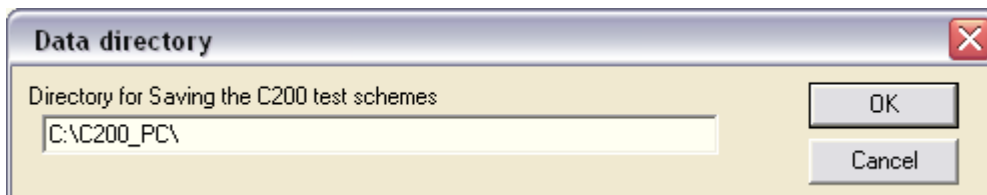


Select a vacant COM-port and confirm by clicking the "OK" button.

**Note :** *There is no default setting for this menu point.  
The COM-port must be selected once after installing the software.  
COM-ports marked with (\*) are not available.*

## 4.3 Data directory selection

By clicking the  button or choosing the **Programme Setup / Data directories** menu you can choose the folder ( directory ) to which your test schemes are to be saved.  
On data directory selection the window shown below is displayed.




Confirm the suggested directory or type in the directory you desire.  
Confirm your settings by clicking the "OK" button.

**Note :** *You can type in only the names of existing directories. The C200\_PC software will not create a new directory. The directory suggested by default is the destination directory chosen by you during software installation ( see page 5 of this manual ).*



## 5. Online programming

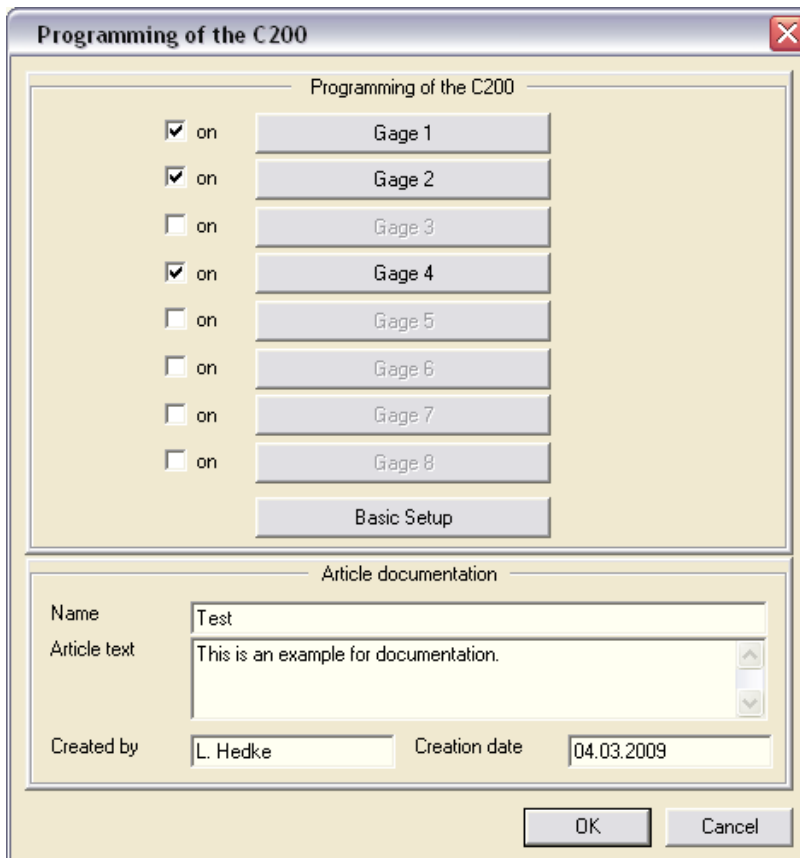


By clicking the  button or choosing the **C200 / Online Programming** menu you can directly programme the **C200 column gauges** by using a PC.

- 1.) By starting the **Online programming** the test scheme of the connected **C200 column gauge** is read out automatically from the **C200**.
- 2.) You can now alter the test scheme. Please refer to the instruction manual of your **C200 column gauge**. The programming windows have the same programming steps as shown on the **C200** Programming-Reference-Card and described in the **C200** manual.
- 3.) By clicking the “**OK**” button the altered test scheme is loaded back into the connected **C200 column gauge**.

For example see the online programming windows displayed below:

Main window :



Buttons for calling up the gauge-programming menu. Checkboxes for activating gauges.

Button for calling up the basic setup menu.

Text input mask for article documentation.

## Gauge-programming menu :

**Programming of the gage 1**

UNIT / RESOLUTION  
0.0001 mm

NOMINAL SIZE  
5.0000

TOLERANCES

☒ Upper red tolerance 0.050

☒ Upper yellow tolerance 0.020

☒ Lower yellow tolerance -0.020

☒ Lower red tolerance -0.050

MEASURING INPUTS

Result = 1.000 x Ch.1 + 0.000 x Ch.2 + 0.000 x Ch.3 + 0.000 x Ch.4 +  
0.000 x Ch.5 + 0.000 x Ch.6 + 0.000 x Ch.7 + 0.000 x Ch.8

MEASURING MODE  
Static measurement

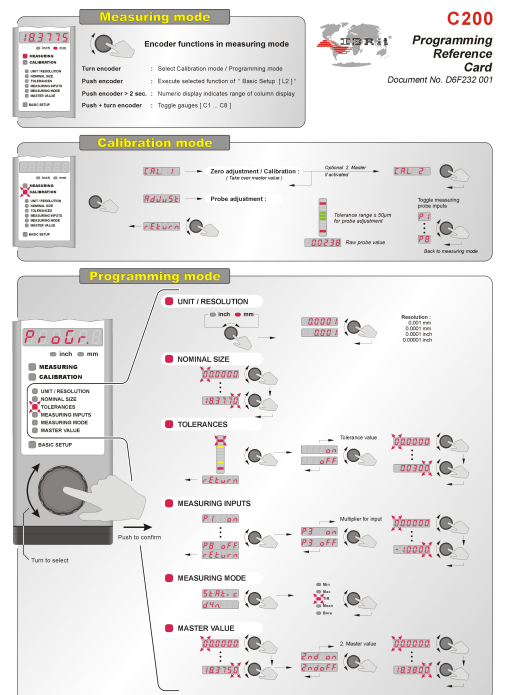
MASTER VALUE

1. Master 5.0200

☐ 2. Master 0.0000

OK Cancel

## Programming-Reference-Card :



**C200**  
Programming  
Reference  
Card  
Document No. D6F232 001

## Basic setup programming menu :

**Basic setup**

Gage selection by auto recognition Automatic gage selection by auto recognition

Minimal value change for gage recognition 12 um

Function of encoder button in measuring mode Toggle to next activated gage C1..8

Function of foot switch 1 in measuring mode Gage Zeroadjustment / Calibration

Function of foot switch 2 in measuring mode Control dynamic measuring

Function of foot switch 3 in measuring mode Toggle display Min, Max, ... in dyn. measuring

RS232 output control Data output by pressing encoder button ☐ Data output with gage number

Bargraph setup: Display range auto

Bargraph setup: Start point Centre

Grading mode

Gage 1 Number of grades: 1 Display on numeric display on

Gage 2 off

Gage 3 off

Gage 4 off

Gage 5 off

Gage 6 off

Gage 7 off

Gage 8 off

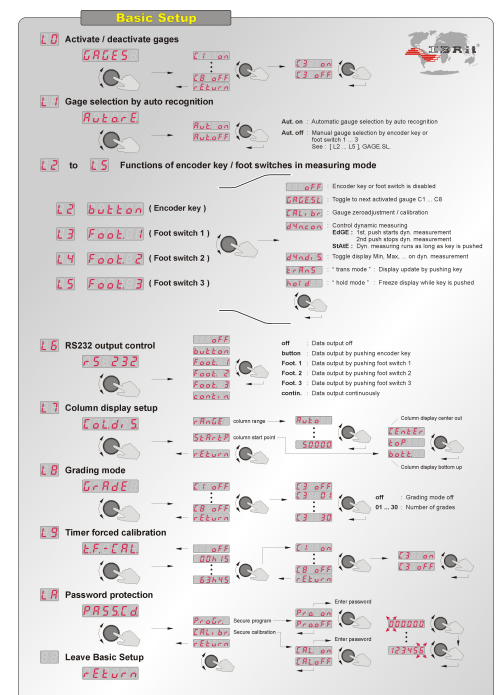
☐ Password programming menu

☐ Password calibration menu

Timer forced calibration after 0 h 15 min ☒ Gage 1 ☒ Gage 2 ☐ Gage 3 ☐ Gage 4 ☐ Gage 5 ☐ Gage 6 ☐ Gage 7 ☐ Gage 8

OK Cancel


## Programming-Reference-Card :

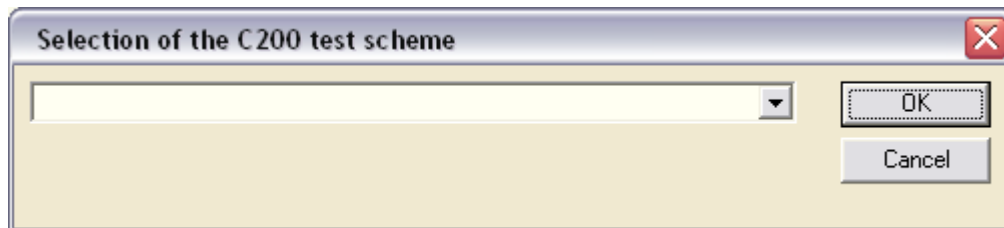


## 6. Test schemes

The software **C200\_PC** enables you to read out test schemes from **C200 column gauges** and load them from files. You can also create new test schemes or alter existing test schemes and save them to files or load them into a **C200 column gauge**.


### 6.1 Creating / changing a test scheme

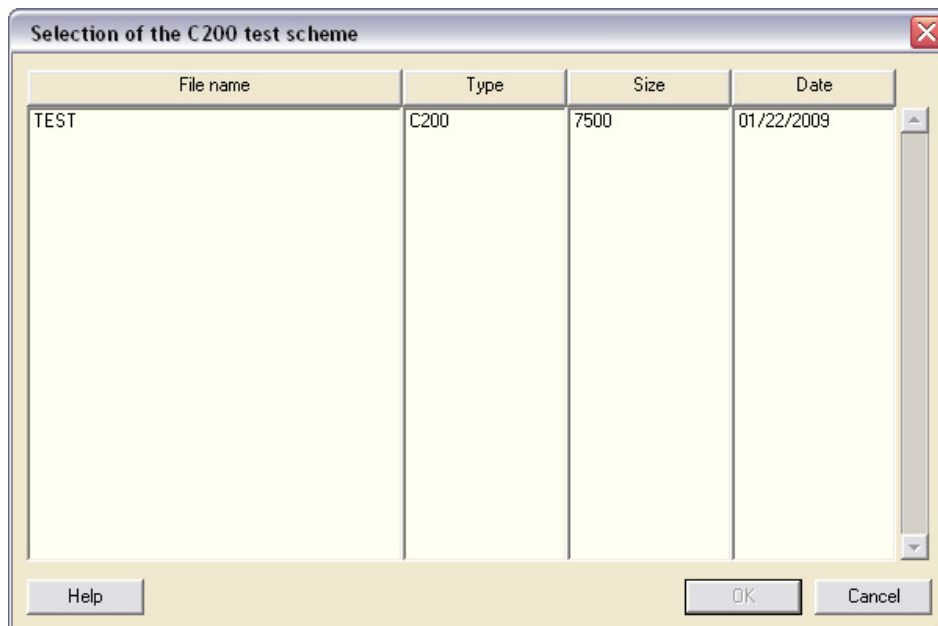
By clicking the  button or choosing the **C200 / Create / Change test scheme** menu you can create a new test scheme or load a test scheme from file and alter it. After activating this programme function you must type in a new file name or choose an existing file. Therefore the window shown below is displayed.



Afterwards the test scheme can be created or altered respectively. For further information please refer to chapter 5 of this manual. When finishing by clicking the **“OK”** button the test scheme is saved to file.

### 6.2 Copying a test scheme into a C200 column gauge


By clicking the  button or choosing the **C200 / Copy test scheme into C200** menu you can copy a test scheme from file into a **C200 column gauge**. After activating this programme function you must choose a test scheme file. Therefore the window shown below is displayed.

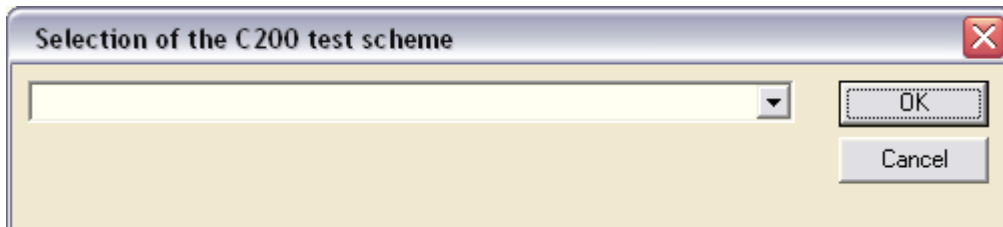


By clicking the **“OK”** button the test scheme file is loaded and copied into the connected **C200 column gauge**.

## 6.3 Loading a test scheme from a C200 column gauge




By clicking the  button or choosing the **C200 / Load test scheme from C200** menu you can load a test scheme from a **C200 column gauge** and save it to a test scheme file. After activating this programme function you must type in a new file name or choose an existing test scheme file. Therefore the window shown below is displayed.

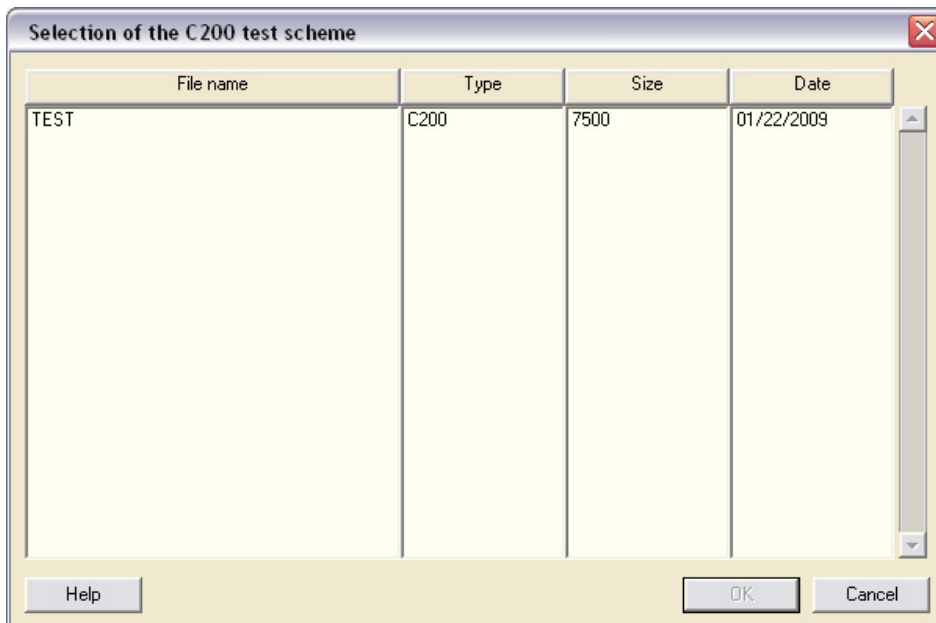


*By clicking the “OK” button the test scheme file is loaded from the connected **C200 column gauge** and is saved to the test scheme file.*

## 6.4 Deleting a test scheme



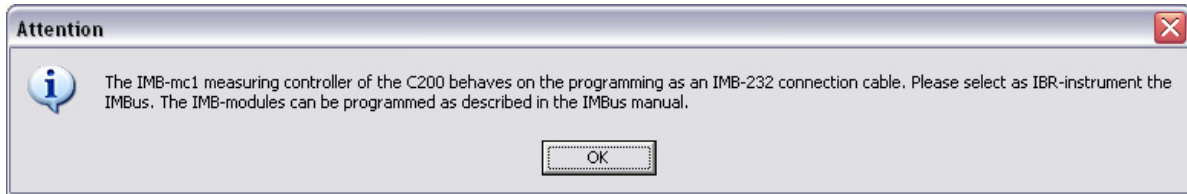
By clicking the  button or choosing the **C200 / Delete test scheme** menu you can delete test scheme files. After activating this programme function you must select a test scheme file. Therefore the window shown below is displayed.



*By clicking the “OK” button the test scheme file is deleted.*

## 7. Programming IMBus modules

By choosing the **C200 / Programming of IMB-Modules** menu you can directly access the IMBus modules installed in the connected **C200 column gauge**. The following message is displayed.




**Note :** *Programming of the IMBus modules is described in detail in the IMBus manual ( Document-No. : D2MF120 000 ). This special feature of the C200\_PC software should be used only by experienced users with the necessary knowledge or according to prior consultation with us ( IBR ) respectively.*

## 8. Firmware update of C200 or IMB-mc1 module

By choosing the **C200 / Firmware Update** menu you can perform a firmware update.

**Note :** *This special feature of the C200\_PC software should be used only according to prior consultation with us ( IBR ). If performed inexpertly the C200 column gauge may as a result become unusable!*

## 9. Programme version information

By clicking the  button or choosing the **Help / Info** menu you can have the version information of the programme displayed. Therefore the window shown below is displayed.



By clicking the **"OK"** button the window is closed.



## 10. Important conditions concerning the use of C200\_PC software

1. The **C200\_PC** software is an accessory for the **C200 column gauge**. It is free of charge and so **IBR** does not give any guarantees for the **C200\_PC** software.
2. IBR software products are not developed and tested for the high demands in the medical field, in combination with applications in the medical field or in critical components of life-saving systems whose malfunctions or failure can lead to personal injury.
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4. All applications which contain the risk that SYSTEMERRORS can lead to damages or personal injuries should not only depend on electronic systems. In order to avoid damages, injuries or death the operator or system developer should create reasonable, suitable precautions against SYSTEMERRORS or their consequences. These precautions can include backup or shutoff mechanisms.
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