

IKA Werke GmbH & Co. KG

CalWin

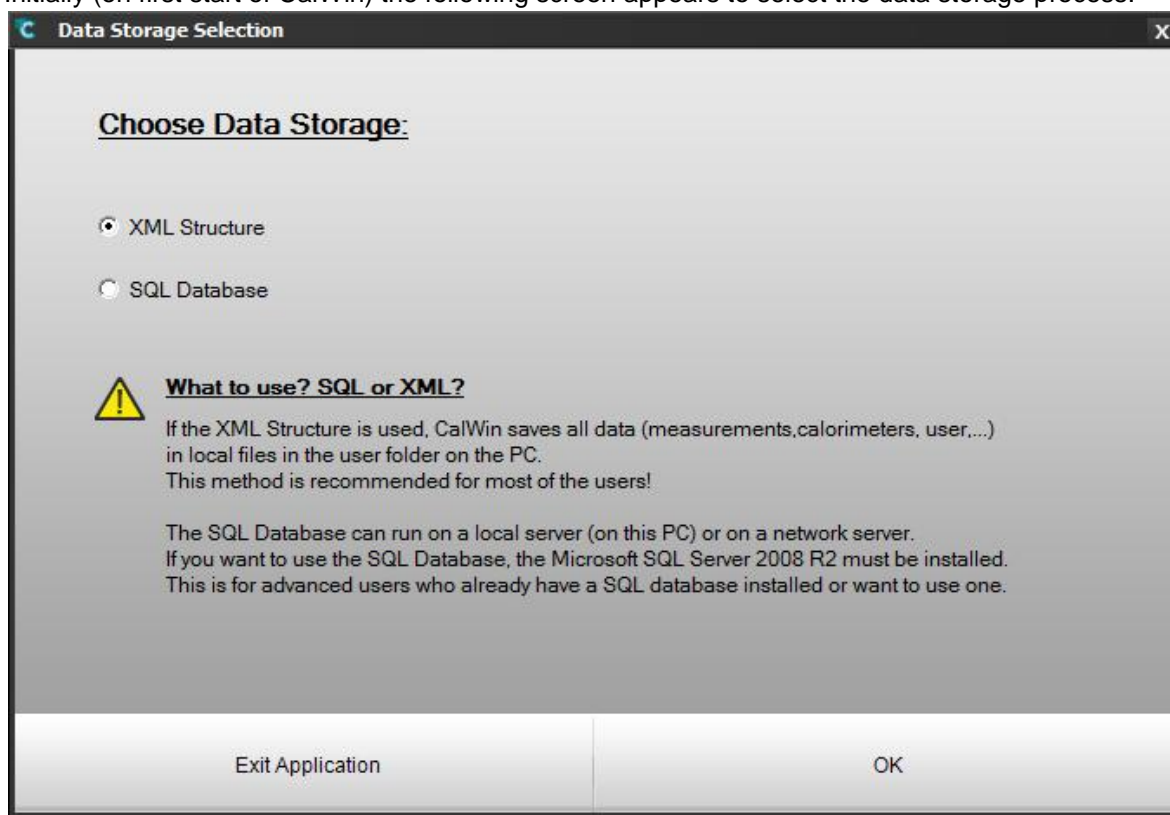
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1 CalWin first steps

Initially (on first start of CalWin) the following screen appears to select the data storage process.



On this screen you can select between

- a local storage in a XML file
- a SQL Database

1.1.1 XML

Stores the data (measurements, vessels, c-values, users,...) in a structured file in the user's documents folder. The installation is

1.1.2 SQL

Uses the Microsoft SQL Server to store the data. Therefore the Microsoft SQL Server 2008 R2 must be installed. The advantage of the SQL server is that it can be installed local on the PC or on a server in the network.

For a detailed installation description please read the following document:

SQL Server 2008 for Calwin 4716100.pdf

The setup process can be found in the document:

Setup Database 4716200.pdf

These 2 documents can be found on the DVD.

1.2 Initial Main Screen

To start working with CalWin the first step is to setup a calorimeter and its vessel(s) next you can create a new measurement and let it run.

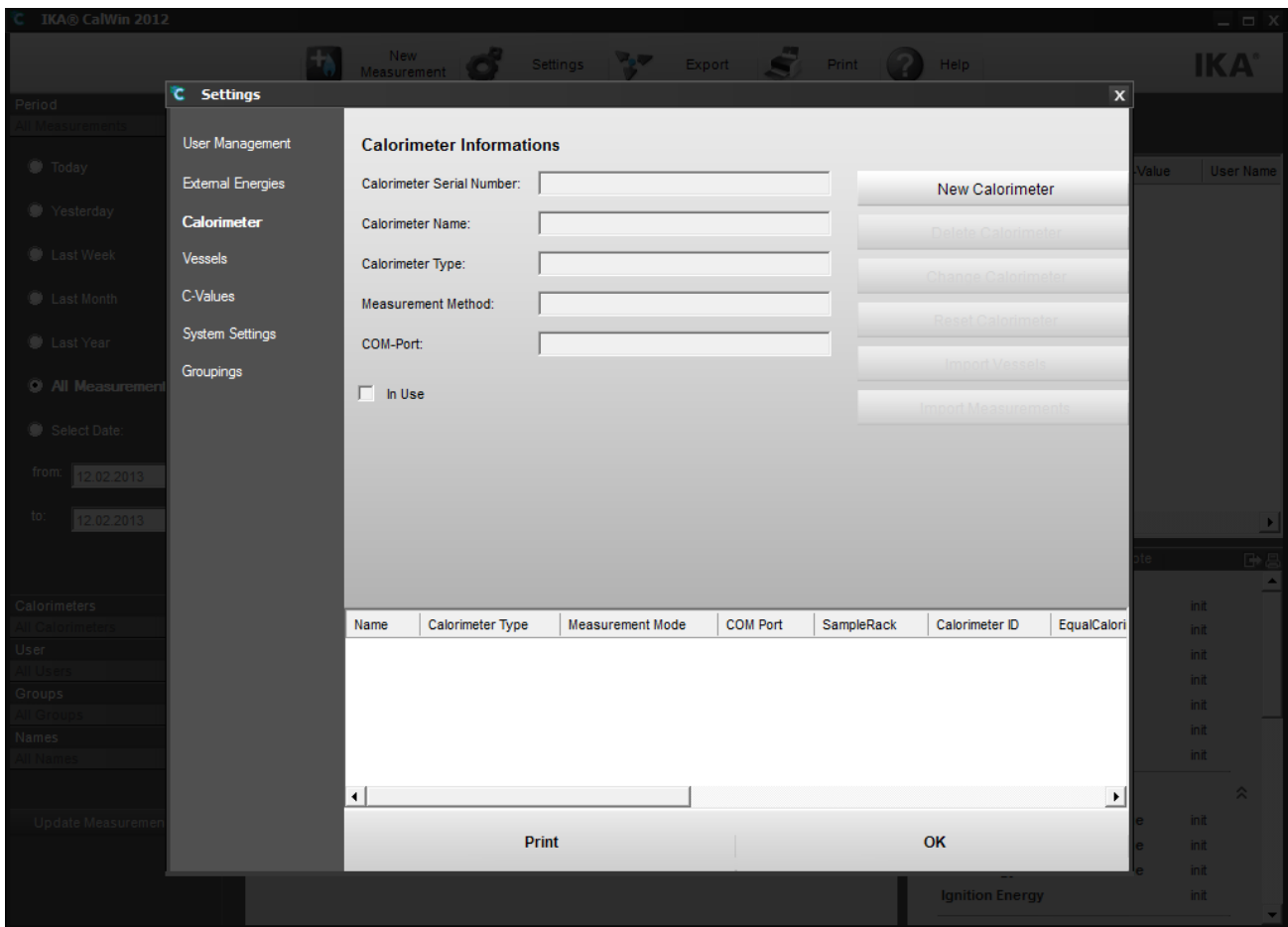
The screenshot displays the IKA CalWin 2012 software interface. The window title is "IKA® CalWin 2012". The top menu bar includes "New Measurement", "Settings", "Export", "Print", and "Help". The main area is titled "Selected Measurements:" and contains a table with the following columns: Calorimeter Name, Probe Name, Vessel Name, Weight [g], Result C-Value, Result (Ho), Vessel C-Value, and User Name. The table is currently empty. On the left side, there is a sidebar with a "Period" dropdown menu set to "All Measurements". Below this are radio buttons for "Today", "Yesterday", "Last Week", "Last Month", "Last Year", and "All Measurements" (which is selected). There is also a "Select Date:" section with "from:" and "to:" dropdown menus, both set to "12.02.2013". Below the date selection are expandable sections for "Calorimeters", "User", "Groups", and "Names", each with a sub-option "All [Category]". At the bottom of the sidebar is an "Update Measurement List" button. The bottom right of the interface shows a "Details" panel with a list of parameters and their values, all set to "init".

Calorimeter Name	Probe Name	Vessel Name	Weight [g]	Result C-Value	Result (Ho)	Vessel C-Value	User Name
------------------	------------	-------------	------------	----------------	-------------	----------------	-----------

Device	Details	Graph	Analysis	Note
	Probe Name			
	Weight [g]			
	Result			
	User Name			
	Calorimeter Name			
	Vessel Name			
	Start Date			
	External Energies			
	Ext. Energy 1 Calculated Value			
	Ext. Energy 2 Calculated Value			
	Ext. Energy 3 Calculated Value			
	Ignition Energy			

1.3 Setup a calorimeter (C1, C200, C2000, C5000, C6000 iso, C6000 gs)

If you want to work with CalWin you first have to setup a calorimeter and its vessels to work with. Press on the “Settings” button on the top panel of the main screen and then on the calorimeter button.



1. Start the calorimeter and select its main menu view.
2. Connect the calorimeter to a free PC COM-port.
3. Press the “New Calorimeter” button.
4. Select the COM-port, the calorimeter is connected to.



- Press on the "Calorimeter Information" button to receive the serial number and the calorimeter type from the device.

Calorimeter Information

Calorimeter Serial Number: 00.0000000

Calorimeter Name:

Calorimeter Type: C1

Measurement Method: Isoperibol 22°C

COM-Port: COM3

In Use

Buttons: Add Calorimeter, Delete Calorimeter, Change Calorimeter, Reset Calorimeter, Calorimeter Information

- Enter a calorimeter name and then press the "Add Calorimeter" button.

Calorimeter Information

Calorimeter Serial Number: 00.0000000

Calorimeter Name: C1 No 1

Calorimeter Type: C1

Measurement Method: Isoperibol 22°C

COM-Port: COM3

In Use

Buttons: Add Calorimeter (circled), Delete Calorimeter, Change Calorimeter, Reset Calorimeter, Calorimeter Information

- Now the calorimeter appears in the overview list below.

Calorimeter Information

Calorimeter Serial Number: 00.0000000

Calorimeter Name: C1 No 1

Calorimeter Type: C1

Measurement Method: Isoperibol 22°C

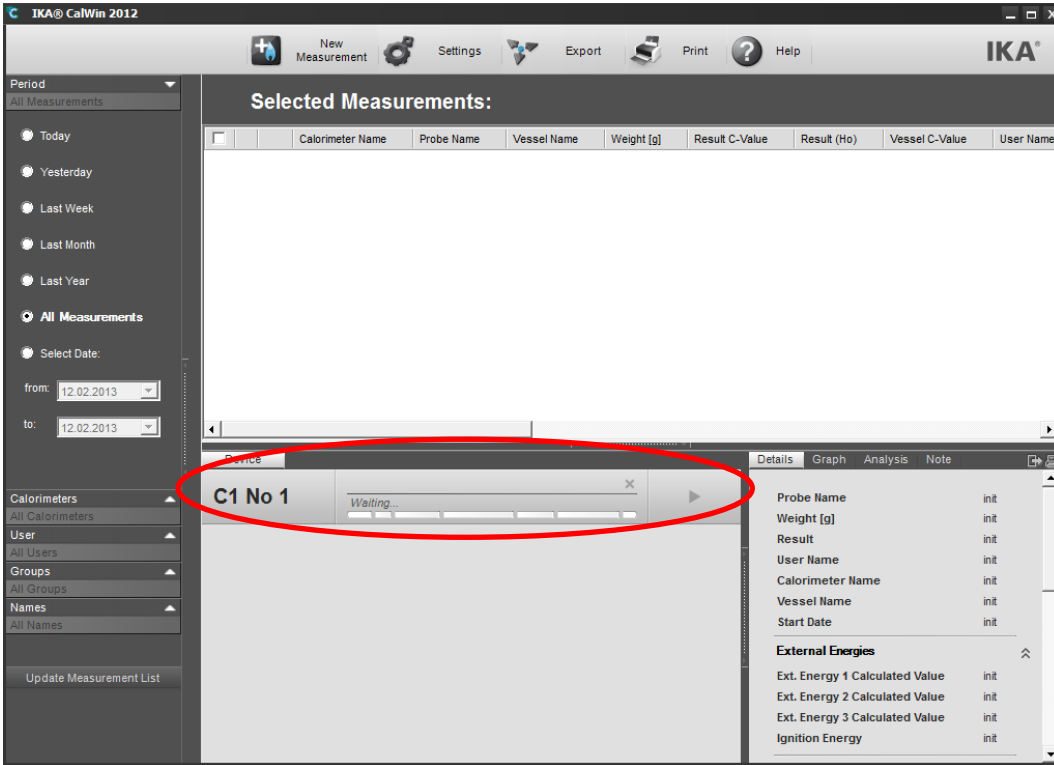
COM-Port: COM3

In Use

Buttons: New Calorimeter, Delete Calorimeter, Change Calorimeter, Reset Calorimeter, Import Vessels, Import Measurements, Calorimeter Information

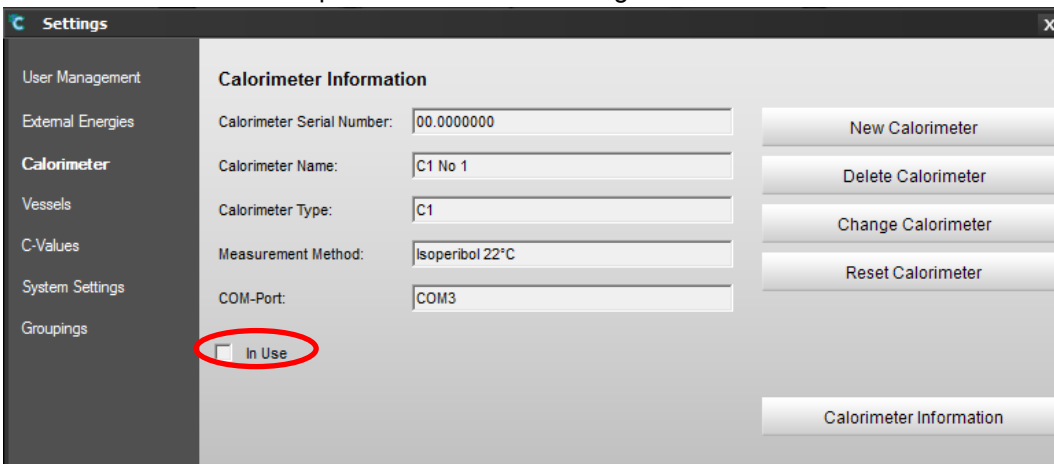
Name	Calorimeter Type	Measurement Mode	COM Port	SampleRack	Calorimeter ID	EqualCalori
C1 No 1	C1	Isoperibol 22°C	COM3	SampleRack	00.0000000	1

8. The calorimeter appears now in the main view of CalWin.



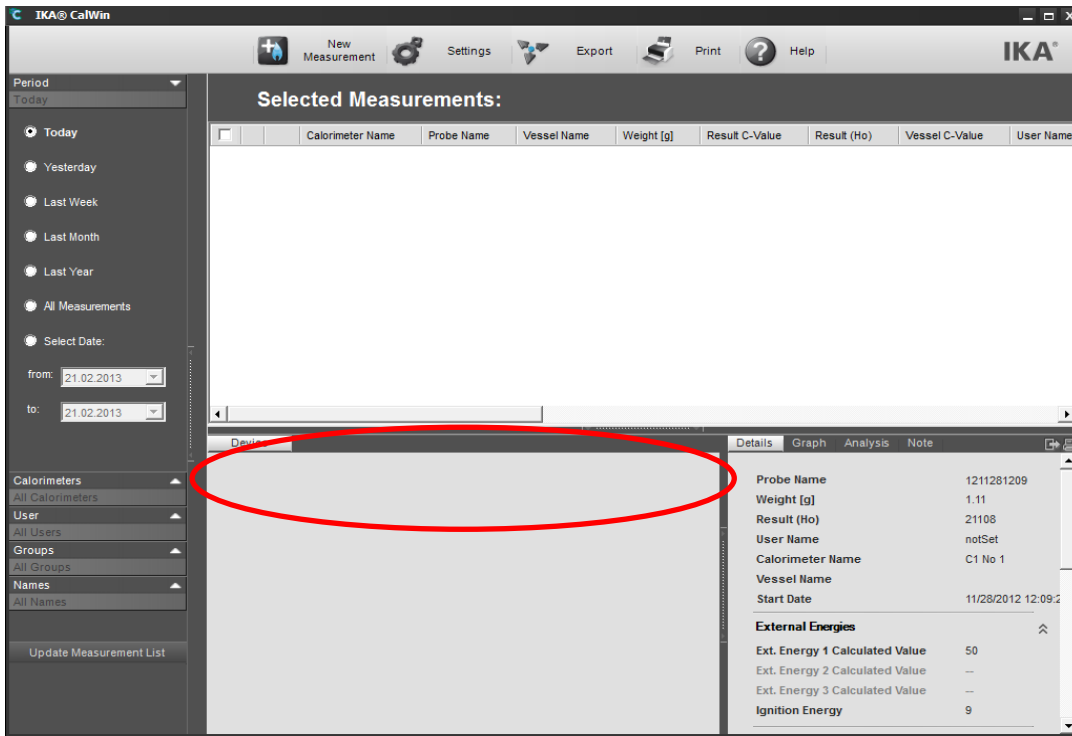
1.3.1 Remove calorimeter

If a calorimeter should be deactivated (currently not in use), you can uncheck the “In Use” checkbox in the calorimeter settings. To activate the “In Use” checkbox, first press on the “Change Calorimeter” button, check or uncheck “In Use” and then press on the “Save Changes” button to take over the new value.



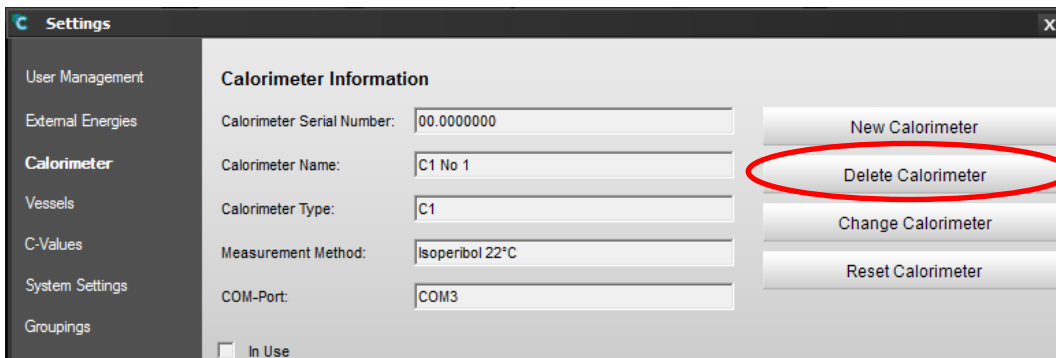
The calorimeter disappears in the main screen, the COM-port gets freed, so that you can use it with an other calorimeter or scale.

Use this option if you just want to temporarily work without this calorimeter.



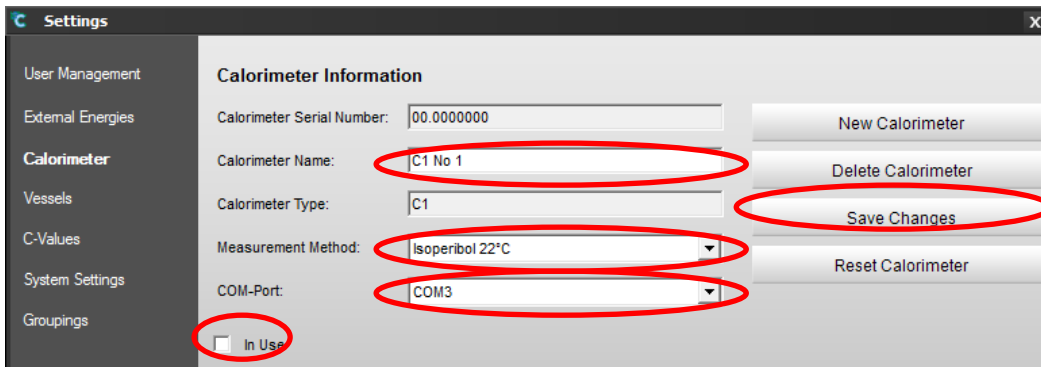
1.3.2 Delete calorimeter

If you want to delete a calorimeter (not in use any more) you can do this by clicking the “Delete Calorimeter” button on the calorimeter settings.



1.3.3 Change calorimeter settings

If you want to change the measurement method, the name or the COM-port of a calorimeter, press the “Change Calorimeter” button. The input fields and the checkboxes, that are possible to change get activated. If all changes are made, press on the “Save Changes” button to take over the new values.

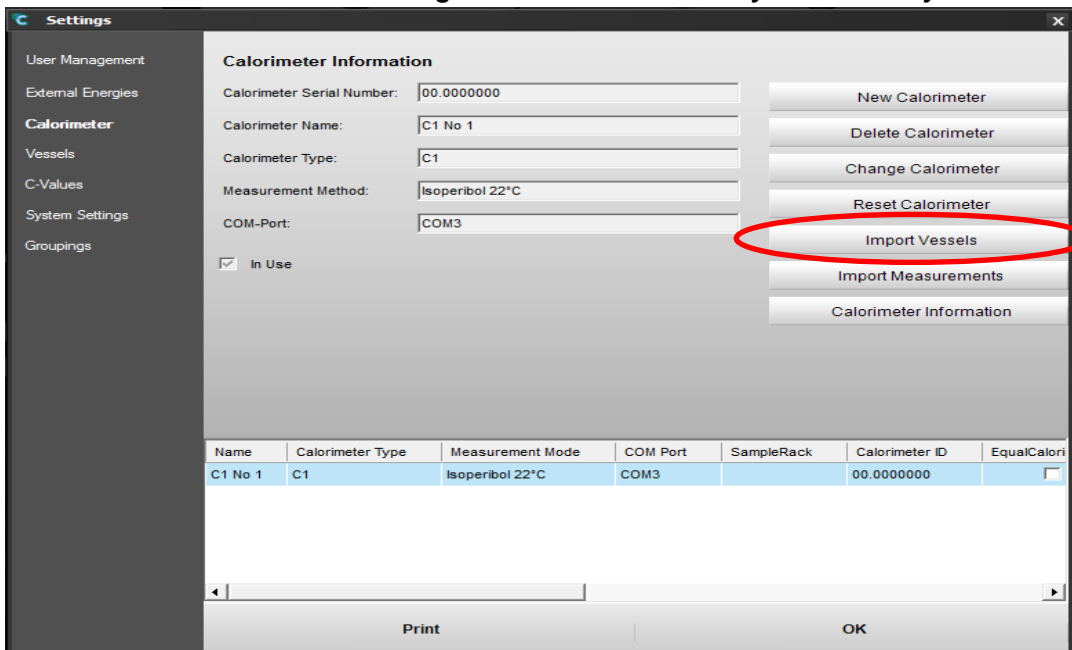


1.4 Setup the calorimeter vessels

1.4.1 Automatic vessel import

It is possible to import the vessels including their c-values directly from the device. This works for the C1 and C6000 calorimeter. The import can be started from the calorimeter settings form. The "Import Vessels" button gets activated if a connection with the calorimeter is established on the main form. The c-values are taken over from the calorimeter device.

This is the recommended procedure for the C6000iso and C6000gs calorimeter because the vessel serial number must be the RFID-tag which can automatically be read in by the device.



Now the imported vessels are listed on the vessel settings.

Settings

User Management
External Energies
Calorimeter
Vessels
C-Values
System Settings
Groupings

Vessel Informations:

Vessel-ID/RFID: 10
Name: V2
Optical ID:
Calorimeter: C1 No 1 (Isoperibol 22°C | COM3)
Working Mode: Isoperibol 22°C
C-Value: 0
Ignitions: 0
Note: Vessel imported

New Vessel
Delete Vessel
Change Vessel
Reset Vessel

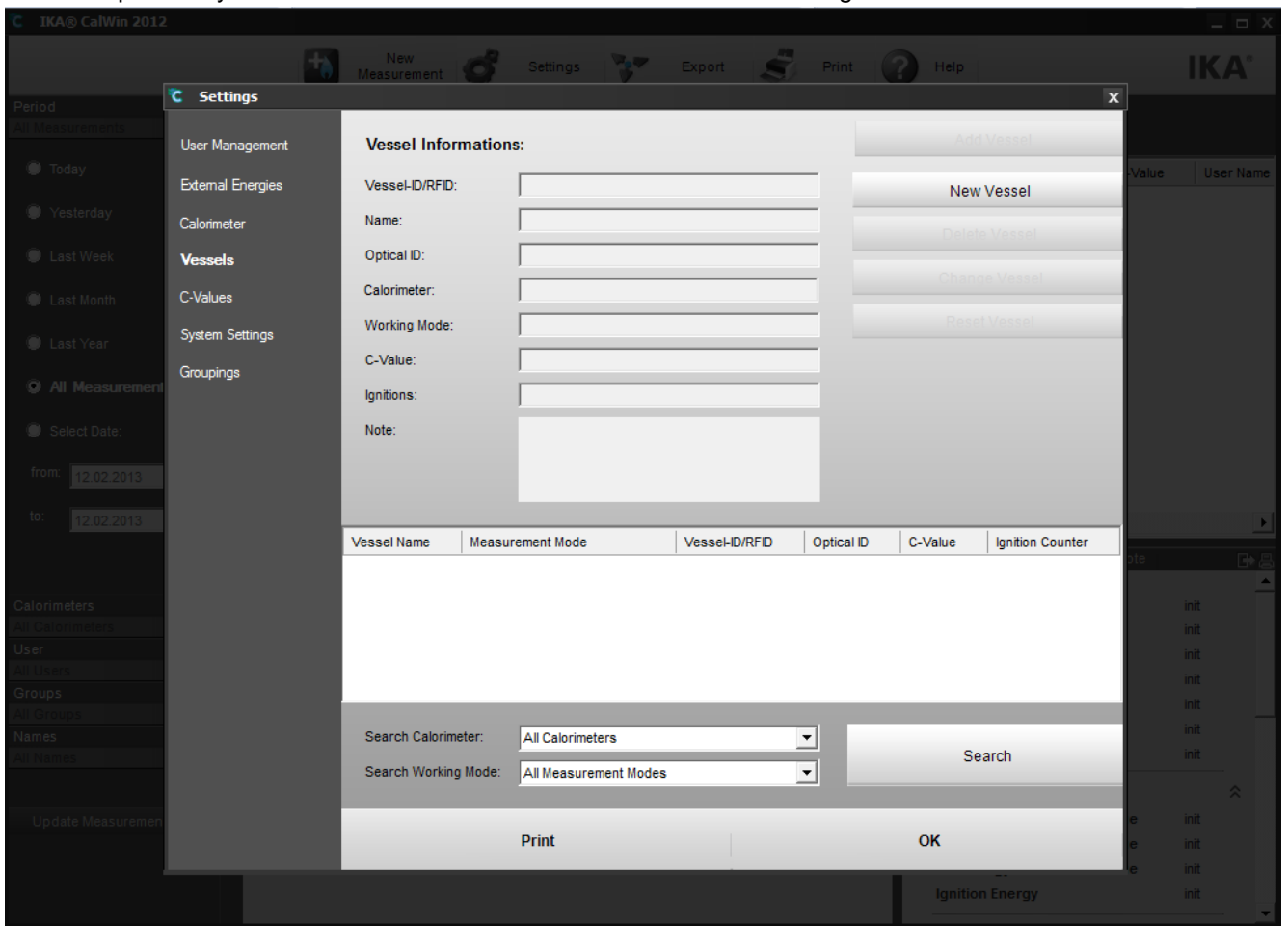
Vessel Name	Measurement Mode	Vessel-ID/RFID	Optical ID	C-Value	Ignition Counter
V1	Isoperibol 22°C	10		0	0
V2	Isoperibol 30°C	10		0	0
V3	Isoperibol 22°C	9		4000	0
V3	Isoperibol 30°C	9		0	0

Search Calorimeter: All Calorimeters
Search Working Mode: All Measurement Modes
Search

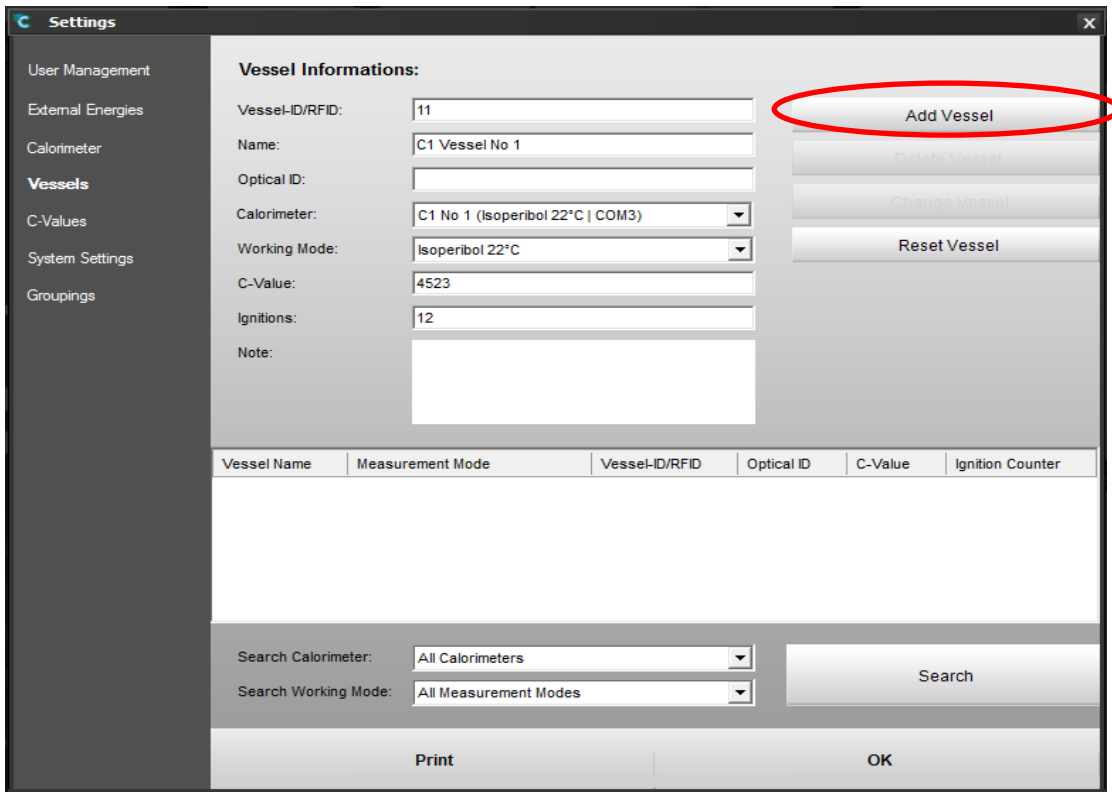
Print OK

1.4.2 Manual vessel input

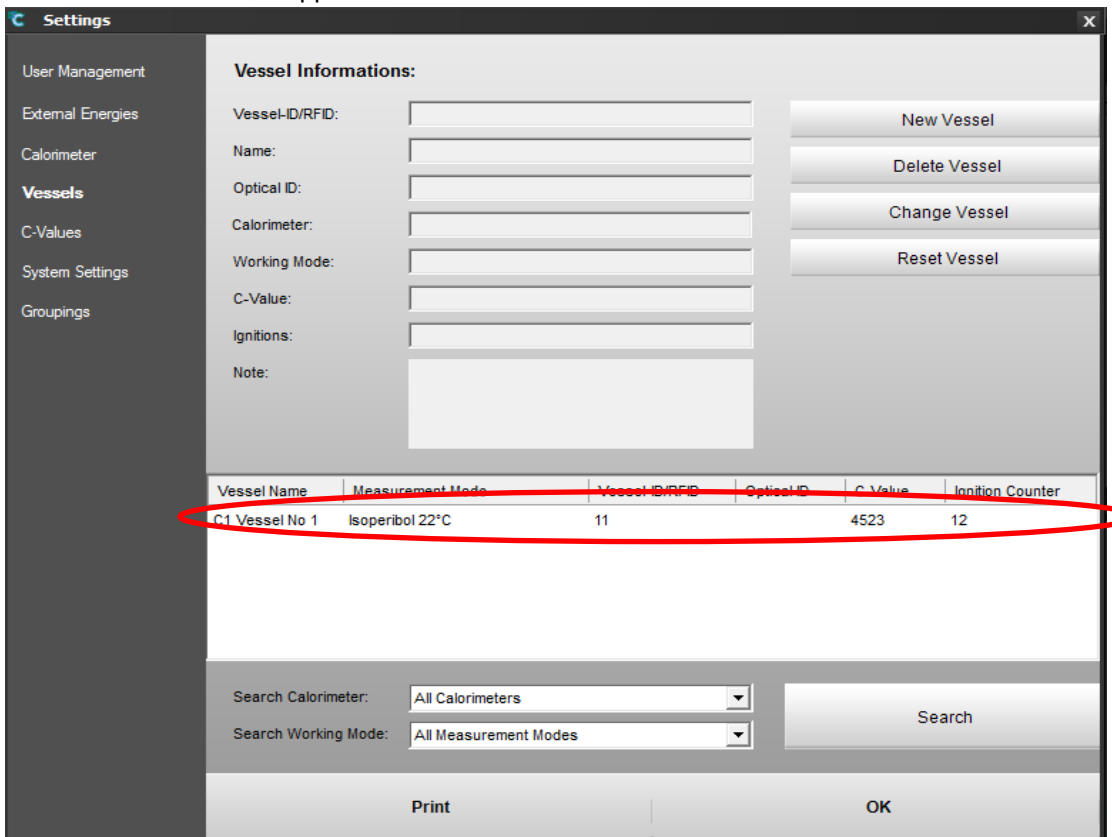
The other possibility is to enter the vessel information in the vessels settings screen.



1. Press the “New Vessel” button.
2. Enter the Vessel-ID/Rfid. This number is shown by C6000gs/iso display.
This value must be unique!
Use the RFID number for the C6000gs/iso vessels and the engraved vessel serial number for other devices. The automatic vessel detection of the C6000 device just works with a correct RFID number.
3. Enter a vessel name
4. The optical ID can be set for the C5000/C2000 if the vessel detection is activated
5. Select a calorimeter from the calorimeter combo box.
6. Select the working mode of the calorimeter
7. Select a c-value (if already known) or leave initial value.
8. Enter the number of ignitions that are already performed with this vessel.
9. **Optional:** It's possible to enter an additional note to the vessel (f.e.: “in use since 01.01.2013”)
10. Press on the “Add Vessel” button to insert the vessel.



11. Now the vessel appears in the overview list.



1.4.3 Filtering Vessels

To keep the overview if there are a lot of vessels stored, it is possible to search for:

- All the vessels of a calorimeter
- All vessels in a specific measurement mode
- All vessels of a calorimeter in a measurement mode

Vessel Name	Measurement Mode	Vessel-ID/RFID	Optical ID	C-Value	Ignition Counter
C1 Vessel No 1	Isoperibol 22°C	11		4523	12

1. Select the calorimeter (optional)
2. Select the working mode (optional)
3. Press the “Search” button to start the search and update the vessel list.

1.4.4 Delete or change a vessel

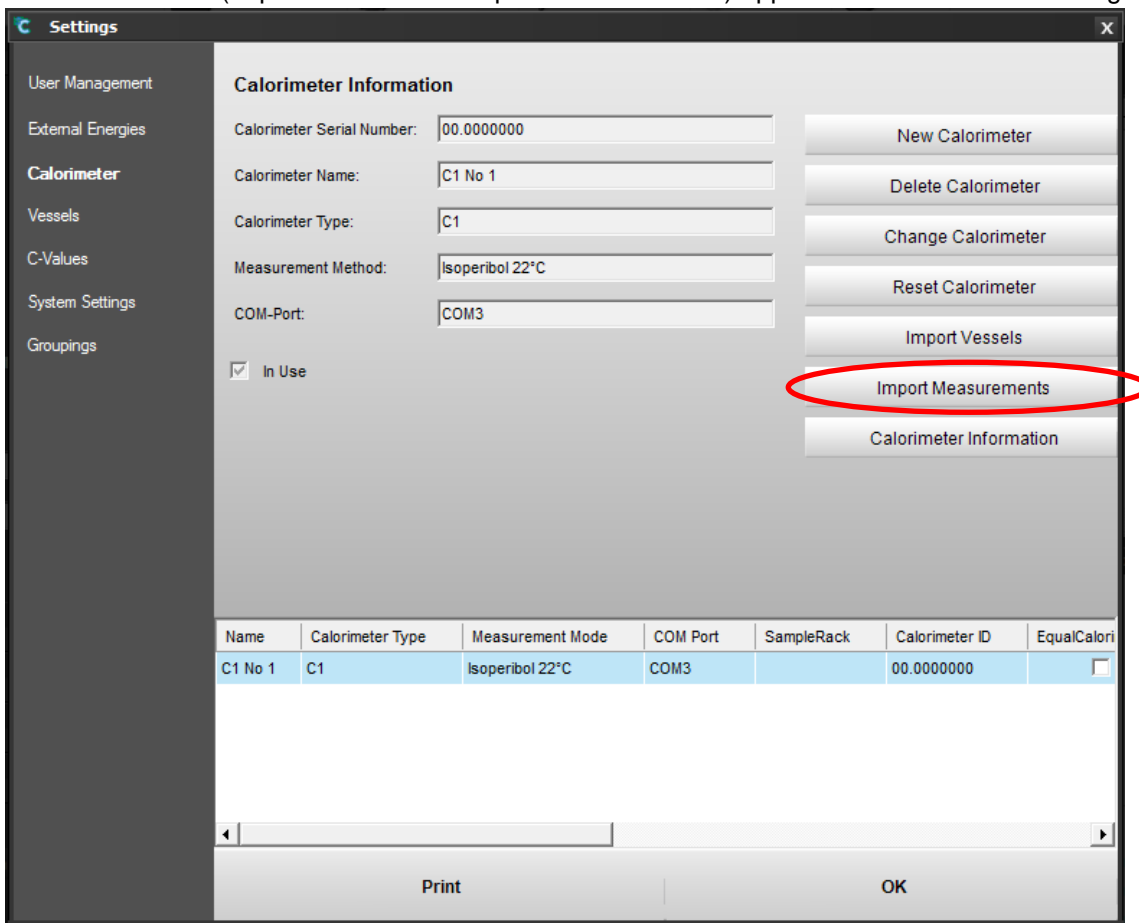
By pressing the “Delete Vessel” or “Change Vessel” button, the user can delete or change an available vessel.

- **Delete:** The vessel is not in use any more.
- **Change:** possible to change the name, optical ID (used for C5000, C2000), c-value, ignition counter or the note of a vessel.

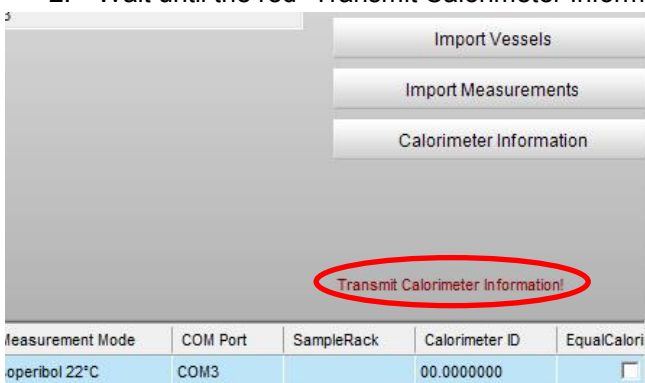
1.5 Import Measurements

It is possible to import measurements from the calorimeter device C6000gs/iso and C1 to CalWin. To perform this task, ensure that the calorimeter is connected and in the main menu (wait state).

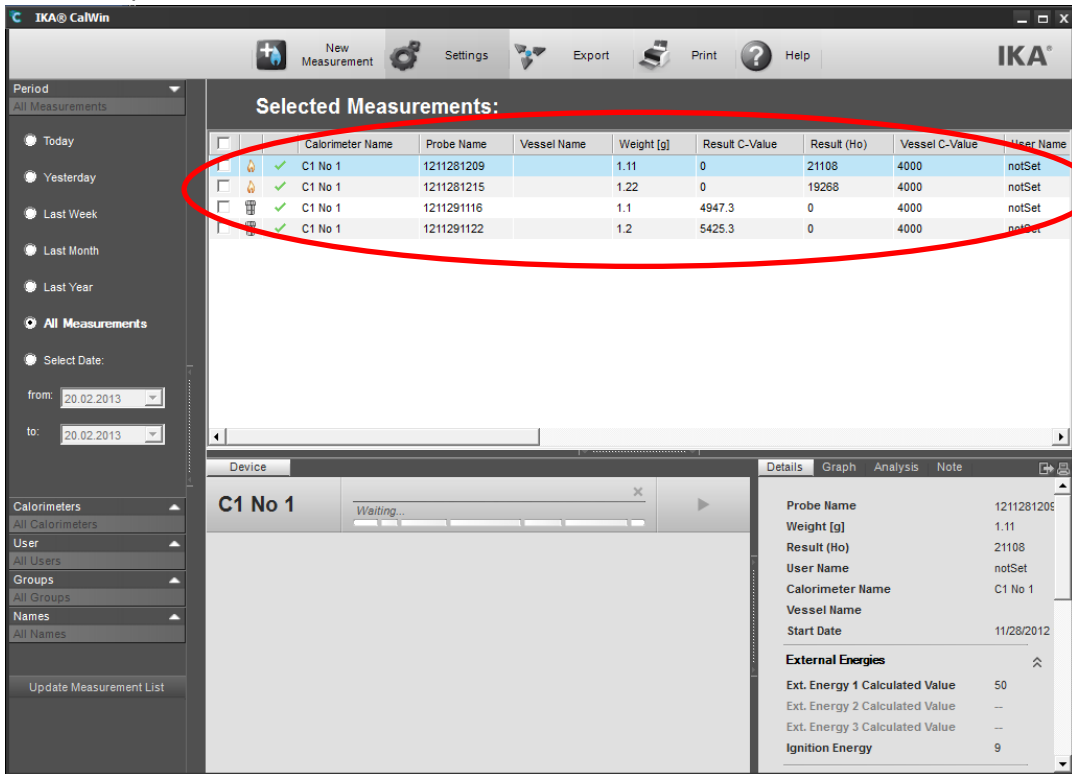
Additional buttons (Import Vessels and Import Measurements) appear in the calorimeter settings menu.



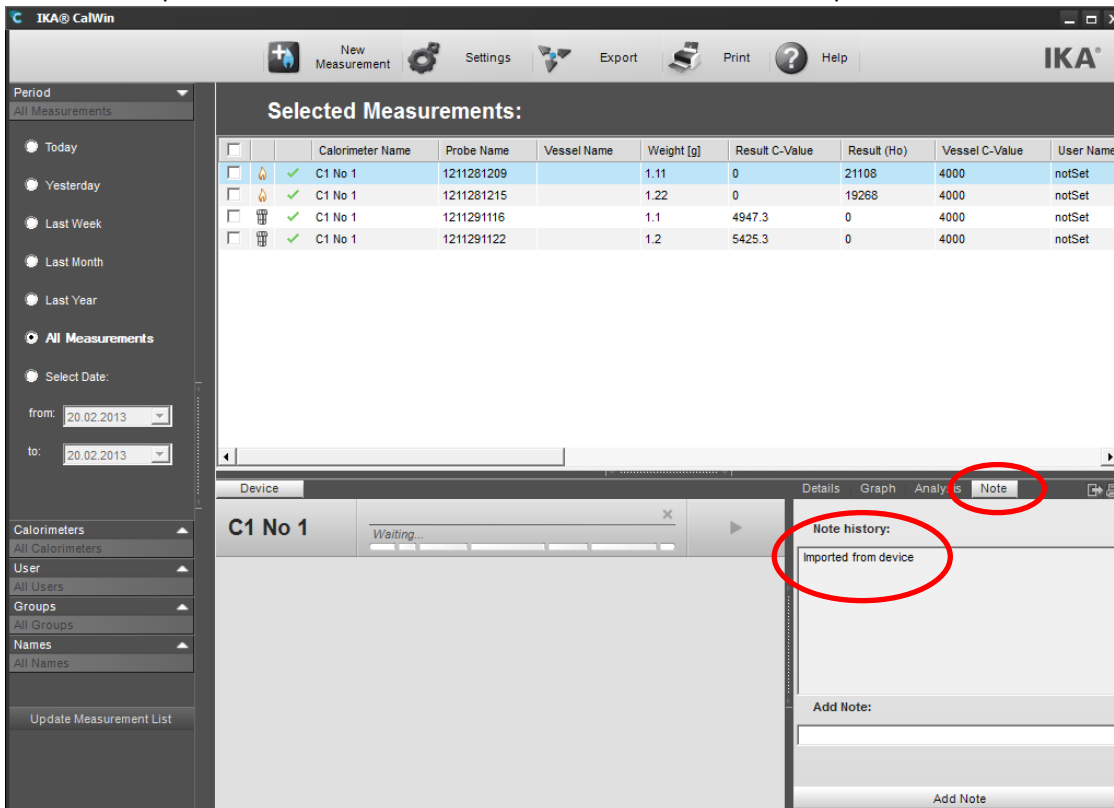
1. Press the "Import Measurements" button
2. Wait until the red "Transmit Calorimeter Information!" label disappears.



3. The imported measurements and calibrations are now visible in the main screen.



4. All imported measurements are marked in the note field as "Imported from device"



It is not possible to see the Graph of an imported measurement/calibration! The temperature values are not available if the measurement is not controlled by CalWin.