easyEmission – step 2
Software set-up
for Engine Testing

Install easyEmission

testo easyEmission

loading modules

Version 2.3

Committing to the Future

loading modules

Version 2.2

Committing to

loading modules

Version 2.1

Committing to
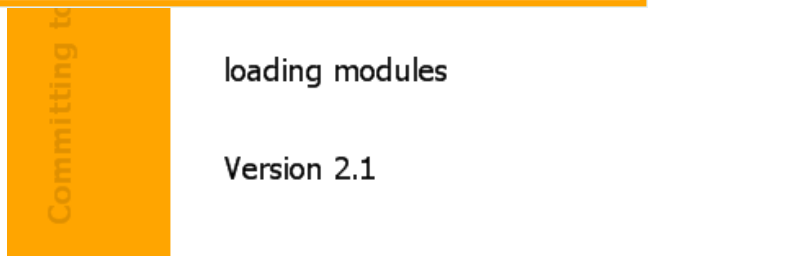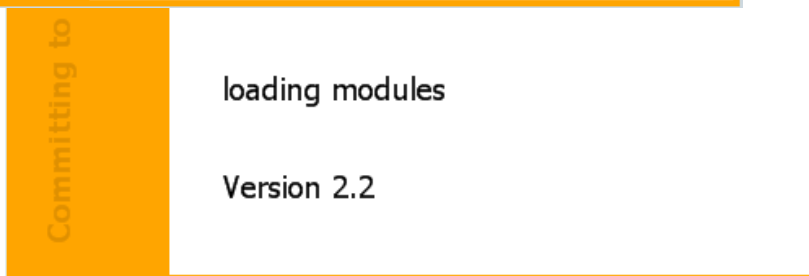
- The following Installation Guide is based in the actual easyEmission Version 2.1 or higher. If you are using an older version of easyEmission please update your program (see next page)

- The following functions only can be used when you are using your analyzer in combination with the easyEmission software (real time measurement)

- Once you made some inputs and configured of easyEmission, you will get the full functionality of all calculations and reports.

# easyEmission - Software Setup

- Installing software

- Start testing proceedure

- Save data & print report

- Importing a Measure type / Report template

- Configure Special Site Data

- Input Own Data / Folder & Site-Information

- Configure Measure type

Importing a measure type

- **Download** the ET-file from www.testo350.com /Engine Testing Templates … and save it to "My documents" on your computer

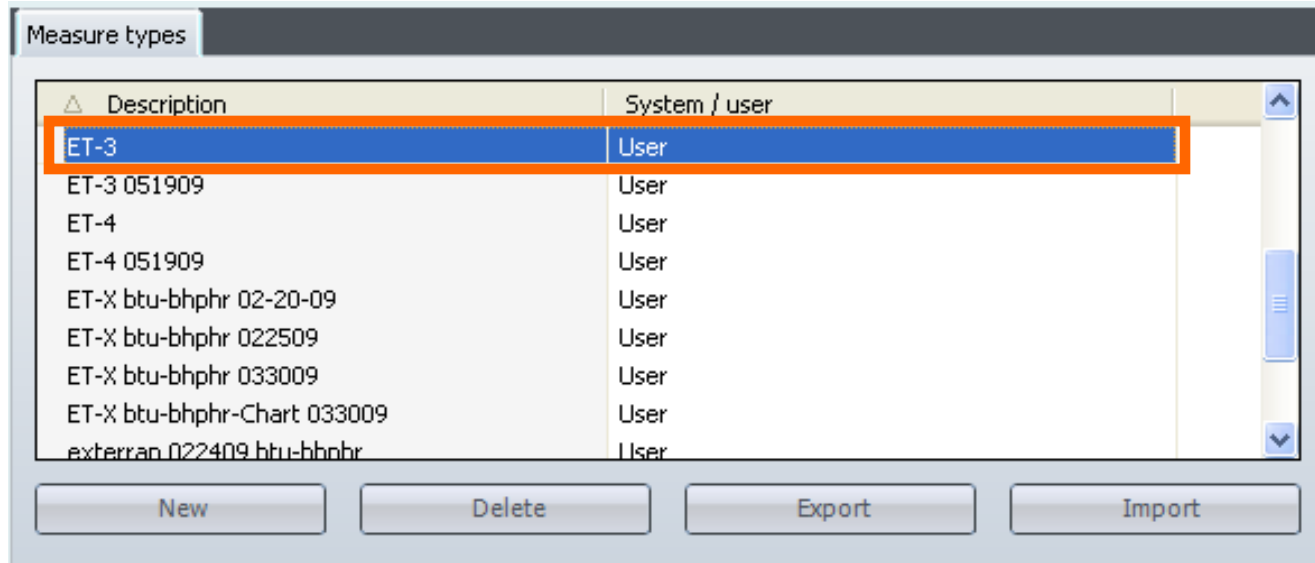- Open the menu "Measure types" **Click on** "Manage measure types"

- **Click on "Import"** on the measure type tapand the next window will appear. Click on "My Documents" and mark the ET-… .zip file **(do not unzip the file!!)**. Click on "**Open**", this will import the file.
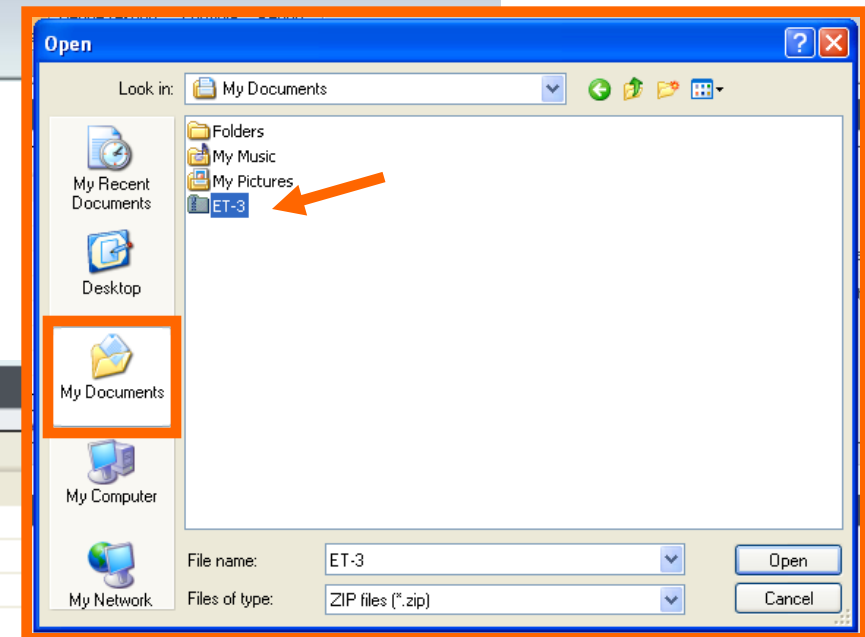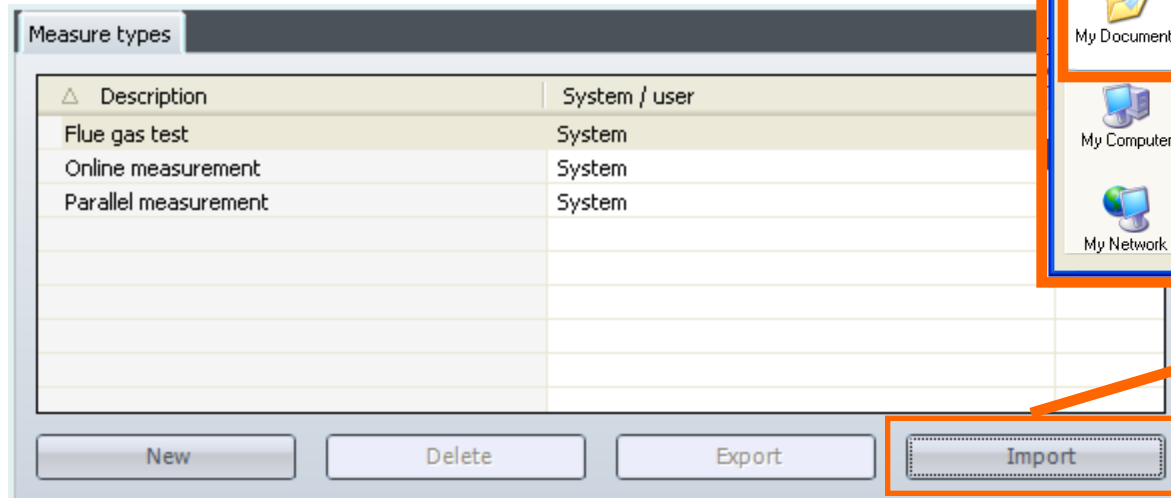
Importing a measure type
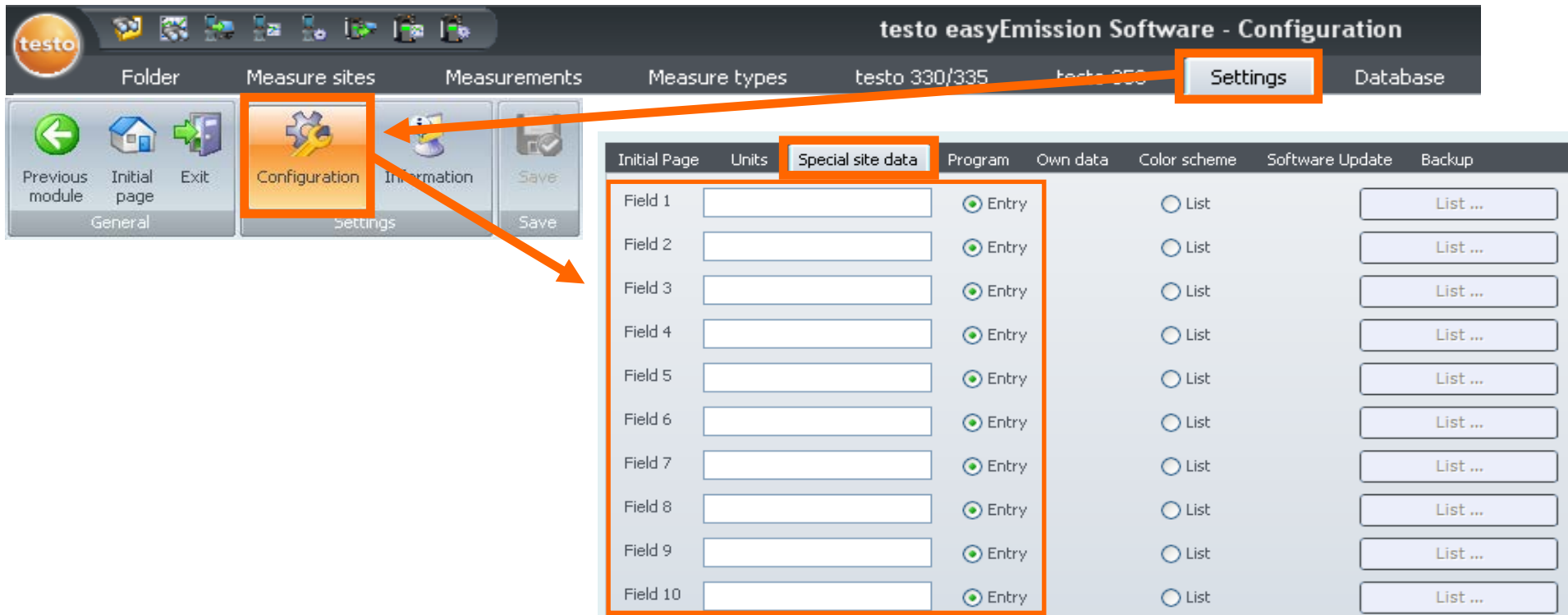
- The imported file is listed in the measure type folder with the other default measure types

Special Site Data - Configuration
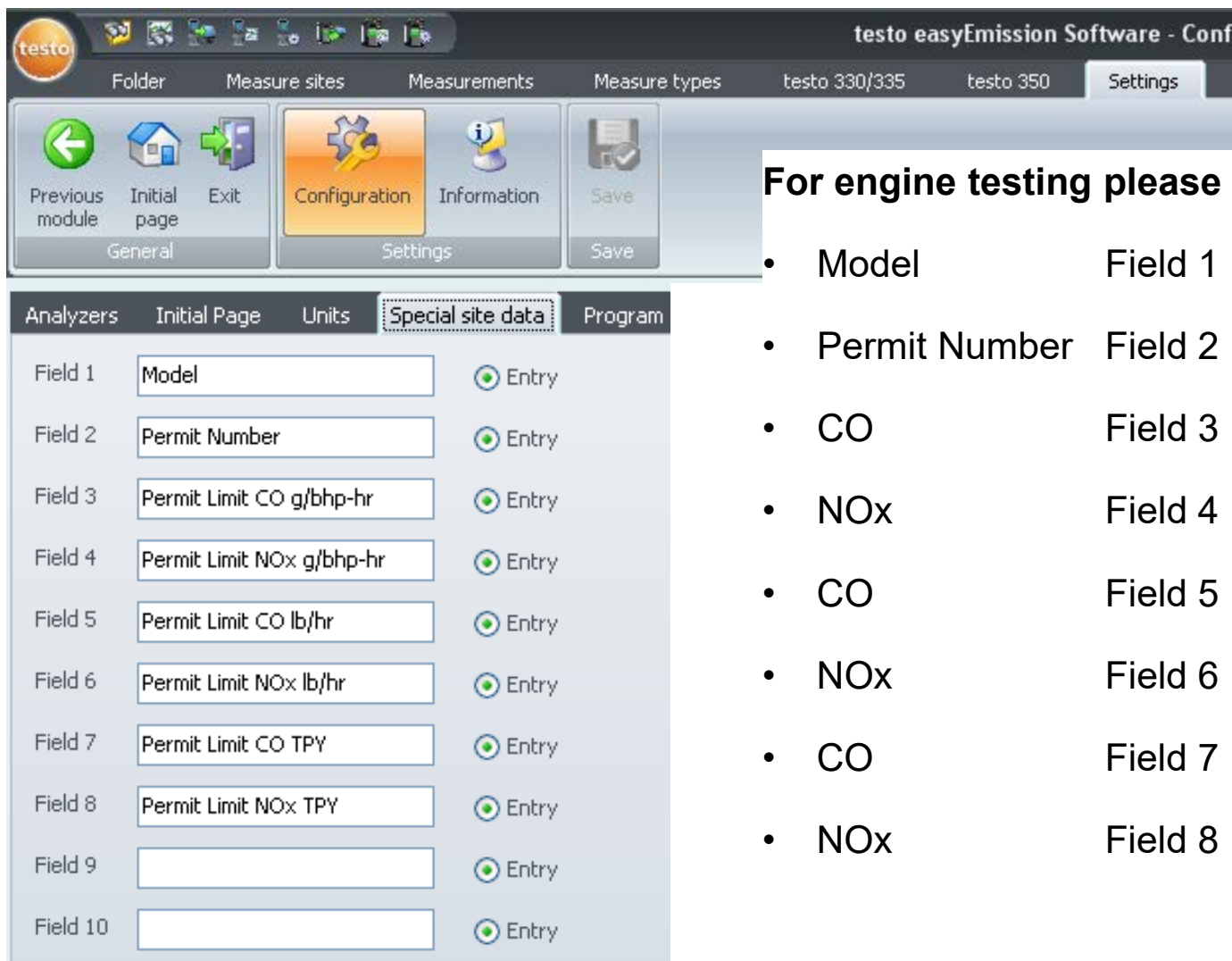
● easyEmission is designed to work with various testing applications (Engines, Boilers, Process, …) and can be configured to special reporting requirements. For regulatory testing, the site permit information may be needed. The special site data sheet is the mechanism to collect this information for the report.

Go to Special site data sheet under "Settings" → "Configuration" –> "Special site data" →
Fields 1 - 10

Input – Special site data information

For engine testing please enter following labels

- Model   Field 1

- Permit Number   Field 2

- CO   Field 3

- NOx   Field 4

- CO   Field 5

- NOx   Field 6

- CO   Field 7

- NOx   Field 8

It is important fill in the "fields" in the order shown. If not done this order, the database "pointers" will be NON functional.

Input "Own data" operator fields

- Fill in your company data under "Settings" → "Configuration" –> "Own data"

All this data is shown on the report when you print out your measurement!

- You can also upload your company logo **"File …"** → **"Look in"** choose out the folder where your logo file is → **"Open"** the image file

Input folder & general site information

1. Create a new folder with the customer data and **Save** the inputs
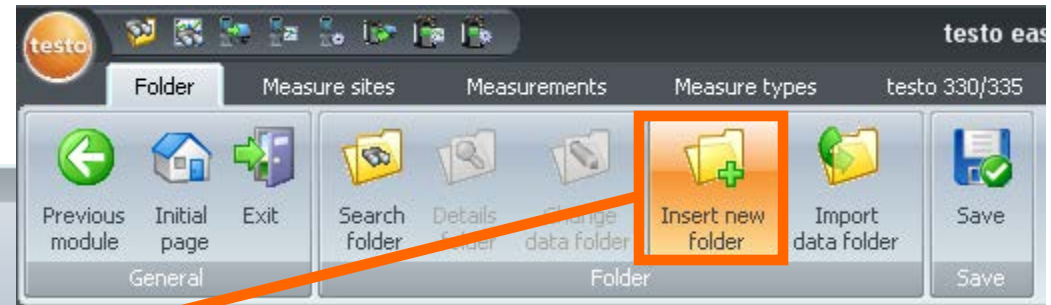
2. Next create a **New** Site with the site information
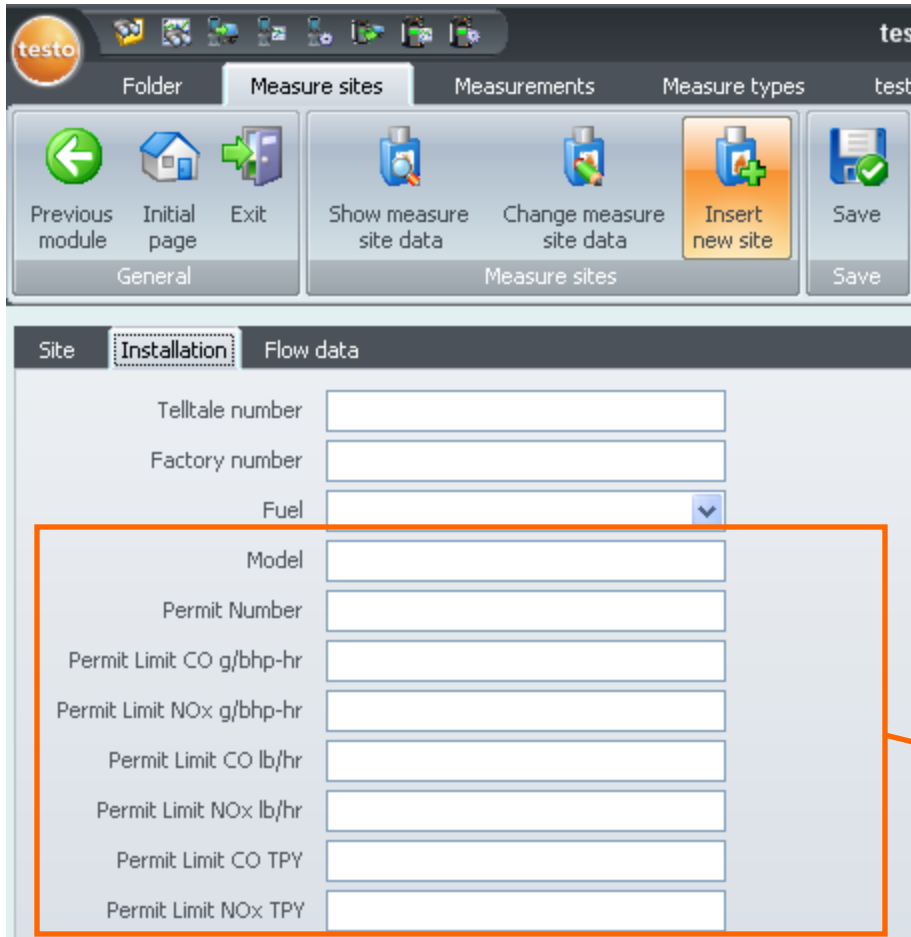
Disable the checkmark if the "Site information" is different than the Customer Data in the Folder data!

Input Site specific information

- Fill in the Engine data

This input is used for reports and used to calculate the emission values!

- Telltale number is the Engine Model in the report

- Factory number is the Serial number in the report
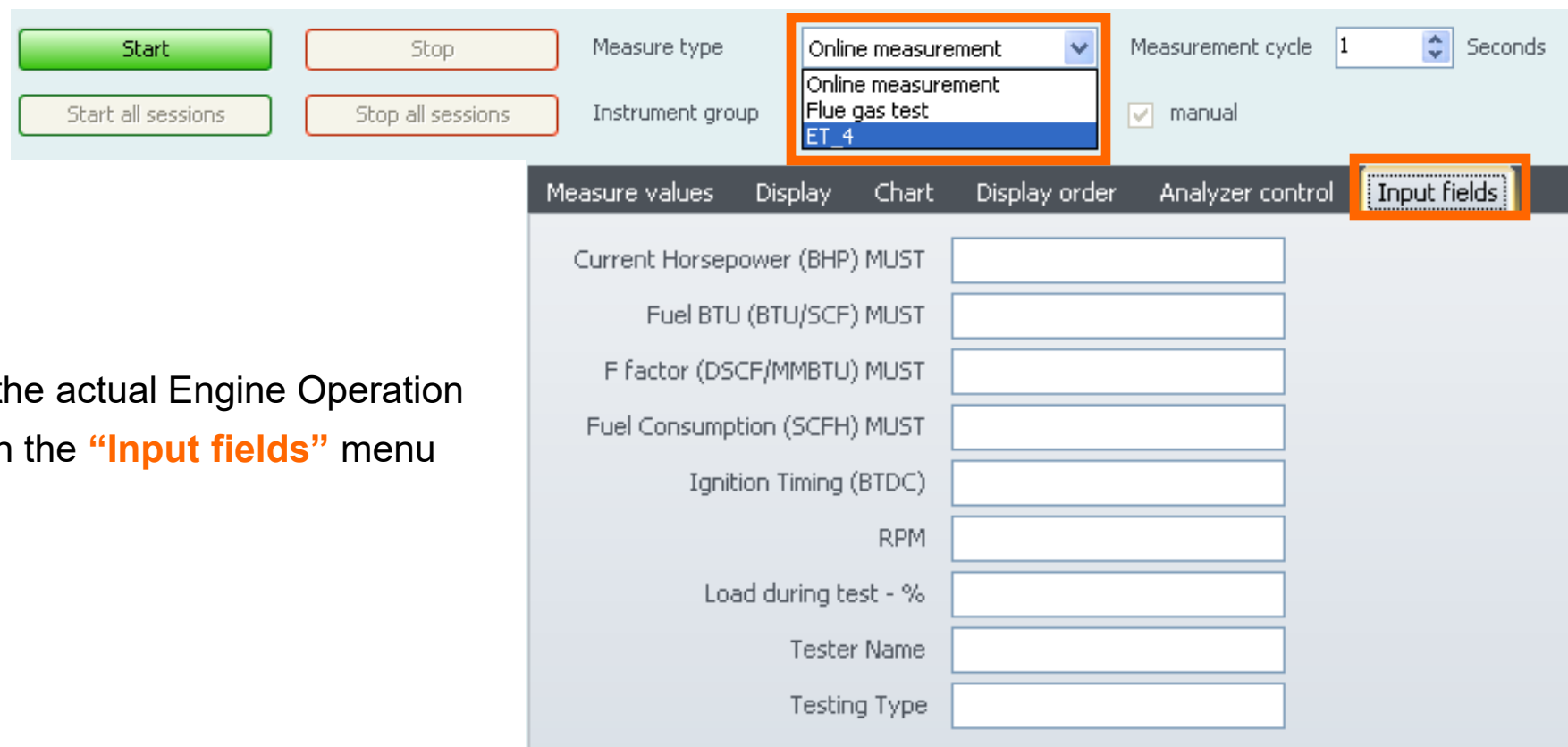
These are the fields defined under "Input – Special site data information" 3 pages before!

Configure "Measure type"

- Start Menu **"Real time measurement"** under "testo 350" → "Real time measurement"

- Choose the imported measure type for e.g. **ET 4**

- Fill in the actual Engine Operation Data in the **"Input fields"** menu

Configure display screen
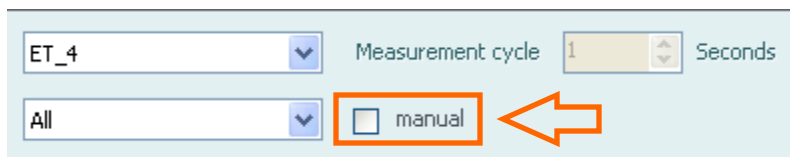
● You can choose the data channels to be shown in the Real Time measurement and later in the report!

● Press **"Start** "Real time measurement" → For a quick test or to run an automatic program see next page
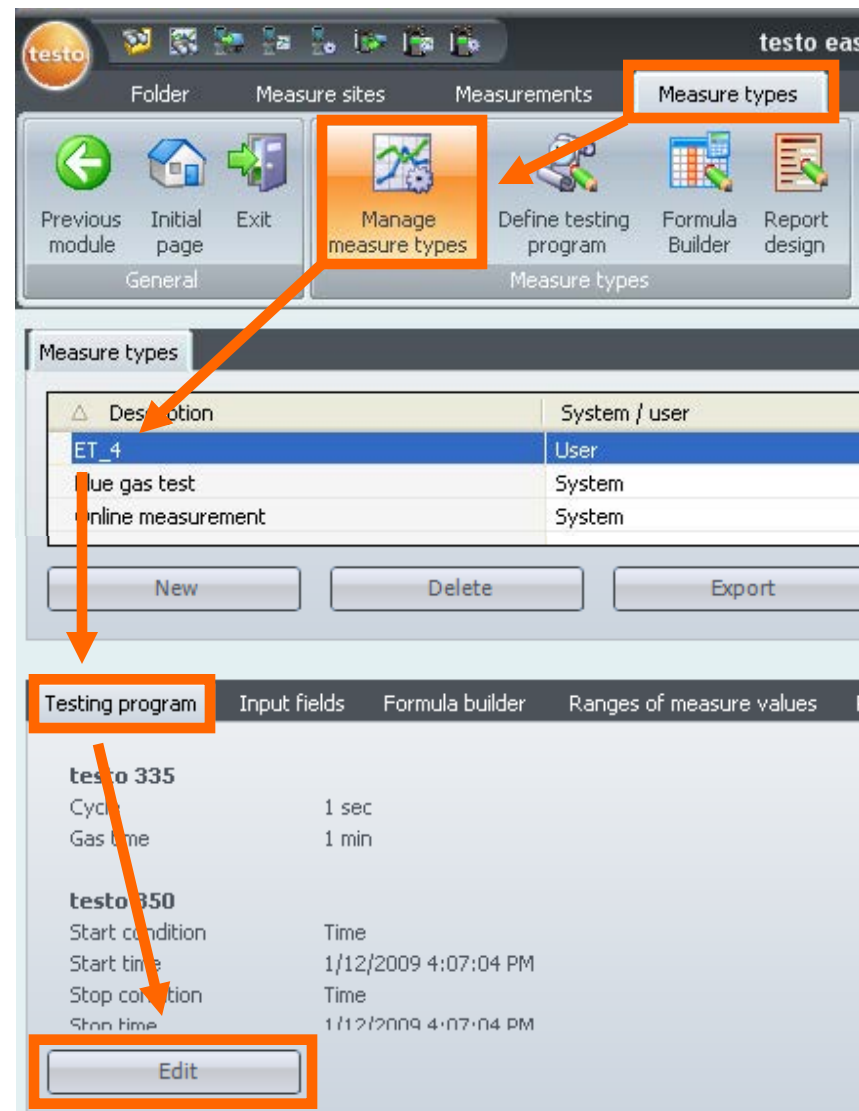
Configure "Measure type" - Set the "Testing program"

- Disable the checkmark **"Manual"** and

  use the default testing program **"Real time testo 350"** measurement and use the default "Testing program"

- You can change the default settings of the testing program in the menu "Measure type" → "Manage measure types" → choose out "ET_4" → "Testing program" → **Edit** → **Real time testo 350** (see next page)

Configure "Measure type" - Set the "Testing program"

- You can use the default setting or change the parameters

- Go back to **"Real time measurement"** and **Start** the online measurement and your configured measuring phases are running

Save readings of "Real time measurement"

- Use **"Save as ..."** to store the readings

- Choose the inserted Site folder (in this example Engine Owner) and confirm with **OK**
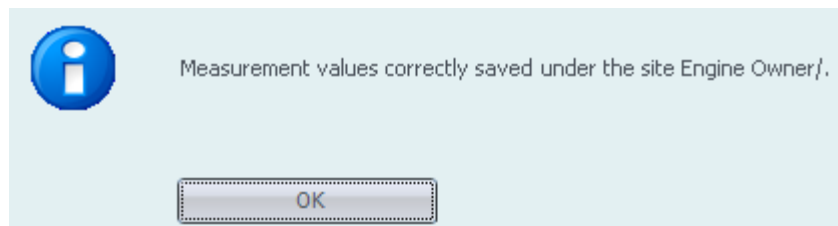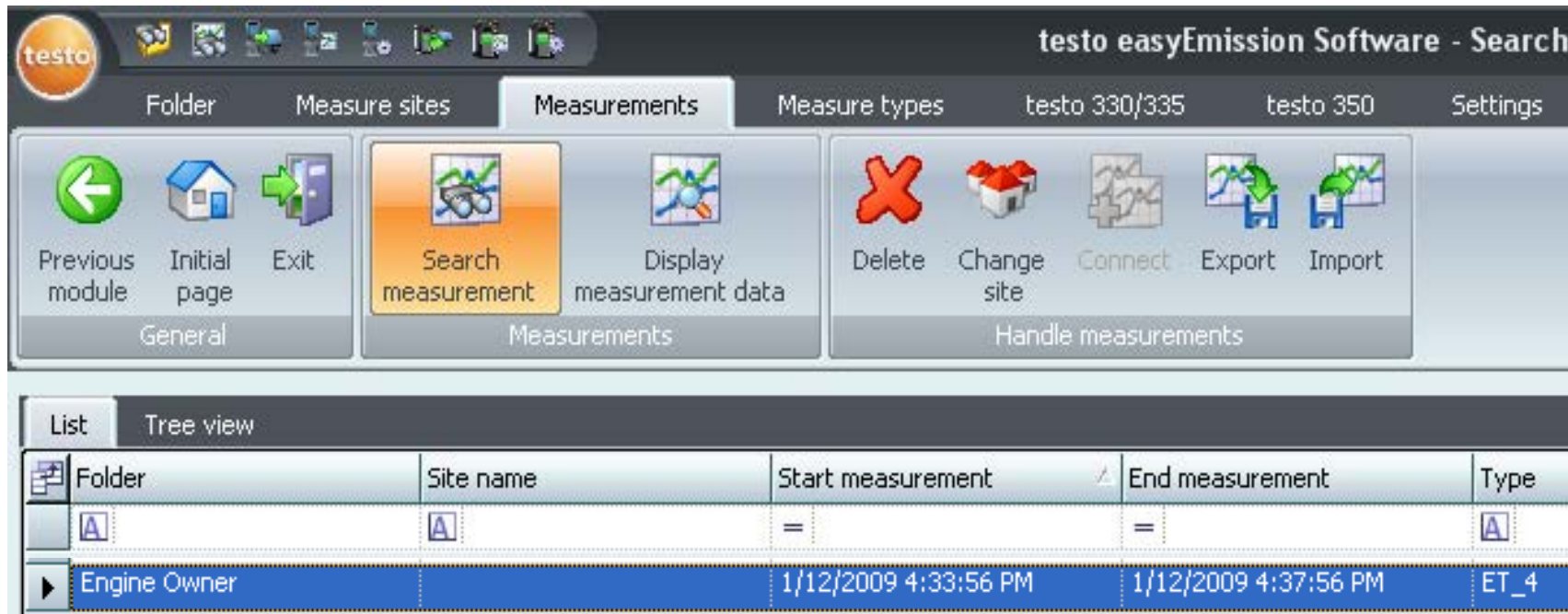
Save the measurement and print the report

- Choose the measurement under "Measurements" → "Search measurement" → Double click on the desired measurement

Save the measurement and print the report

- Mark the checkmark **"Average" and "Also from ranges"** to calculate the average of the "Real time measurement

- Choose the ET-4 for the Engine Test Report 4 and confirm with **OK**

Example easyEmission report

● After your measure type is downloaded, input parameters are set, your program defined and your site information is loaded, you do not need to change the fields.

● For subsequent testing, simply input the on-site testing information and save the measurement to the proper site.

For the greatest flexibility, the measurement type can be changed to satisfy user defined parameters.

Or you can change it as your testing requirements dictate!

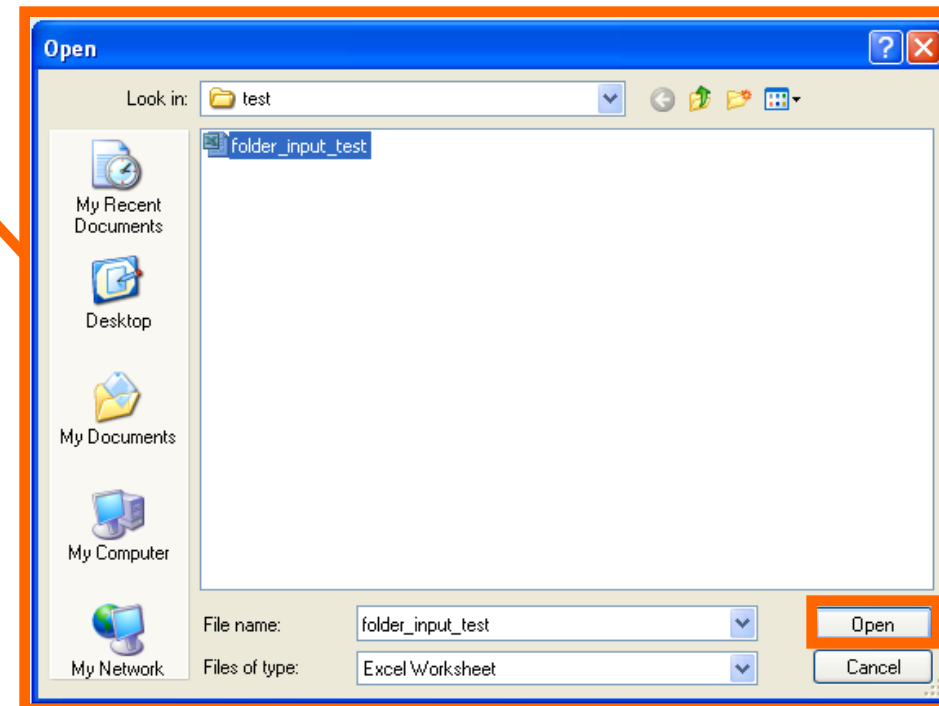# Import Folder information from an Excel-List

Import Folder information from an Excel-List
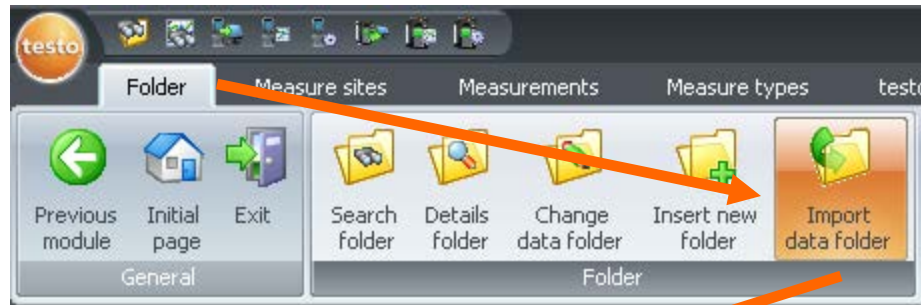
- Choose the data base

  Folder → Import data folder → Excel worksheet

- Locate the excel file on your computer, mark the desired file and **Open**

Import Folder information from an Excel-List

The chosen Excel sheet is shown

→ klick **Next**

Define the columns for the import

Import Folder information from an Excel-List

- Define the columns for the import and **Apply** when you are finished

ET_4 – What is this file doing?

- ET_4 is a predefined Measure type. A measure type relates many different functions of easyEmission for user-specific applications. Here is an overview!

Implement calculations
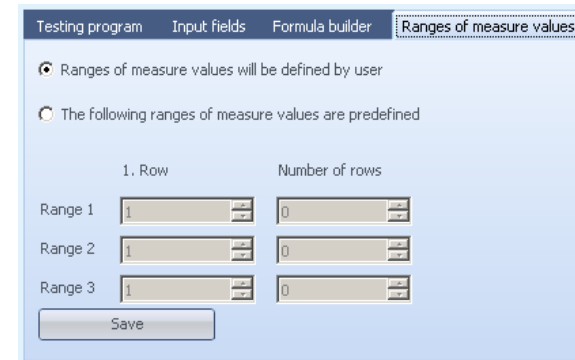
Define measurement program
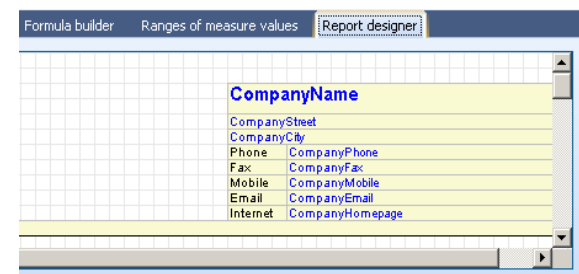
Define ranges in your measurement for Minimum, maximum and average calculations

Define user specific input-fields

Define specific reports for your printouts

ET_4 – On-site Testing Information
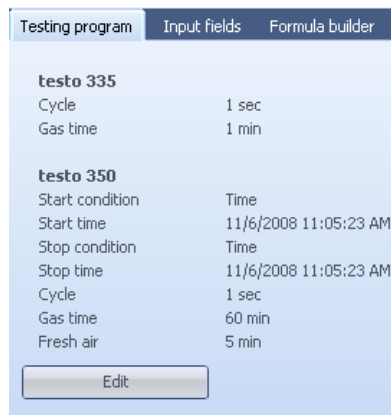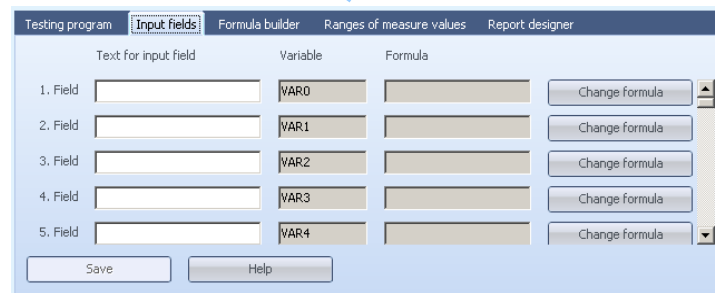
- Input parameters for engine parameters for the calculation of the engine specific readings. Make this inputs before the "Real time measurement" or even after, before printout saving the readings and make the printout.

- Specific report for an Engine testing protocol

- Engine specific calculation of the emissions in g / bhp-hr and lb / hr

Current Horsepower (BHP)	
Fuel BTU (BTU/SCF)	
F factor (DSCF/MMBTU)	
Fuel Consumption (SCFH)	
RPM	
Load during test - %	

ET_4 – Site Specific Input Parameters

● Input field for site engine information: This information can be stored once under "Measure site" → "Installation" and will be used for every measurement at the site