



Committing to the future

IR Soft 2.2



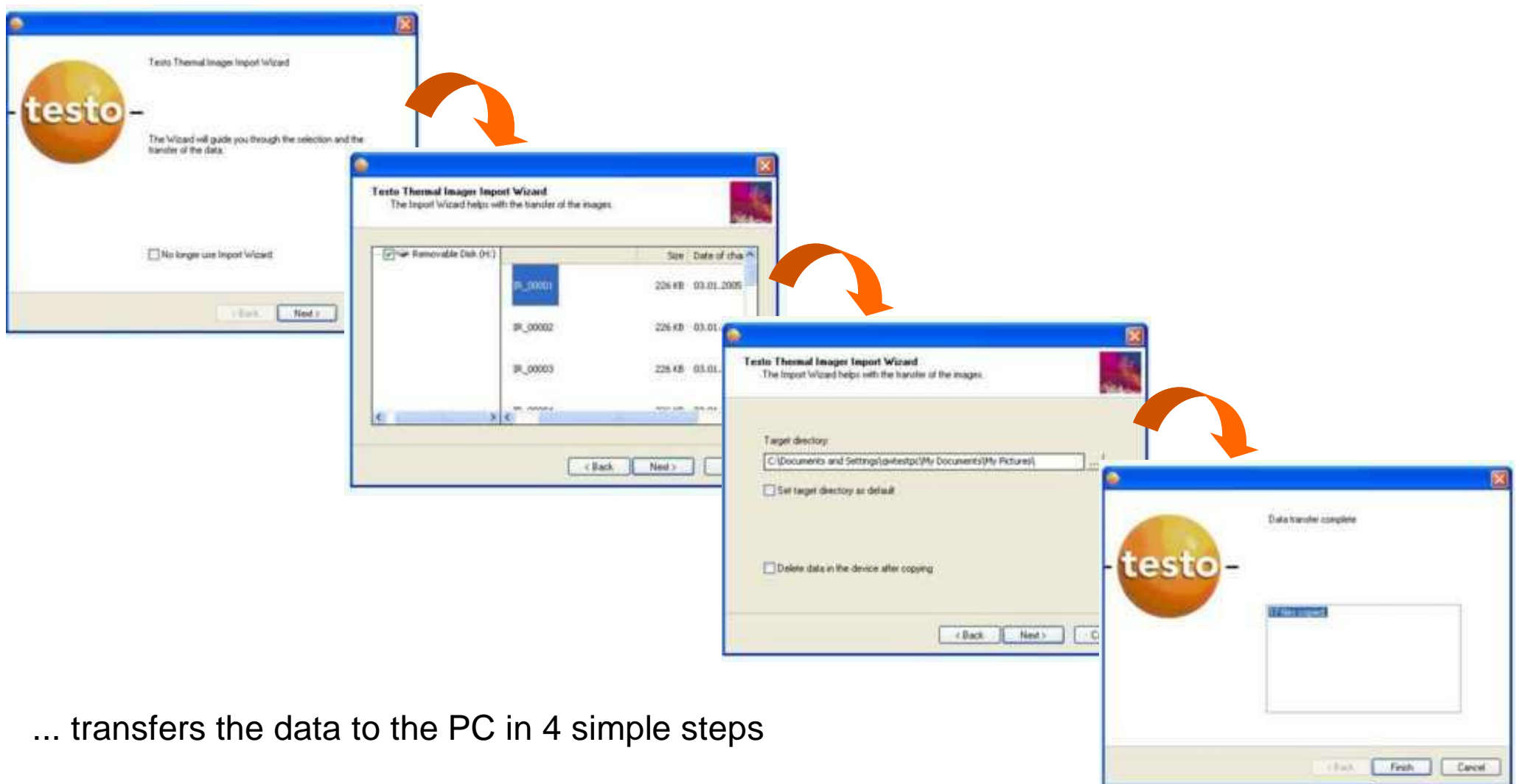
Transferring images to the PC



- 1) Install software on PC with CD out of scope of delivery
- 2) Start the software
- 3) Switch on the camera
- 4) Connect the camera to the PC using the USB cable
- 5) The camera is recognized automatically
- 6) The import assistant starts and assists you to upload images

Transferring images to the PC

The Import Wizard...



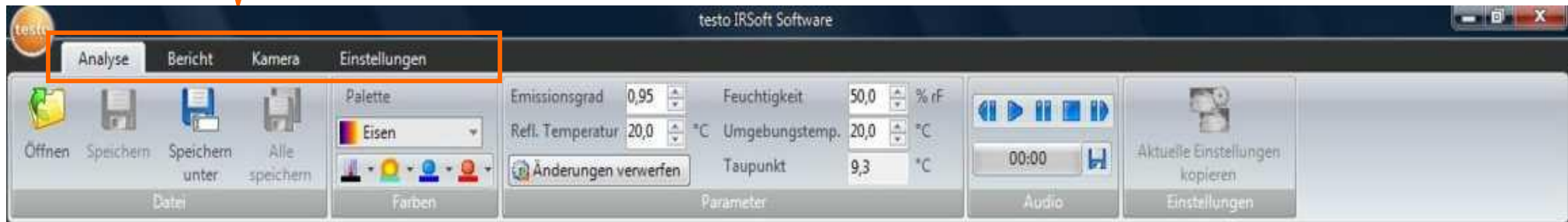
... transfers the data to the PC in 4 simple steps

Ribbon

4 tabs



- (1) Analysis
- (2) Report
- (3) Camera
- (4) Settings



- Depending on the selected tab different activities and settings can be carried out

Tab analysis



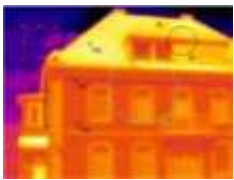
Open and save data file

Change of **palette** and colour of the image markings

Manual setting of parameters for the whole IR image which is currently selected:

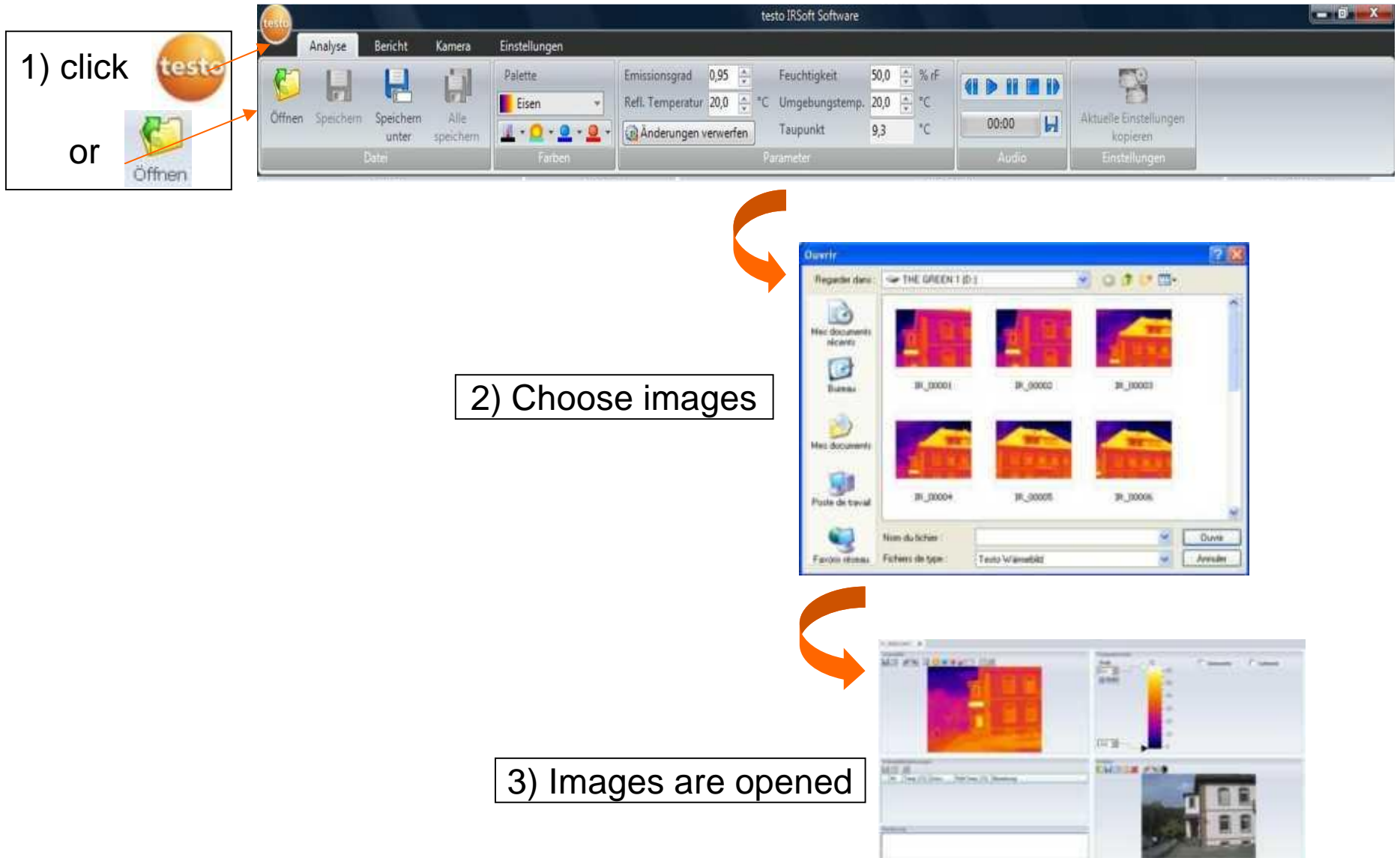
replay speech comment

Copy the settings of the currently selected IR image into all open IR images



- emissivity
- reflected temperature
- humidity
- ambient temperature

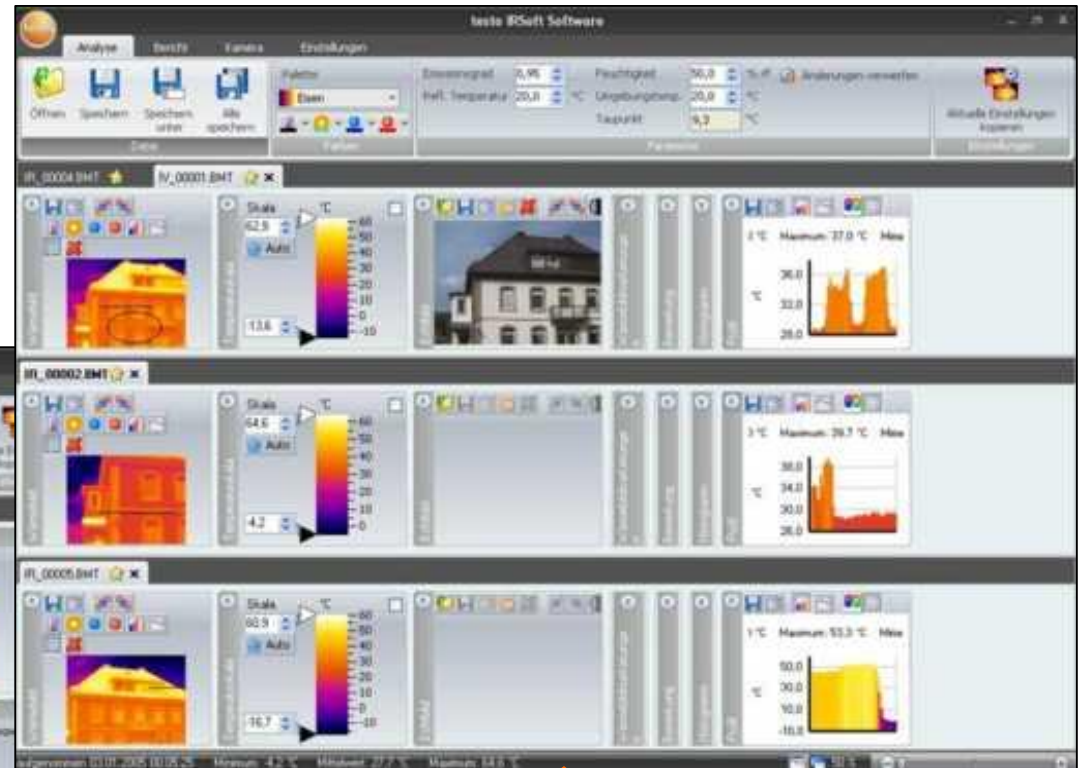
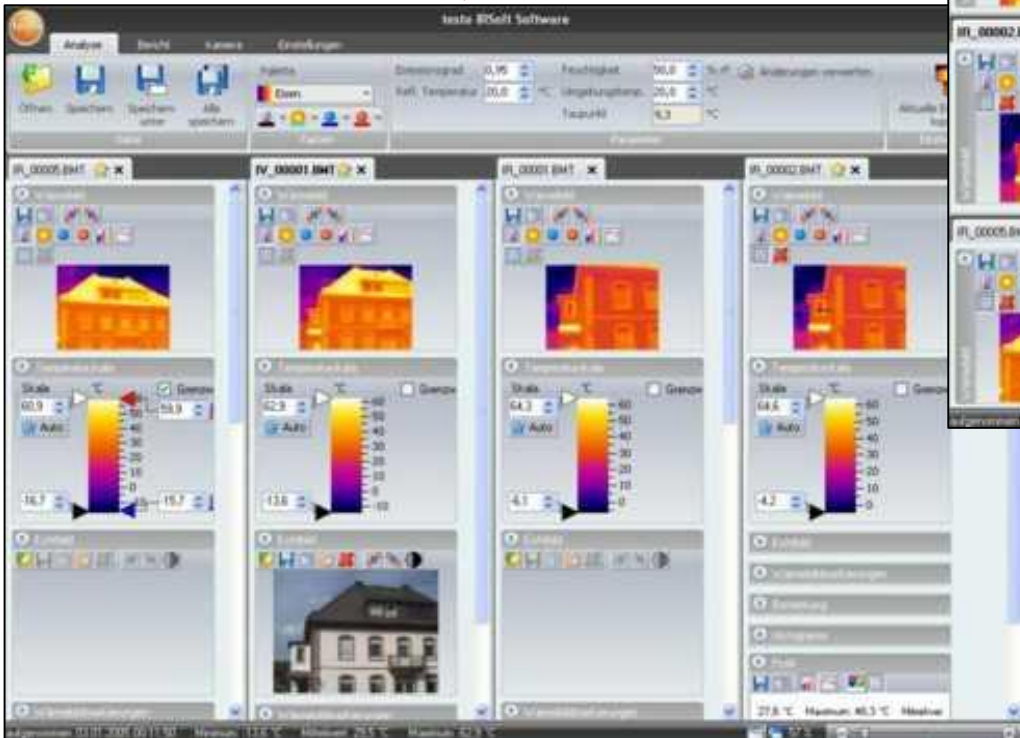
Open images



Compare images

Comparing several images directly besides each other (1)

vertical

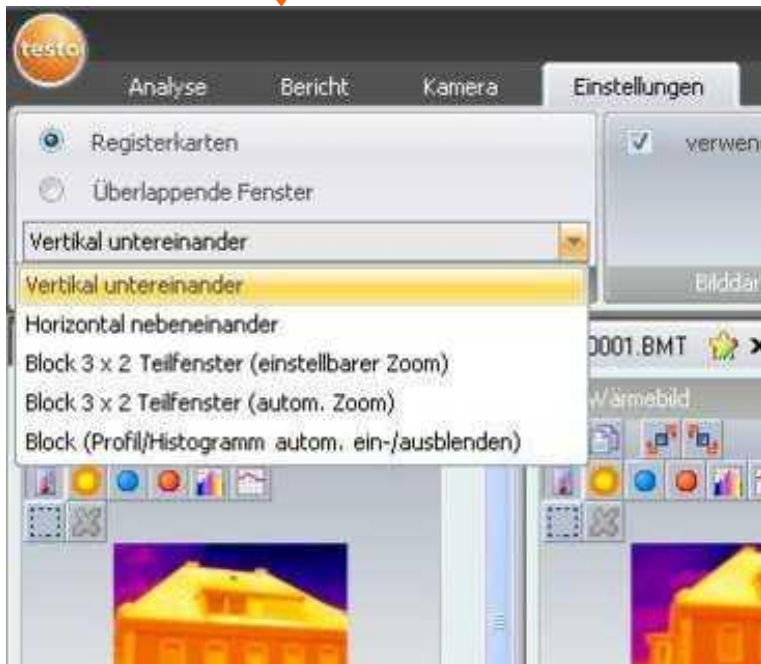


horizontal

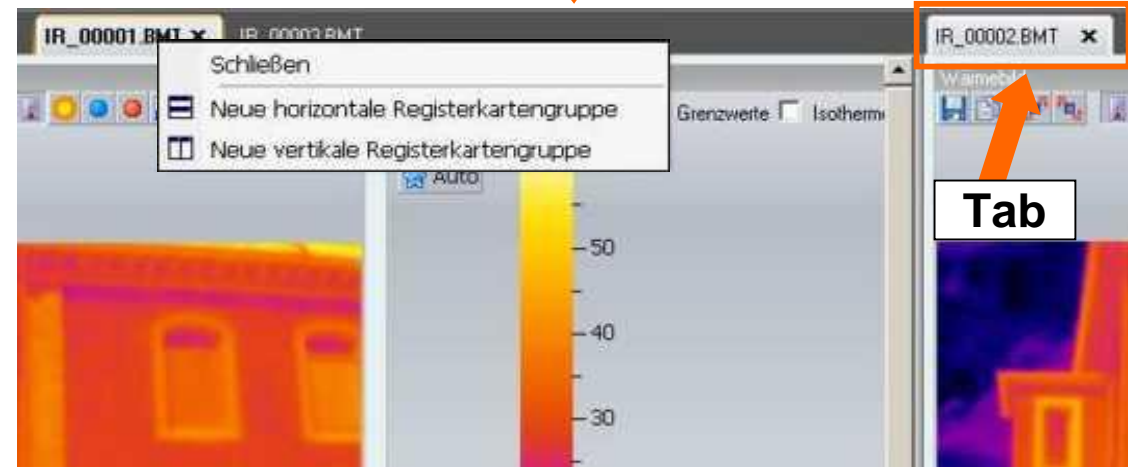
Compare images

Comparing several images directly besides each other (2)

1) In the tab „Settings“ select the option „tabbed“ and choose vertical or horizontal in the group work space view



2) Right-click on the tab of an infrared image



3) Choose alignment

Tab analysis

Function „Copy actual settings“ (1)

1) For the currently selected image changes are made, e.g. emissivity

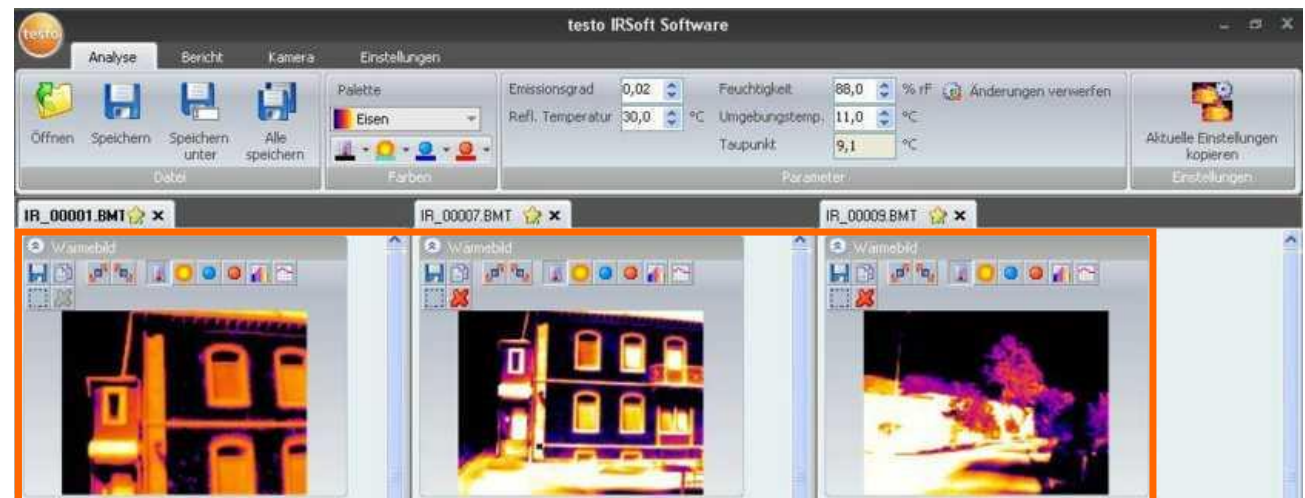
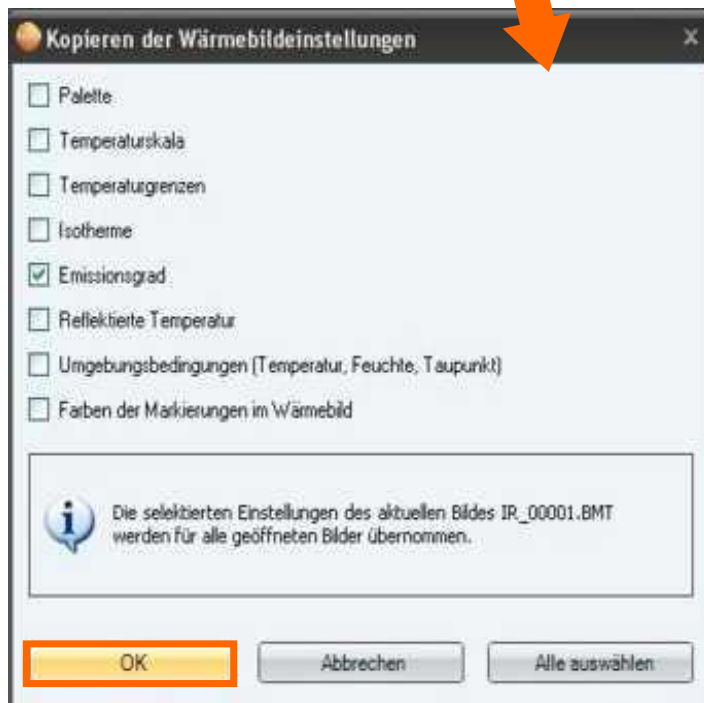
2) Choose function „Copy actual settings“

The screenshot displays the 'testo IRSoft Software' interface. The 'Einstellungen' (Settings) menu is open, showing various parameters. Two orange arrows point to specific elements: one points to the 'Emissionsgrad' (Emissivity) field, which is currently set to 0,02, and the other points to the 'Aktuelle Einstellungen kopieren' (Copy current settings) button. Below the settings, three thermal image tabs are visible: 'IR_00001.BMT', 'IR_00007.BMT', and 'IR_00009.BMT'. The first tab, 'IR_00001.BMT', is highlighted with an orange border and shows a thermal image of a building facade.

Tab analysis

Function „Copy actual settings“ (2)

3) Choose and confirm the settings to be copied



4) The chosen settings are accepted for all open infrared images

Tab analysis

Function „replay speech comment“ (1)

The screenshot displays the testo IRSoft Software interface. The top menu bar includes 'Analyse', 'Bericht', 'Kamera', and 'Einstellungen'. Below the menu, there are icons for file operations (Offnen, Speichern, Speichern unter, Alle speichern) and a 'Daten' section. The main area is divided into several panels:

- Top Right:** A control panel with a speaker icon and a play button, both highlighted with an orange box. Below them is a '00:00' timer and an 'Audio' label.
- Left Panel:** A thermal image of a mechanical component with a color scale on the right ranging from 20.0 to 45.0.
- Bottom Left:** A table with columns: 'Id', 'Temp. [°C]', 'Emiss', 'Ref.Temp. [°C]', and 'Bemerkung'. The table contains three rows of data.
- Bottom Center:** A live video feed showing a close-up of industrial machinery.
- Right Panel:** Two histograms showing temperature distribution. The top histogram has a y-axis from 0.0 to 4.5 and an x-axis from 20.0 to 45.0. The bottom histogram has a y-axis from 0.0 to 44.0 and an x-axis from 20.0 to 45.0.

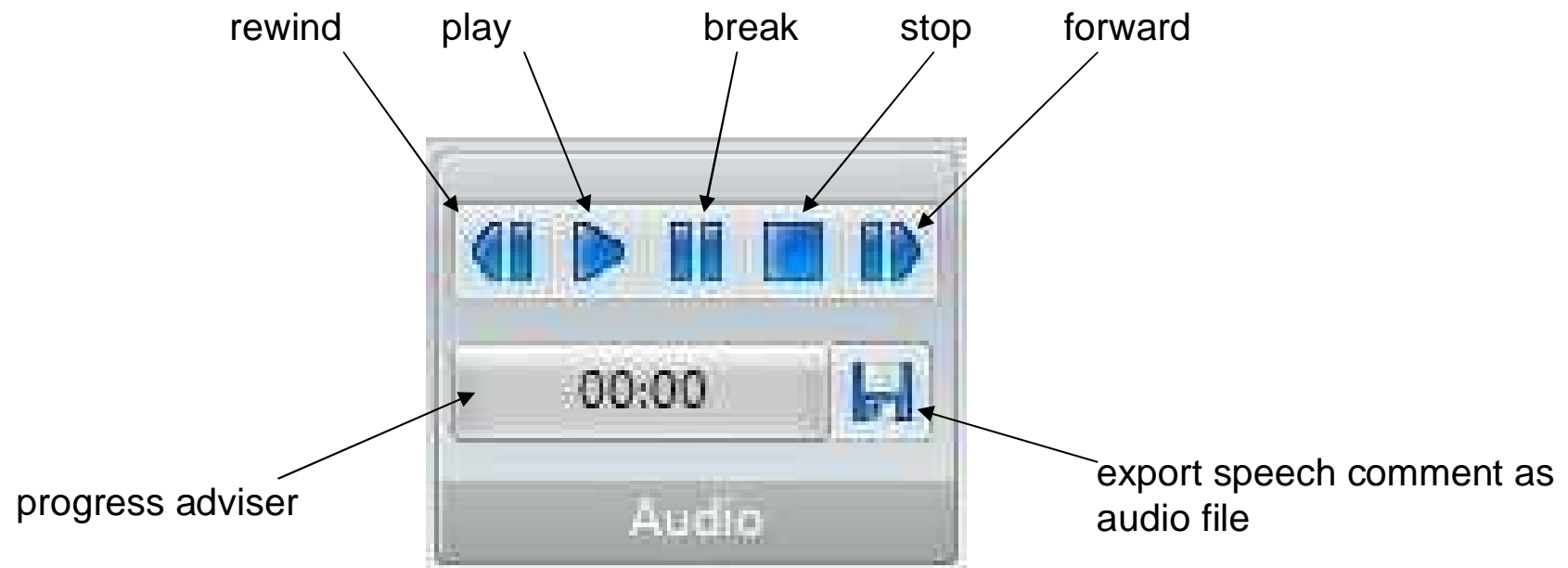
At the bottom of the window, a status bar is visible, containing a speaker icon (highlighted with an orange box) and the text: '14.03.2009 17:12:40 Minimum 21.6 °C Mittelwert 26.7 °C Maximum 36.7 °C'.

If a thermal image was saved with a speech comment a speaker icon appears in the status bar at the bottom and the audio function is active.

Tab analysis

Function „replay speech comment“ (2)

There are the following functions:



Please note: IRSoft can only replay existing speech comments. It is not possible to modify or record a speech comment.

Work space

- (1) Thermal image
- (2) Temperature scale
- (3) Histogram
- (4) Thermal image markings
- (5) Real image
- (6) Profile
- (7) Comments

The screenshot displays the testo IRSoft Software interface with the following components:

- Menu Bar:** Analyse, Bericht, Kamera, Einstellungen
- Toolbar:** Öffnen, Speichern, Speichern unter, Alle speichern, Farben, Parameter, Audio, Einstellungen
- Parameters:** Emissionsgrad: 0,95; Feuchtigkeit: 50,0 % rF; Refl. Temperatur: 20,0 °C; Umgebungtemp.: 20,0 °C; Taupunkt: 9,3 °C
- Wärmebild (1):** Thermal image of a building facade with a circular marking.
- Temperaturskala (2):** Temperature scale from -0,8 °C to 63,1 °C.
- Histogramm (3):** Histogram showing temperature distribution with statistics: Minimum: 11,2 °C, Maximum: 63,1 °C, Mittelwert: 28,6 °C.
- Wärmebildmarkierungen (4):** Table of thermal image markings:

Nr	Temp. [°C]	Emiss.	Ref.Temp. [°C]	Bemerk.
M4	36,3	0,95	20,0	
M5	39,9	0,95	20,0	
M6	34,3	0,95	20,0	

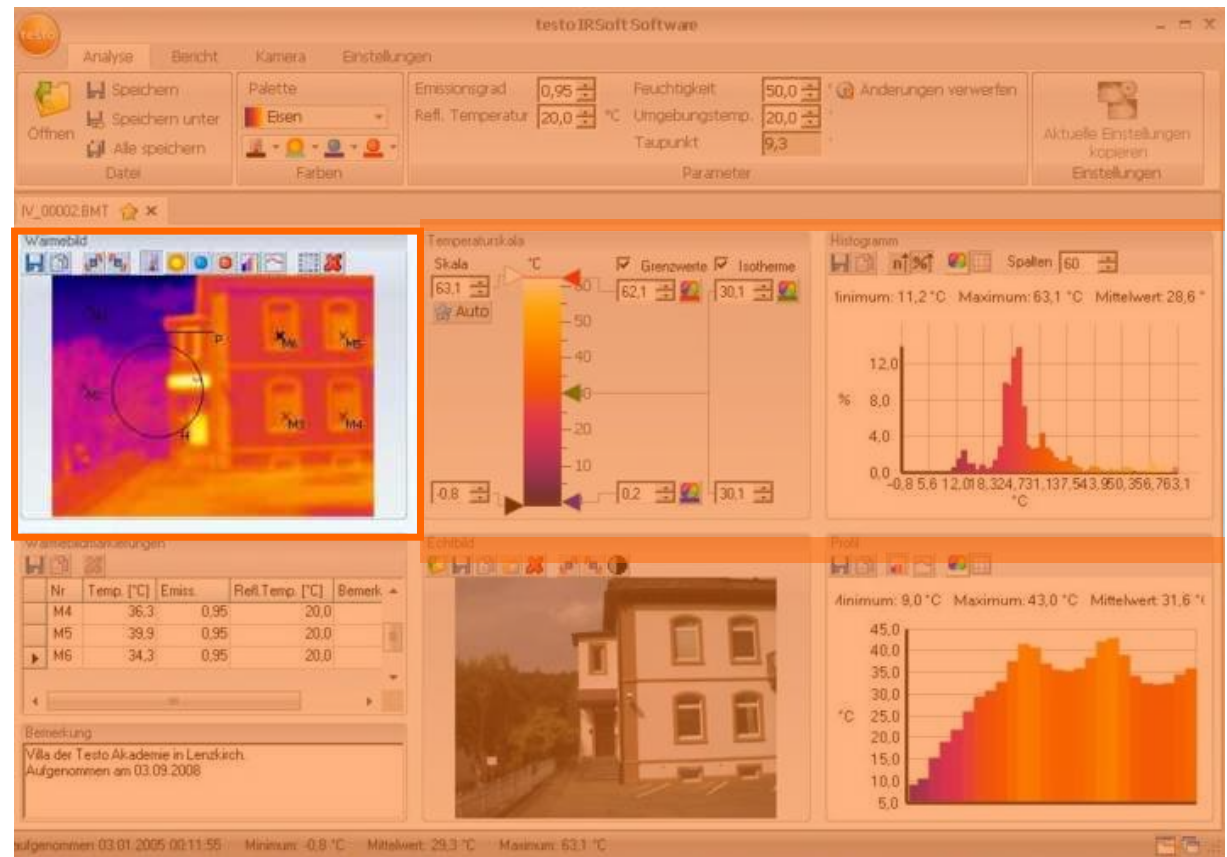
- Echtbild (5):** Real image of the building facade.
- Profil (6):** Profile graph showing temperature distribution across the building facade with statistics: Minimum: 9,0 °C, Maximum: 43,0 °C, Mittelwert: 31,6 °C.
- Bezeichnung (7):** Villa der Testo Akademie in Lenzkirch. Aufgenommen am 03.09.2008

Bottom status bar: aufgenommen 03.01.2005 00:11:55 · Minimum: -0,8 °C · Mittelwert: 29,3 °C · Maximum: 63,1 °C

Thermal image document window

Functions:

- Saving/ exporting the infrared image
- Copying the infrared image to the clipboard
- Rotating the infrared image
- Specifying the readings for one pixel in an infrared image
- Temperature correction in an infrared image area
- Specifying a hotspot/ coldspot for an infrared image area
- Creating a histogram of an infrared image area
- Creating a temperature profile for a line
- Moving/deleting measuring points/range



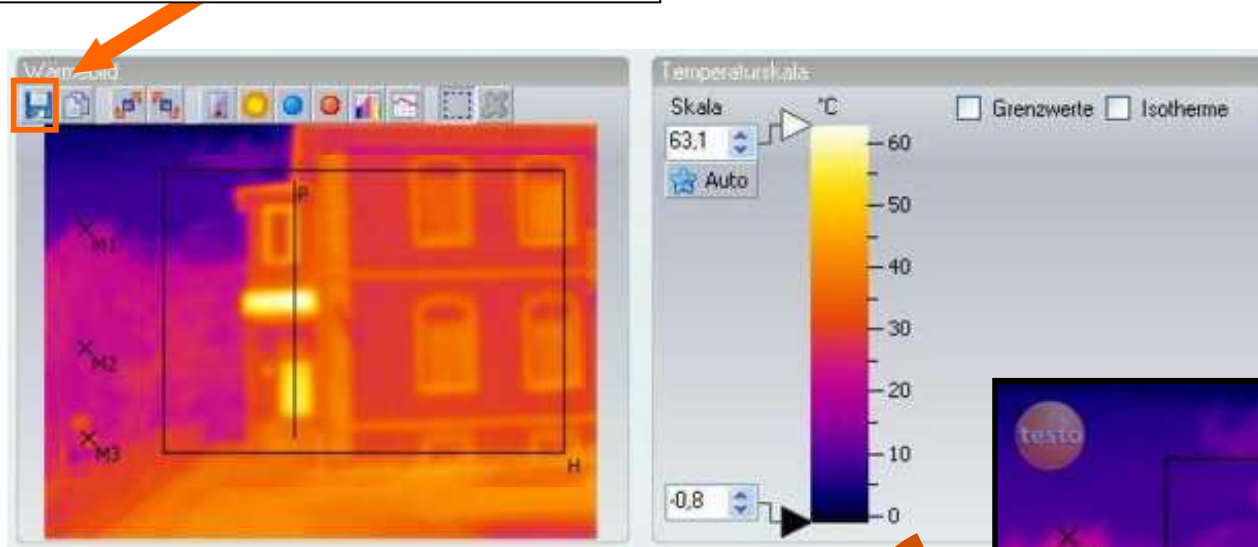
The screenshot displays the testo IRSoft Software interface, which is used for analyzing thermal images. The interface is divided into several sections:

- Top Bar:** Contains menu options like 'Analyse', 'Bericht', 'Kamera', and 'Einstellungen'. It also includes a file management section with 'Speichern', 'Speichern unter', and 'Alle speichern' buttons, and a 'Palette' section with 'Eben' and 'Farben' options.
- Parameters Section:** Shows settings for 'Emissionsgrad' (0,95), 'Feuchtigkeit' (50,0), 'Refl. Temperatur' (20,0 °C), 'Umgebungstemp.' (20,0 °C), and 'Taupunkt' (9,3). There are also buttons for 'Änderungen verwerfen' and 'Aktuelle Einstellungen kopieren / Einstellungen'.
- Main View:** Displays a thermal image of a building facade. A circular region of interest is highlighted, and several measuring points (M1, M2, M3, M4, M5, M6) are marked on the image.
- Temperature Scale:** A vertical color scale is shown, ranging from -0,8 °C (blue) to 63,1 °C (red). It includes a 'Skala' dropdown set to 'Auto' and 'Grenzwerte' (62,1 and 30,1) and 'Isotherme' options.
- Histogramm:** A histogram showing the distribution of temperatures in the selected area. The x-axis represents temperature in °C, and the y-axis represents percentage (%). Statistics shown include: Minimum: 11,2 °C, Maximum: 63,1 °C, and Mittelwert: 28,6 °C.
- Table:** A table with columns for 'Nr.', 'Temp. [°C]', 'Emiss.', 'Refl.Temp. [°C]', and 'Bemerk.'. It lists data for points M4, M5, and M6.
- Profile:** A line graph showing a temperature profile across the selected area. The y-axis is temperature in °C (5,0 to 45,0). Statistics shown include: Minimum: 9,0 °C, Maximum: 43,0 °C, and Mittelwert: 31,6 °C.
- Bottom Bar:** Displays the date and time of capture: 'Aufgenommen: 03.01.2005 00:11:55'. It also shows overall statistics: 'Minimum: -0,8 °C', 'Mittelwert: 29,3 °C', and 'Maximum: 63,1 °C'.

Thermal image document window

Saving the infrared image

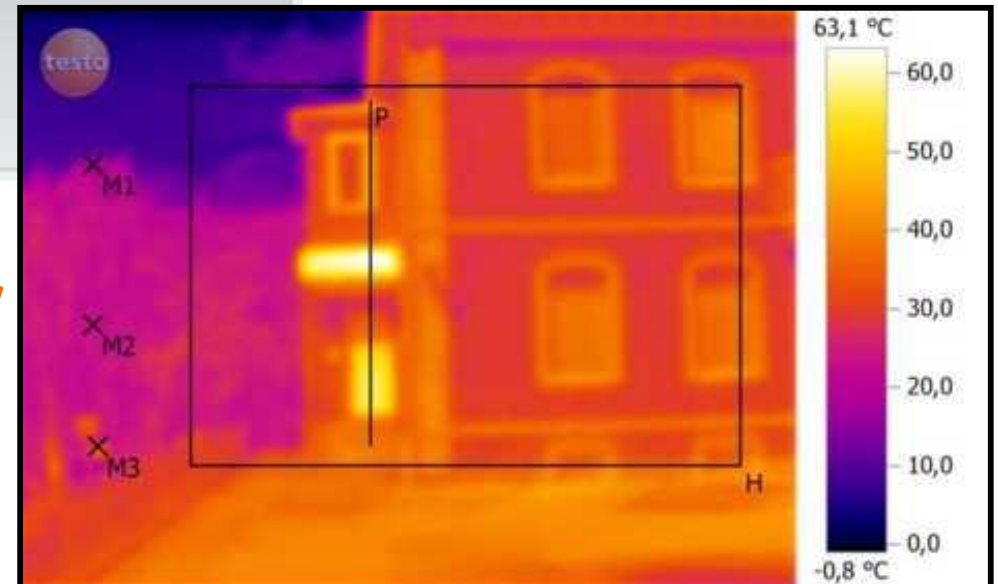
1) Click on function „**Save**“



2) Select a file name, file format and storage location



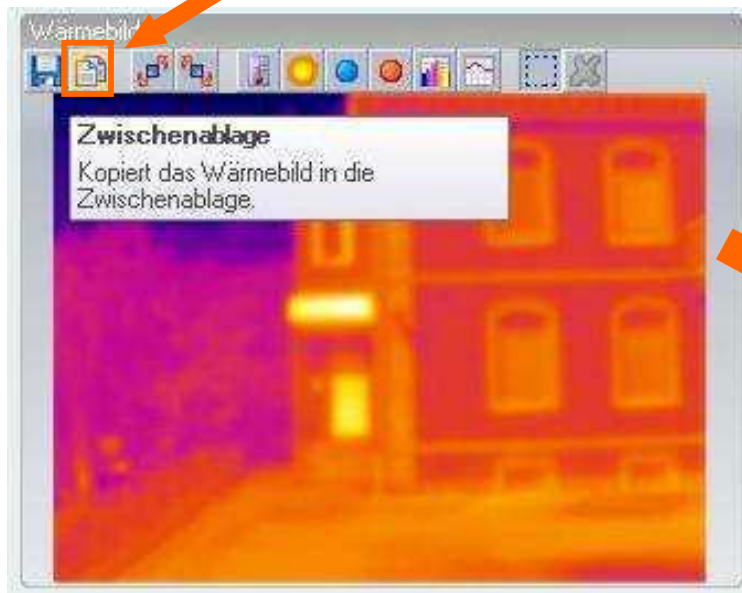
3) IR image is stored with picture markings and scale in the desired file format



Thermal image document window

Exporting the infrared image via the clipboard

1) Click on function „Copy to clipboard“



2) Use function „paste“ resp. „paste special“ in the desired programme

e.g.

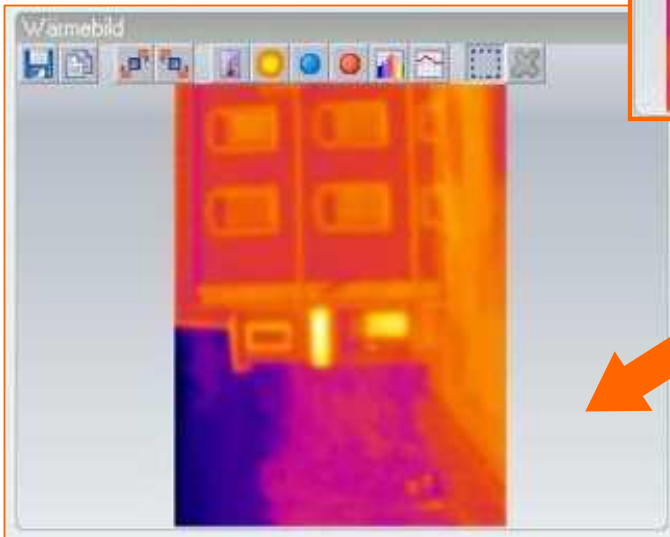
These images are registered trademarks of Microsoft Corporation

- Please note: when pasting into Word the default setting is that the measuring values are inserted as text. To insert the thermal image as image please use function „paste special“ and paste as image file.

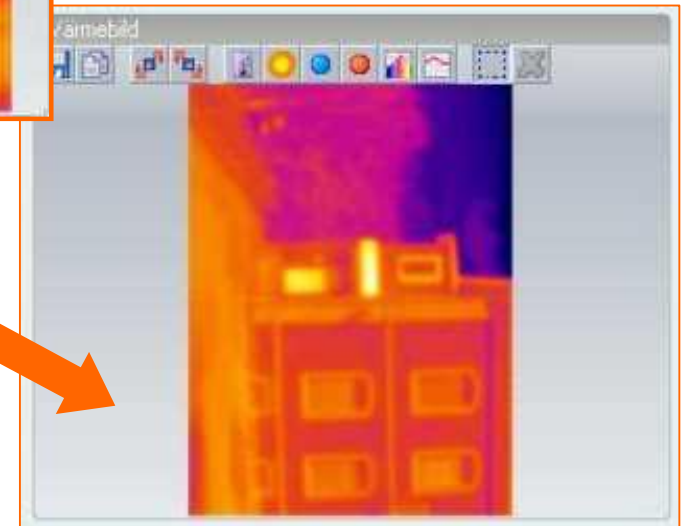
Thermal image document window

Rotating the infrared image

1) Click on function „Rotate left/ Rotate right“



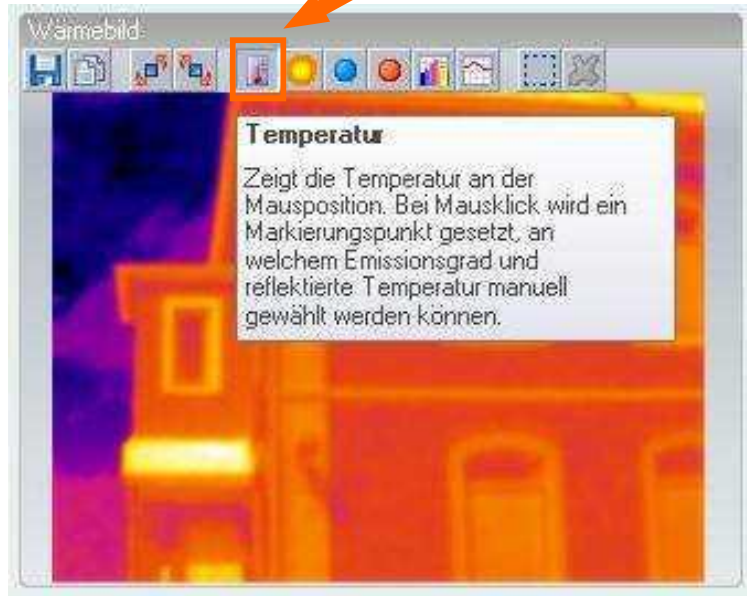
2) Thermal image is turned in desired direction



Thermal image document window

Positioning a measuring point

1) Click on function „Temperature“



2) Click on points in the infrared image

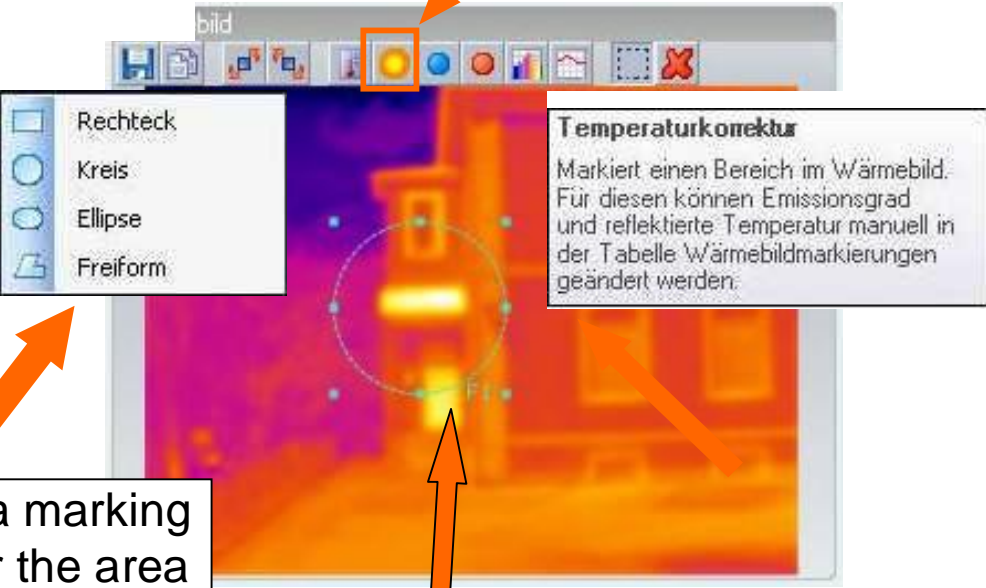


3) Result of the measured points will be displayed in the document window „Thermal image markers“

Thermal image document window

Temperature correction (1)

1) Click on function „**Temperature correction**“



2) Select a marking form for the area

3) Draw the area with drag & drop

Temperaturkorrektur
 Markiert einen Bereich im Wärmebild. Für diesen können Emissionsgrad und reflektierte Temperatur manuell in der Tabelle Wärmebildmarkierungen geändert werden.

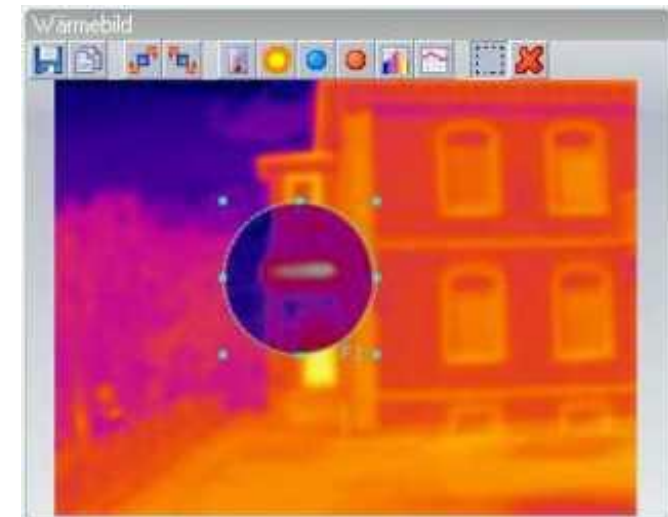
Thermal image document window

Temperature correction (2)

4) In the document window „Thermal image markers“ emissivity and reflected temperature can be set

5) Changes will be displayed in the thermal image

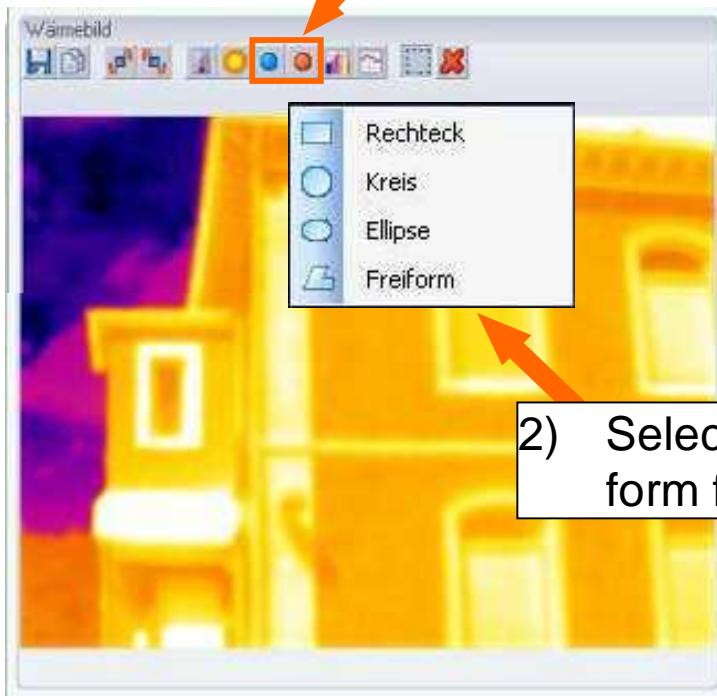
Nr	Temp. [°C]	Emiss.	Ref. Temp. [°C]	Bemerkung
M1	-1,1	0,95	20,0	
M2	39,1	0,95	20,0	
M3	30,4	0,95	20,0	
M4	32,3	0,95	20,0	Erlaubt das Ändern des Emissionsgrades an dem Messpunkt im Bereich 0,00 bis 1,00
M5	28,3	0,95	20,0	
M6	27,8	0,95	20,0	
M7	27,0	0,95	20,0	
M8	38,8	0,95	20,0	
M9	29,2	0,95	20,0	
M10	29,0	0,95	20,0	
M11	61,7	0,95	20,0	



Thermal image document window

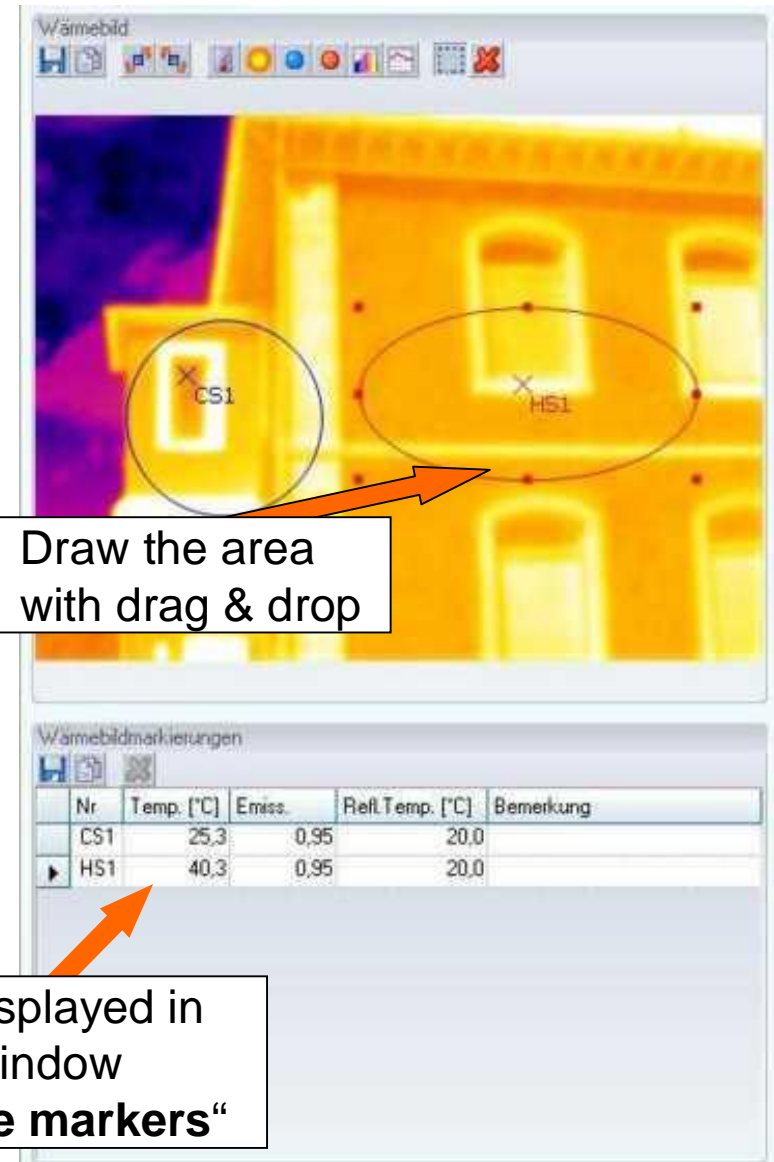
Specifying a hotspot / coldspot

1) Click on function „Coldspot / Hotspot“



2) Select a marking form for the area

3) Draw the area with drag & drop

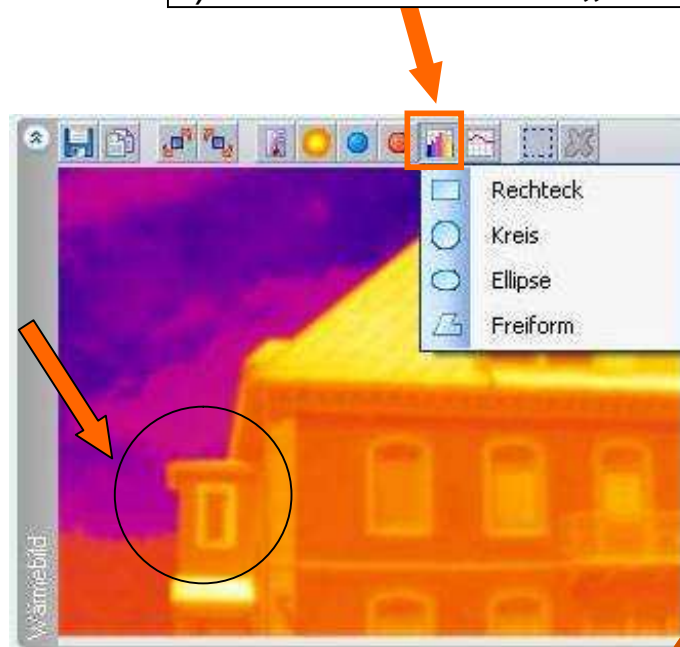


4) Result will be displayed in the document window „Thermal image markers“

Thermal image document window

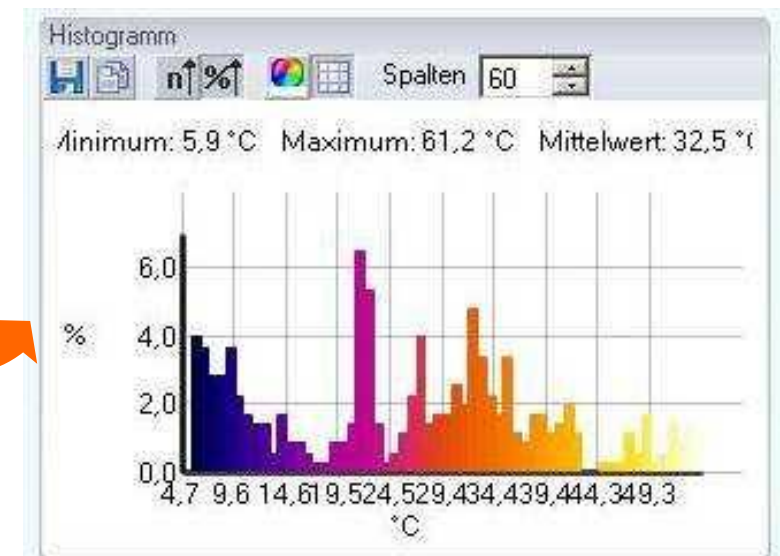
Creating a histogram

1) Click on function „Histogram“



2) Select a marking form for the area

3) Draw and move the area with drag & drop

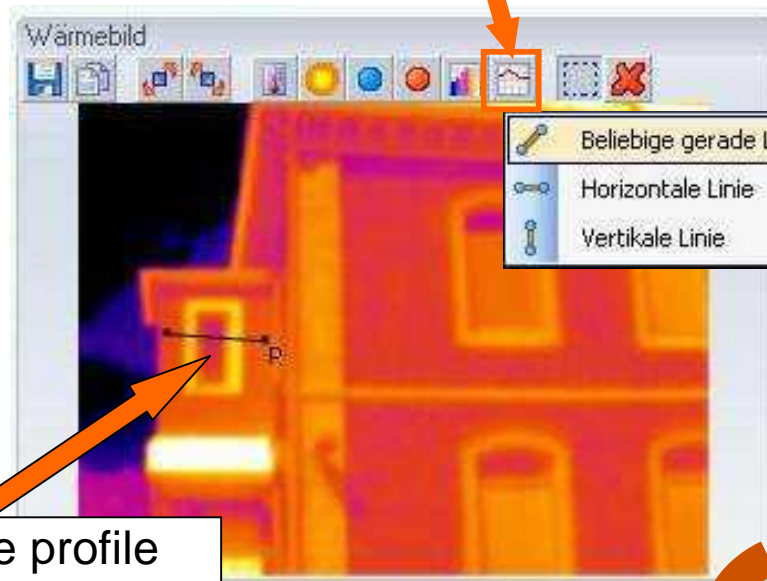


4) Histogram will be displayed in the document window

Thermal image document window

Creating a temperatur profile

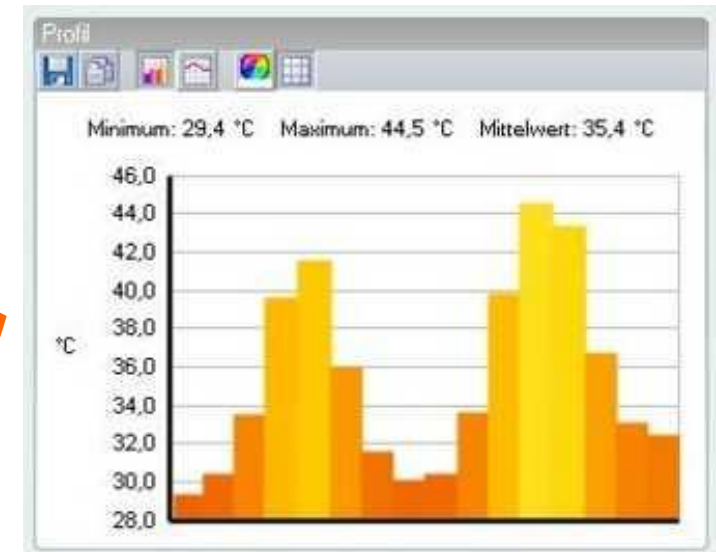
1) Click on function „Temperature profile“



2) Select the characteristics of the profile line

3) Create and move profile line with drag & drop

4) Temperature profile will be displayed in the document window



Thermal image document window

Moving image markers

- If an image marker is active it can be moved by drag & drop straight away
- If an image marker is inactive, the following steps are necessary:

1) Click on function „**Marking tools**“



3) Move image marker

2) Click on image marker with the cursor

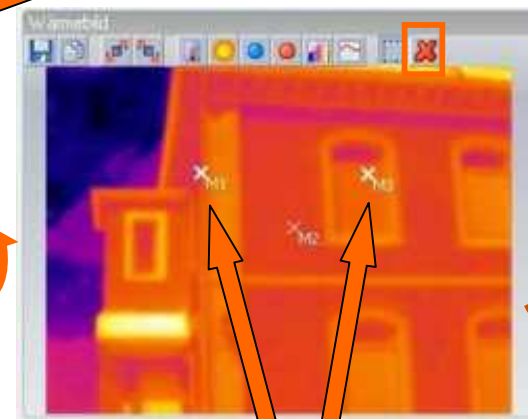
- Several image markers can be moved at the same time

Thermal image document window

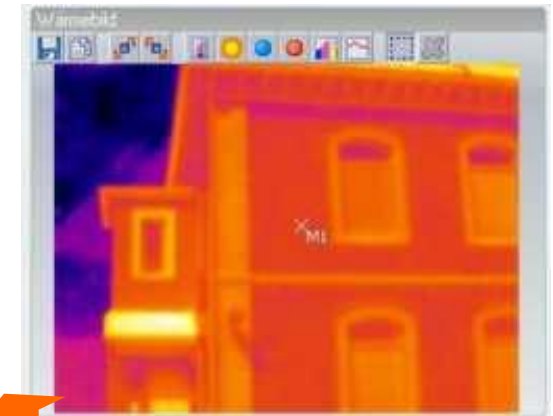
Deleting image markers (1)

- If an image marker is active it can be deleted directly with
- If an image marker is inactive, the following steps are necessary:

1) Click on function „**Marking tools**“ and select the objects to be deleted



2) Selected objects are active



3) Delete marked objects with

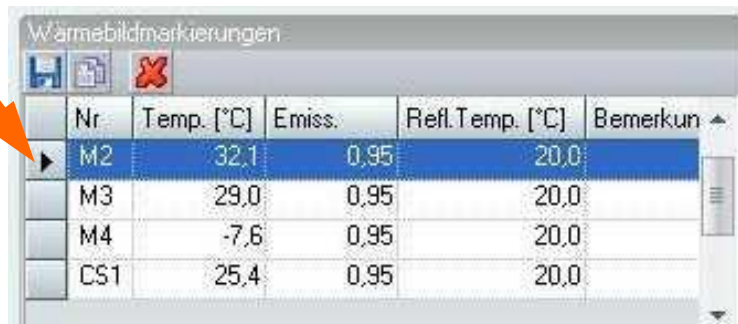
- You can delete single image markers as well as several image markers at the same time

Thermal image document window

Deleting image markers (2)

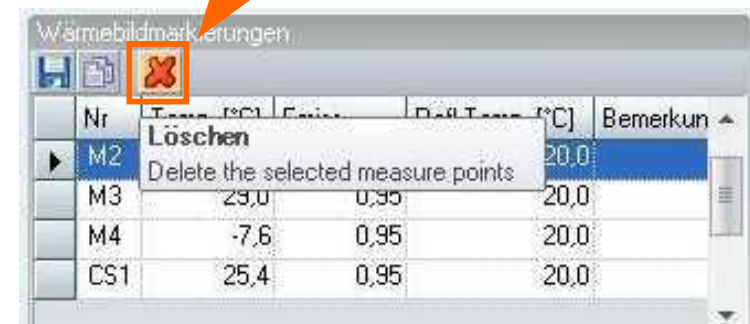
- Alternatively any image marker can be deleted separately in the document window „**Thermal image markings**“

1) Highlight line by mouse click



Nr	Temp. [°C]	Emiss.	Refl.Temp. [°C]	Bemerkun
M2	32,1	0,95	20,0	
M3	29,0	0,95	20,0	
M4	-7,6	0,95	20,0	
CS1	25,4	0,95	20,0	

2) The image marker can be deleted with function „**Delete**“ 



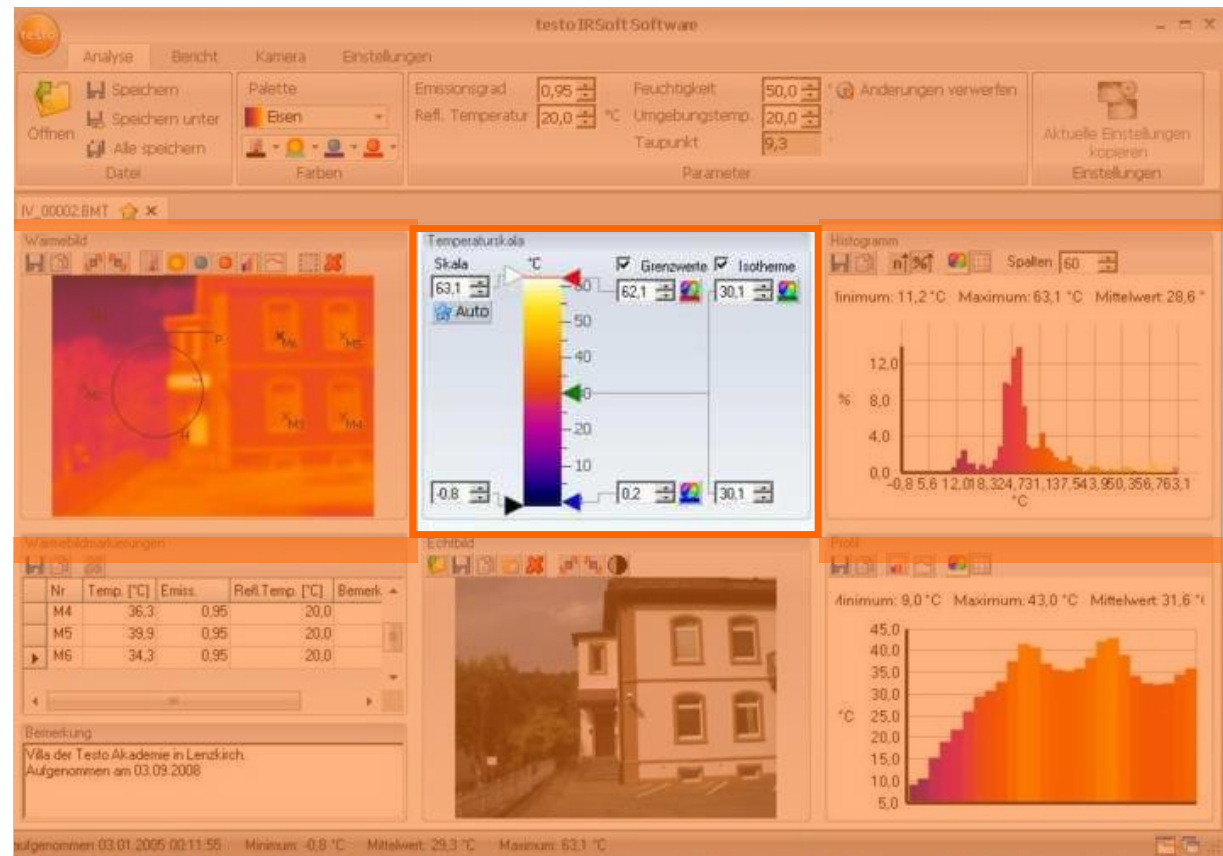
Nr	Temp. [°C]	Emiss.	Refl.Temp. [°C]	Bemerkun
M2	32,1	0,95	20,0	
M3	29,0	0,95	20,0	
M4	-7,6	0,95	20,0	
CS1	25,4	0,95	20,0	

- The deleted image markers are also no longer visible in the thermal image

Temperature scale document window

Functions:

- Setting the scale
- Change the level
- Setting the limits
- Setting the isotherm area



testo IIRSoft Software

Analyse Bericht Kamera Einstellungen

Speichern Speichern unter Öffnen
Datei

PaLETTE
Essen
Farben

Emissionsgrad 0,95
Refl. Temperatur 20,0 °C

Fauchtigkeit 50,0
Umgebungtemp. 20,0
Taupunkt 9,3

Parameter

Anderungen verwerfen
Aktuelle Einstellungen kopieren
Einstellungen

IV_00002.BMT

Wärmebild

Temperaturikala
Skala 63,1
Auto

Grenzwerte Isotheme

62,1 30,1

0,8 0,2 30,1

Histogramm
Spalten 60

Minimum: 11,2 °C Maximum: 63,1 °C Mittelwert: 28,6 °C

Wärmebildanforderungen

Nr.	Temp. [°C]	Emiss.	Ref. Temp. [°C]	Bemerk.
M4	36,3	0,95	20,0	
M5	39,9	0,95	20,0	
M6	34,3	0,95	20,0	

Bemerkung
Villa der Testo Akademie in Lenzkirch.
Aufgenommen am 03.09.2008

Lichtbild

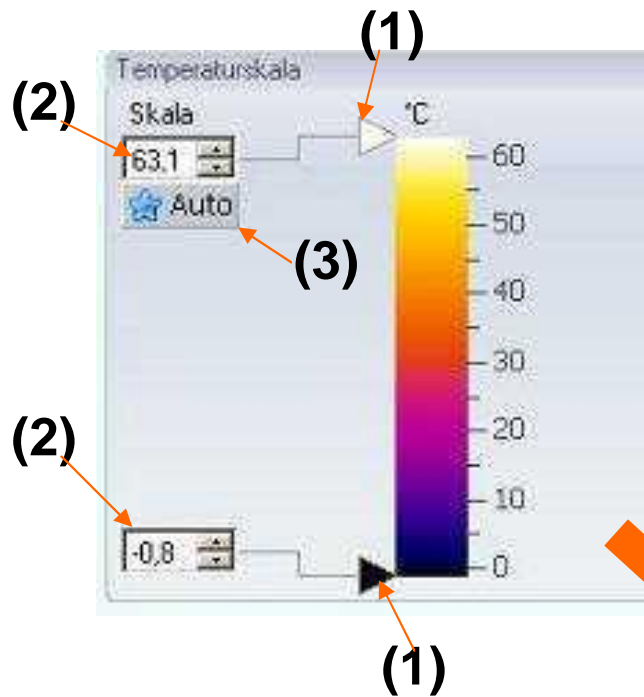
Profil

Minimum: 9,0 °C Maximum: 43,0 °C Mittelwert: 31,6 °C

Aufgenommen: 03.01.2005 00:11:55 Minimum: -0,8 °C Mittelwert: 29,3 °C Maximum: 63,1 °C

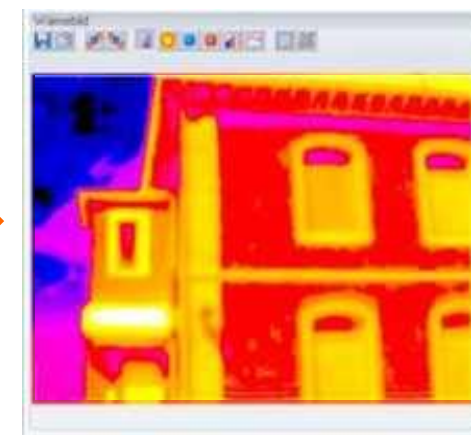
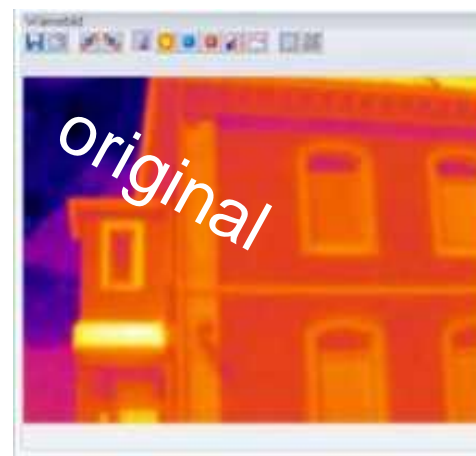
Temperature scale document window

Scale



The scale can be adjusted:

- (1) ... with the roll bar
- (2) ... input via keypad
- (3) ... automatically

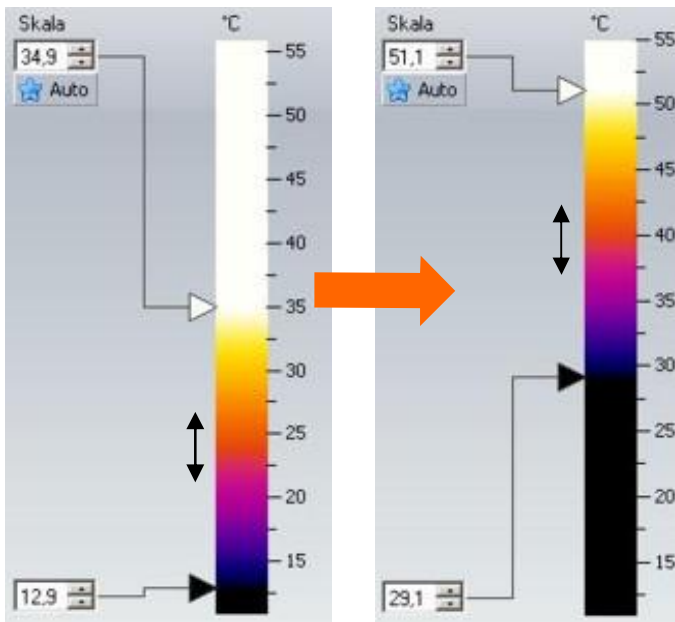


Temperature scale document window

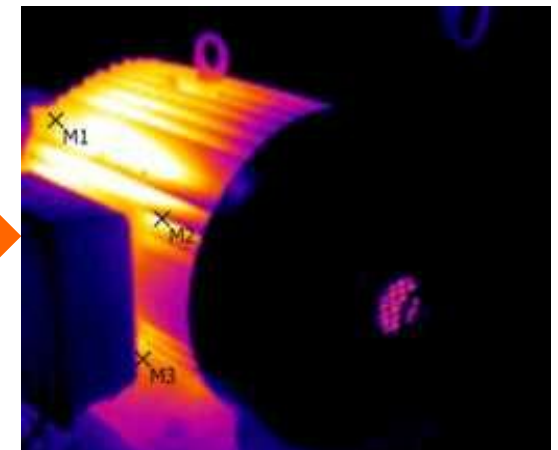
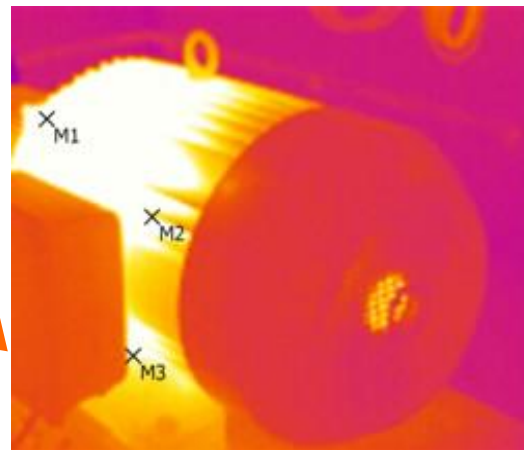
Change level

- (1) Move the cursor with the move to the left of the scale until the symbol \updownarrow appears. Click the symbol \updownarrow and change the level via drag & drop
- (2) The infrared image is changing accordingly

(1)

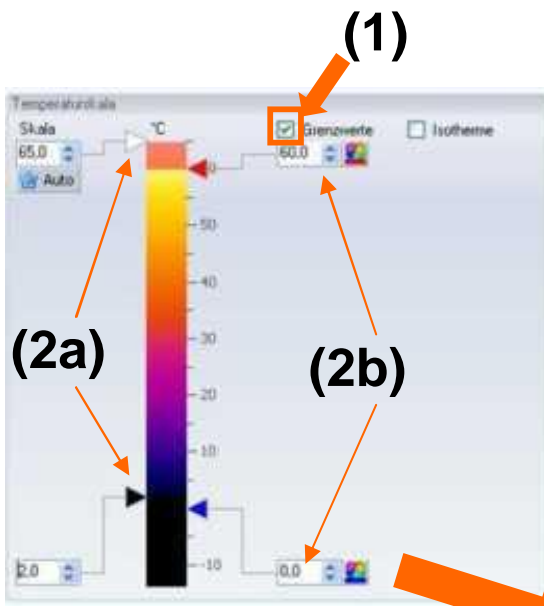


(2)

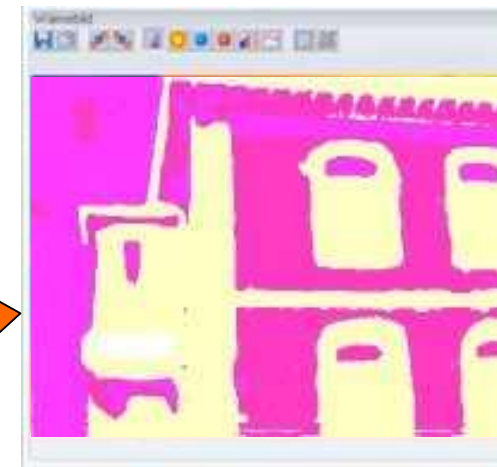
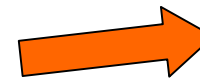
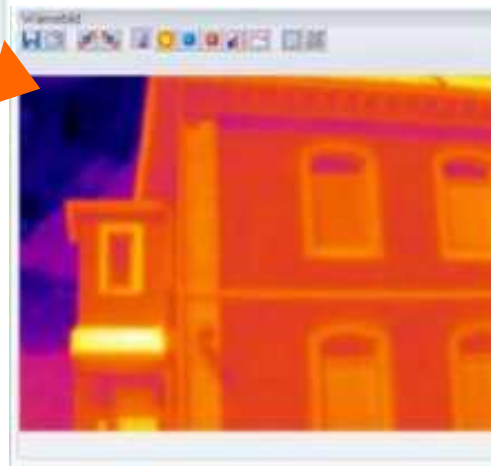


Temperature scale document window

Limits (1)



- (1) Activate limit value
- (2) Set limit values:
 - (2a) ... with the roll bar
 - (2b) ... input via keypad



- When using a lower / upper limit, temperatures below / above this value are shown in the same colour in the thermal image

Temperature scale document window

Limits (2) – Setting the upper/lower limit colour

1) Click on function „Colour“

2) Select a colour

3) Selected colours are shown in the thermal image

Temperature scale document window

Setting isotherms

- A lower and an upper area limit can be defined. Temperatures between the lower and upper area limits are marked with one colour.

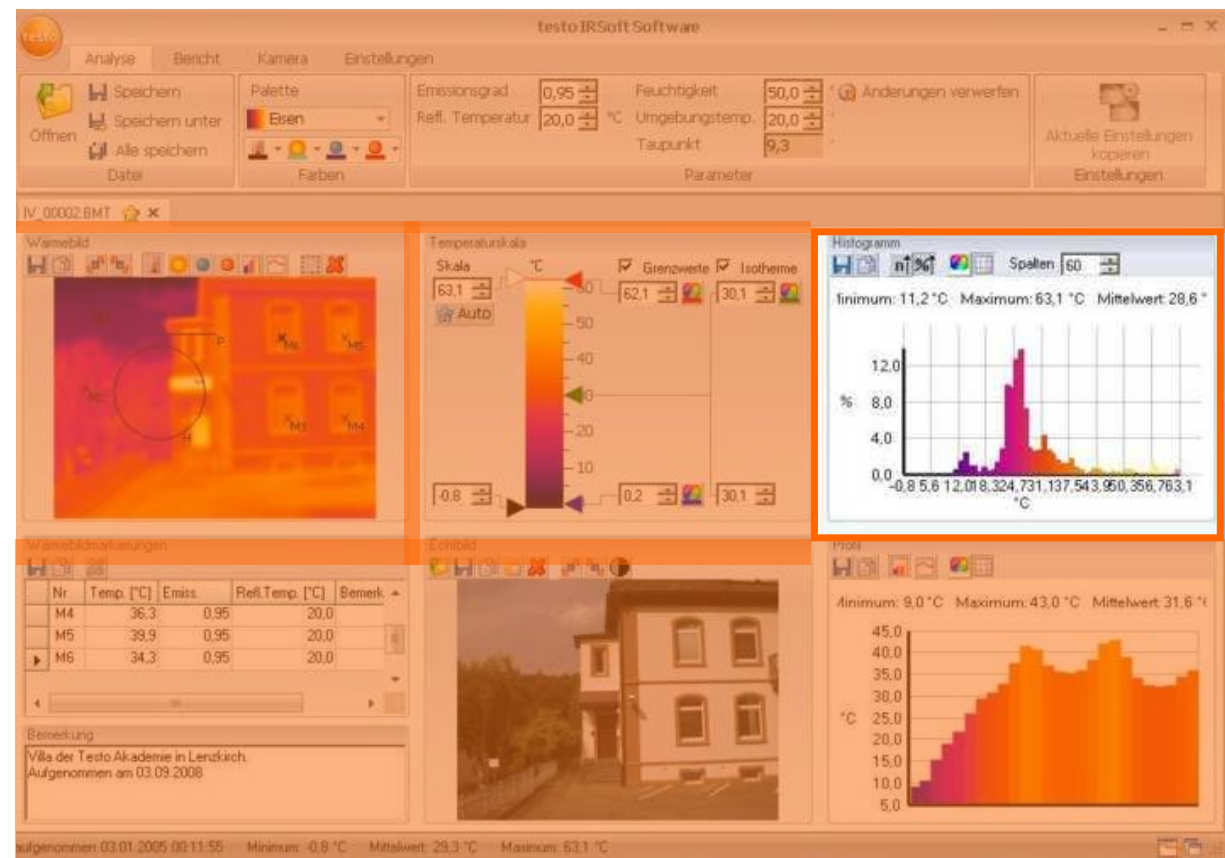
- (1) Activate isotherms
- (2) Set upper and lower area limit with roll bar or input via keypad
- (3) Select colour (optional)
- (4) Changes will be shown in the thermal image

The screenshot shows the 'Temperaturskala' window in the testo software. The window has a title bar 'Temperaturskala' and a toolbar. The main area contains a temperature scale from -10 to 60 °C. To the right of the scale are two checkboxes: 'Grenzwerte' (unchecked) and 'Isotherme' (checked). Below the 'Isotherme' checkbox is a color selection palette. An arrow labeled (1) points to the 'Isotherme' checkbox. An arrow labeled (2) points to the temperature scale. An arrow labeled (3) points to the color selection palette. A text box on the right says 'The colour of the isotherm can be selected'. The 'Skala' section on the left shows a value of 65.0 and an 'Auto' button. The bottom of the window shows a value of 23.0. The background shows a thermal image of a house.

Histogram document window

Functions:

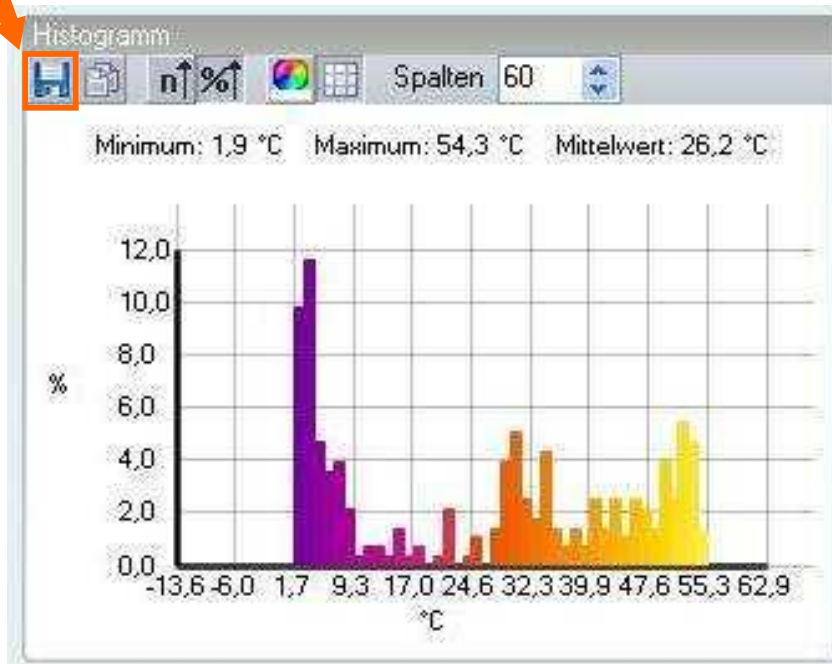
- Saving a histogram as an image file
- Copying a histogram to the clipboard
- Choosing between absolute and relative scaling
- Setting the background colour for the histogram
- Switching grid lines in the histogram on/off
- Specifying number of columns



Histogram document window

Saving a histogram as an image file

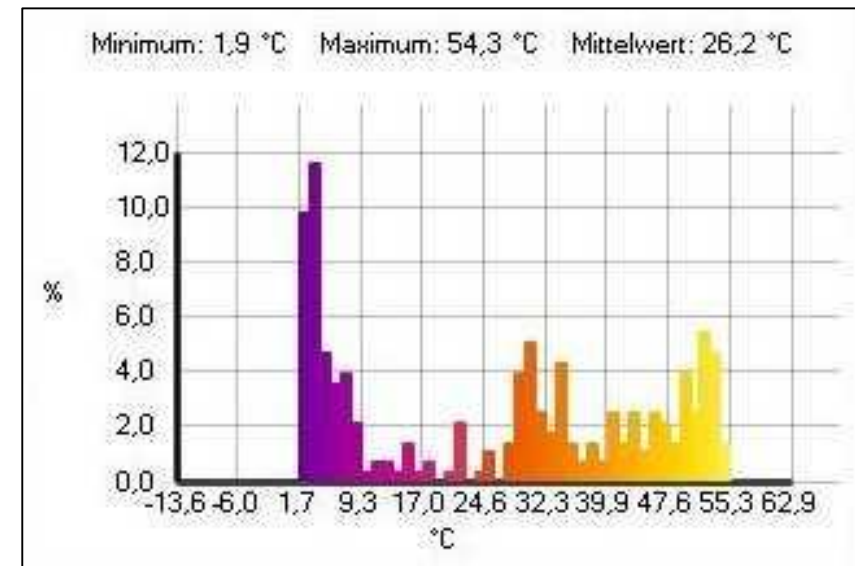
1) Click on function „Save“



2) Enter a file name, choose file format and select a storage location



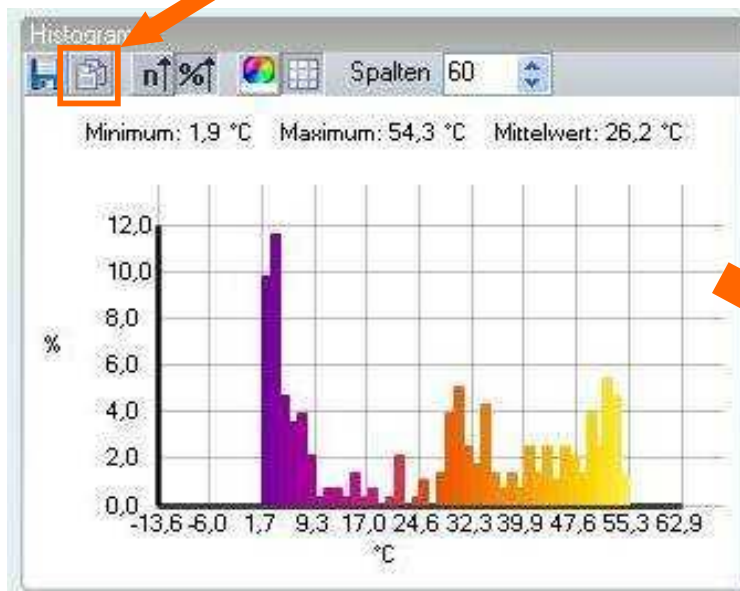
3) Histogram is saved in chosen file format



Histogram document window

Exporting a histogram with the clipboard

1) Click on „Clipboard“



2) Data can be pasted into other programs

z.B.

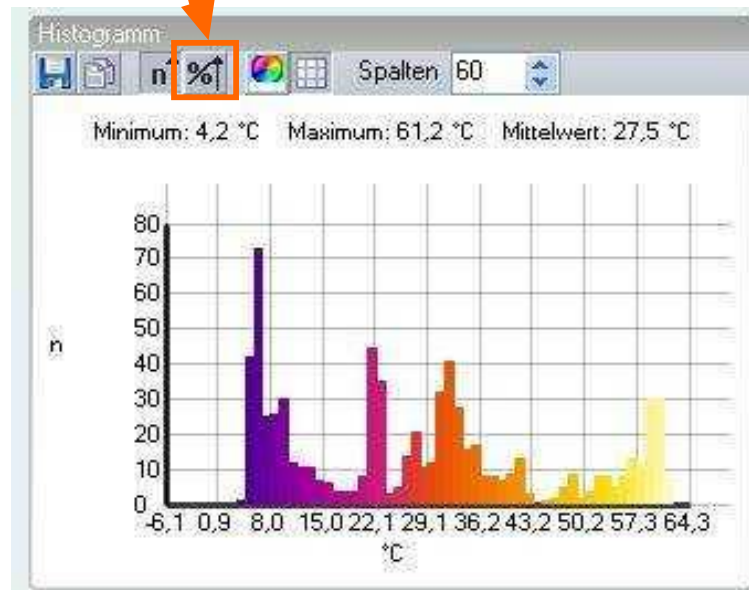


These images are registered trademarks of Microsoft Corporation

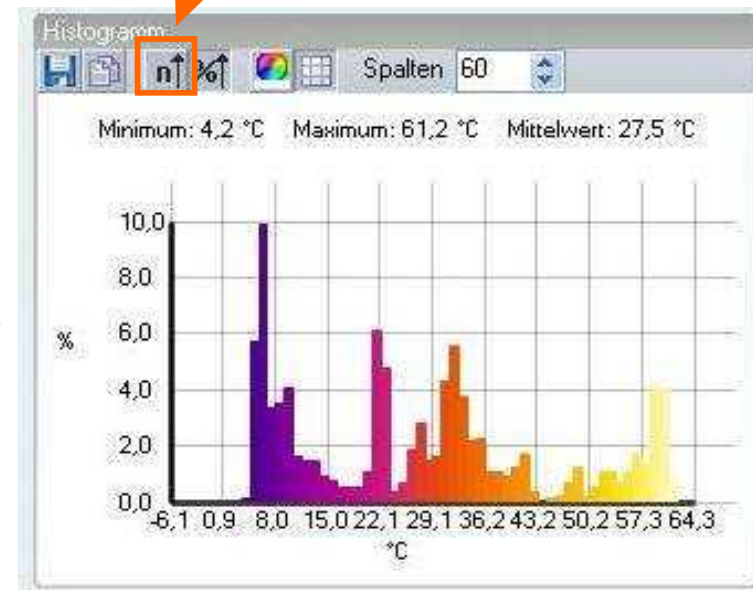
Histogram document window

Choosing between absolute and relative scaling

1a) Click on function „**Relative Scaling**“ (% ↑)



1b) Click on function „**Absolute Scaling**“ (n ↑)

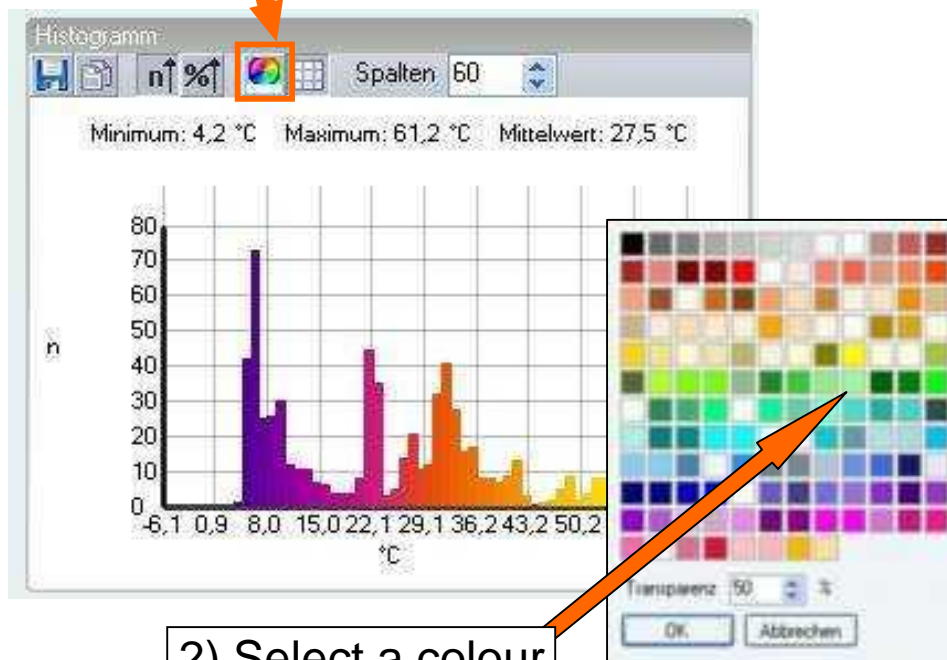


2) Selected scaling is indicated in the document window

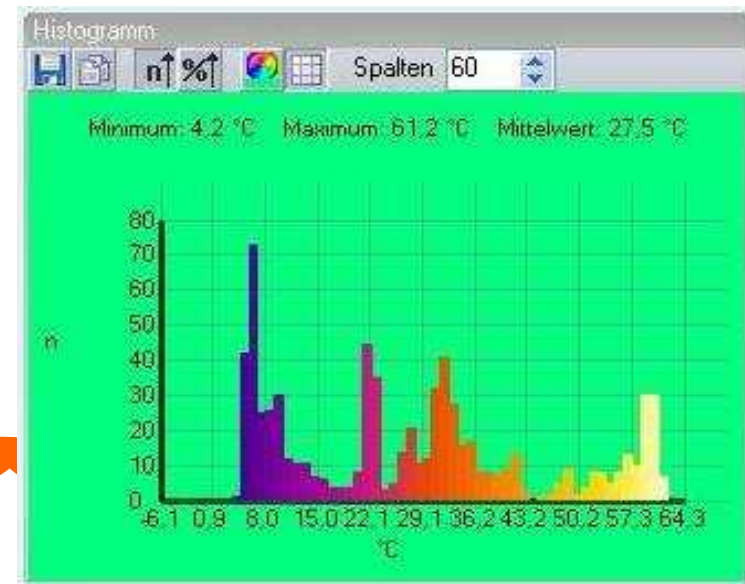
Histogram document window

Setting the background

1) Click on function „Background colour“



2) Select a colour

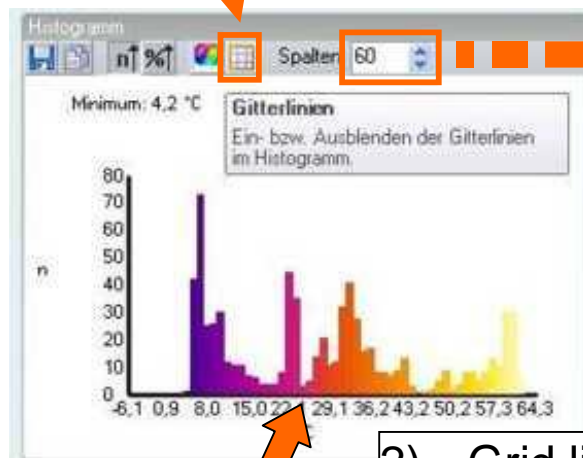



3) Selected color is indicated

Histogram document window

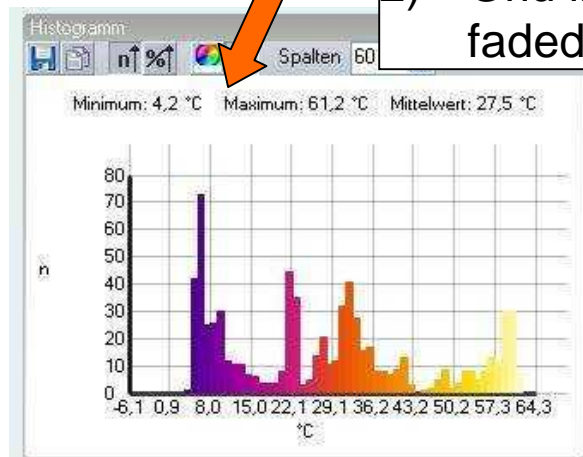
Switching grid lines in the histogram on/off & change number of columns

1) Click on function „Grid lines“



- By input via the keyboard respectively via  the number of columns over the regarded temperature range can be adjusted.
- Settings between 10 and 100 columns are possible

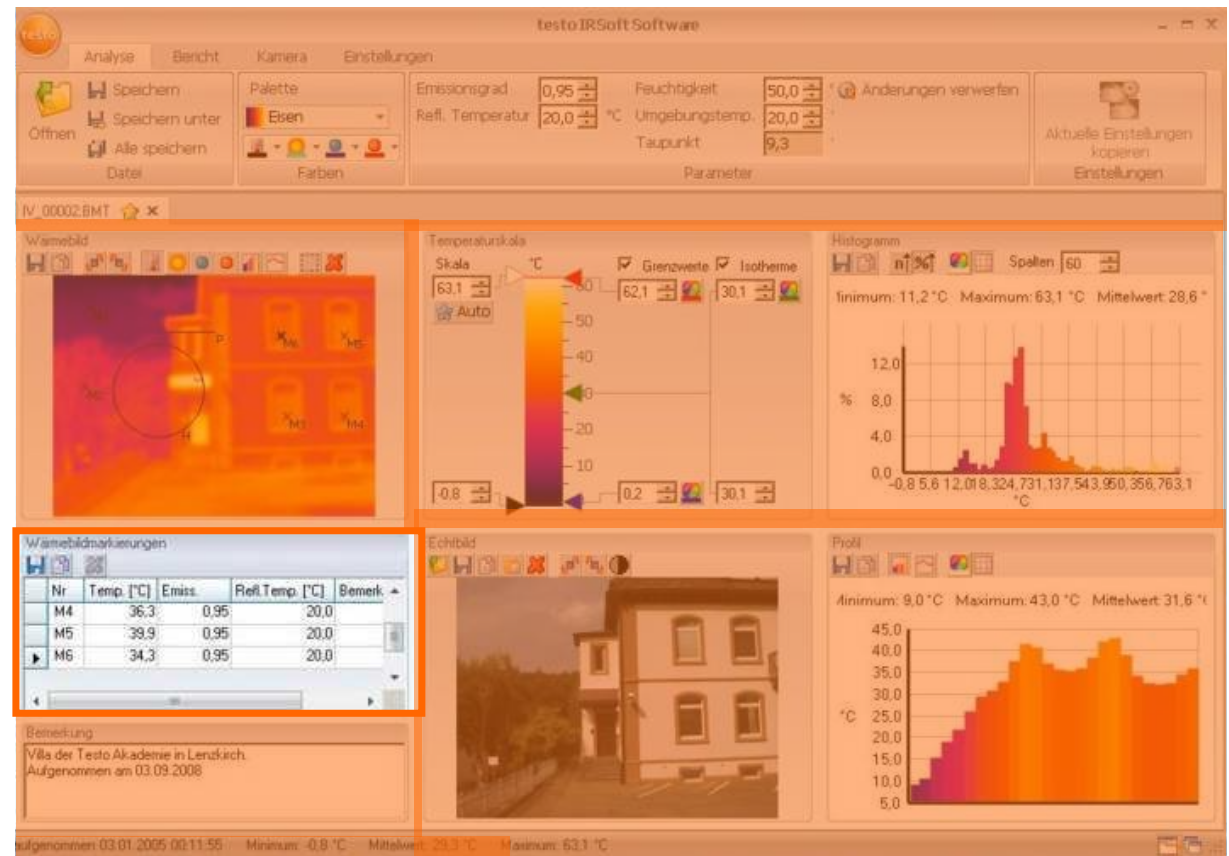
2) Grid lines are shown or faded out



Thermal image markers document window

Functions:

- Saving/ exporting measurement results for the image markers in Excel
- Copying measurement results to the clipboard
- Deleting measurement results for the image markers
- Modifying emissivity and reflected temperature for image markers at specific points/ranges
- Entering comments



The screenshot displays the testo IRSoft Software interface. The main window shows a thermal image of a building facade with several markers (M1-M6) placed on it. A 'Wärmebildmarkierungen' (Thermal Image Markings) window is open, showing a table of marker data:

Nr	Temp. [°C]	Emiss.	Ref. Temp. [°C]	Bemerk.
M4	36,3	0,95	20,0	
M5	39,9	0,95	20,0	
M6	34,3	0,95	20,0	

Below the table, there is a 'Bemerkung' (Remarks) field containing the text: 'Villa der Testo Akademie in Lenzburg, Aufgenommen am 03.09.2008'. The main interface also shows various analysis tools like 'Temperaturskala' (Temperature Scale) and 'Histogramm' (Histogram).

Document window thermal image markings

Measurement results



Nr	Temp. [°C]	Emiss.	Ref. Temp. [°C]	Bemerkung
M1	-1,9	0,95	20,0	
M2	39,0	0,95	20,0	
M3	30,4	0,95	20,0	
M4	32,3	0,95	20,0	
M5	28,3	0,95	20,0	
M6	27,8	0,95	20,0	
M7	27,0	0,95	20,0	
M8	38,8	0,95	20,0	
M9	29,2	0,95	20,0	
M10	29,0	0,95	20,0	
M11	61,7	0,95	20,0	

Erlaubt das Ändern des Emissionsgrades an dem Messpunkt im Bereich 0,00 bis 1,00

- In the table the measurement results for measuring points and/or image markers are shown.
- Each of these measuring points and/or image markers can also be deleted in the table. The marking will thereby disappear in the thermal image.

Document window thermal image markings

Modifying emissivity and reflected temperature

Wärmebildmarkierungen

Nr	Temp. [°C]	Emiss.	Ref. Temp. [°C]	Bemerkung
M1	-1,9	0,95	20,0	
M2	39,0	0,95	20,0	
M3	30,4	0,95	20,0	
M4	32,3	0,95	20,0	Erlaubt das Ändern des Emissionsgrades an dem Messpunkt im Bereich 0,00 bis 1,00
M5	28,3	0,95	20,0	
M6	27,8	0,95	20,0	
M7	27,0	0,95	20,0	
M8	38,8	0,95	20,0	
M9	29,2	0,95	20,0	
M10	29,0	0,95	20,0	
M11	31,7	0,95	20,0	

Wärmebildmarkierungen

Nr	Temp. [°C]	Emiss.	Ref. Temp. [°C]	Bemerkung
M1	-1,9	0,95	20,0	
M2	39,0	0,95	20,0	
M3	30,4	0,95	20,0	
M4	32,3	0,95	20,0	Erlaubt das Ändern der reflektierten Temperatur an dem Messpunkt
M5	28,3	0,95	20,0	
M6	27,8	0,95	20,0	
M7	27,0	0,95	20,0	
M8	38,8	0,95	20,0	
M9	29,2	0,95	20,0	
M10	29,0	0,95	20,0	
M11	31,7	0,95	20,0	

Emiss.

9	0,95
0	0,95
4	0,95

Ref. Temp. [°C]

5	20,0
5	20,0
5	20,0

The emissivity and reflected temperature can be corrected and adjusted in the table.

Document window thermal image markings

Clipboard

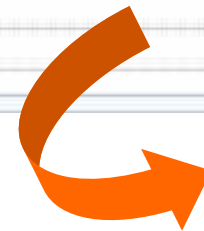
Wärmebildmarkierungen:

Nr.	Temp. [°C]	Emiss.	Refl. Temp. [°C]	Bemerkung
Zwischenablage				
Kopiert die Daten der Messpunkte in die Zwischenablage				
M3	30,4	0,95	20,0	
M4	32,3	0,95	20,0	
M5	28,3	0,95	20,0	
M6	27,8	0,95	20,0	
M7	27,0	0,95	20,0	
M8	38,8	0,95	20,0	
M9	29,2	0,95	20,0	
M10	29,0	0,95	20,0	
M11	61,7	0,95	20,0	



Microsoft Excel - Maple1

	A	B	C	D	E	F
	Nr	Temp. [°C]	Emiss.	Refl. Temp. [°C]	Bemerkung	
2	M1	-1,9	0,95	20		
3	M2	39	0,95	20		
4	M3	30,4	0,95	20		
5	M4	32,3	0,95	20		
6	M5	28,3	0,95	20		
7	M6	27,8	0,95	20		
8	M7	27	0,95	20		
9	M8	38,8	0,95	20		
10	M9	29,2	0,95	20		
11	M10	29	0,95	20		
12	M11	61,7	0,95	20		
13	M12	61,6	0,95	20		
14	M13	6,4	0,95	20		
15	M14	9,7	0,95	20		
16	M15	28	0,95	20		
17	M16	28,8	0,95	20		
18	M17	28	0,95	20		



➤ Via the clipboard measurement data can be imported directly into standard office programs like Excel or Word.

Document window thermal image markings

Comments

Wärmebildmarkierungen

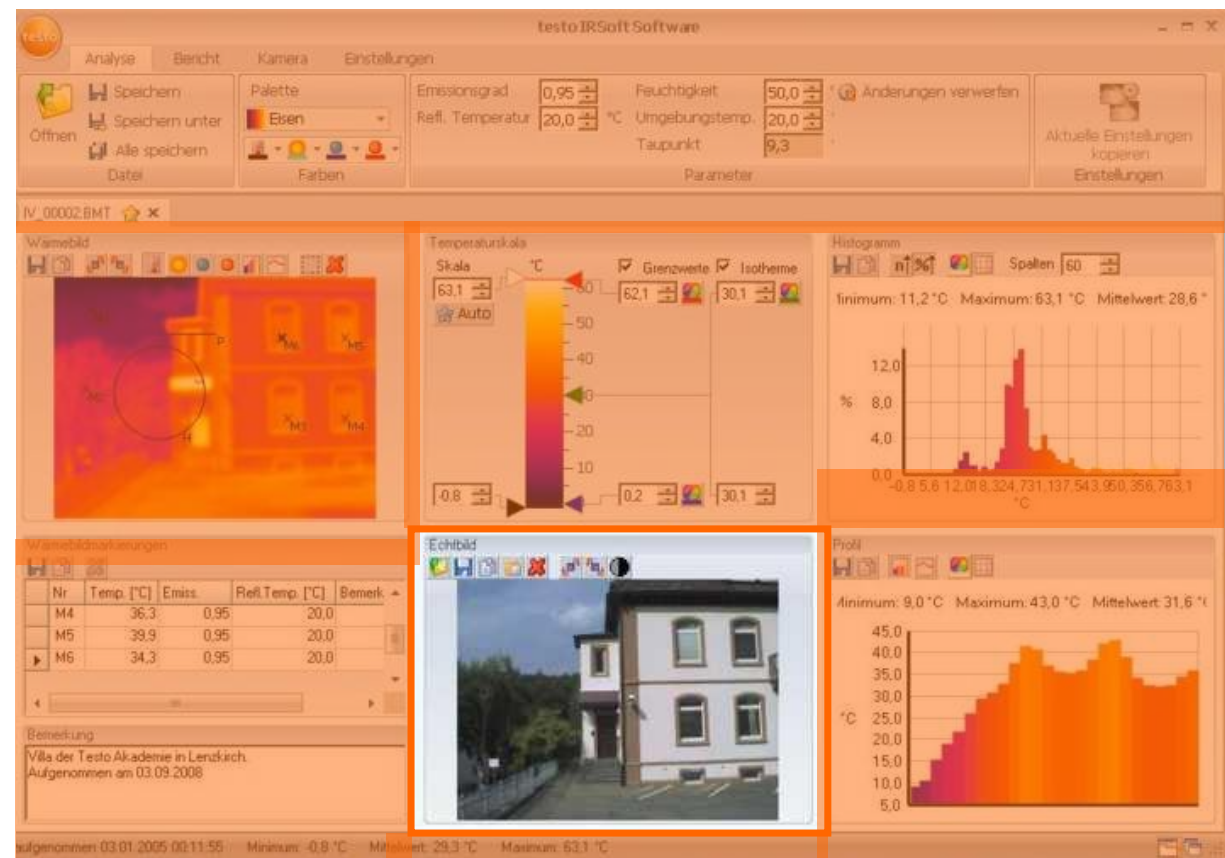
	Nr	Temp. [°C]	Emiss.	Refl.Temp. [°C]	Bemerkung
▶	CS1	26,4	0,95	20,0	Nebeneingang Villa
	M1	34,3	0,95	20,0	Rahmen 1. Obergeschoss

Each measured value can be provided with a comment

Real image document window

Functions:

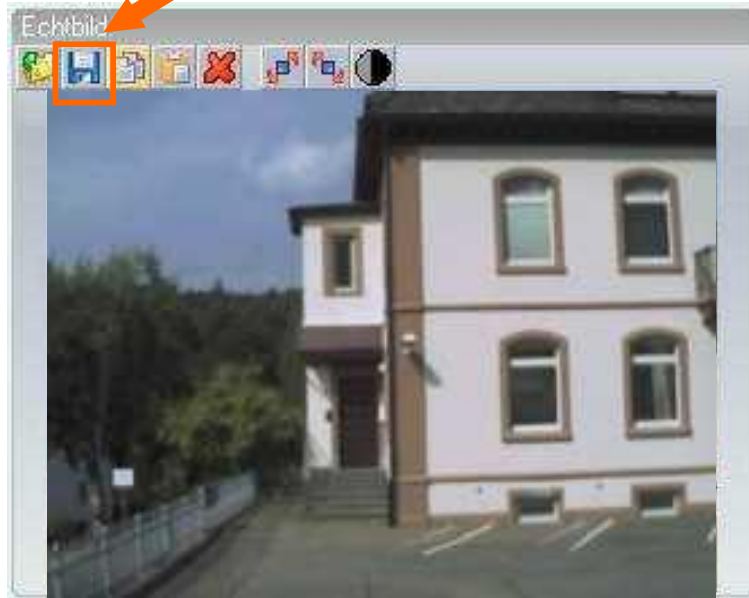
- Importing real images
- Exporting real images
- Copying a real image to the clipboard
- Inserting a real image from the clipboard
- Deleting a real image
- Rotating a real image
- Modifying the brightness of a real image



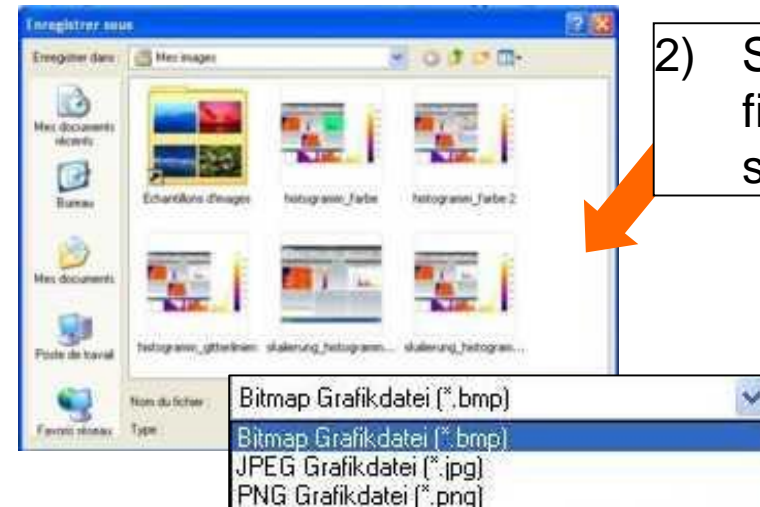
Real image document window

Saving real image

1) Click on function „Save“



2) Select file name, file format and a storage location



3) Real image is stored in the desired file format

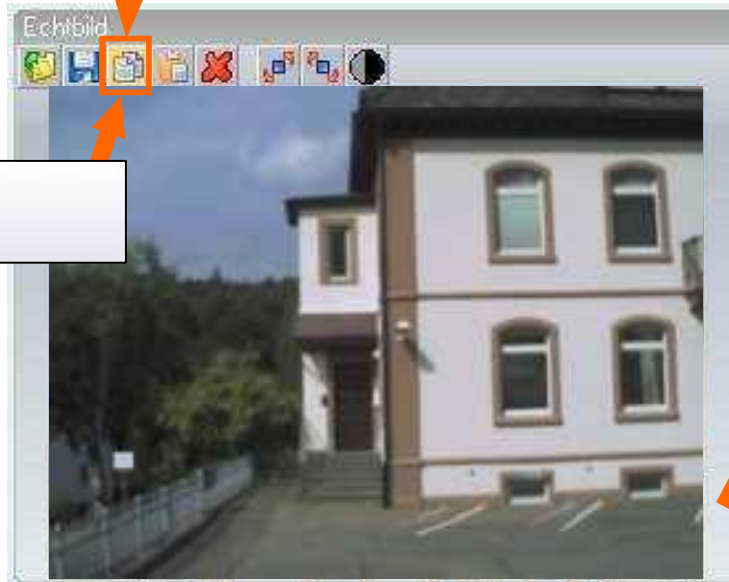


➤ This is the only way to export the real image out of an image that has been taken in the picture in picture mode (type IV = IR and real combined)

Real image document window

Exporting a real image to the clipboard

1) Click on function „Clipboard“



Zwischenablage
Kopiert das Echtbild in die Zwischenablage

2) Use " Paste"-function to import image into the desired programme

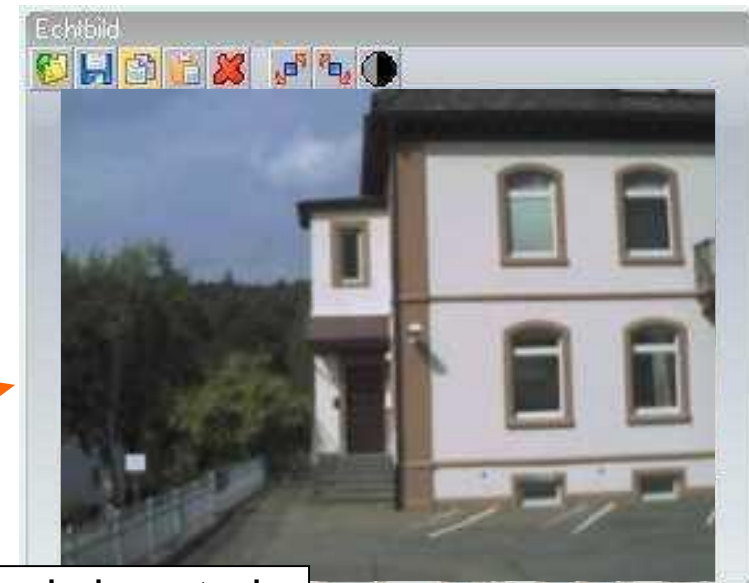
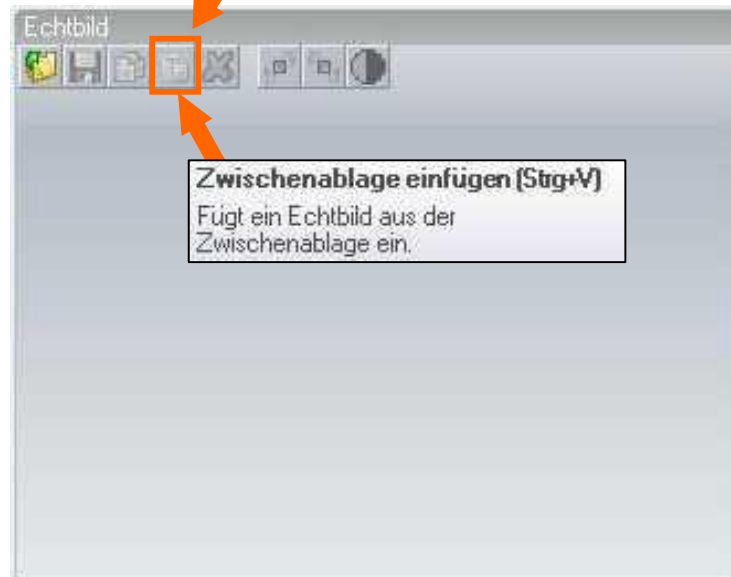


Real image document window

Importing a real image from the clipboard

1) Copy image from another programme into the clipboard

2) Click on function „**Insert clipboard**“

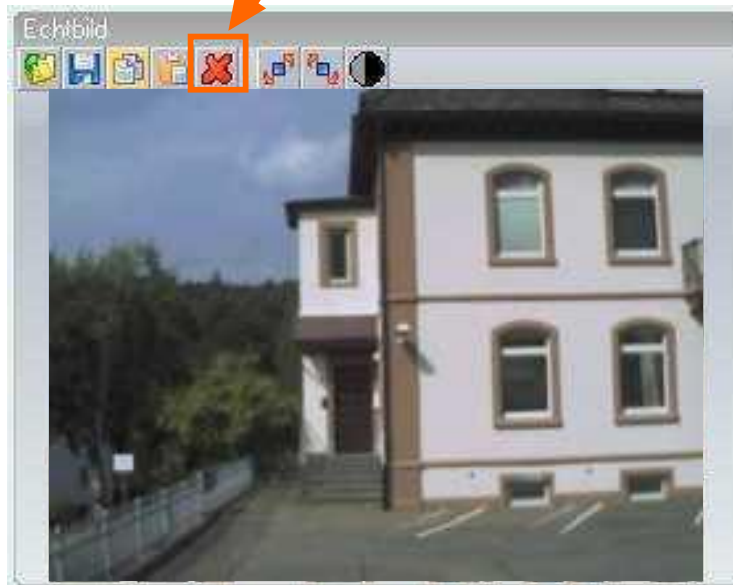


3) Image is inserted and displayed

Real image document window

Deleting a real image

1) Click on function „Delete“



2) The real image is removed from the document window

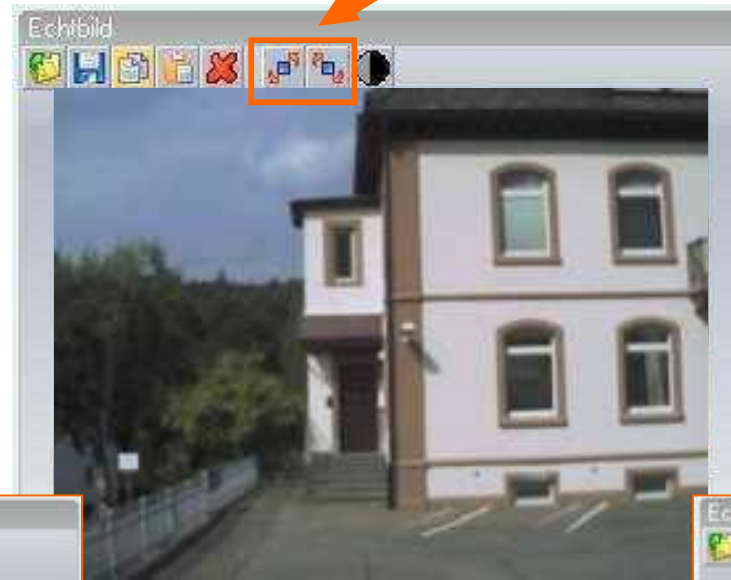


➤ Warning: If the image file of picture in picture image (IV) is saved after the real image was deleted, the real image cannot be reproduced.

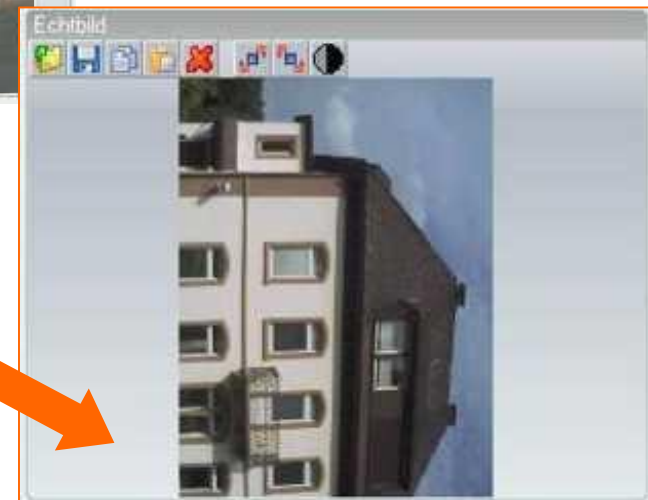
Real image document window

Rotating a real image

1) Click on function „Rotate left / Rotate right“



2) Real image is turned into the desired direction



Real image document window

Modifying the brightness of a real image

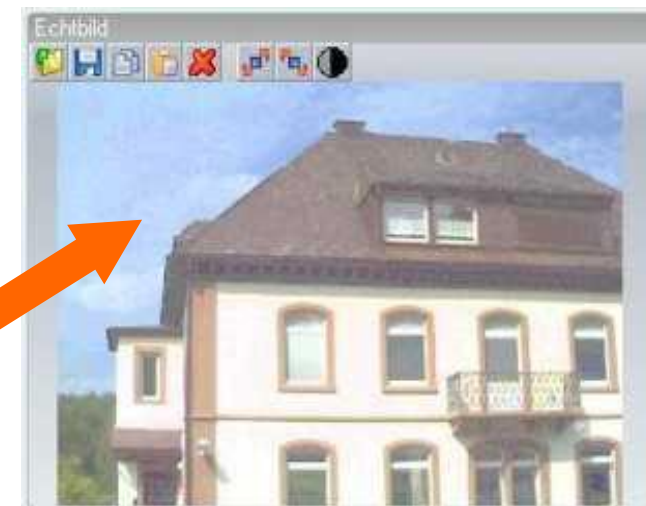
1) Click on function „**Brightness**“



2) Use the scroll bar to modify the brightness of the real image



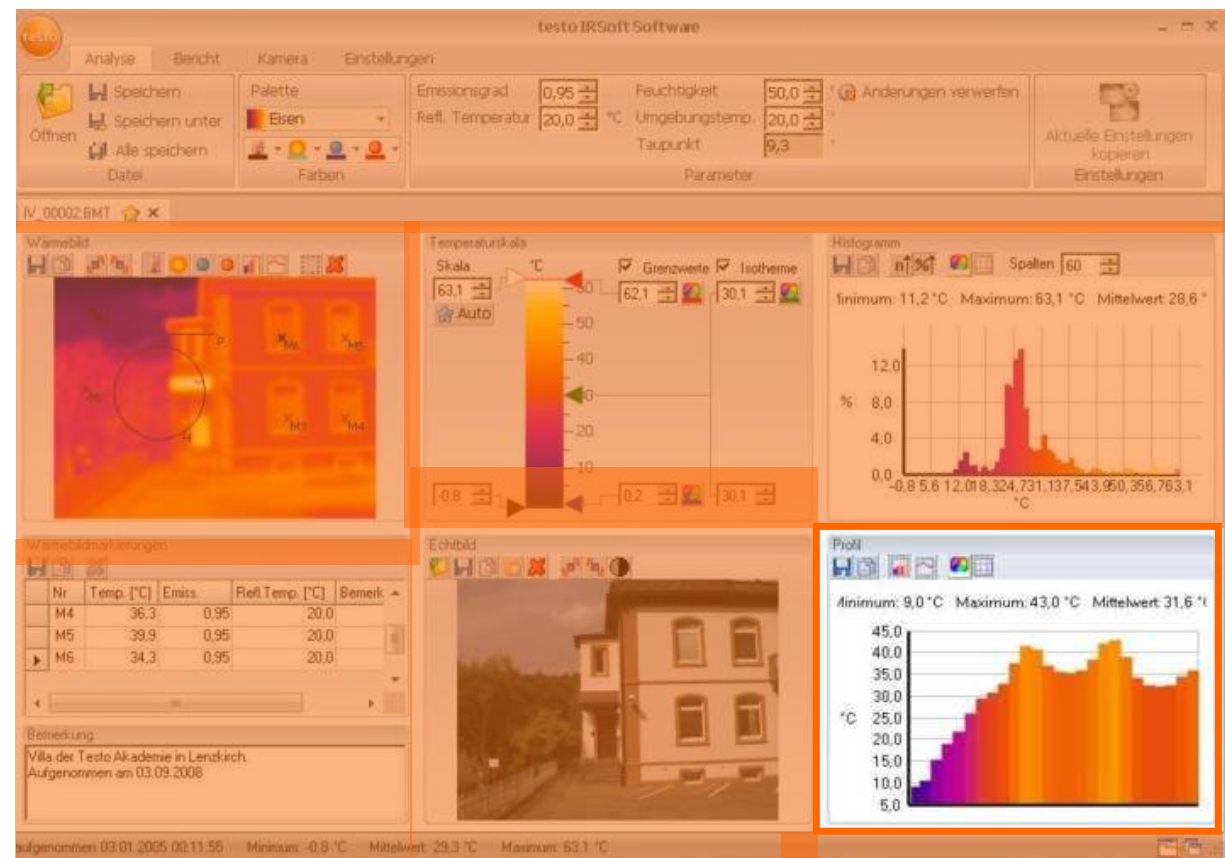
3) Changes are displayed in the real image



Temperature profile document window

Functions:

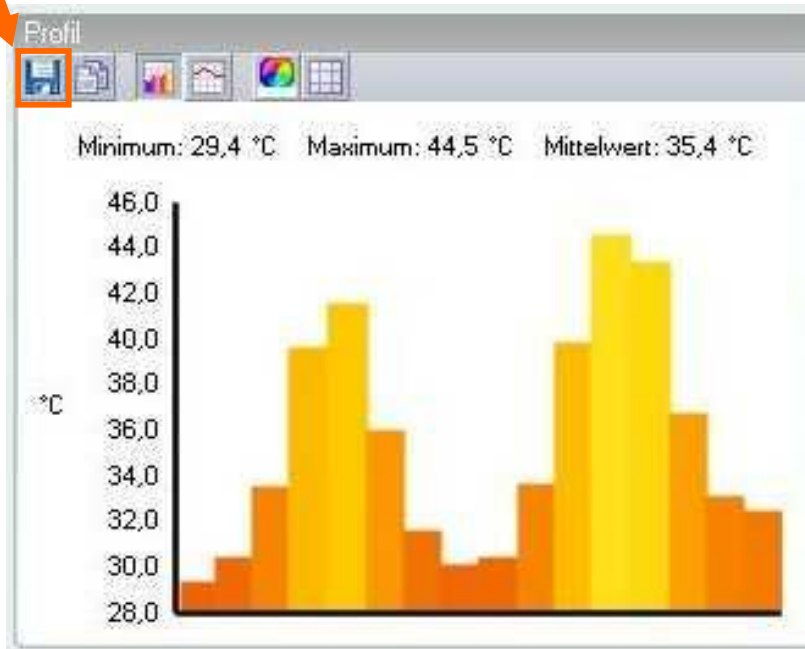
- Saving a temperature profile as an image file
- Copying a temperature profile to the clipboard
- Selecting the presentation of the temperature profile
- Changing the background colour of the temperature profile
- Switching grid lines on/off



Temperature profile document window

Saving a temperature profile as an image file

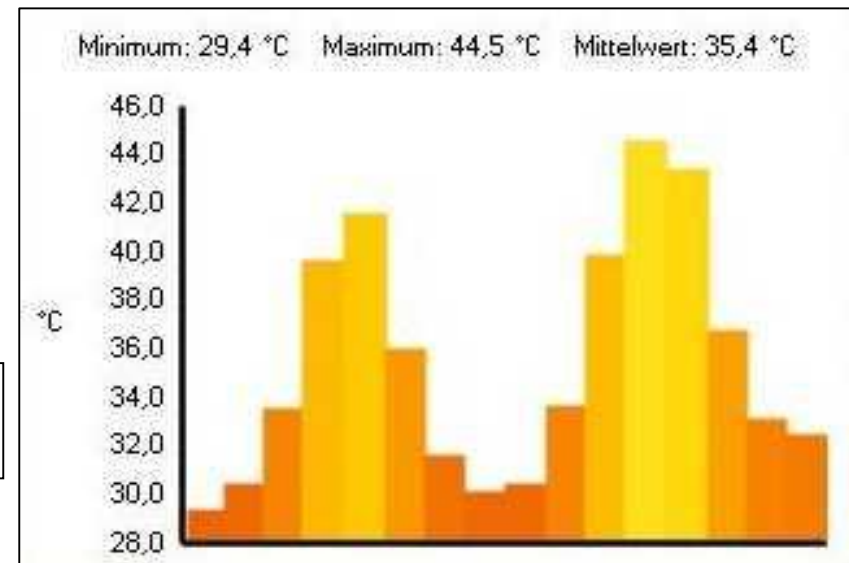
1) Click on function „Save“



2) Select a file name, file format and a storage location



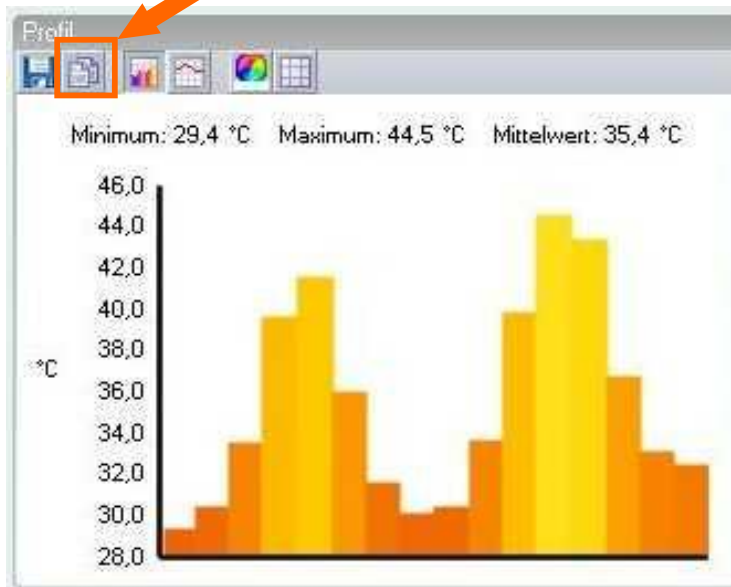
3) Temperature profile is stored in the desired file format



Temperature profile document window

Copying a temperature profile to the clipboard

1) Click on function „Clipboard“



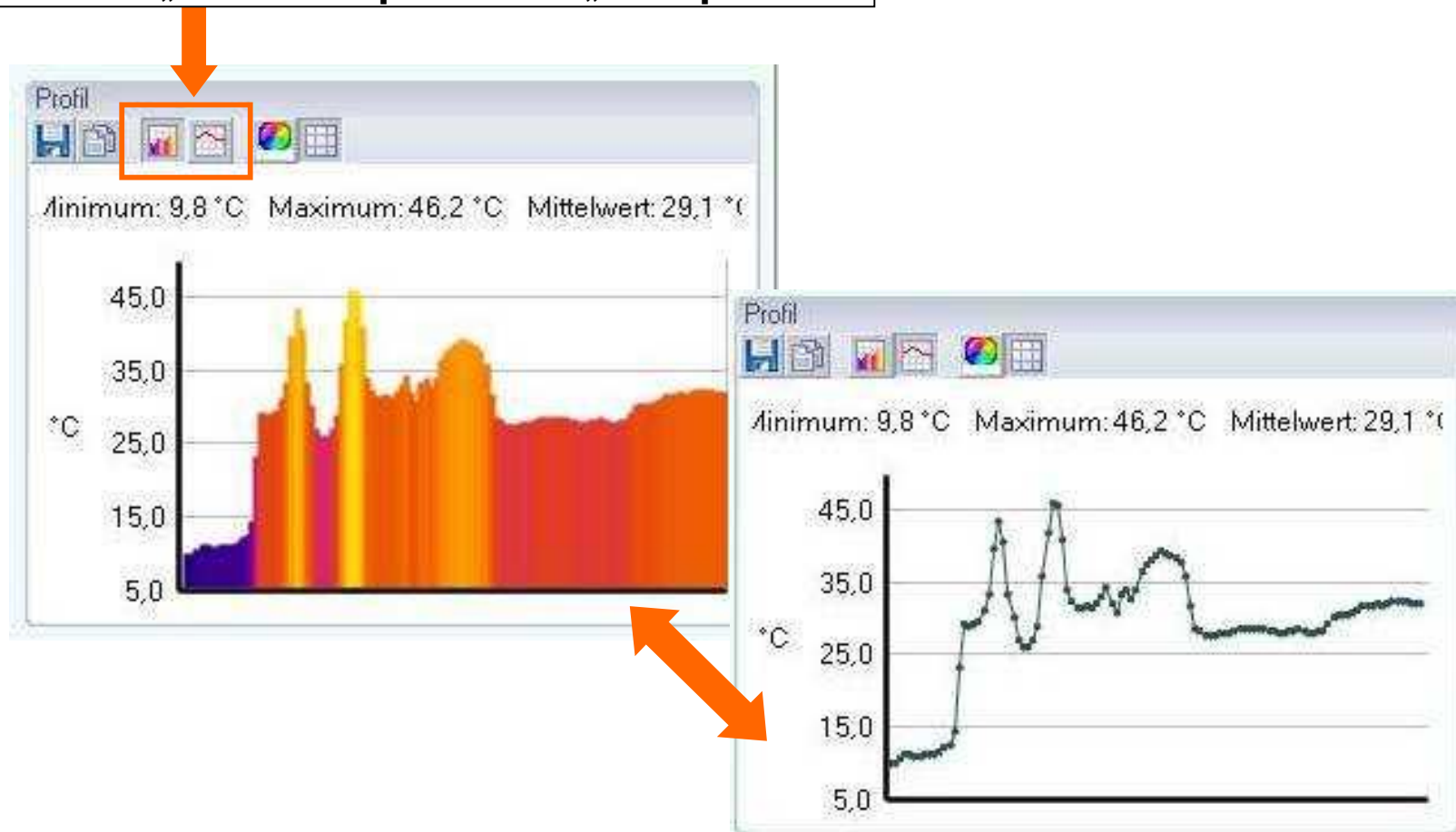
2) Data can be pasted in other programs (e.g. Microsoft Word, Powerpoint)



Temperature profile document window

Selecting the presentation of the temperature profile

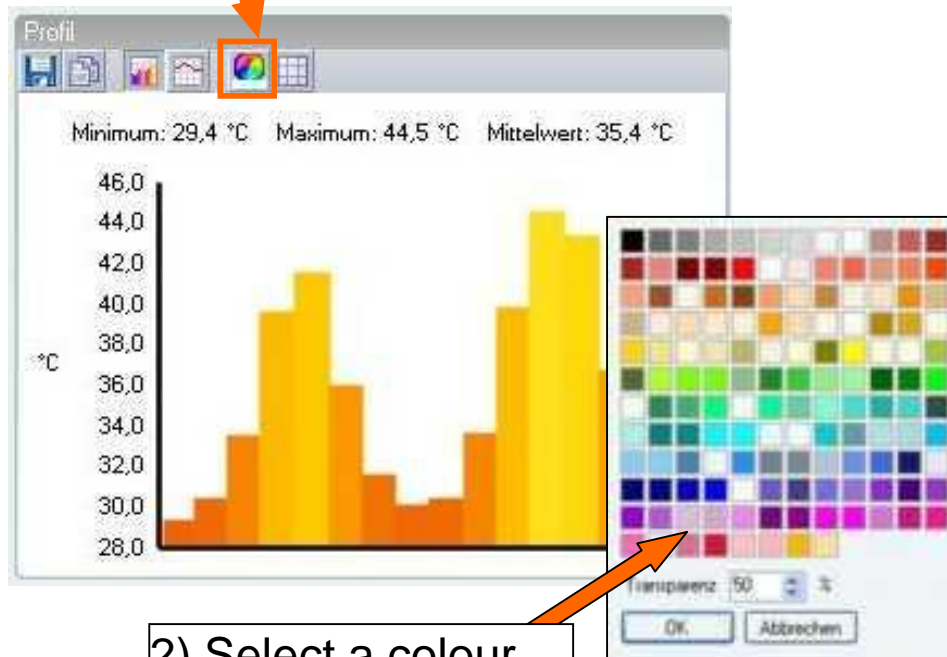
1) Click on function „Filled out profile“ or „Line profile“



Temperature profile document window

Changing the background colour

1) Click on function „Background colour“



2) Select a colour

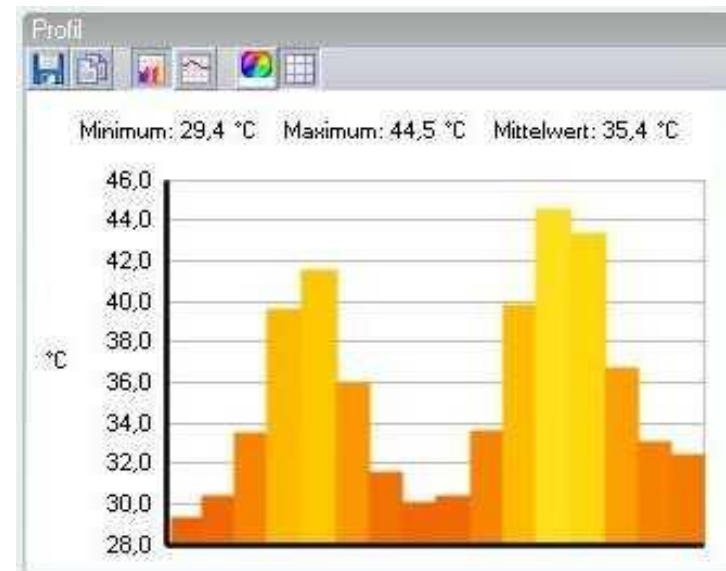
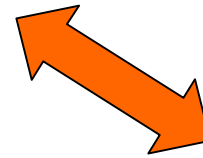
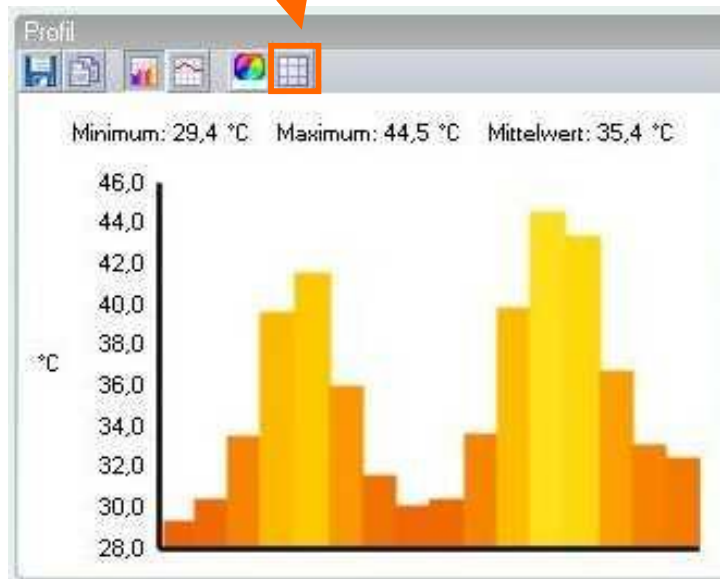


3) Selected colour is displayed

Temperature profile document window

Switching grid lines on/off

1) Click on function „Grid lines“



Comments document window

Functions:

- Register comments for the currently selected thermal image

The screenshot displays the testo IRSoft Software interface. The main window shows a thermal image of a building facade. A table in the bottom-left corner lists measurement data for points M4, M5, and M6. A comment window is open over the table, containing the following text:

Bemerkung
 Villa der Testo Akademie in Lenzkirch.
 Aufgenommen am 03.09.2008

The interface also includes a menu bar (Analyse, Bericht, Kamera, Einstellungen), a toolbar with file operations (Speichern, Öffnen, etc.), and various data fields for Emissionsgrad, Feuchtheit, and Refl. Temperatur. A histogram and a profile graph are also visible on the right side of the interface.

Comments document window

- The comment for the selected image can be registered directly into the text field
- The comment is automatically displayed in the report



Bemerkung

Testo-Villa Lenzkirch
Probeaufnahmen

Reports

With the software...

... a new report can be created with the report wizard

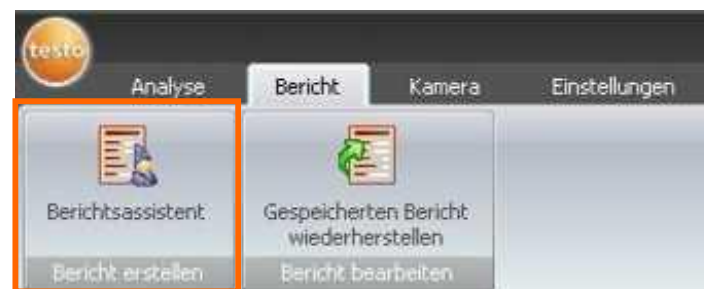
... existing reports can be modified

... existing templates can be adapted

Creating a report with the report wizard

Step 1 – Select tab „Report“ & start report wizard

1) Click on tab „Report“



2) Click on function „Report Wizard“

Creating a report with the report wizard

Step 2 – Select a report template



Templates:

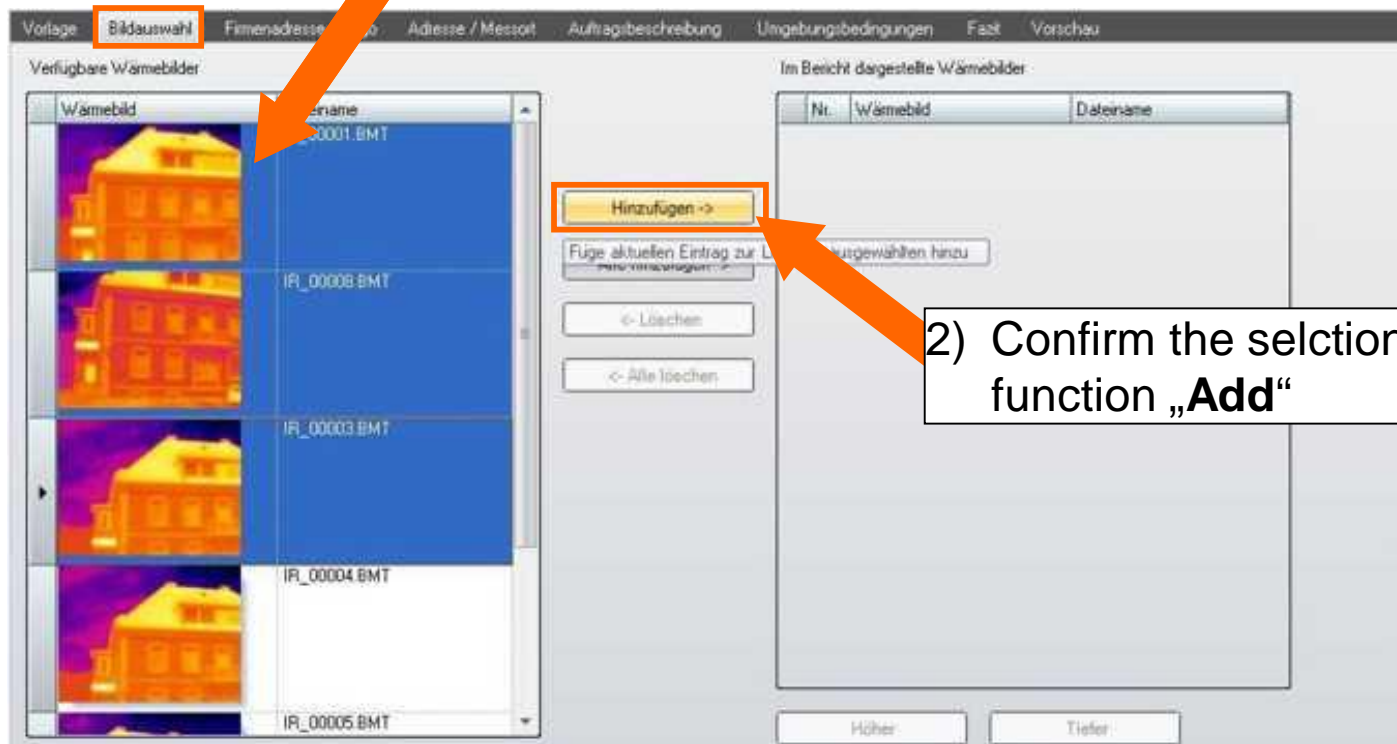
- Thermal bridges in buildings in accordance with EN 13187 (comprehensive)
- Thermal bridges in buildings in accordance with EN 13187 (simplified test)
- Industrial thermography
- Short report
- Standard

➤ Depending upon template the input fields change

Creating a report with the report wizard

Step 3 – Select images (1)

1) Select images for the report

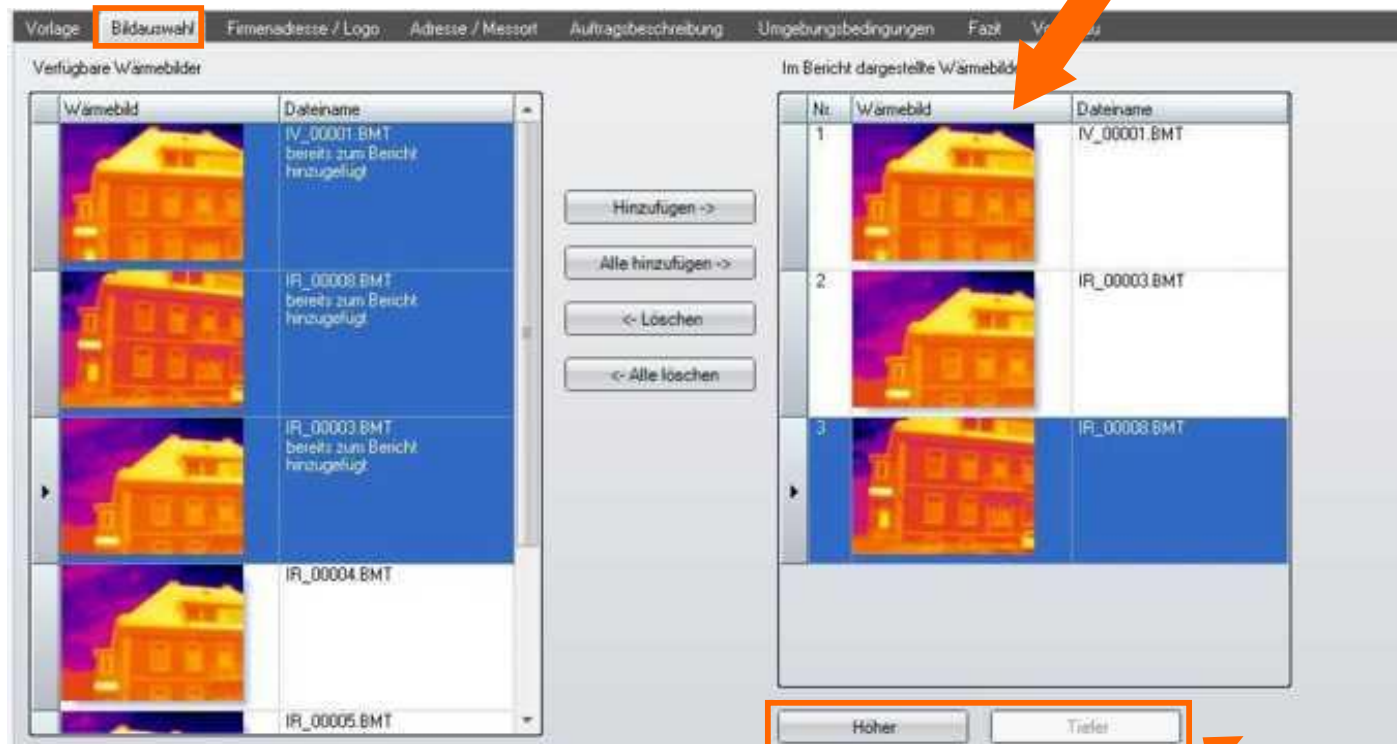


2) Confirm the selection with function „Add“

Creating a report with the report wizard

Step 3 – Select images (2)

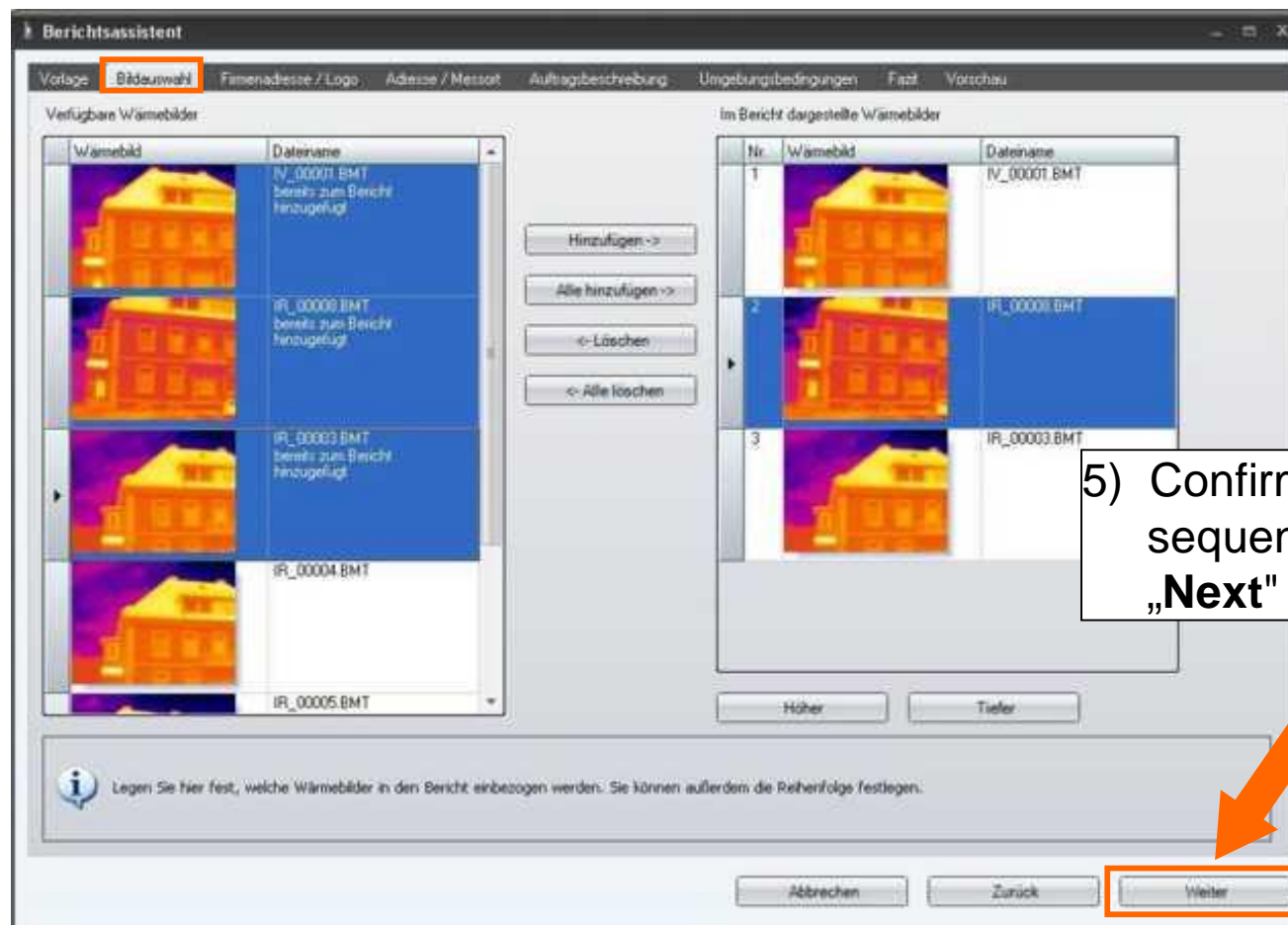
3) Select images for the report are displayed



4) Bring images into the desired sequence with function „Up" or „Down"

Creating a report with the report wizard

Step 3 – Select images (3)



Creating a report with the report wizard

Step 4 – Enter company address & logo


Berichtsassistent

Vorlage Bildauswahl **Firmenadresse / Logo** Adresse / Messort Auftragsbeschreibung Umgebungsbedingungen Fazit Vorschau

Firmenadresse

Firma: Testo
 Straße: Testo-Str. 1
 Ort: 79853
 Telefon: 07653/681-0

Logo



Datei ...

 Geben Sie hier Ihre Firmenadresse ein und wählen Sie das Logo. Diese Daten werden auch als Vorgabe für zukünftige Berichte verwendet.

Abbrechen Zurück Weiter

The data entered here appear automatically in future reports

Creating a report with the report wizard

Step 5 – Enter client address & measuring location

Berichtsassistent

Vorlage Bildauswahl Firmenadresse / Logo **Adresse / Messort** Auftragsbeschreibung Umgebungsbedingungen Fazit Vorschau

Auftraggeber / Eigentümer	Messort / inspizierter Gegenstand
Name: Franz Mustermann	Name: Karl Ransayer
Straße: Musterstr. 1	Straße: Messfleckweg 3
Ort: 0815 Musterstadt	Ort: 4711 Thermo-Messenhaus

Creating a report with the report wizard

Step 6 – Job description

Berichtsassistent

Vorlage Bildauswahl Firmenadresse / Logo Adresse / Messort **Auftragsbeschreibung** Umgebungsbedingungen Fazit Vorschau

Angaben zum Auftrag

Titel: Neuer Bericht

Messdatum:

Berichtsdatum: 15.09.2008

Kurzbeschreibung Auftrag:


Testbedingung gemäß EN 13187: Die Prüfung wurde gemäß EN 13187 mit einer Wärmebildkamera durchgeführt.

Name Prüfer:

Kameramodell: testo 880-3

Kamera SN: 1434519

Objektiv:

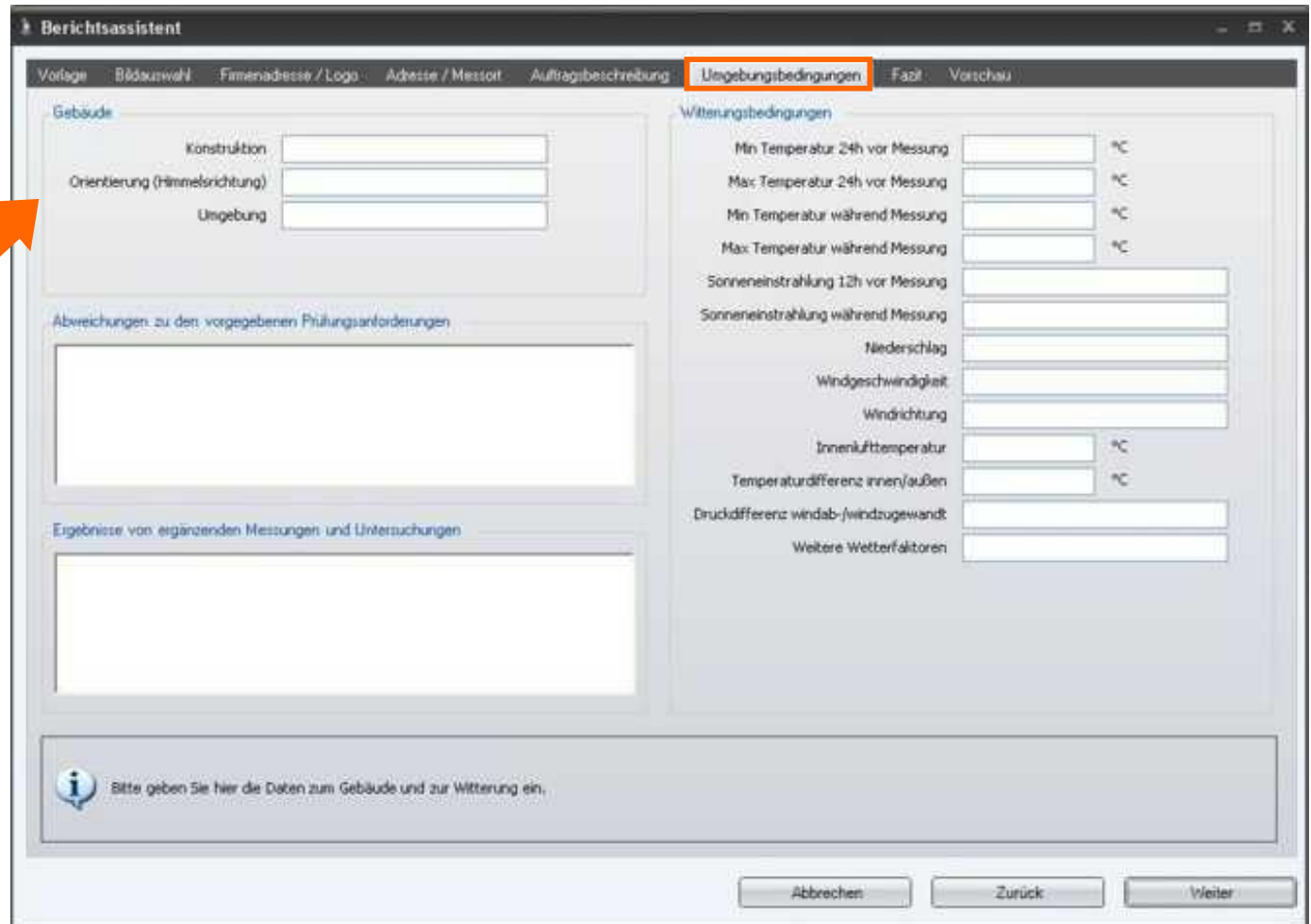
 Bitte geben Sie hier die allgemeinen Informationen zum inspezierten Objekt und zur Messung ein. Sollten diese Daten bei einzelnen Bildern abweichen, tragen Sie die Werte bitte bei den Bildbemerkungen im Analysenmodus ein oder markieren Sie hier deutlich welche Daten sich auf welche Bilder beziehen.

Abbrechen Zurück Weiter

Creating a report with the report wizard

Step 7 – Ambient conditions

These input fields of the ambient conditions are only available within the templates „thermal bridges“



Berichtsassistent

Vorlage | Bildauswahl | Firmenadresse / Logo | Adresse / Messort | Auftragsbeschreibung | **Umgebungsbedingungen** | Fazit | Vorschau

Gebäude

Konstruktion

Orientierung (Himmelsrichtung)

Umgebung

Abweichungen zu den vorgegebenen Prüfungsanforderungen

Ergebnisse von ergänzenden Messungen und Untersuchungen

Witterungsbedingungen

Min Temperatur 24h vor Messung °C

Max Temperatur 24h vor Messung °C

Min Temperatur während Messung °C

Max Temperatur während Messung °C

Sonneneinstrahlung 12h vor Messung

Sonneneinstrahlung während Messung

Niederschlag

Windgeschwindigkeit

Windrichtung

Innenlufttemperatur °C

Temperaturdifferenz innen/außen °C

Druckdifferenz windab-/windzugewandt

Weitere Wetterfaktoren

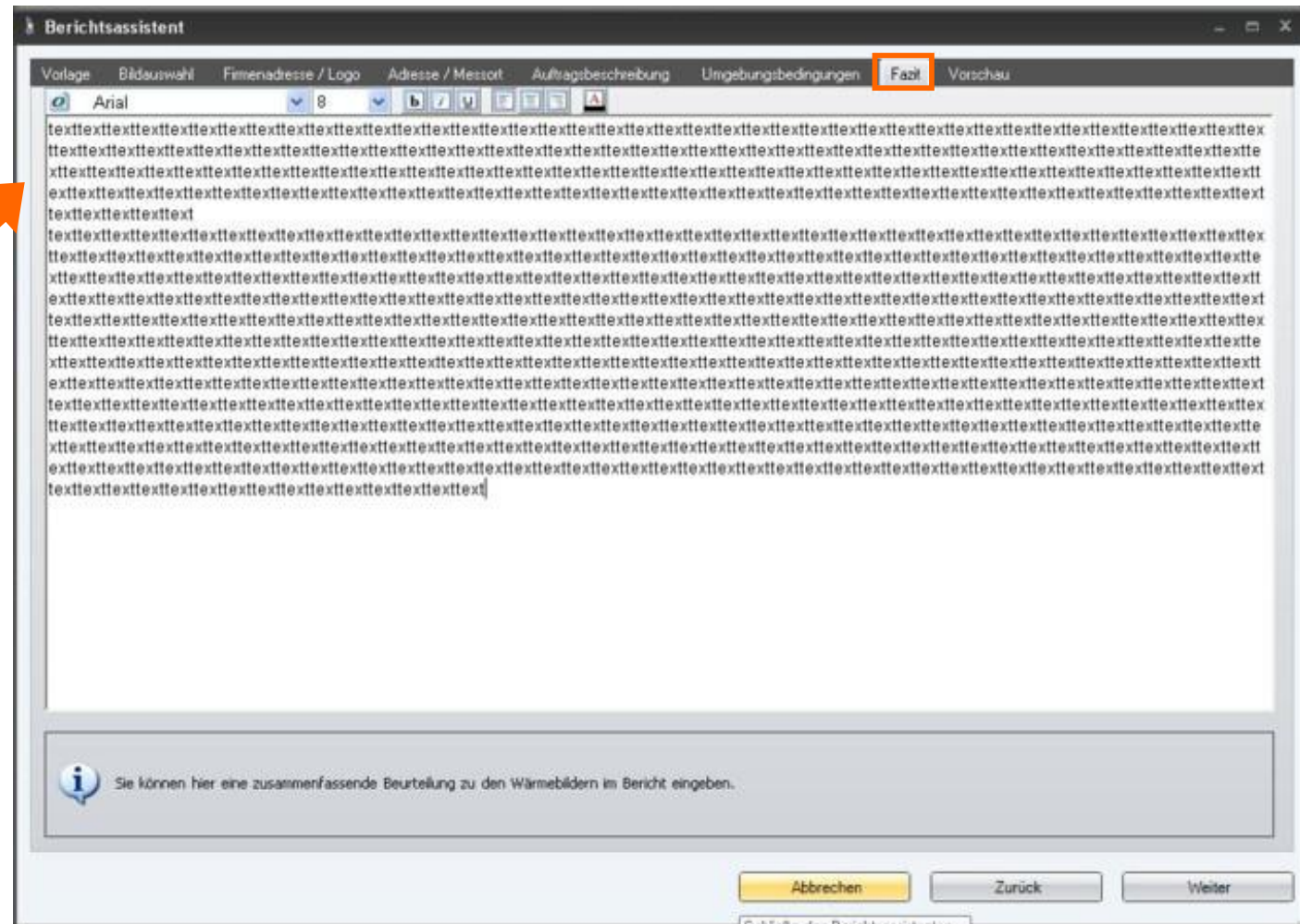
Bitte geben Sie hier die Daten zum Gebäude und zur Witterung ein.

Abbrechen | Zurück | Weiter

Creating a report with the report wizard

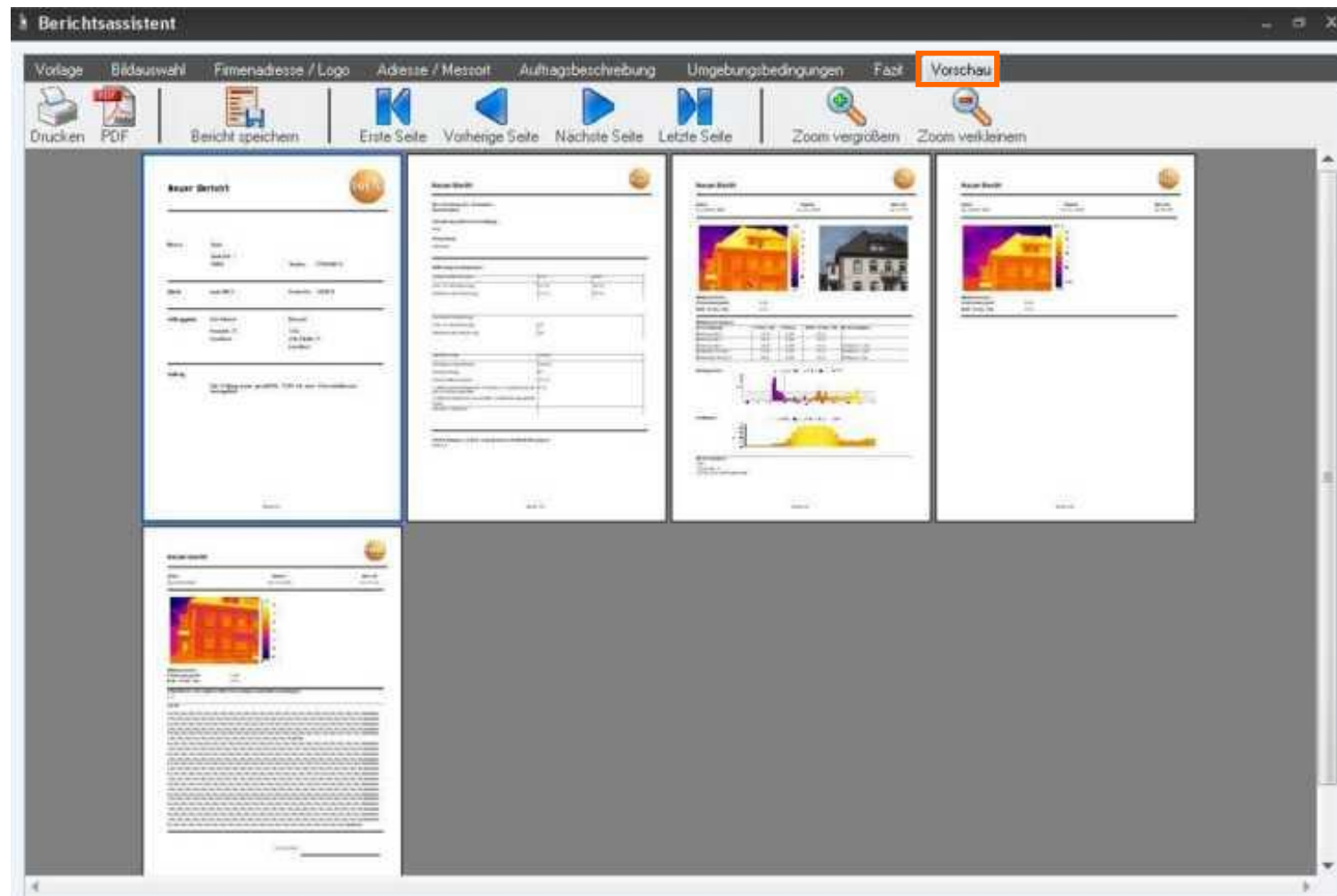
Step 8 – Write conclusion for the report

Text can be edited easily



Creating a report with the report wizard

Step 9 – Preview



Creating a report with the report wizard

Step 10 – Saving, printing & exporting a report

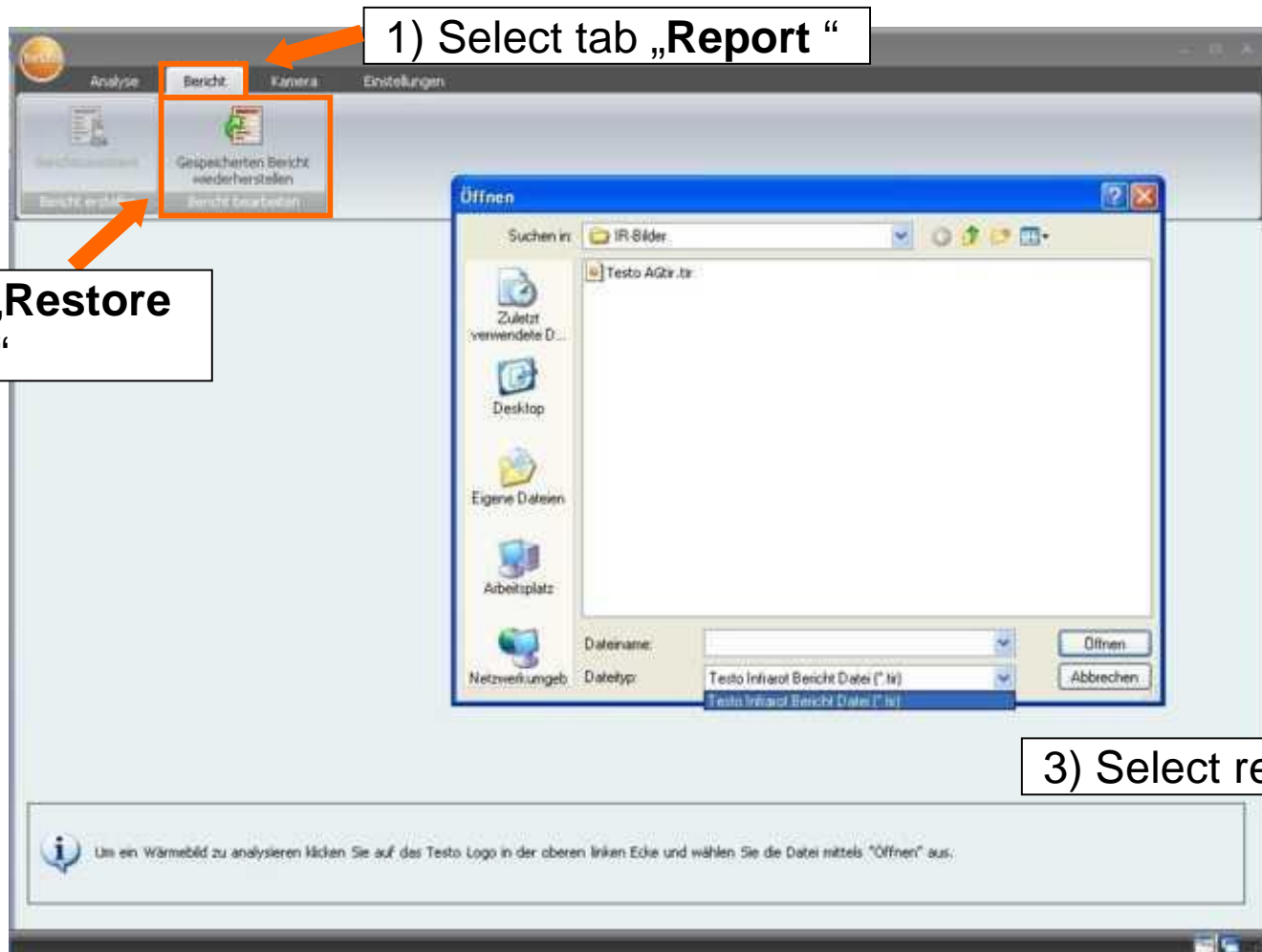
The report can be exported as .pdf

The report can be saved in „tir“ file format for modification afterwards.

The screenshot shows a software window titled 'Bericht' with a menu bar containing 'Vorgabe', 'Berichtsvorlage', 'Firmenname / Logo', 'Adresse / Metzdort', 'Auftragsbeschreibung', 'Umgebungsbedingungen', 'Fact', and 'Vorschau'. Below the menu bar is a toolbar with icons for 'Drucke', 'PDF', 'Bericht speichern', 'Erste Seite', 'Vorherige Seite', 'Nächste Seite', 'Letzte Seite', 'Zoom vergrößern', and 'Zoom verkleinern'. The main area displays a preview of a report with multiple columns containing text, tables, and thermal images. Three orange arrows point from the 'Drucke', 'PDF', and 'Bericht speichern' buttons to a stack of printed reports on the left side of the image.

Modifying a saved report

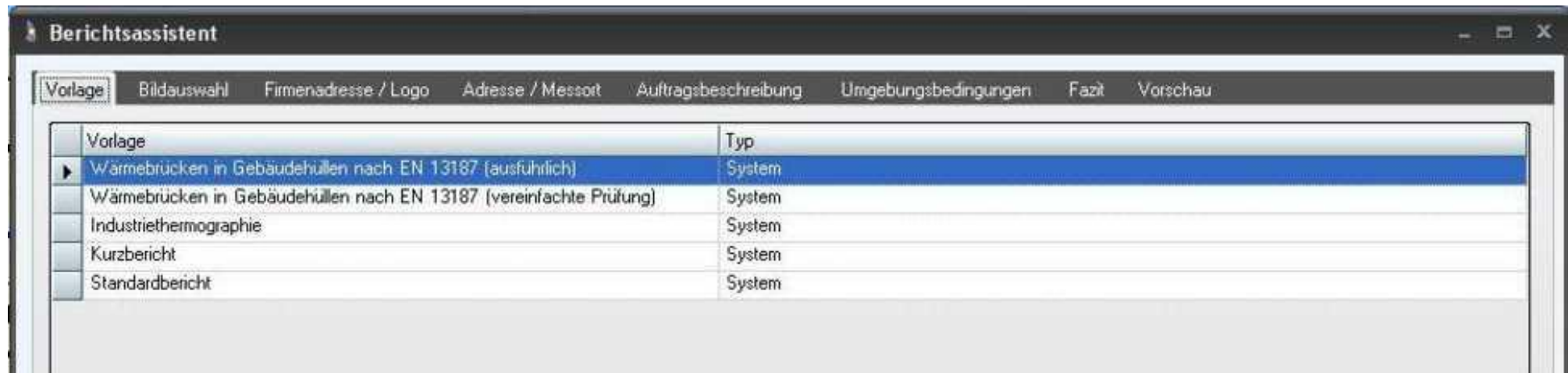
Step 1 – Select tab „Report“ & restore saved report



The screenshot shows the main application window with a menu bar containing 'Analyse', 'Bericht', 'Kamera', and 'Einstellungen'. The 'Bericht' tab is selected and highlighted with an orange box. Below the menu bar, there are two buttons: 'Bericht erstellen' and 'Gespeicherten Bericht wiederherstellen'. The 'Gespeicherten Bericht wiederherstellen' button is also highlighted with an orange box. An orange arrow points from the 'Bericht' tab to the 'Gespeicherten Bericht wiederherstellen' button. A callout box labeled '1) Select tab „Report“' points to the 'Bericht' tab. Another callout box labeled '2) Use function „Restore saved report“' points to the 'Gespeicherten Bericht wiederherstellen' button. An 'Öffnen' (Open) dialog box is open in the foreground, showing a search path of 'IR Bilder' and a list of files. The 'Dateityp' (File type) is set to 'Testo Infrarot Bericht Datei (*.ir)'. A callout box labeled '3) Select report' points to the file list in the dialog box.

Modifying a saved report

Step 2 – Select report template & conduct changes



- When opening an existing report the report wizard opens again. Text modifications are done in the wizard.
- Simultaneously the images are opened in the work space view and can be modified there.
- To finish the report the standard procedure for reporting with the report wizard is done.

Modifying templates with the report designer

Step 1 – Select tab „settings“ & start report designer

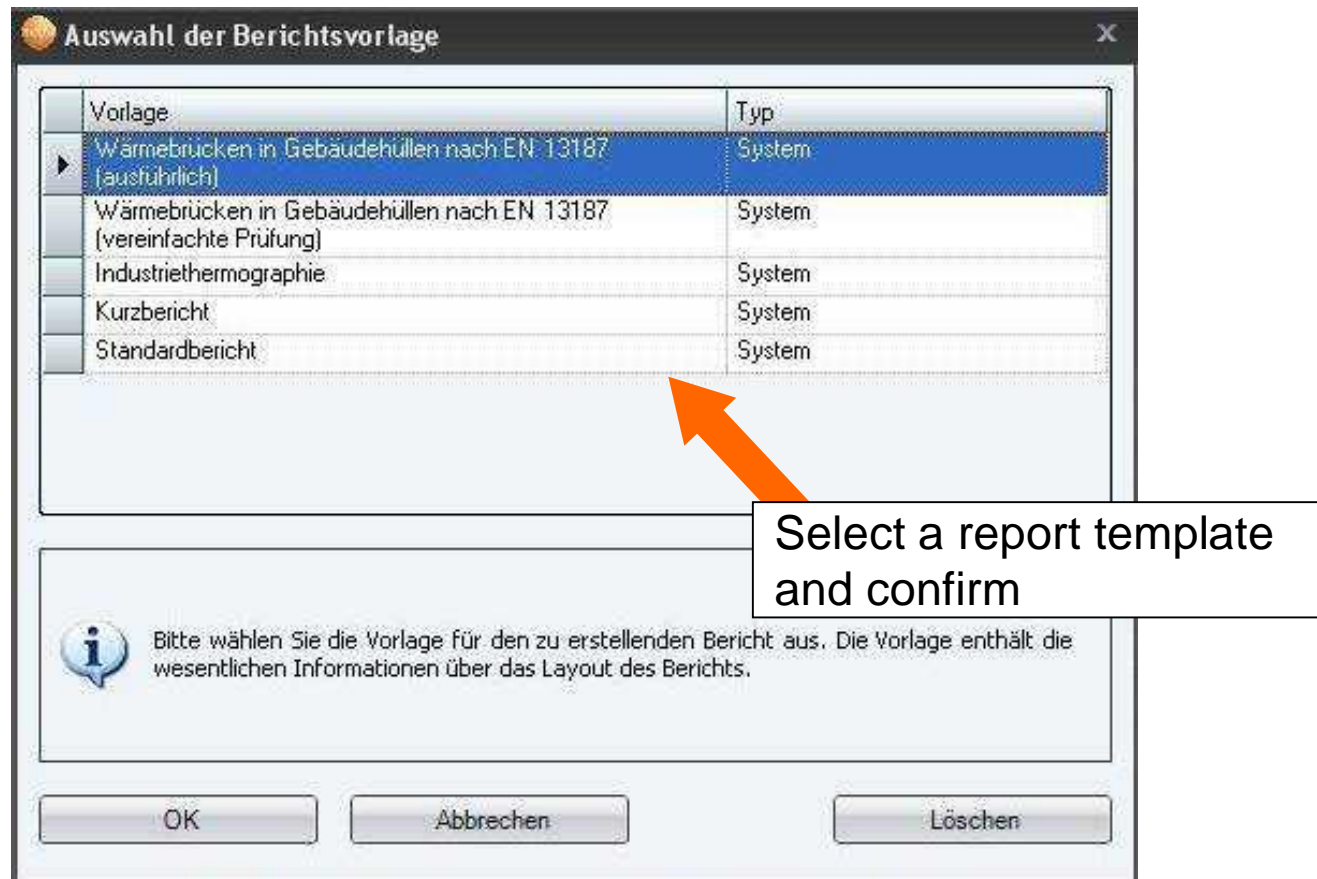
1) Click on tab „Settings“



2) Click on function „Report Designer“

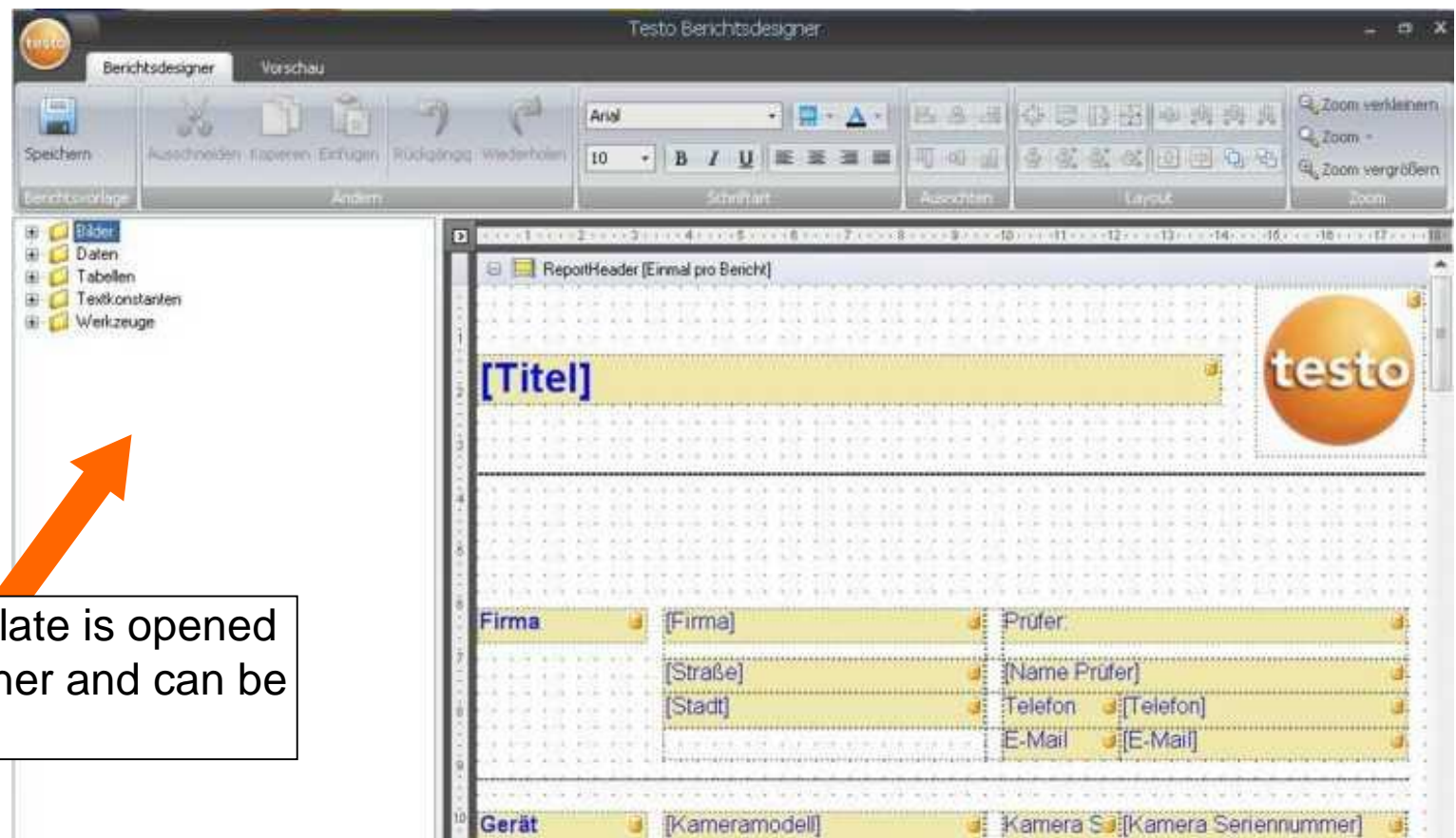
Modifying templates with the report designer

Step 2 – Select the report template



Modifying templates with the report designer

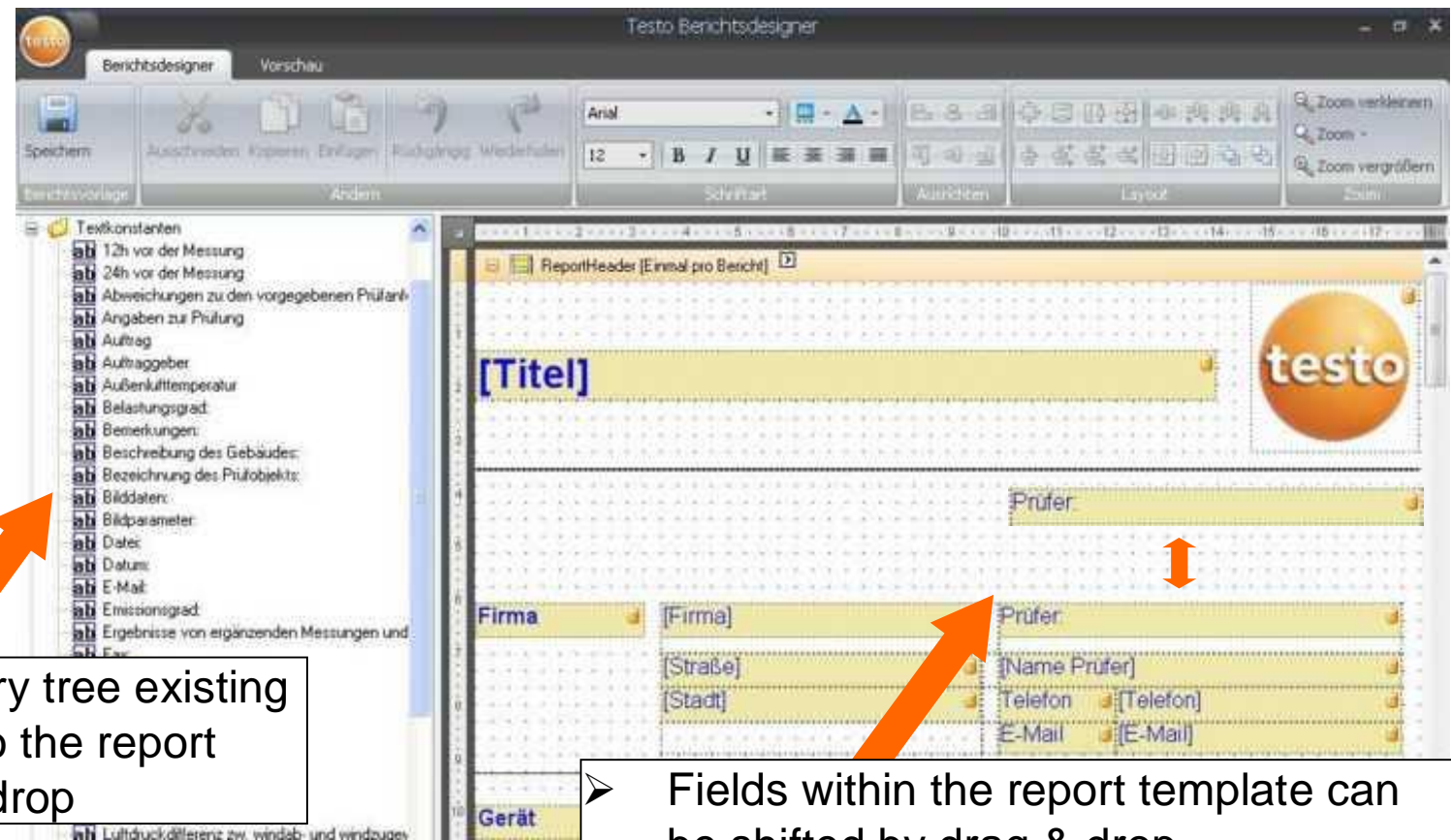
Step 3 – Open the report template



The selected template is opened in the report designer and can be modified

Modifying templates with the report designer

Step 4 – Editing the report template



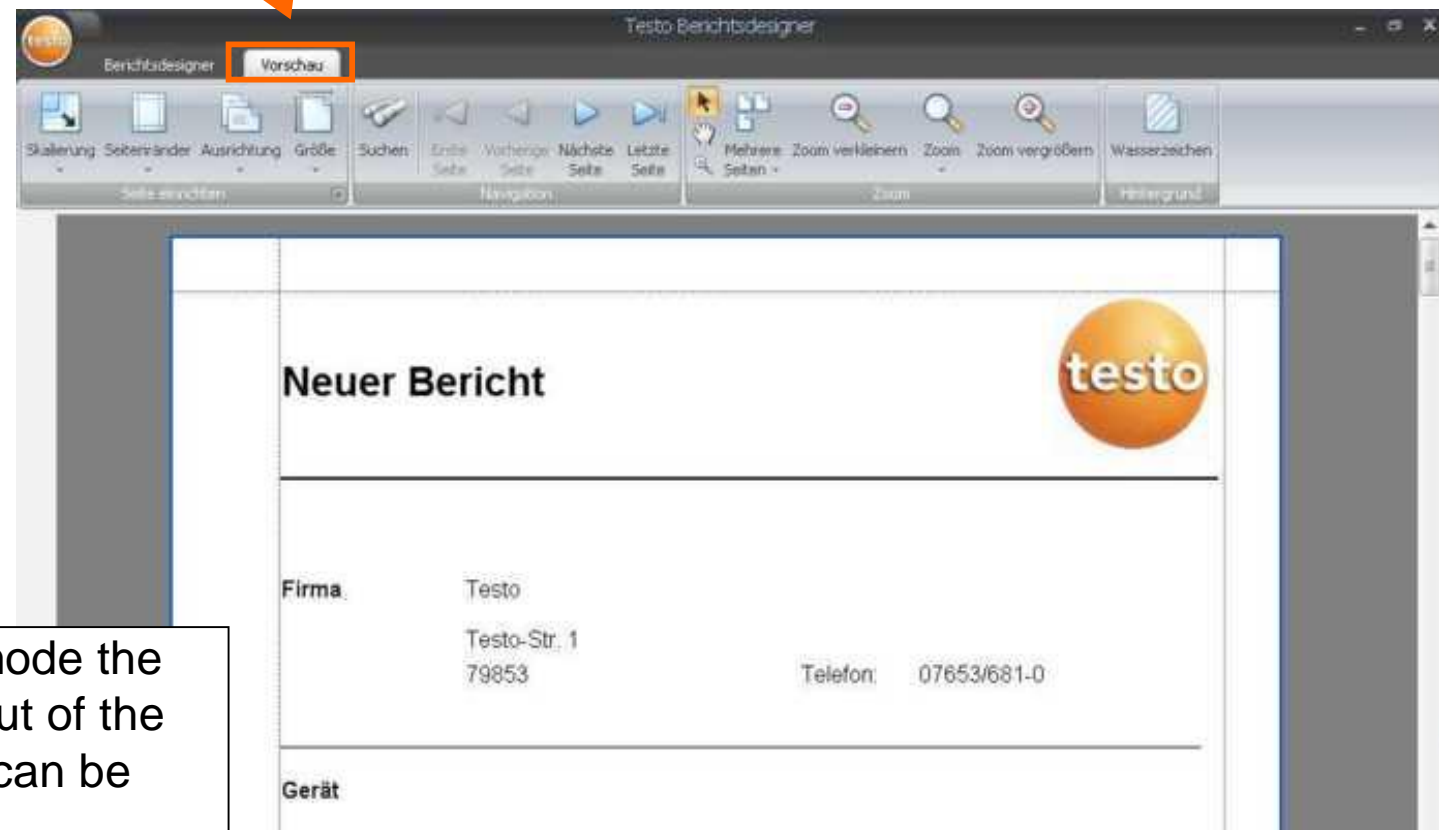
➤ From the file directory tree existing fields can be put into the report template by drag & drop

➤ Fields within the report template can be shifted by drag & drop

Modifying templates the with the report designer

Step 5 – Preview of the report template

Click on tab „Preview“

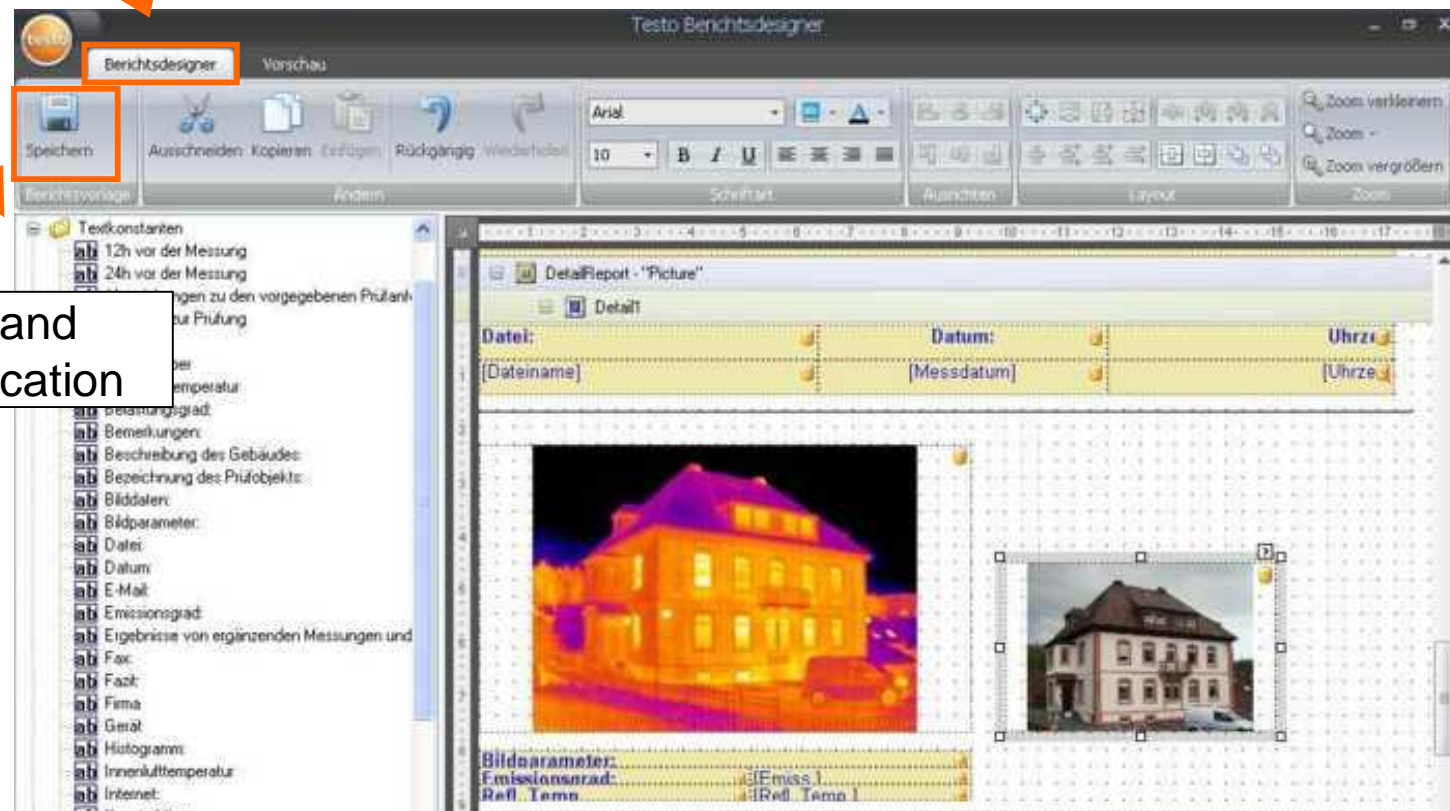


➤ In the preview mode the entire page layout of the report template can be modified

Modifying templates with the report designer

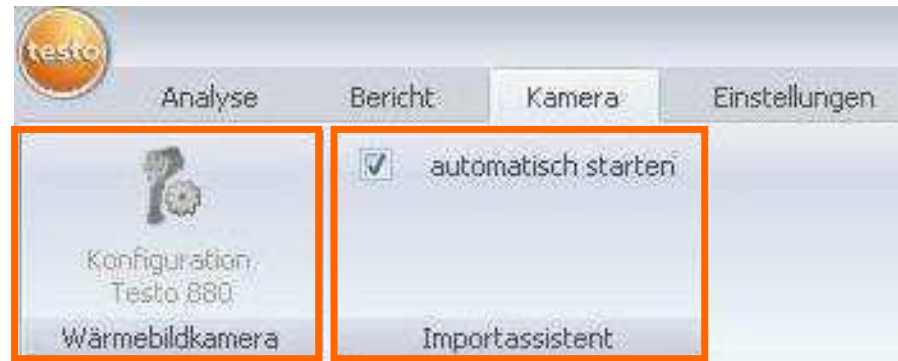
Step 6 – Saving a modified report template

Click on tab „Report Designer“



Enter a file name and save at desired location

Tab camera



Configuration of the thermal imager

Activating / deactivating Import Wizard

Tab Settings



- Setting of work space view
- Setting of image quality
- Change temperature unit (°C / °F)
- Choose colour scheme of work space view
- Activating / deactivating tips
- Activating / deactivating automatic program updates
- Adjust templates in report designer