INSTRUMENTS
TECHNO
TEST

IRT CRONISTA ™

Thermographic Organizer • Analyzer • Reporter



IRT Cronista® , a unique tool for the organization of your infrared images, their evaluation and the generation of significant reports. All functions needed for image management, analysis and report generation are combined in one piece of software.

- Fast and comprehensive high quality reports of your daily work with one mouse click;
- Customized layout templates to match your needs;
- Clearly structured and easy-to-use user interface;
- Wide range of high-quality and powerful analysis tools.

GRAYESS ®
Sophisticated Software Solutions

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Overview

IRT Cronista Organizer is used to organize your files and folders on your computer or workspace.
In Organizer you can:

- copy, delete, rename and create new folders and directories.
- link infrared images with their visual counterparts,
- edit and create new sets of notations,
- add comments,
- Select the color palette and displayed temperature range,
- modify properties of infrared images, a.s.o.

Workspace Layout:



1. Main menu, toolbar and address bar.
2. Buttons to switch between Organizer and Analyzer modes.
3. Folders Tree window.
4. Folder Contents window (displays the contents of the folder selected in the folders tree).
5. Temperature scale and palette.
6. Preview window (the active item preview).
7. An infrared image connected to a visual image.
8. Notations for the active (previewed) item.
9. Comments for the active (previewed) item.

Main Functions

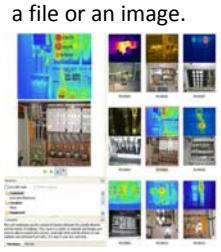
Files and Folders Management
IRT Cronista combines file management, thermal analysis and image database functionality in a convenient all-in-one environment. It automates routine tasks, saving much of your work and time.

- It displays the hierarchical structure of files, folders, and drives.
- you can copy, move, delete, rename files similar to Windows Explorer
- You are able to link infrared images to corresponding visual images.
- You can create sets of notations and comments for single images or groups of images.

IRT Cronista provides several ways to arrange your files: as *thumbnails*, *icons*, as a *list*, etc.

Adjust the user interface layout according to your needs.

IRT Cronista has several predefined user interface layouts: *standard*, *filmstrip* and *dual*. The preview window shows the contents of a file or an image.



Standard layout



Filmstrip layout



Dual layout

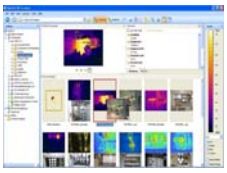
In IRT Cronista operations with files and folders are similar to those in Windows Explorer.
It uses folders to provide a storage system for the files on your computer.
Creating folders, copying or moving files or folders , renaming and deleting works similar to Windows Explorer, including the convenient drag-and-drop functionality.



Management of infrared image, visual image and corresponding image annotations - easy organize and manage your files in folder structure similar to Microsoft Explorer®

Image Linking

You can link infrared images to corresponding visual images. Two linked images are displayed and handled by IRT Cronista as one item. For example, when a report is generated, the linked images will appear at the same page and you will not need to choose the corresponding images manually.



Easy linking of visual and infrared image automatic or manually, simply by drag and drop

IRT Cronista automatically links images if they are placed in the same folder and have the same filename. Manually linking the images is possible as well in a very convenient way.



Image Notations

a set of frequently used notes, divided into groups is called notations.
Notations allow you to define possible comments once and divide them into groups. Every time, when you need to add a note to an image, instead of keying in the text again, you simply select it from a list of notations.
Notations are indispensable when creating reports. Just define the place in the report template where to insert notations belonging to the given category – and the text part of your report will be done automatically.



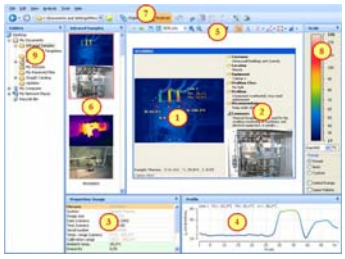
Preview of infrared and visual image and corresponding image notations
view images and corresponding notations and add or change the notations

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Overview

The Analyzer provides a wide range of tools, helping to create a comprehensive examination of an infrared images

Workspace Layout:



1. Active image with analysis objects on it.
2. Measurement Details concerning active image (notations, comments, linked visual image).
3. Properties of the active object or image.
4. Profile diagram(s).
5. Analysis toolkit with all the measurement tools.
6. Infrared (and linked visual) images in the active folder.
7. Buttons to switch between Organizer and Analyzer modes.
8. Temperature scale and palettes window.
9. Folders tree.

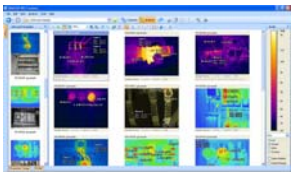
Main Functions

Image Zoom & Multi-Image-Analysis

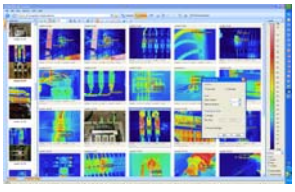
Custom zoom in IRT Cronista allows you to magnify any image up to 1000%. By this you can see the value of every single detector separately, and help you positioning measurement tools or emissivity corrections more precisely.



You can also choose between two anlysis modes: single-image analysis (see above right) and multi-image analysis (right).
In case of single-image analysis, only one image is shown in the analysis window for detailed analysis.
Multi-image analysis, allows you to work on see several images simultaneously .Simply adjust the zoom factor. Multi-image analysis allows to compare images and values at certain points. This also allows to put analysis objects onto several images at once. (Auto Hot/Cold Spot detection for example)

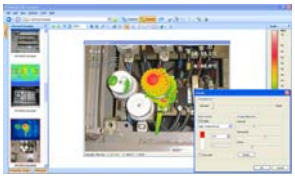


Simultaneous analysis on several images - work on several infrared images at the same time



Fusion of Infrared and Visual Images

After you have linked Infrared and Visuel Images in the Organizer, you may overlay those two images – infrared and visual, independently whether your IR-Camera has a build –in visual camera or the visual image is produced by an external devise. There are several options of how infrared image is fused with the visual image: transparency blending from full infrared to full visual and opaque alarm range by high, low, or high and low temperatures.

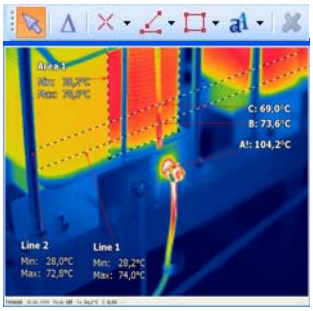


Measurement tools

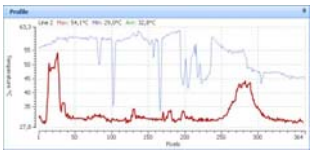
IRT Cronista provides various analysis tools to evaluate thermal information contained in an infrared image.
The measurement tools include:

- **Cursor (Fly-) Spot** temperature display; immediately shows the temperature at any point in the image
- Spot temperature tool to display the temperature value at any point in the image
- **Hot and cold spot** finder tool to automatically locate problem zones in the image
- **Profile line** tool to display the maximum, minimum and average temperatures along a line
- **Profile diagram** to display the temperature profile along the line
- **Area tool** to display the maximum, minimum and average temperatures within an area
- **Histogram** to display the temperature distribution in a certain area
- **Temperature Difference** tool to show temperature delta between two measurement tools
- **Dew Point** option to locate zones of dew accumulation
- **Labels** to identify objects in the image

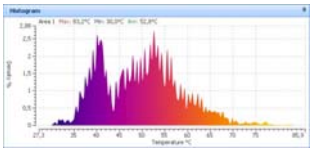
Measurement tool kit

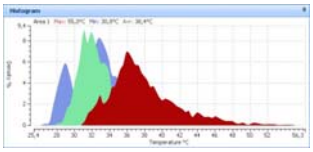


Profile diagrams

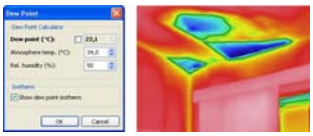


Area Histograms





Dew Point Calculation

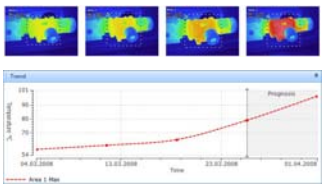


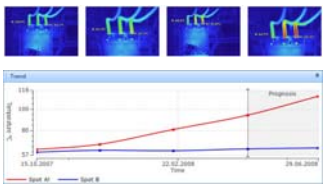
Trends in IRT Cronista

Trend is displaying object temperature changes over time. A very convenient tool not only to show when the actual problem, but even how it occurred, and how it may develop in the future! With the Prognosis function you can extrapolate the current situation to the future.
Trend can be built by images taken during different inspections:

- by image maximum (hottest spot) temperature;
- by temperature at a spot;
- by maximum temperature at a line;
- by maximum temperature in an area;
- by temp.-difference between two selected measurements.

Trend Samples





Main Functions

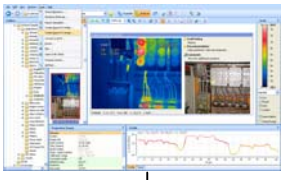


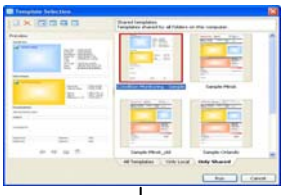
IRT Cronista generates reports Microsoft Word® .

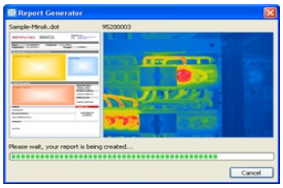
Thermal analysis, comments, notations, infrared images and linked visual images are stored together in one single file, ready to be delivered . To achieve this, IRT Cronista offers several ways:

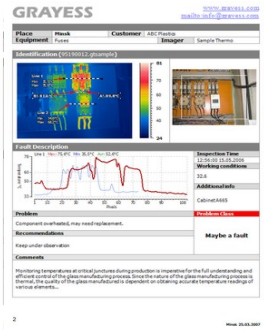
- Automatic generation of multi-page-reports using predefined templates, by the PUSH of one button
- Manually creating a new report document in Microsoft Word, using templates or starting from scratch, making the analysis work without leaving the Microsoft Word workplace
- Editing an existing document, periodically inserting images and analysis data

Create your report for a single image, a selection of files of a complete folder.









Automatic generation of reports using templates

Before creating a report, finish the thermographic analysis of the selected infrared images. If you have already linked a visual image and also comments and notations to the infrared image, your work is almost done. Select one of the pre-defined templates included in IRT Cronista or create your own custom report template. Choose whether to create your report for a single image, a selection of files or a complete folder. And with the next mouse click, your report is done!

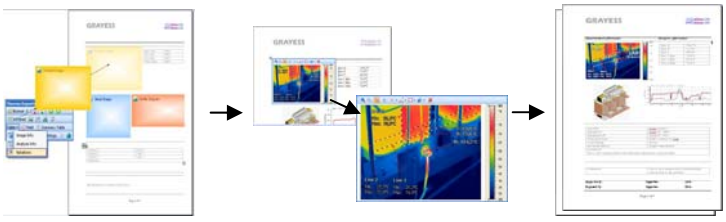
Report templates used in IRT Cronista are standard Microsoft Word document templates. Basic knowledge of Microsoft Word functions is helpful for creating your own report templates. To create a template, use the functions of the Thermo Reports toolbar in Microsoft Word. The Thermo Reports toolbar is divided into three groups: Section, Placeholders, Fields & Tables.

- **Section** group can be used to separate template data that will be multiplied from information that will be not. Only the main section (holding the infrared image placeholder) will be copied to the report as often as there are infrared images to add to the report.
- **Placeholders** are special objects that mark places in the document where a certain type of data should be inserted, e.g., infrared and visual images, profiles and histograms, etc.
- **Fields & Tables** are placeholders replaced with text information instead of pictures. Available objects are image information, measurement parameters, camera information, notations & comments, etc.

During installation the Thermo Reports Toolbar is added to your Microsoft Word, upgrading your word processing software to a fully functional t analyzer. Sophisticated and intuitive infrared image analysis tools allow for fast and easy evaluation of infrared images and convenient and quick report generation.

Manually creating a report document in Microsoft Word

Start with a template or from scratch, in either way, you will finish your comprehensive and meaningful report within no time. Simply add placeholders for the desired analysis objects and select the correct infrared image by double-clicking on the corresponding placeholder. Once the infrared image is added to your report document, you can do all your analysis work within this document by clicking on the infrared image. All other placeholders (point temp info, profile graph, etc) will be updated with the correct information automatically.



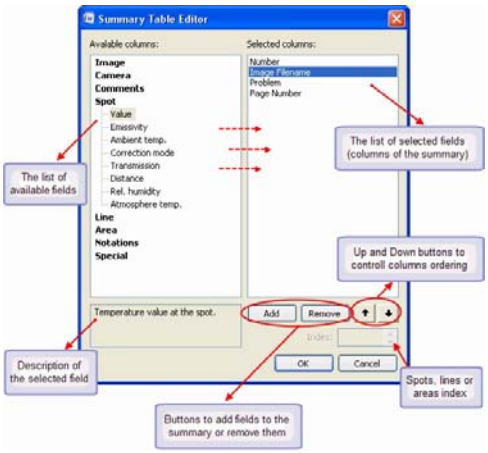
If you want to add additional images to your report, simply hit the add-page button and select the next infrared image to add. Repeat this procedure as often as needed.

Editing an existing report

Report docs are standard word files. They can be re-opened at any time to add, delete, or modify some information. You can add new images to the report or correct mistakes made in previous analysis work. By clicking on the infrared image, you can re-arrange the measurement objects or add or delete any object.

Summary Table

Summary Table adds an additional page to your report. On this page IRT Cronista automatically creates a report summary with information on one or more parameters for all images in the report. The summary table could contain information like image parameters , camera parameters, point/line/area temperature information, problem description (comments), recommendations, etc. **All you need to know at a glance!**



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