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Annotations Tool of JENOPTIK GRYPHAX® software

The "Annotations tool" of JENOPTIK GRYPHAX software enables user to highlight and comment important areas at images directly at live preview image or at recorded images from Gallery.

General description:

The "Annotations tool" is part of the JENOPTIK GRYPHAX software. It contains arrow and text tool to highlight and comment important areas at images directly at live preview or at recorded images from Gallery afterwards.

Text tool and arrows applied on loaded z-stack image from Gallery:

13.1 Start Annotations tool:

To activate the Annotations tool open the software tool bar by pressing the arrow ◀ on right-hand software site or use keyboard short cut (**ctrl / cmd + T**)

Click to the Annotations icon ▣ at the tool bar, the Annotations widget will be displayed and contains the following tools and options:

- **Arrow tool** – to add arrows to highlight important locations at images
- **Text tool** – to add comments directly at images

- **Font Size** – by value 8 – 72px
- **Font Style** – by option Normal, Bolt, Italic or Bold + Italic
- **Outline Width** – by value 1 – 20px
- **Colour** can be selected by colour selector, click on colour rectangle ▣ to open colour selector
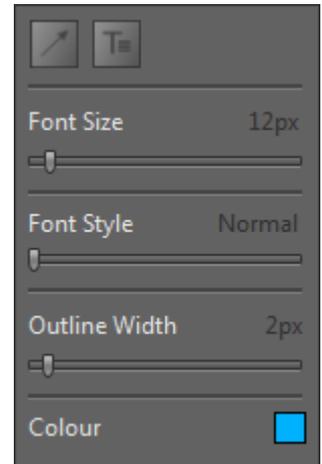
Note: Annotations tool is available only if record mode "**Single shot**" is active and live image is activated before. Or a recorded image is opened from Gallery. No support for Time-lapse preview or video files.

Reset button ↩ on a tool sets all properties to their initial values. Initial values are fixed.

13.2 Pre-define settings:

When no object is current or selected, the tool widgets show default properties. In this state default properties can be modified. They are stored in settings/profiles.

To predefine the general settings of Annotations tool e.g. font size, outline width or colour by change of the according parameter <u>without</u> selecting any Annotations method.

The settings for each drawing object can be individual adjusted after start of drawing or by selecting a drawn object from image window.

13.3 Start & save drawings:

To start drawing select record mode "Single shot" and **start live** by pressing the "Live"-button [LIVE] or open a **recorded image** from Gallery.

By pressing "Rec" [REC] button all previously drawn annotations from **live preview** will be merge into the image and cannot be modified afterwards.

To save drawn annotations at loaded **recorded images** from Gallery, start live preview [LIVE] or load another image from Gallery. An **image copy** will be always saved automatically by software with a file name extension: "_copy_1" and increment the image copy number accordingly.

13.4   Creation (drawing) of objects:

In general, after clicking one of the annotations method buttons ▨ ▨ (Arrow or Text), the cursor changes and user can draw an annotation object of the type selected.

Additionally, a small floating pane is opened as image window overlay and shows a detailed view of a selected sector like as the magnifier tool.

Zoom level of magnifier can be adjusted on the used section of "zoom level" under *Preferences / General / Magnifier* (valid as of version 1.1.8)

Pressing "Del" or "Esc" key before finishing an object, aborts the creation and removes unfinished objects.
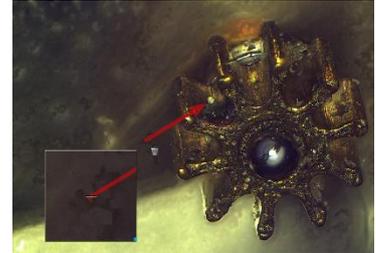
For further details, please see annotations button descriptions below.

13.4.1 Draw an arrow:

The arrow tool ▨ is a 2-point drawing object.

To draw an object start with left mouse-click on first point and release. The start point is marked.

Move the mouse away and a colored semi-transparent arrow is drawn from the start point to the current mouse position (refreshed as long as the mouse is inside the image window).

Go to the end point and make left mouse-click and release.

As long as the annotation object is selected the arrow is semi-transparent. A trash button appears right beside the end point. The start- and end points are marked.
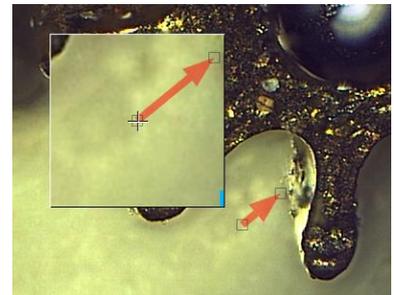
13.4.2 Draw a text field:

To draw a text ▨ object click with left mouse-click on point of interest and release. The text field is applied and ready to fill in with text. The size of field will be adapt automatically according the insert text.

As long as the text object is selected the text are semi-transparent and a rectangle border is visible. A trash button appears right beside the start point.

example text for user guide
text field can contain letters, numbers and special characters as well…
!> < :-) ? /*-+ # 1234

By click again into the image, a new text object will be added to the image.

Note: Text objects can contain letters, numbers and special characters as well.

13.5   Object selection:

Every object can be selected as the **current one** at live and captured images before image is recorded / saved with annotations overlay. The current object is displayed as semi-transparent and decorated with the trash icon. Most objects (except text object) when selected as the current one, also display grey, square control points which are used to modify the geometry of the object.

An object can be selected as the current one, by clicking it with the pointer tool - 'arrow' button on the main window's top bar. But when an active tool is other than the pointer tool (e.g. text tool), this requires switching the active tool off and switching the pointer tool on. To make it more convenient, the pointer tool can be temporarily activated by pressing the **"ctrl / cmd"** key. As long as the key is pressed, the pointer tool is active. When **"ctrl / cmd"** is released, the previously active tool activates again.

The current object can be moved and reshaped (text object only moved) using the pointer tool. When the annotation GUI widget is visible on the tool bar, the properties of the current object (colour, line width, etc.) are set in the widget. Note: For Arrow object only start point can be modified.

By double-click at text object the content can be modified as long as the object isn't merged to the image.

13.5.1 Object multi-selection:

By marking a rectangular area with the pointer tool at the image window, one can also select more than one object. Multi-selected objects are also displayed as semi-transparent, but without their trash buttons. A multi-selection trash will be displayed in center of the selected objects to delete all. Pressing **"del"** key remove all selected objects.
Multi-selection can be also created, extended or modified by clicking on objects with the pointer tool while **"shift"** key is pressed. Objects selected can be moved together as well.

13.6   Deleting objects:

The current object can be deleted by clicking its trash icon, or pressing "del" key. Objects selected can be deleted together by pressing "del" key.

13.7   Changing objects properties:

Object's properties can be modified using controls on the tool widget appropriate for the object. I.e. annotation objects (arrow, text) can have their properties modified using annotation tool widget. The properties of the current object are visible in the widget and can be modified. When more than one object is selected (multi-selection), some common properties (like color or line width) for all selected objects can be modified.

Note: If a tool widget is closed, double-click on an object makes the object current and opens the appropriate tool widget at the toolbar.

Limitations:

- Annotations are not available during record of time-lapse, video, Z-stacking, Panorama or Fluorescence mode.
- Annotation tool is active only if record mode "Single shot" is selected and live image is activated before. Or a recorded image is opened from Gallery. No support for Time-lapse preview or video files.