

# Getting Started

## User Interface



ATOMS  
Precision V2

In this tutorial, we introduce you to the user interface of Atoms Precision V2. The user interface has the similar “look and feel” of Microsoft Office 2007. The **Application Button** where we find the “**File**” menu commands where we can create, open and save file documents is shown in fig 1.

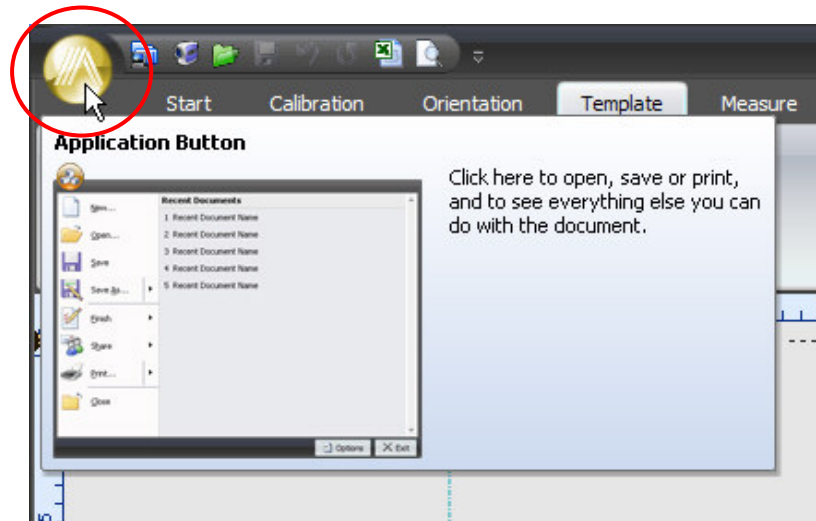


Figure 1

The application gives you options for customization; for example, we may want to move the **Quick Access Toolbar** to below the ribbon as shown in figures 2. This toolbar was located above the ribbon in figure 1.

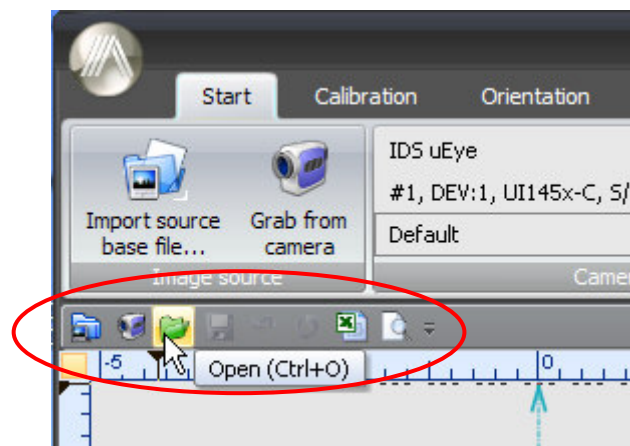


Figure 2

The Options menu can be found in the Application menu as shown in figure 2A. Under Options you can customize the Quick Access Toolbar, keyboard shortcuts, User Interface, Video Grabber, General Options and Objects Visualization.

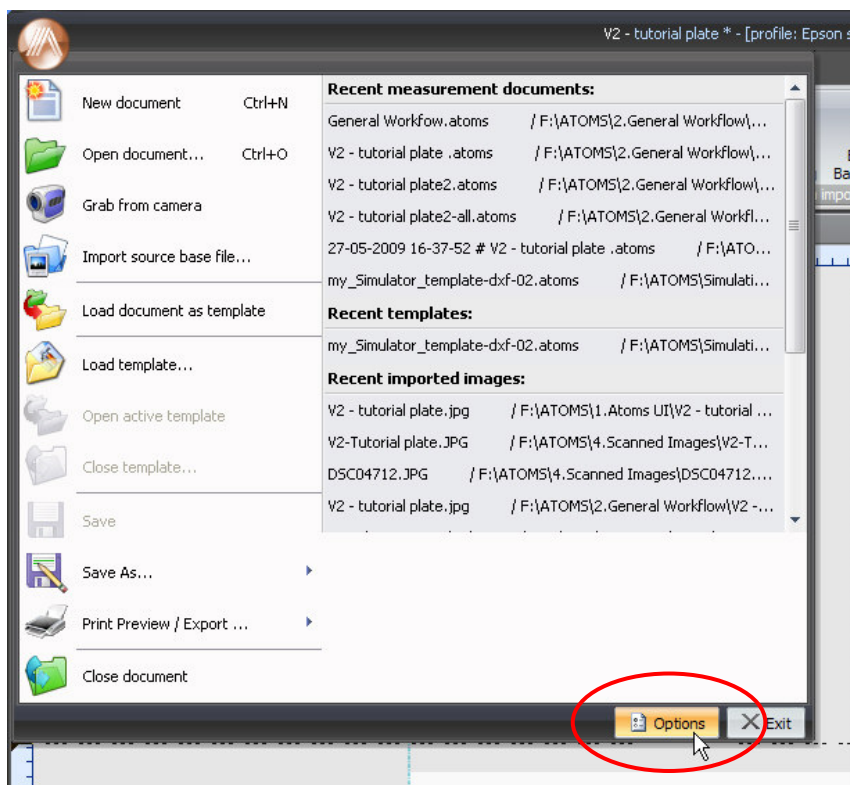


Figure 2A

For example, to show the Quick Access Toolbar to below the ribbon, check the option as shown in figure 3.

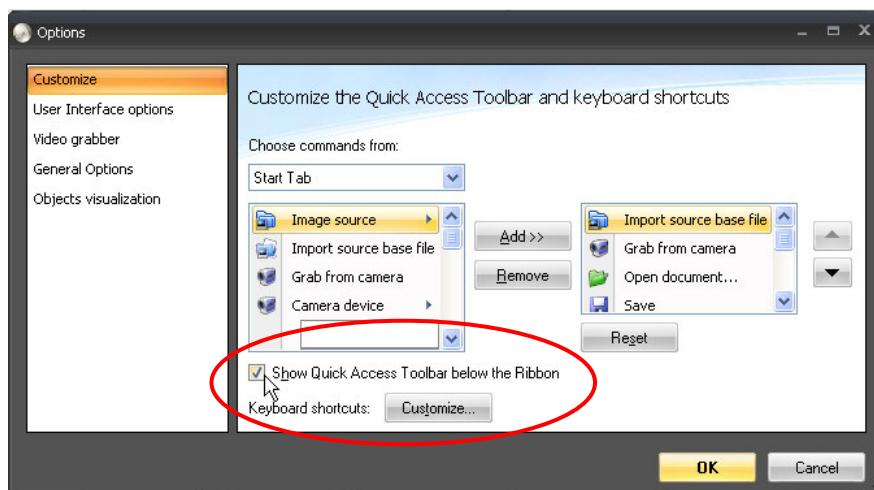


Figure 3

We can open a document in the **Quick Access Toolbar** (figure 4) or we can open a file from the **Recent Measurement Documents** as shown in figure 5.



Figure 4

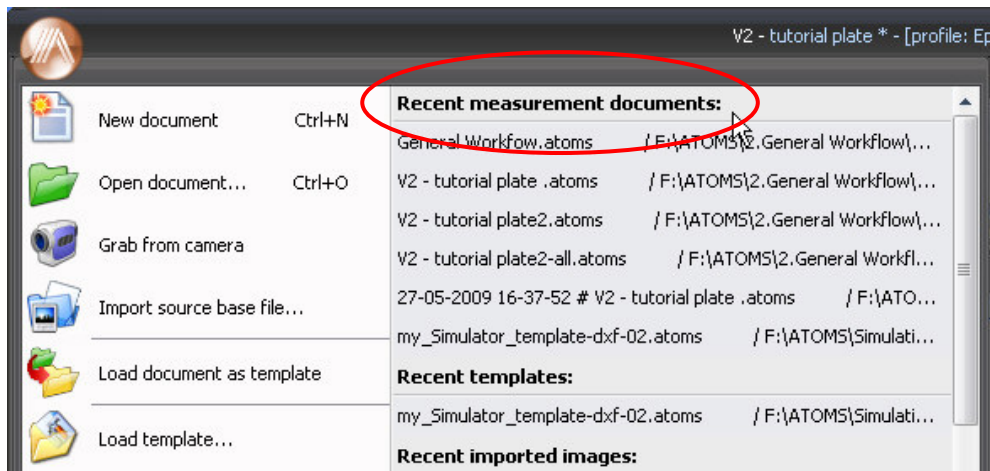


Figure 5

Menus can be easily moved and docked. For example we may want to move the two menu panels and dock them at the side of the user interface as shown in figures 6 and 7.

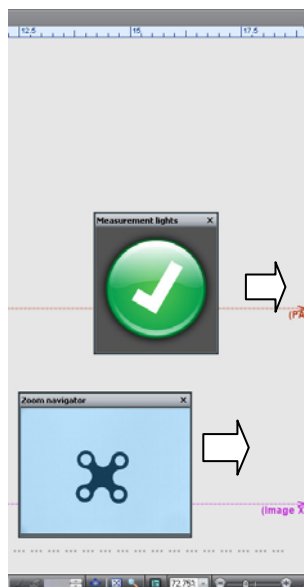


Figure 6

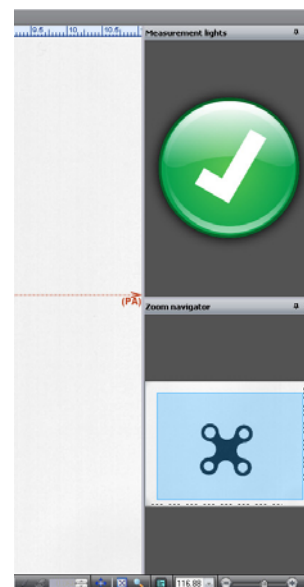


Figure 7

If you need a particular menu, you can right click over the title bar of a menu panel then select the **Document Properties** menu as shown in figure 8.

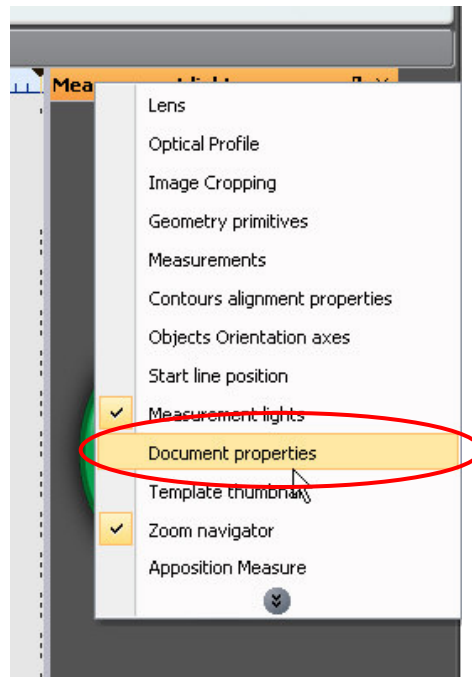


Figure 8

We can dock the menu at the right side. Click on the **Auto-Hide** icon as circled in figure 9 so that our user interface remain neat and tidy. Figure 9 displays the **Document Properties** menu when the cursor is on the minimized menu and figure 10 'auto-hides' the menu once the cursor is back to the working space.

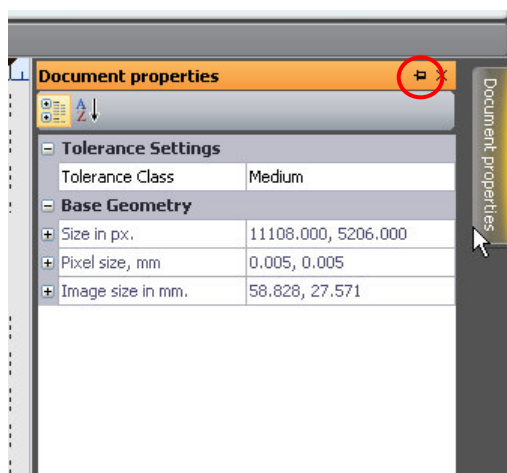


Figure 9



Figure 10

To navigate the model there are several tool in the **Status Bar** as shown in figure 10A.



Figure 10A

You can move the mouse scroll wheel for zooming. You can use the **Fit** to reset the zoom. You can use the **Pan** to move around and use this **Zoom Tool** to zoom to particular area of interest just by click and drag. You can also use the **Zoom Scale Slider Bar** for image zooming as well. The **Zoom Navigator** as shown in figure 11 is particularly useful to move around the model, just click and drag the mouse within the image.

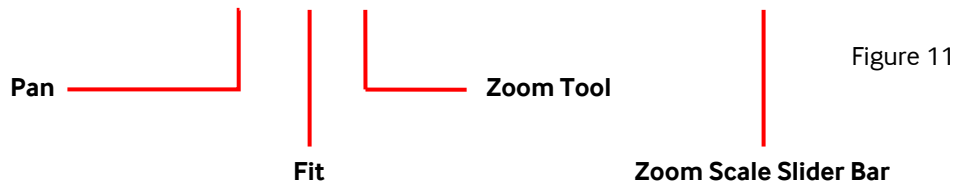
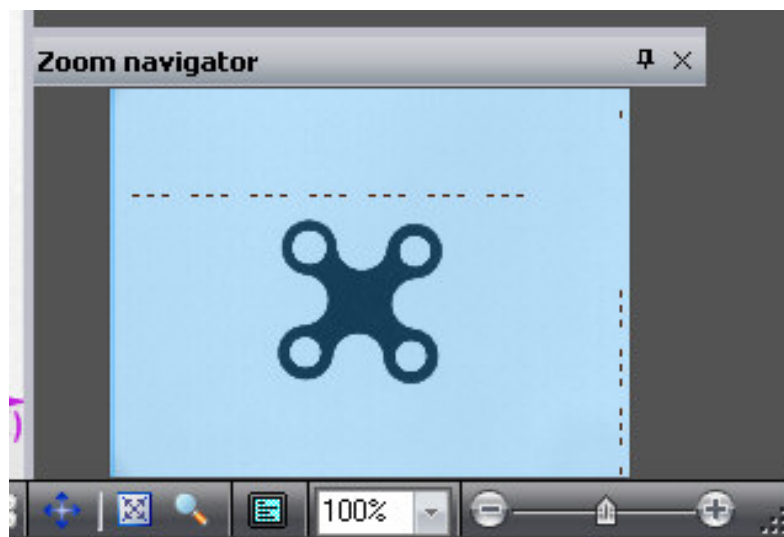


Figure 11

There are five main tabs in **Atoms Precision V2**. The first is the **Start Tab** which allows you to load an image from a scanner or directly from a camera. This tab contains all the commands for the image input and control as shown in figure 12.

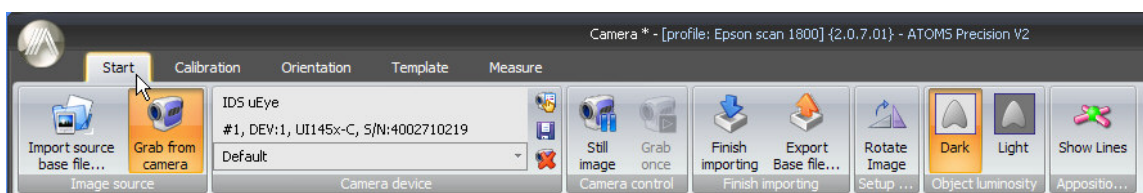


Figure 12

The **Calibration Tab**, as shown in figure 13, allows you calibrate the model so that the measurements taken match the real object's measurements. For your information there is a separate tutorial on Calibration.

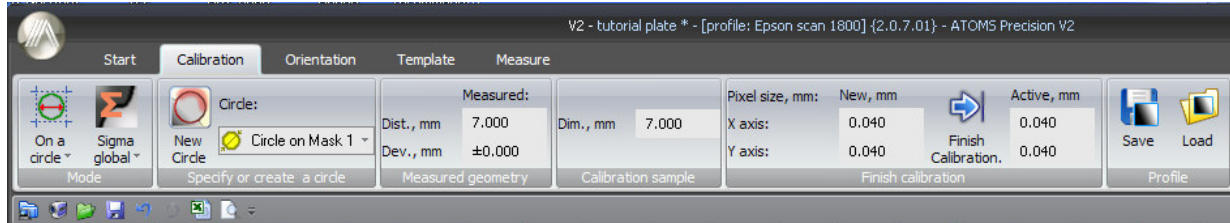


Figure 13

If the source is a DXF file, the Calibration Tab will be replaced by the **CAD Contour Tab** as shown in figure 14. In this case no calibration is necessary. You can set the resolution of the pixel and switch the direction of the contour as required.

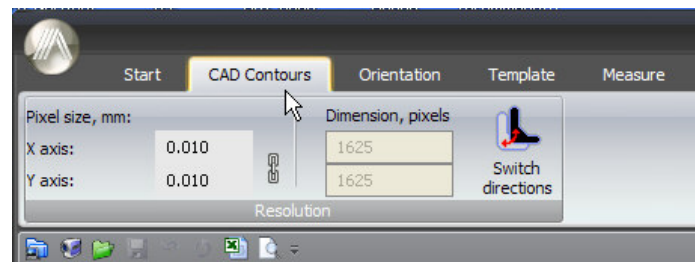


Figure 14

The next tab is the **Orientation Tab** as shown in figure 15. Its purpose is to maintain the proper positioning of the inspected object with that of the template. By using geometry objects such as lines, circles and points, we can create the required axes to be used for alignment between the inspected object and the template.

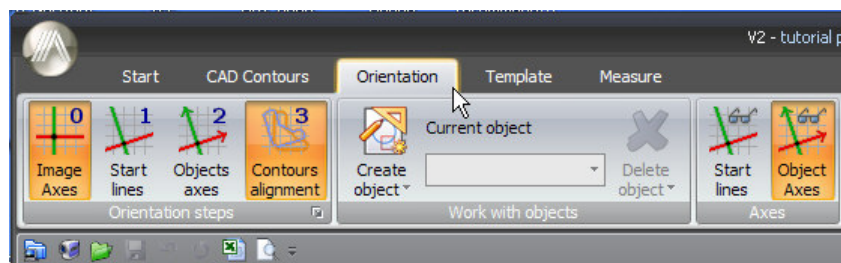


Figure 15

The next tab is the **Template Tab** as shown in figure 16. This where all the required or critical measurements are made for the regions marked and the tolerances specified.

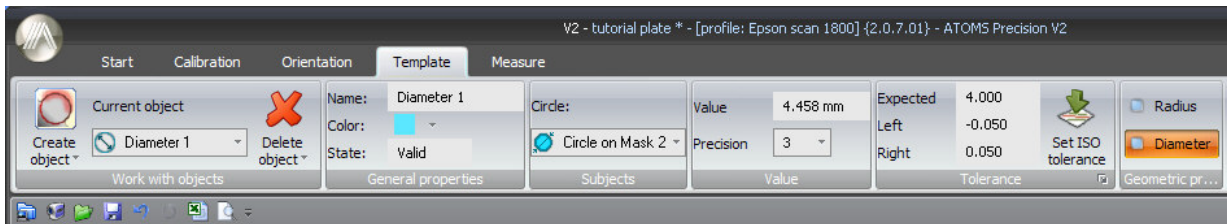


Figure 16

The measurement commands are shown in figure 17. With these commands you can create measurement definitions based on the earlier created geometry objects.

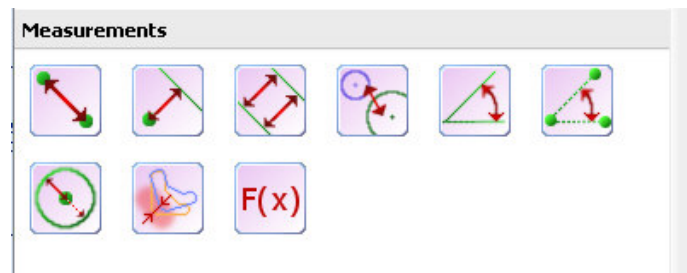


Figure 17

The **Measure Tab** as shown in figure 18, contains functions to load and apply a template so as to validate an inspected object with all the measurements made previously.

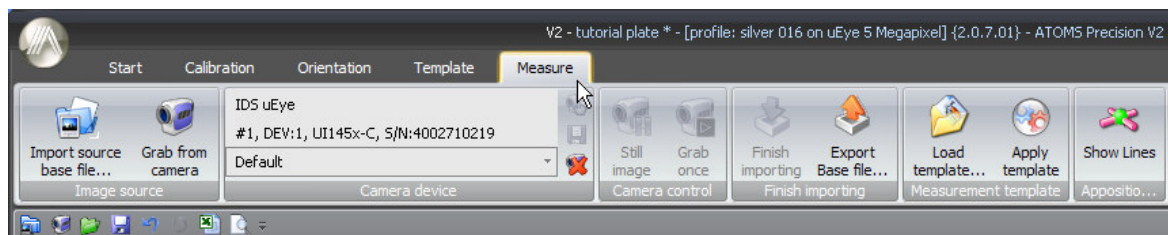
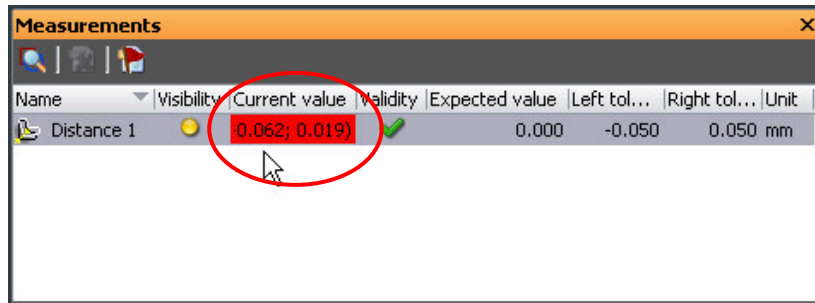


Figure 18

All the measurements that do not satisfy the tolerance are shown in red as shown in figure 19.

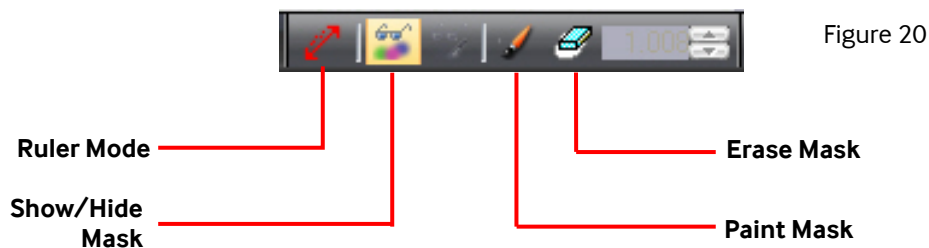


Name	Visibility	Current value	Validity	Expected value	Left tol...	Right tol...	Unit
Distance 1		0.062; 0.019		0.000	-0.050	0.050	mm

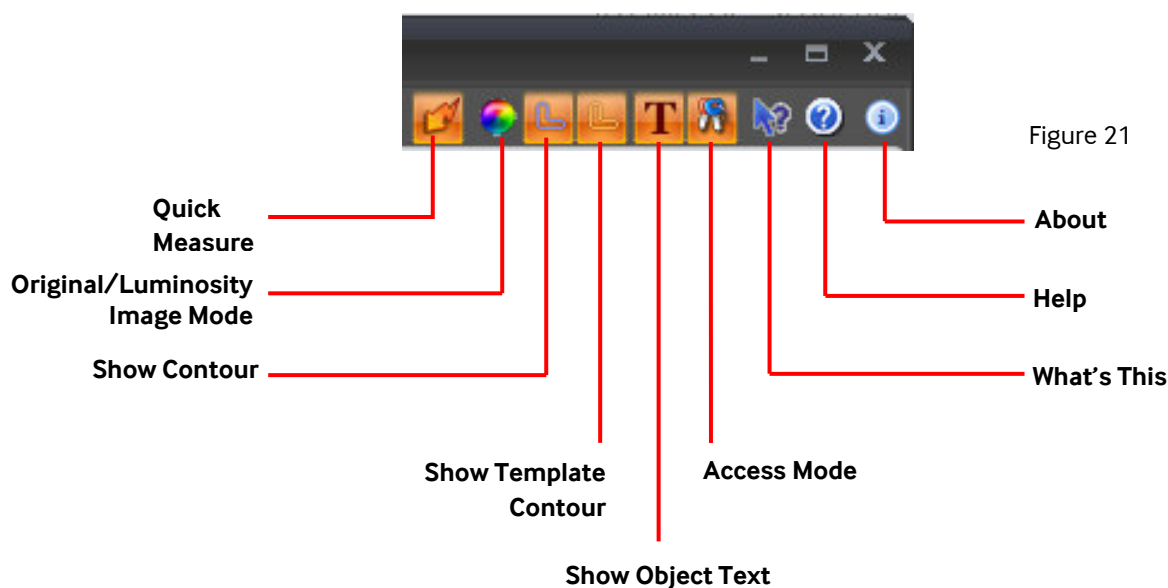
Figure 19

There are also other useful tools and commands in the **Status Bar** as shown in figure 20. For example, you can use the **Ruler Mode** to do a quick measurement by click and drag.

The **Show/Hide Mask** command is a quick way with which you can control the display of the mask. The **Paint Mask** and **Erase Mask** commands allow you to switch between the two states of creating and erasing masks.



Over at the top corner of the user interface is the **Quick Launch Toolbar** as shown in figure 21.



The first tool is the **Quick Measure** button where you can make various measurements “on-the-fly”.

The **Original/Luminosity Image Mode** button allows you to switch between the original color image and gray-scaled image.

The **Show Contour** button allows you to show/hide contours that Atoms Precision V2 has identified from the image.

The **Show contour from Template** button allows you to show/hide contours from the template.

Next, the **Show Object Text** button allows you to control the display of the text and dimension. You can toggle the display in three different modes.

The **Access Mode** button allows you to switch between two working modes. The engineer mode is when the button is pressed, allowing the user full functions of Atoms Precision V2. The operator mode is active when the button is not pressed, allowing the user access only to measuring functions found in the Measure Tab.

The **What's This** button allows the user to get context help on clicked menus or commands on the user interface. You can also use the short-cut key of Shift-F1 to activate this function.

The **Help** button will open a window with help about Atoms Precision V2 where you can find detailed instructions and information about the software.

The **About** button will display a window showing the version and copyright information of the software as shown in figure 22.

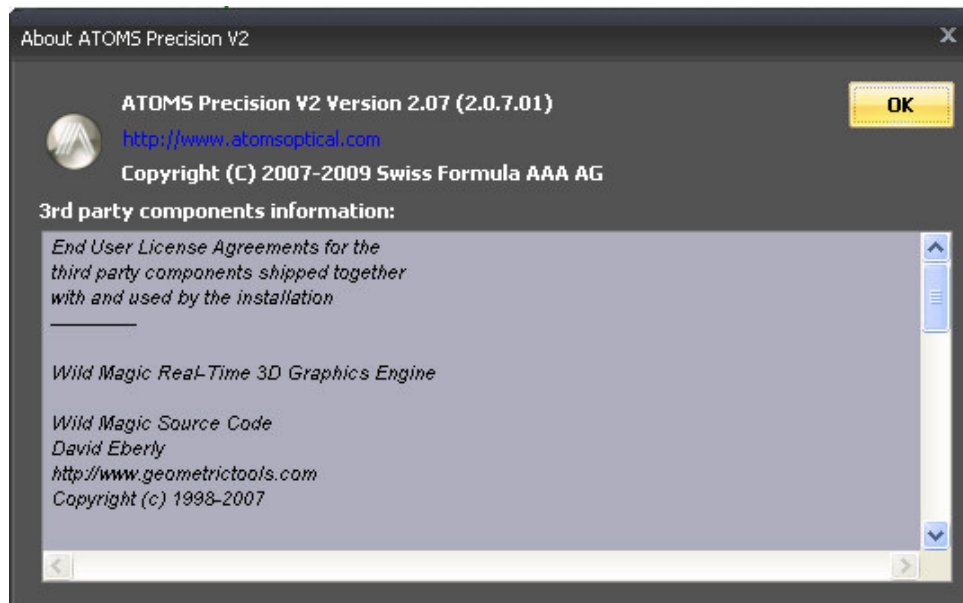


Figure 22

In this tutorial, we gained a brief insight on how to navigate the Atoms Precision V2 User Interface. Thanks for viewing this tutorial and please view the other tutorials in this series to learn more about the features of Atoms Precision V2.

