

Applying Template

In Atoms precision, measurements are done by comparing predefined template file with the inspection object file.

Dimensions defined in template are used to validate the dimensions obtained from inspection object. Validation results are shown in Measurement panel and in Measurement light tools panel.

This tutorial covers applying templates on two types of images

- Image from an Optical scanner
- Direct captured image from camera.

APPLYING TEMPLATE ON A SCANNED IMAGE

Click **Start** tab. Click **Import Source Base File** from Image source panel. Select **ScannedImage.atmos** file from tutorials folder.

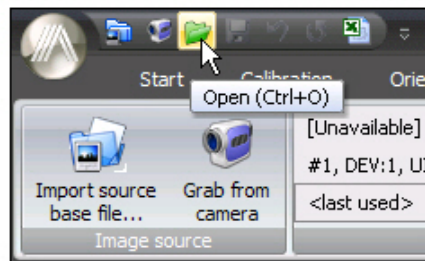


Figure 1

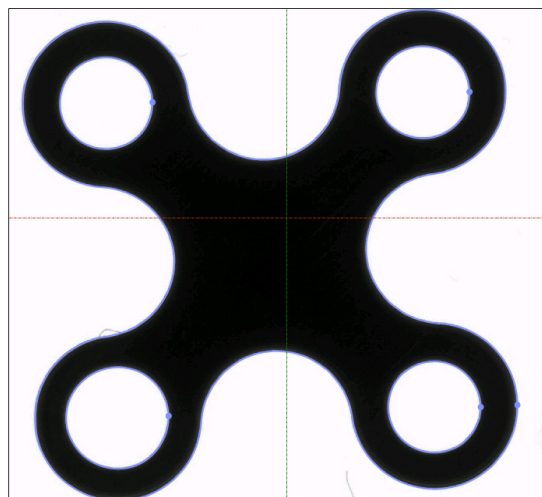


Figure 2

Click **Measure tab**. Open template thumbnail panel from task bar.

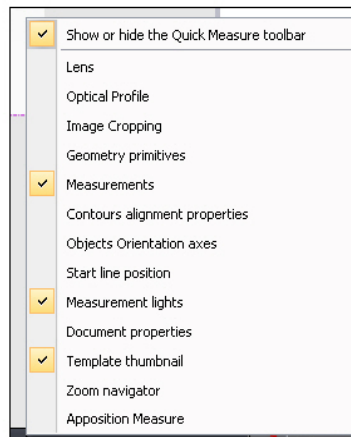


Figure 3

Select **Load Template** and select **Scanned Image Template.atoms** file from Tutorial folder.

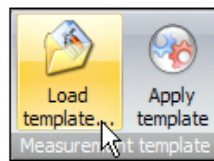


Figure 4

Template image appears in template window.

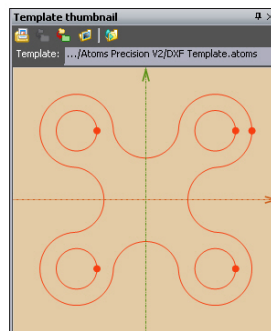


Figure 5

Select **Apply template** from measurement template panel.

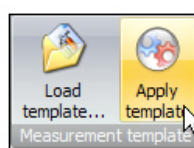
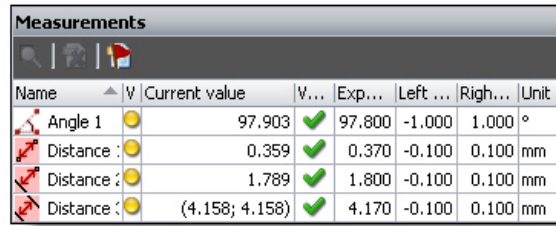


Figure 6

Measurement is done and dimensions are displayed in measurements panel.



Name	V	Current value	V...	Exp...	Left ...	Righ...	Unit
Angle 1		97.903		97.800	-1.000	1.000	°
Distance :		0.359		0.370	-0.100	0.100	mm
Distance :		1.789		1.800	-0.100	0.100	mm
Distance :		(4.158; 4.158)		4.170	-0.100	0.100	mm

Figure 7

Measurements light indicate green when dimensions are with in tolerance.

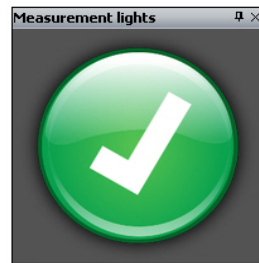


Figure 8

APPLYING TEMPLATE ON DIRECT CAPTURED IMAGE FROM CAMERA

Click **Start** tab. Click **Grab from camera** from Image source panel.

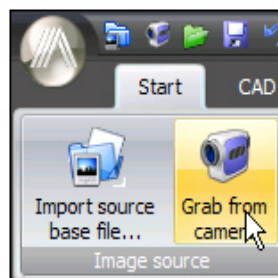


Figure 9

Select optical profile file of the camera device (Please refer to Calibration tutorial to know how to create optical profile file for a camera device).

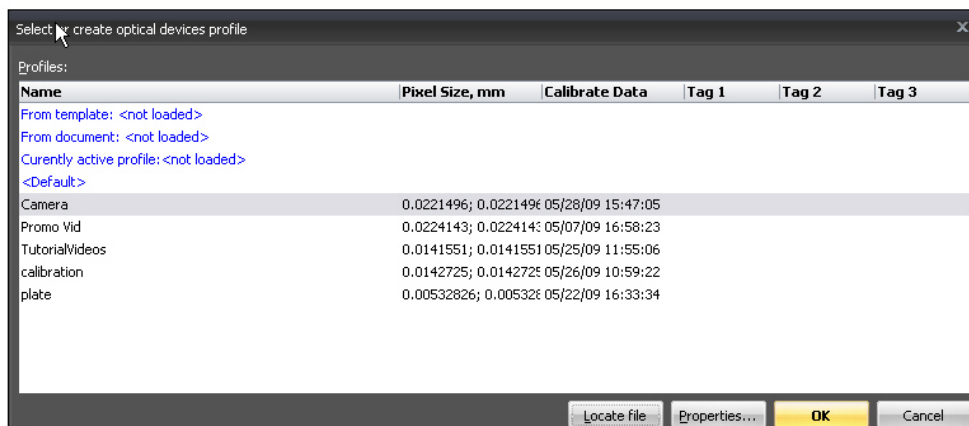


Figure 10

To capture image Select **Finish Importing** or click on the blinking measurement light button.

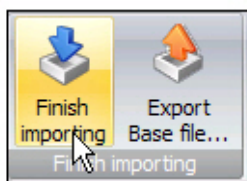


Figure 11



Figure 12

Click Measure tab. Open template thumbnail panel from task bar.

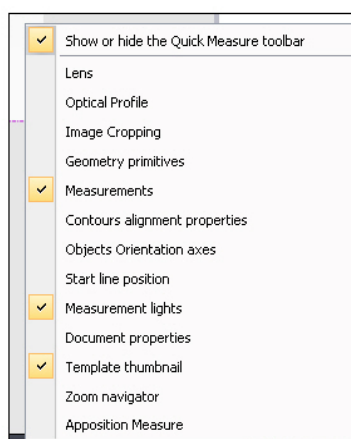


Figure 13

Select **Load Template** and select template file.

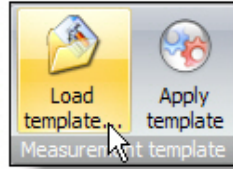


Figure 14

Template image appears in template window.

Select **Apply Template** from measurement template panel.

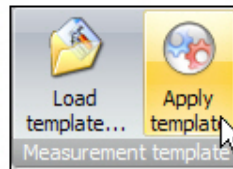


Figure 15

Measurement is done and dimensions are displayed in measurements panel.

Measurements light show the validation result.

- Green – Dimensions with in limit
- Yellow – Dimensions at maximum and minimum limit
- Red – Dimensions out of tolerance.

