

Quick Manual Measurement



ATOMS
Precision V2

Quick manual measurements are used to measure subject contour dimensions manually. Measurements are created by selecting directly on the subject contour. Masking is not required for quick manual measurements.

Quick manual measurement is available in all five modes of ATOMS precision.

There five types of manual measurements are available in Atoms precision.

MEASURE DISTANCE BETWEEN LINE AND POINT OBJECTS

Click **Start** tab. Click **Import Source Base File** from Image source panel. Select **Quick Manual Measurement.dxf** file from tutorials folder.

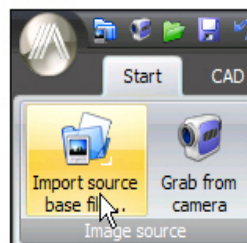


Figure 1

To access Quick manual measurements commands, select **Show Quick Measure Tool Bar** from Template quick launch tool bar.

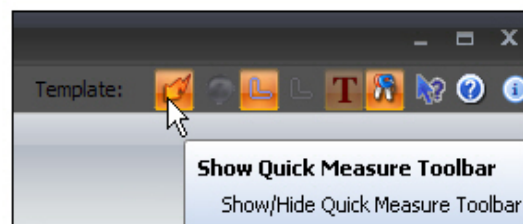


Figure 2

Select **New Manual Distance Measure** command from quick measure tool bar.

Measure distance between any two points or between a line and a point or between two lines by using this command.

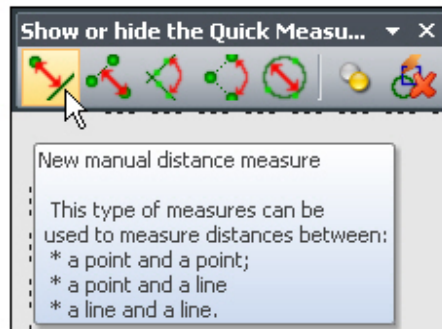


Figure 3

Zoom navigator and hint window appears. Zoom navigator helps to control mouse movements precisely.

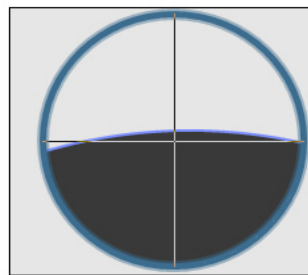


Figure 4

Hint window shows the available options.

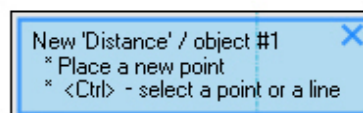


Figure 5

Select any two points on the contour. Use CTRL key during selection to snap to contour.

Two new point objects created. Distance measurement between two points is shown.

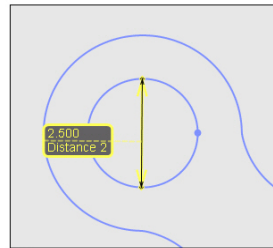


Figure 6

Quick manual measurements command creates geometry objects and measurement objects. They are listed in Geometry primitives' panel and measurements panel respectively.

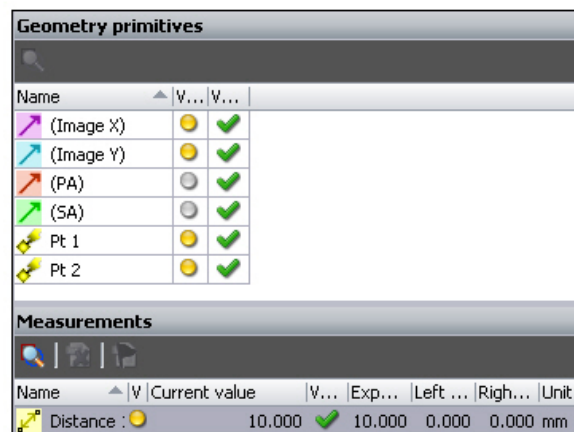


Figure 7

To move point objects created in manual mode, place cursor over the point and drag by holding LMB.

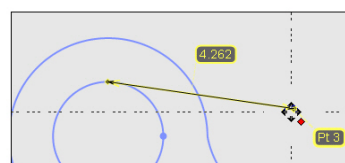


Figure 8

Hold down ctrl key and snap near contour, a point on the contour is selected. Select second point, if more than one object is available for selection, a list window appears. Selects correct object.

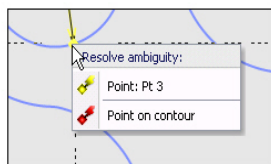


Figure 9

To hide objects created using quick manual measurement, select **Show/Hide All Objects** command.

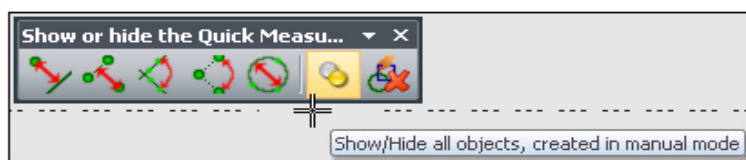


Figure 10

To delete objects and measurements created by quick manual measurements, select **Delete All Objects Created in Manual Mode** command.

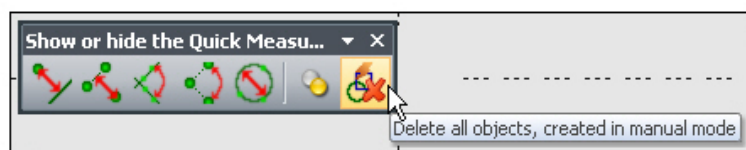


Figure 11

MEASURE DISTANCE BETWEEN THREE POINTS

Select **3-Point Short Cut** command from Quick Measure Tool Bar.

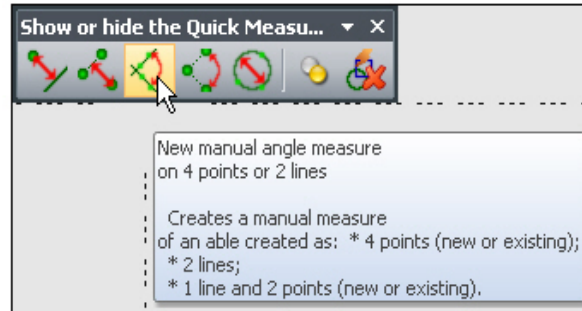


Figure 12

Select two points on the contour. First two points creates a line object. Select Third point. Normal distance between a line and points is measured.

Use this command to measure distance between a line and a point object.

To deselect a command press escape key or toggle command button.



Figure 13

ANGLE BETWEEN TWO LINES OR FOUR POINTS

Select **Angle Measurement on Four Points or Two Lines** command from Quick Measure Tool Bar.

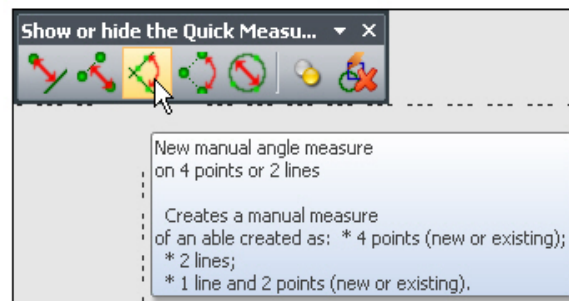


Figure 14

Select two points on the contour, which creates first line. Select two more points to create second line and angle dimension is measured.

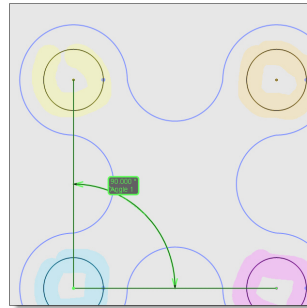


Figure 15

To shift angle to correct quadrant, go to Template tab and toggle Shift Angle command. In addition, we can select two lines to measure angle between them.

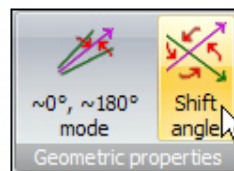


Figure 16

MEASURE ANGLE BY SELECTING THREE POINTS

Select **Angle by Three Points** command from Quick Measure Tool Bar.

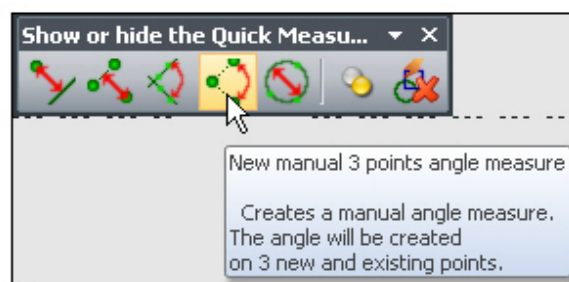


Figure 17

Select three points on the contour. Use CTRL key to snap to contour.

Point 1 and point 2 creates line1, point 2 and point 3 creates line2.

Point 2 is the crossing point. Angle between line one and line two is measured.

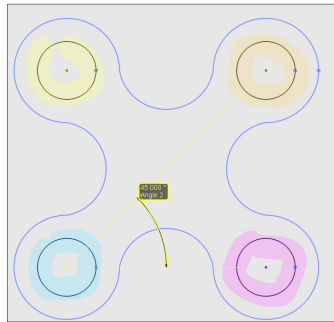


Figure 18

Toggle shift angle to select the correct quadrant.

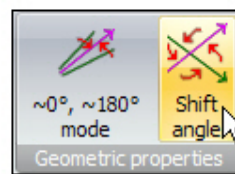


Figure 19

RADIUS OR DIAMETER MEASUREMENT BY THREE POINTS

Select **Radius or Diameter Measurement by Three Points** command from Quick Measure Tool Bar.

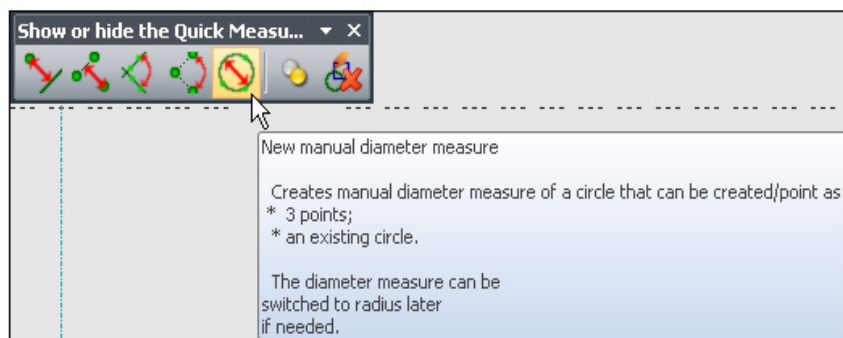


Figure 20

Select any three points on the contour. Creates a circle object and diameter value is shown.

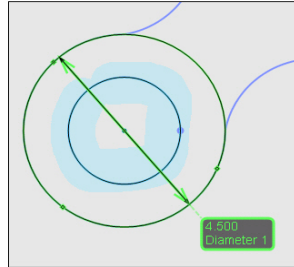


Figure 21

Geometry objects and measurements created by quick manual measurements can be saved in a template and used for measurements.

To apply tolerance value, go to template tap. Select the dimension and set tolerance value.

