

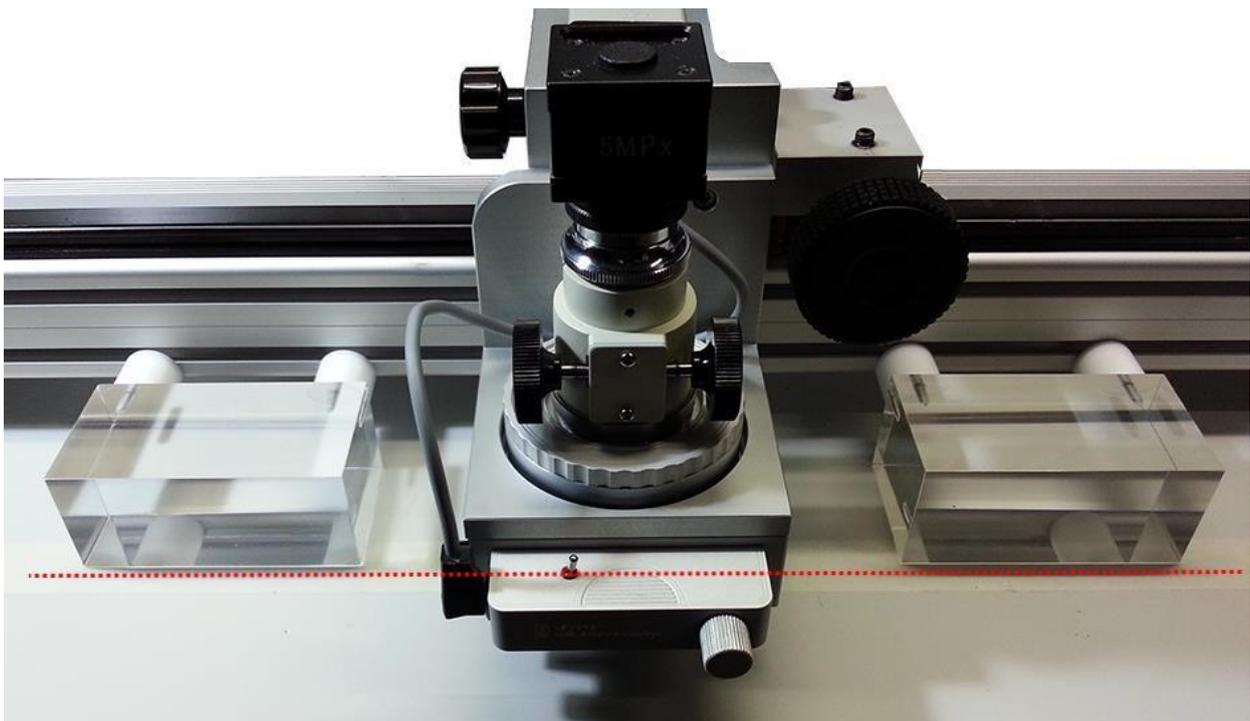
## **RULER ABSOLUTE: 2 STEPS TO PERFORM A CORRECT MEASUREMENT**

### **1) Alignment of the ruler with the surface to be examined**

Two plexiglas spacers have been supplied with the ruler. Their task is to facilitate the alignment of the ruler optic head with two or more points of the surface aligned with each other, along the "X" axis.

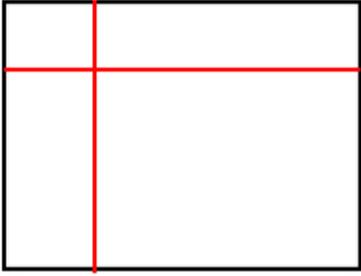
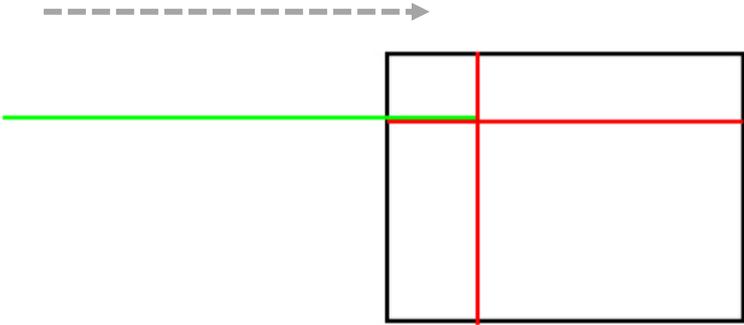
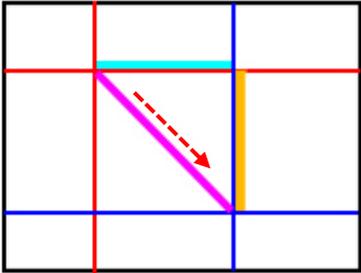
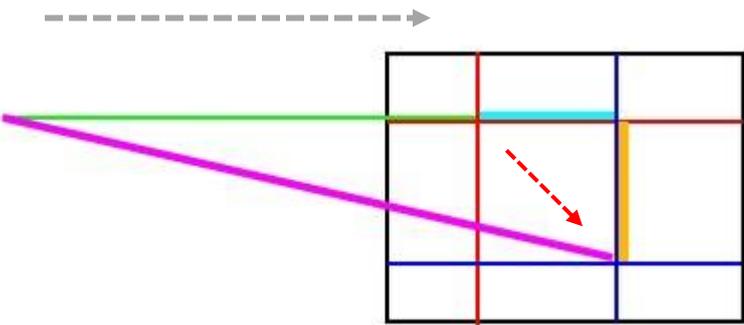
To perform the alignment, move the optic head carriage towards the center of the ruler, place the two plexiglass spacers on the front edge to the end left and the end right of the ruler respectively (as shown in the figure), manually move the ruler onto the object/surface, or vice versa, ensuring that the front edge of the two plexiglass blocks graze the edges on the object/surface along the "X" axis.

With this last operation the collimation of the optical axis is ensured along the entire "X" axis.



## 2) How to perform the measurement

In the examples below, the black rectangle represents the video image.

Example	Description
	<p><b>Resetting the scale</b></p> <p>By pressing the <b>Zero</b> key all the values in the software and on the ruler display will reset to 0.</p>
	<p><b>Ruler optic head shifted only</b></p> <p>Shifting the ruler optic head (grey arrow), without moving the axis (in red), the X value and the distance shown in the software and the value in the ruler display are the same.</p> <p>It represents the <b>GREEN</b> line in the figure.</p>
	<p><b>Axes moved only</b></p> <p>The axes (in blue) are moved from their origin (in red, position where zeroing took place). The following values will be shown:</p> <p><u>Displacement X:</u> value indicated by <b>CYAN</b> line</p> <p><u>Displacement Y:</u> value indicated by <b>ORANGE</b> line</p> <p><u>Distance:</u> value indicated by <b>PURPLE</b> line</p>
	<p><b>Ruler optic head shifted and axes moved</b></p> <p>The ruler optic head (grey arrow) and the axes (in blue) are moved from their origin (in red). The following values will be shown.</p> <p><u>Displacement X:</u> value indicated by the sum of <b>GREEN</b> + <b>CYAN</b> lines</p> <p><u>Displacement Y:</u> value indicated by <b>ORANGE</b> line</p> <p><u>Distance:</u> value indicated by <b>PURPLE</b> line</p>



**Multiple points measurements:**

It is also possible to perform multiple measurements between different points of the examined surface just by taking pictures with the software.

Selecting 2 images the distance between the 2 points will be shown.

