



Stretch Calibration DiaMobile XL

1. Stretch test & calibration

The purpose of this calibration is to adjust the physical size and the measured size.

1.1. At XCaliber, go to *Stretch Calibration* tab (image 1.1).

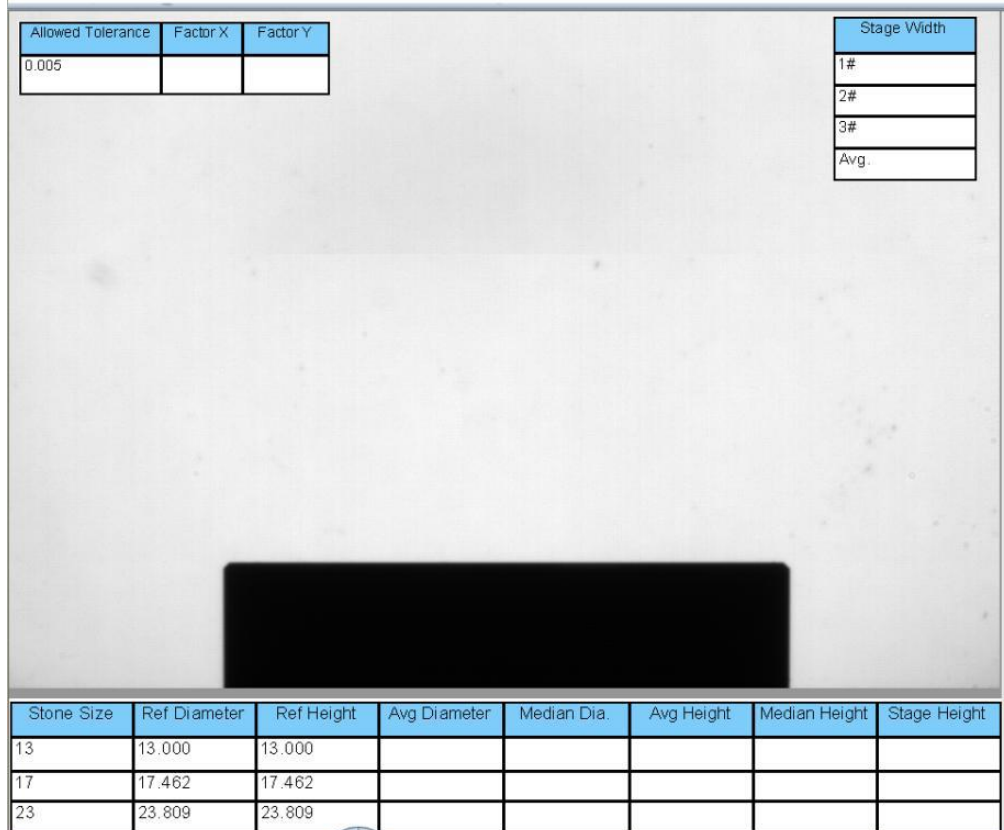


Image 1.1

1.2. Verify correct parameters according to image 1.2. (***)



Image 1.2

1.3. Go to **Tools->Options** and verify correct parameters for the Stretch calibration (Fig 1.3)(***)

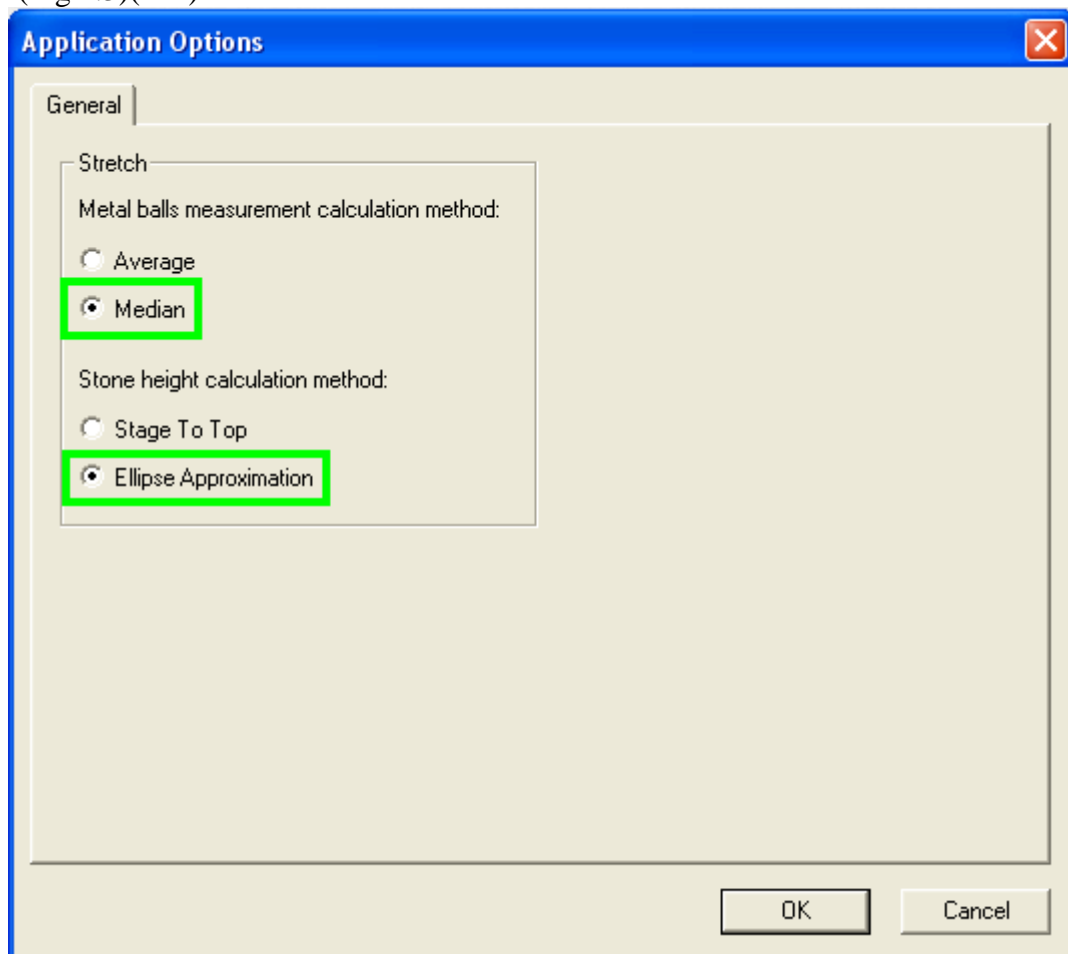


Image 1.3

1.4. Verify that the stage and metal balls are clean, place ball #13 in the middle of the stage, choose the corresponding line (as shown in image 1.4) and press 'Measure'.

Stones Reference Measurements (mm):		
Stone	Diameter	Height
13	13.000	13.000
17	17.462	17.462
23	23.809	23.809

Image 1.4

1.5. Repeat stage 1.4 above for balls #17 & #23 (image 1.5)

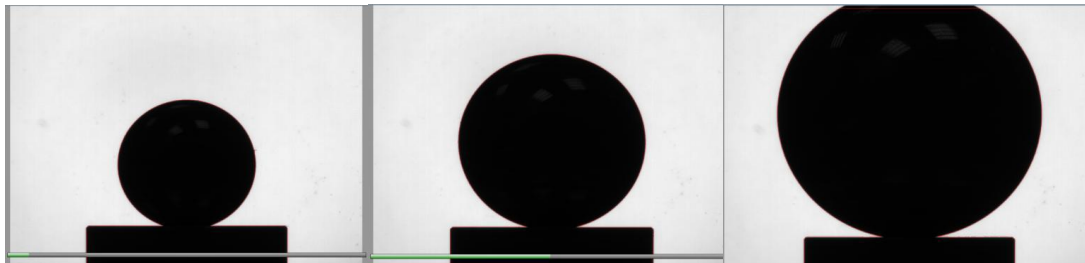


Image 1.5

1.6. The 3 measurements will appear on screen (image 1.6). Compare 'Ref Diameter' column with 'Avg Diameter' column, and 'Ref Height' column with 'Avg Height' column. If the deviation is less than $\pm 100\mu$, press 'Stretch' (image 1.6).

Allowed Tolerance	Factor X	Factor Y
0.005	1.000001	1.000049

Stage Width
1# 730.645512
2# 730.624562
3# 730.575983
Avg. 730.615353

Stone Size	Ref Diameter	Ref Height	Avg Diameter	Median Dia.	Avg Height	Median Height	Stage Height
13	13.000	13.000	13.001	12.998	12.999	12.999	4.542
17	17.462	17.462	17.462	17.461	17.462	17.462	4.544
23	23.809	23.809	23.808	23.808			4.546

Display Instructions

Current Lens: 2

Calibration Parts Type

Metal Balls Metal Edge Polish Stones

Measure **Stretch** Clear Clear All

Stones Reference Measurements (mm):

Stone	Diameter	Height
13	13.000	13.000
17	17.462	17.462
23	23.809	23.809

Two possible measurements received before performing Stretch

Stone Size	Ref Diameter	Ref Height	Avg Diameter	Median Dia.	Avg Height	Median Height	Stage Height
13	13.000	13.000	13.003	13.002	13.028	13.028	4.542
17	17.462	17.462	17.467	17.467	17.500	17.500	4.540
23	23.809	23.809	23.812	23.812			4.539

Image 1.6

1.7. To verify that the stretch was successful, repeat the measurement of the three balls according to stage 1.4. If any of the 4 columns is colored red (image 1.7) press 'Stretch' again. Repeat this stage until all columns are white. (***)

Stone Size	Ref Diameter	Ref Height	Avg Diameter	Median Dia.	Avg Height	Median Height	Stage Height
13	13.000	13.000	13.001	12.998	12.999	12.999	4.542
17	17.462	17.462	17.462	17.461	17.462	17.462	4.544
23	23.809	23.809	23.808	23.808			4.546

Image 1.7