

Compass DOP Calibration

Before using with Galahad Compass, a DOP should be calibrated.

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Preparation

To perform DOP calibration, first, calibrate Compass as described at [Compass Workflow](#) page.

Switch to Compass mode.

Disable automatic slope direction detection (switch off "Auto"), press "Clear" to enable zero position detection.

Calibration

[2018-04-04_11-32-54.mp4](#) - DOP calibration

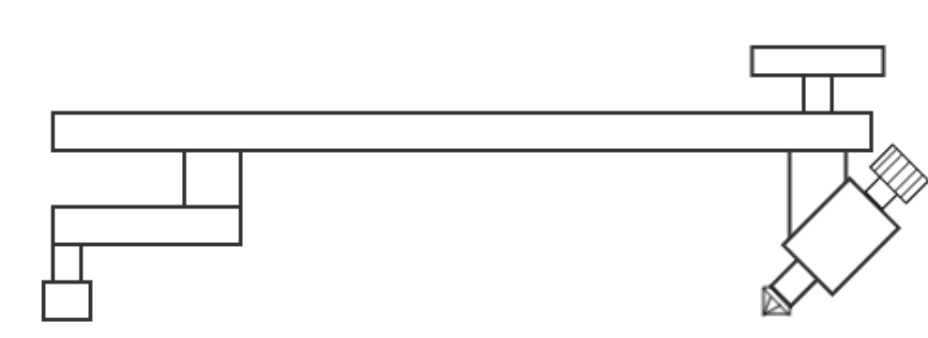
Repeat the following sequence for each DOP:

Put on a Compass a DOP with a stone, with the recently polished facet.

Enter distinguished DOP name, e.g. "DOP1" or "DOP2" etc. and press "+" button.

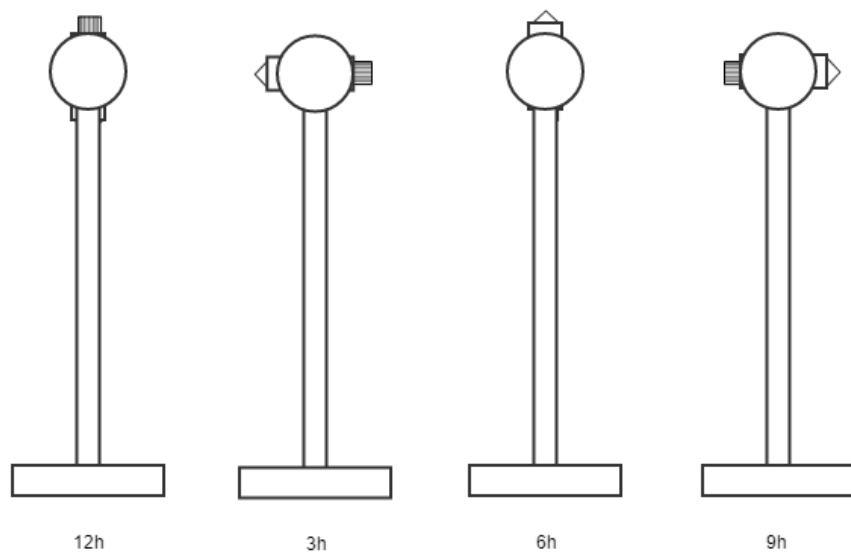
Set zero position by pressing "Set DOP 0+" button.

Rotate vertical DOP axis to position "12h" (12 hours):



Position "12h", view from the side

We need to record four different positions, where position "12h" is when stone holder aiming at 12 hours, each next positions angle is measured clockwise:



Positions "12h", "3h", "6h", "9h", view from the top

Move DOP to each position and press "><" button against the corresponding cell:

Polishing

DOP Calibration

DOP_3

+

×

12h	0.27°	13°	↔
3h	0.12°	-26°	↔
6h	0.08°	144°	↔
9h	0.20°	62°	↔

0

Set zero to center

center: (0.10,0.06)

Da: 0.23°, Db: 0.32°

max. error: 0.27°

No check points collected

Add 0 check point

Remove last 0 check point

Clear all 0 check points

Save to...

Load from...

☐ Add

Save results (Save to.. button) and send us obtained the file. Also, send us config.xml.

DOP Calibration Data

"Add DOP 0+" button - for adding reference zero position

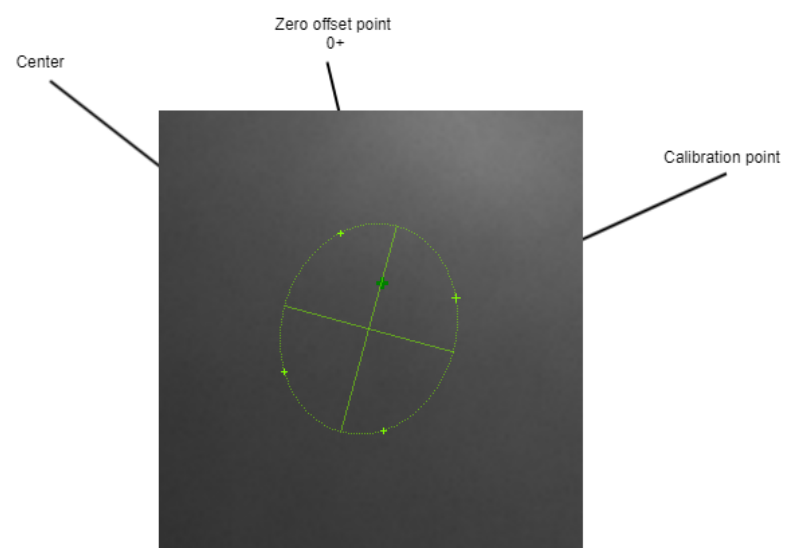
"Remove last 0+" button - removing last reference zero position

"Reset 0+" button - clearing 0+ history

Gliffy Macro Error

You do not have permission to view this diagram.

DOP Ellipse



DOP calibration data is built by 4 points, obtained at different angles. When all points collected, there will be a calibration ellipse drawn on the image. It has 4 points marked with crosses, the bigger cross is at "6h" position. Also there will be a dark-green cross, which marks average zero offset (0+). Ellipse parameters are shown in the text box: center coordinates, main diameters values, and the maximum deviation of the current zero offset from ellipse points.

You can always change current zero offset to one of these points: ellipse center and zero offset (0+) by pressing the corresponding button in the DOP calibration area: