

Lower Girdle Length and Lower Girdle Length Symm

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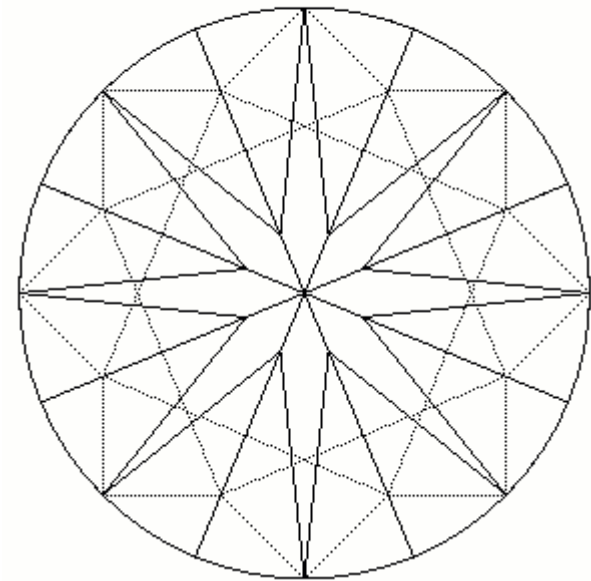
Lower Girdle Length



This parameter is applicable to the following cuts: Round brilliant, Marquise, Oval, Pear, Heart.

There are several ways from different systems and tools to measure lower girdle facets.

Lower girdle length: 78% (EX)



The stone is positioned in the standard orientation, that is, with its table horizontal and facing downwards.

HPOxygen supports measurement of the heights' ratio on projection to vertical plane (depth girdle facets) and measurement of the lengths' ratio on projection to horizontal plane (length girdle facets). These parameters are measured for each lower girdle facet. All measurements are made using virtual cut that does not have "Extra" facets and culet (figure 1).

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Figure 1. Helium create virtual model without "Extra" facets and culet for measurements of the parameters.

During the measurement of these parameters the three points on the cut are taken into consideration (figure 2).

First (A) point is the virtual pin of the pavilion. The culet facet is discarded and the A point is the lowest vertex, which would have the pavilion without culet. Thus the culet does not affect the parameter.

The second (B) point is the lowest vertex of the analyzed lower girdle facet. Please note that these points on the adjacent facets may not coincide on the non-ideal cut (B1, B2). The values of the parameters are calculated for B1 and B2 separately. Thus the values may differ for adjacent facets.

The third point (C) is the highest point that lies on the edge between adjacent lower girdle facets.

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Figure 2. The three points on the cut are taken into consideration. A, B1, C for blue lower girdle facet. A, B2, C for yellow lower girdle facet.

The depth girdle facet 1 (for blue lower facet) is the ratio between B1C height and AC height (figure 3). The depth girdle facet 2 (for yellow lower facet) is the ratio between B2C height and AC height.

The length girdle facet 1 (for blue lower facet) is the ratio between distances B1C and AC, where the distances are measured in the horizontal projection (figure 3). The length girdle facet 2 (for yellow lower facet) is the ratio between distances B2C and AC.

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Figure 3. The measurements depth and length girdle facets for blue lower girdle facet.

Depth girdle facet 1 = $H1_{\text{lower}} / H_{\text{pavilion}}$

Length girdle facet 1 = $L1_{\text{lower}} / L_{\text{pavilion}}$

Lower Girdle Length (symmetry)

Lower Girdle Length (symmetry) is defined as the maximum difference of Lower Girdle Length measurements, i.e. the same as deviation of Lower Girdle Length value. As all symmetry parameters, it is an estimate of a deviation from perfect symmetry, and should be zero for an ideal stone.

Reporting

There are 16 independent values in a round brilliant or rounded fancy cut.

Reported in	Section	Values	Units	Bookmarks
Full Report for Brilliant, Full Report for Rounded Fancies	Main Parameters	Avg, Min, Max, Dev	%(diameter)	LENGTH_GIRDLE_FACET, LENGTH_GIRDLE_FACET_MIN, LENGTH_GIRDLE_FACET_MAX, LENGTH_GIRDLE_FACET_DEV
	Detailed Parameters	All 16 values	%(diameter)	LENGTH_GIRDLE_FACET_1, ..., LENGTH_GIRDLE_FACET_1