Girdle Shape Tolerance
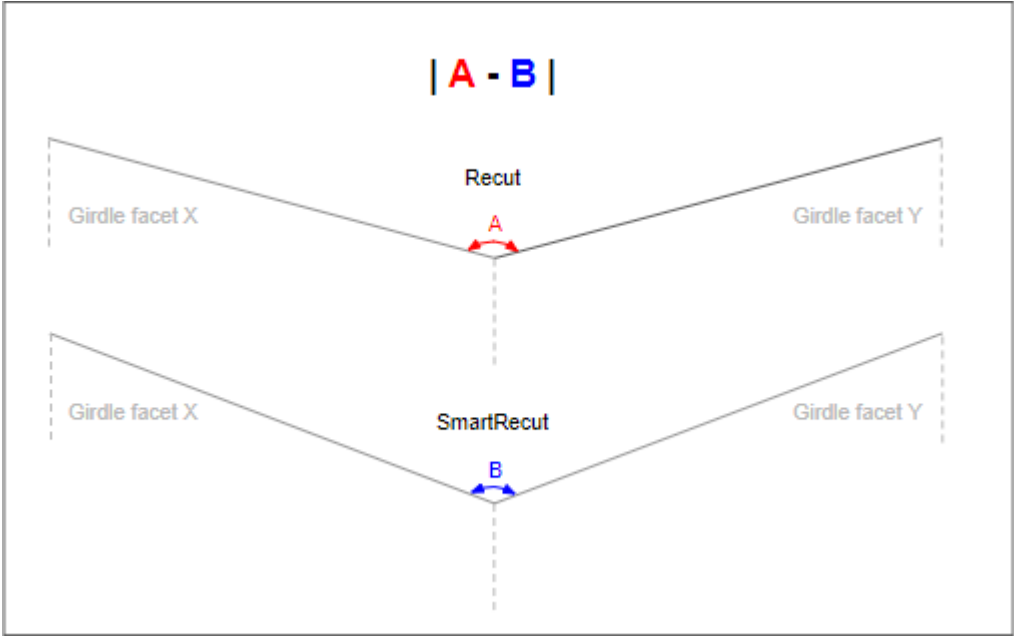
- GirdleShape1stDerEveryToleranceModule
- GirdleShape2ndDerEveryToleranceModule

GirdleShape1stDerEveryToleranceModule

> ⓘ This parameter is applicable to the following cuts: AnyCut (only when performing SmarRecut via TestRelative appraiser).

Both Recut and SmartRecut solutions for the shapes different from Round Brilliant and Oval have a vertical girdle. Each girdle facet has its Azimuth,°. Because of the girdle verticality, the angle between neighboring facets equals to the difference between their Azimuth,°. The parameter defines that angles between two neighboring facets in Recut and SmartRecut solutions should not differ more than the parameter specifies.

Calculation

The parameter is set manually via preset and should be:

GirdleShape1stDerEveryToleranceModule / 100 * 360 / number of girdle facets > | | (Azimuth X-REC,° - Azimuth Y-REC,°) | - | (Azimuth X-SR,° - Azimuth Y-SR,°) | |

Where

- **X, Y** - two neighboring facets of the girdle in Recut (**REC**) and the same facets in further SmartRecut (**SR**) solutions
- **Azimuth ...** - their Azimuths
- **360 / number of girdle facets** - average girdle angle for a particular cutting
- **GirdleShape1stDerEveryToleranceModule / 100 * 360 / number of girdle facets** - expression means that number that you specify in the system is:
- "how many **%** from the average girdle angle the SmartRecut may deviate from Recut" regarding angles described above

Usage and Examples

For a detailed description of how the parameter can be used for getting optimal solutions, see **Using Girdle Shape Parameters** page.

Reporting

Reported in	Section	Values	Units	Bookmarks	Name in Reports
None	NA	Single value	% (from average girdle angle)	NA	NA

Visualization in Appraisers

Value	Units	Bookmark	Tab	Parameter Name	Comment
Single value	% (from average girdle angle)	NA	**Cut**	GirdleShape1stDerEveryToleranceModule	Visible only when presets are displayed.

GirdleShape2ndDerEveryToleranceModule

ⓘ

Both Recut and SmartRecut solutions for the shapes different from Round Brilliant and Oval have a vertical girdle. Each girdle facet has its Azimuth,°. Because of the girdle verticality, the angle between neighboring facets equals to the difference between their Azimuth,°. There are differences between neighboring angles in Recut and in SmartRecut. The distinction between them should not be more than the parameter specifies.

$$| \, | \, A_{(R)} - B_{(R)} \, | - | \, A_{(SR)} - B_{(SR)} \, | \, |$$
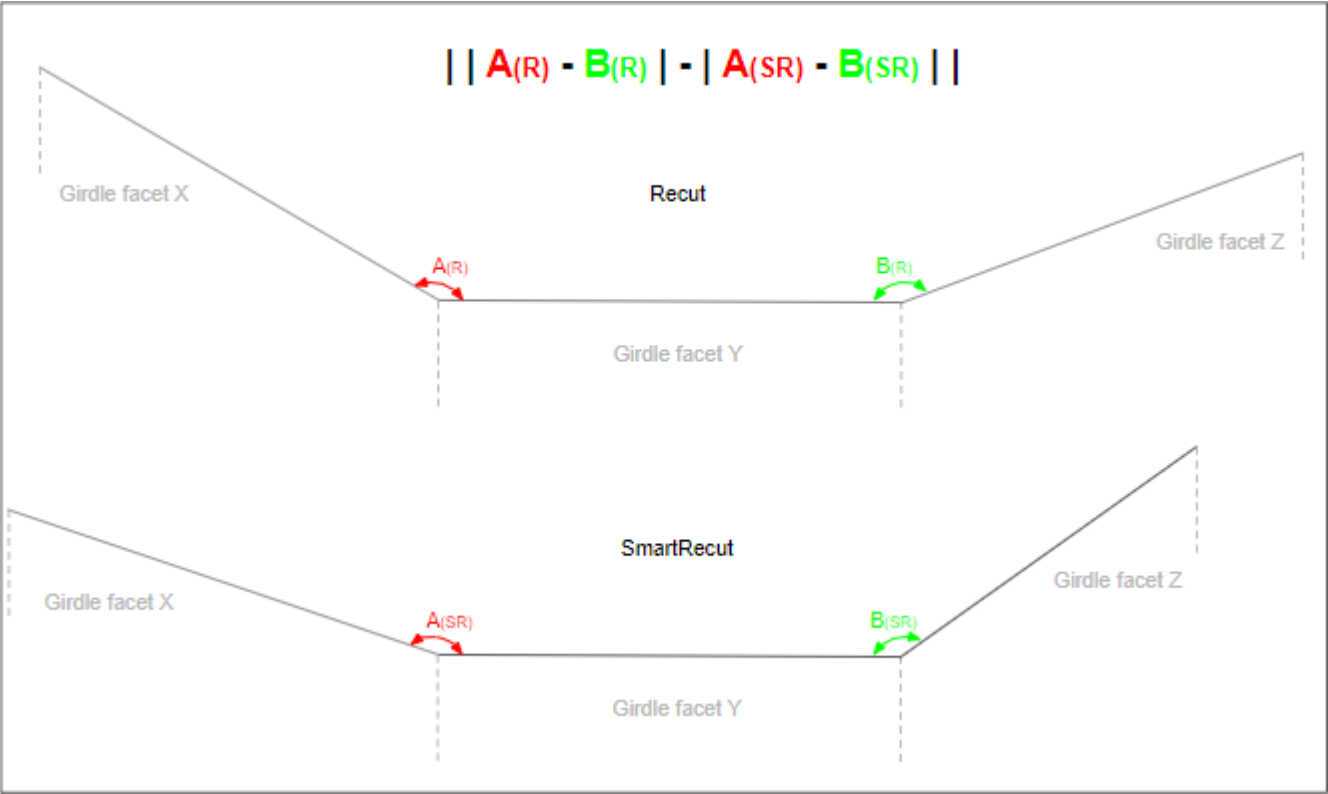
Calculation

The parameter is set manually via preset and should be:

GirdleShape2ndDerEveryToleranceModule / 100 * 360 / number of girdle facets > | (| | (Azimuth X-REC,° - Azimuth Y-REC,°) | - | (Azimuth Y-REC,° - Azimuth Z-REC,°) | |) - (| | (Azimuth X-SR,° - Azimuth Y-SR,°) | - | (Azimuth Y-SR,° - Azimuth Z-SR,°) | |) |

Where

- **X, Y, Z** - three facets and **X, Z** are the neighbors of **Y** of the girdle in Recut (**REC**) and the same facets in further SmartRecut (**SR**) solutions
- **Azimuth ...** - their Azimuths
- **360 / number of girdle facets** - average girdle angle for a particular cutting
- **GirdleShape1stDerEveryToleranceModule / 100 * 360 / number of girdle facets** - expression means that number that you specify in the system is:
- "how many **%** from the average girdle angle the SmartRecut may deviate from Recut" regarding angle difference described above

Usage and Examples

For a detailed description of how the parameter can be used for getting optimal solutions, see **Using Girdle Shape Parameters** page.

Reporting

Reported in	Section	Values	Units	Bookmarks	Name in Reports
None	NA	Single value	% (from average girdle angle)	NA	NA

Visualization in Appraisers

Value	Units	Bookmark	Tab	Parameter Name	Comment
Single value	% (from average girdle angle)	NA	**Cut**	GirdleShape2ndDerEveryToleranceModule	Visible only when presets are displayed.