Extra facets Girdle\Crown\Pavilion
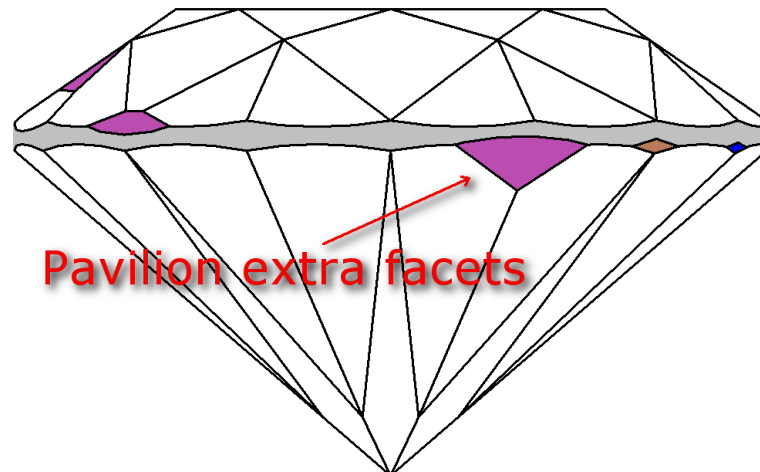
1. Extra Facets Crown\Pavilion

There are two types of extra facets indicated with purple color in reports:

- **Extra facets crown** - extra facets belong to crown:
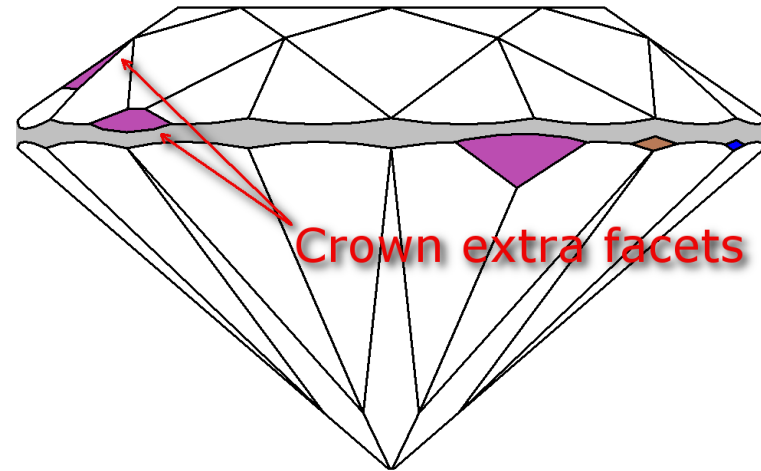
- **Extra facets pavilion** - extra facets belong to pavilion:

Presence of **extra facets pavilion\crown** indicated in report. The number of Crown and Pavilion extra facets indicated in brackets:

Extra Facet Girdle (steep/shallow)	3 (1/2)
Extra Facet Crown	Yes (2)
Extra Facet Pavilion	Yes (1)
Appraiser title	N/A
Overall cut quality	N/A
Symmetry appraiser title	Symmetry
Overall symmetry quality	PR
Density, g/cm3	3.51524
Rake Girdle angle, °	75.0

In case **crown** or **pavilion extra facets** adjust girlde, it will be indicated on **Girdle height plot:**
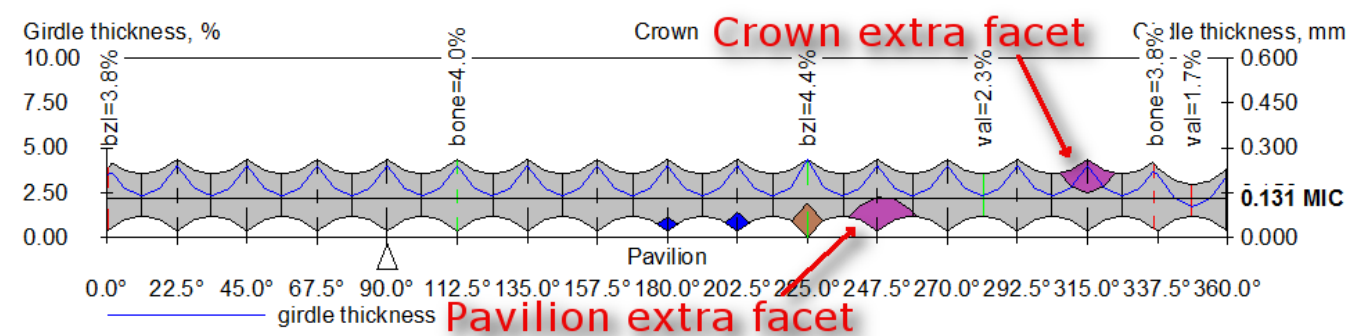

Please pay attention that **Crown** and **Pavilion extra facets** do not include **extra facets girdle** described below (see in p.2).

2. Extra Facets Girdle

There are two Girdle height calculation methods - GIA heights method and Octonus heights method.

1. For both methods Girdle height calculation depends on extra facets depending on their slope angles. **RakeGirdleAngle** is a new parameter of extra facets slope angle. There are two types of Extra Facet Girdle depending on **RakeGirdleAngle** value:

   - **Steep extra facets girdle** – slope angle is more than **RakeGirdleAngle** (brown color).
   - **Shallow extra facets girdle**- slope angle is less than **RakeGirdleAngle** (blue color).
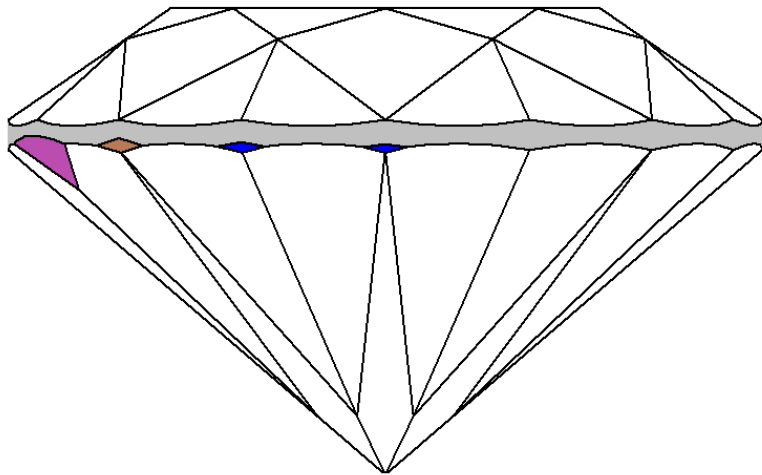

2. **Extra Facet Girdle** (steep\shallow) shows the total number of **extra girdle facets**. The number of **Steep** and **Shallow** extra facets girdle are displayed in brackets:

Extra Facet Girdle (steep/shallow)	3 (1/2)
Extra Facet Crown	Yes (2)
Extra Facet Pavilion	Yes (1)
Appraiser title	N/A
Overall cut quality	N/A
Symmetry appraiser title	Symmetry
Overall symmetry quality	PR
Density, g/cm3	3.51524
Rake Girdle angle, °	75.0

3. **RakeGirdleAngle** is equal to 75° by default. That value can be changed (see p. 4.1 below) and indicated in report (see picture above).

4. **Extra facet girdle** are indicated on **Girdle height plot**:
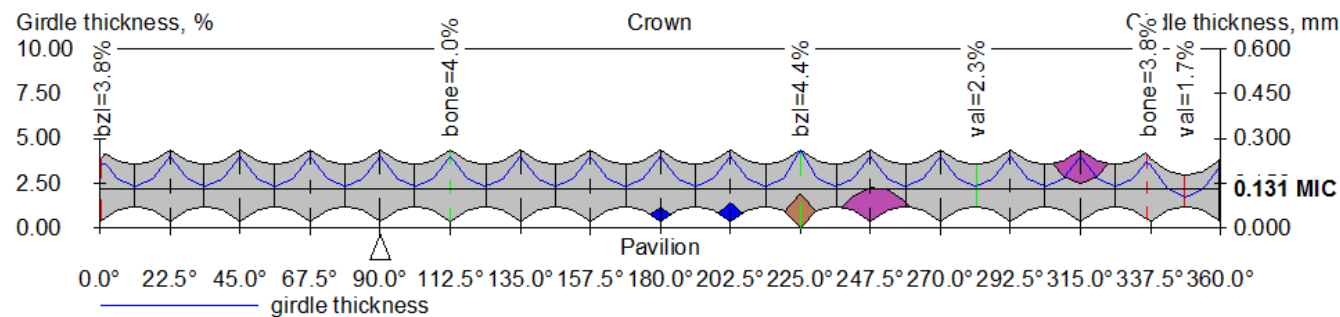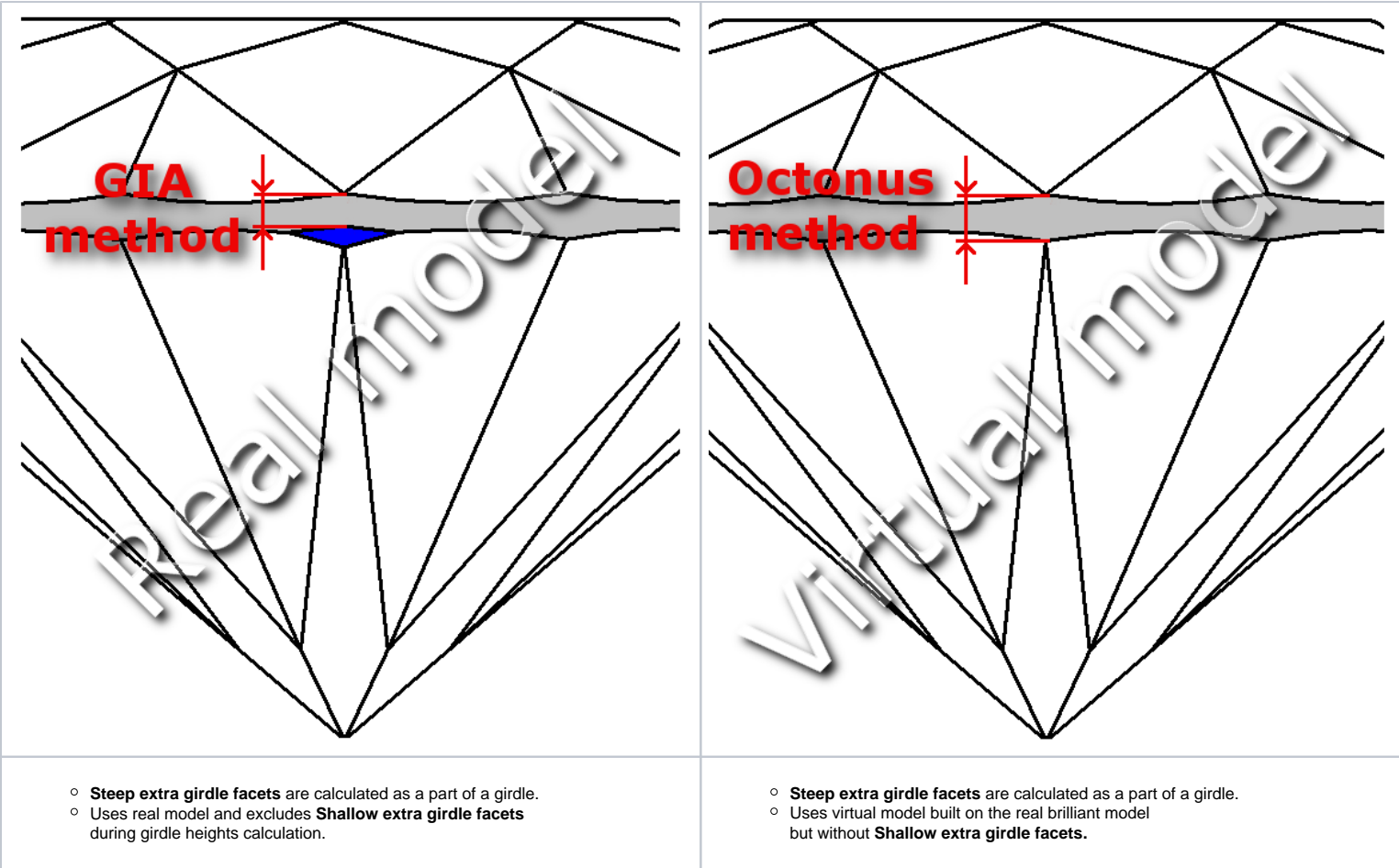

5. Girdle heights method indicates Octonus or GIA heights method was used for heights calculation in the report:

GIA height method		Octonus height method	
General Information		**General Information**	
Model	N/A	Model	N/A
Expert name	N/A	Expert name	N/A
Report date	N/A	Report date	N/A
Scale weight, ct	N/A	Scale weight, ct	N/A
Model mass, ct	0.82, 0.8239	Model mass, ct	0.82, 0.8248
Corrected mass, ct	N/A	Corrected mass, ct	N/A
Spread	-0.03 ct, -3.36%	Spread	-0.03 ct, -3.49%
AGS Spread	-0.03 ct, -3.42%	AGS Spread	-0.03 ct, -3.54%
Girdle height method	GIA	Girdle height method	Octonus

3. Difference between Octonus and GIA girdle height methods calculation

Girdle heights calculation method	
GIA method	**Octonus method**

GIA method (Real model)	Octonus method (Virtual model)
○ **Steep extra girdle facets** are calculated as a part of a girdle. ○ Uses real model and excludes **Shallow extra girdle facets** during girdle heights calculation.	○ **Steep extra girdle facets** are calculated as a part of a girdle. ○ Uses virtual model built on the real brilliant model but without **Shallow extra girdle facets.**

4. Setup changes

To change **RakeGirdleAngle** value:

1. Go to Scan Polish diamond\Process\Options…\Report tab
   blocked URL
2. Change the **RakeGirdleAngle** value
3. Press Enter button

To activate **GIA heights method** calculation:

1. Go to Scan Polished Diamond/Options… /Report tab .
   blocked URL
2. Select GIA heights.

When **GIA heights method** is active all heights parameters are calculated according new rules (see above).

5. Samples

DMC file	Height method	Report
RBC_girdle_extra_facets_Sample_1.dmc	GIA	Full_report_RBC_Sample_1_GIA.docx
	Octonus	Full_report_RBC_Sample_1_Octonus.docx
RBC_girdle_extra_facets_Sample_2.dmc	GIA	Full_report_RBC_Sample_2_GIA.docx
	Octonus	Full_report_RBC_Sample_2_Octonus.docx

6. Notes

- Please use **report.dll 2.5.7.1 or higher** to see features described in the manual
- If you have any question, please ask it in comments or send e-mail to developer.
- If you find mistake, please describe it in comments or send e-mail to developer.