


2021-07-30 - HP Carbon 1.2.95

Here you can find information about what is new in HP Carbon version 1.2.95.

 This version is available for [download](#) from the Octonus official web site.

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In-house cuts and hybrid appraisers overview

| Brief vocabulary | |
|------------------|---|
| In-house cut | = "your own", "created by you", "added to the system by you" |
| Hybrid appraiser | An appraiser that has both absolute and relative parts: <ul style="list-style-type: none">The absolute part provides a maximum mass without a grade loss (industry-standard intervals).The relative part allocates plans close to your own forms with excellent optical performance. |

What can you do with version 1.2.95 that you could not do in the older versions?

The new version of the system provides a lot of new possibilities. They are described in the sections of these release notes. But the main changes in the release are related to in-house cuts and hybrid appraisers:

- For any number of your in-house (created by you) cuts, you can create its hybrid appraiser and thus get plans for beautiful and massy diamonds for these cuts.
- You can get excellent plans for both in-house and generic, including Brilliant via GIA Facetware, cuts in one run.
- You have the right appraiser at your fingertips - no need to manually select, no need to know or remember which one is needed.

Here is the brief abilities comparison:

| Ability | Previous Version | New Version | Provided by what? |
|---|------------------|-------------|--|
| Using absolute appraisers when working with multiple cuts. | Yes* | Yes | - |
| Using hybrid (absolute+relative) appraisers when working with multiple cuts. | No | Yes | Create hybrid appraiser for in-house cut + Automatic appraiser selection |
| Creating for each in-house cut its hybrid appraiser. | No | Yes | Create hybrid appraiser for in-house cut |
| Editing appraiser of in-house cut via the user interface. | No | Yes | Create hybrid appraiser for in-house cut |
| Automatic detection and presenting in the user interface of the link between cut and its appraiser/active profile. | No | Yes | Automatic appraiser selection |
| Using simultaneously RBC (including optimization by GIA Facetware) and in-house cuts when working with multiple cuts. | No | Yes | Create hybrid appraiser for in-house cut + Automatic appraiser selection |
| Getting Smart Recut solutions for multiple selected cuts simultaneously. | No | Yes | Automatic appraiser selection + +Smart Recut |
| Getting Smart Recut solutions for a larger diamond in the multi-diamond solutions. | Yes | Yes | - |
| Getting in one click Smart Recut solutions for both diamonds in the multi-diamond solutions. | No | Yes | Automatic appraiser selection + +Smart Recut + "gold stars" |
| Automatic switch to correct appraiser when selecting a solution with a different cut. | No | Yes | Automatic appraiser selection |

* Via adding in-house cut and then adding the corresponding section in one of the existing appraisers (by editing its text file).

Create hybrid appraiser for in-house cut

What is new?

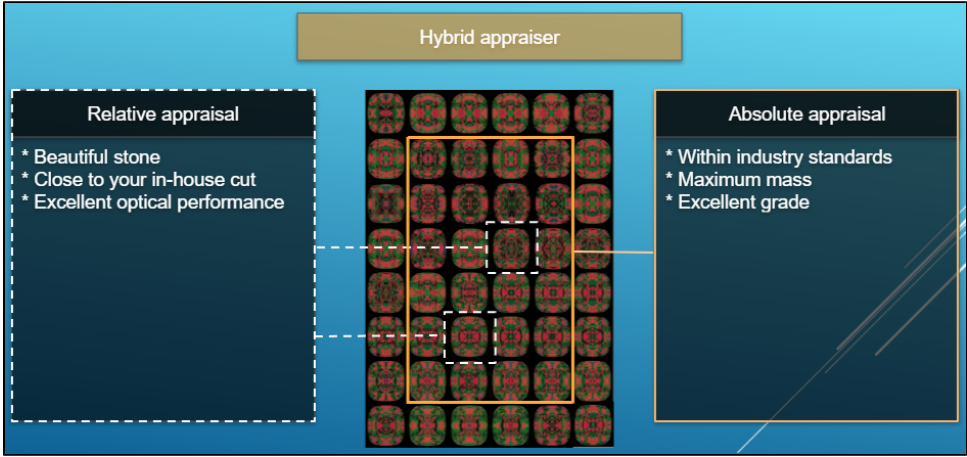
Now for your in-house cut, you can create *its* hybrid appraiser.

What is it for?

To get plans with the best combination of mass and performance, add your in-house cuts to the system, populate them with forms, then allocate plans close to these forms with a hybrid appraiser.

How?

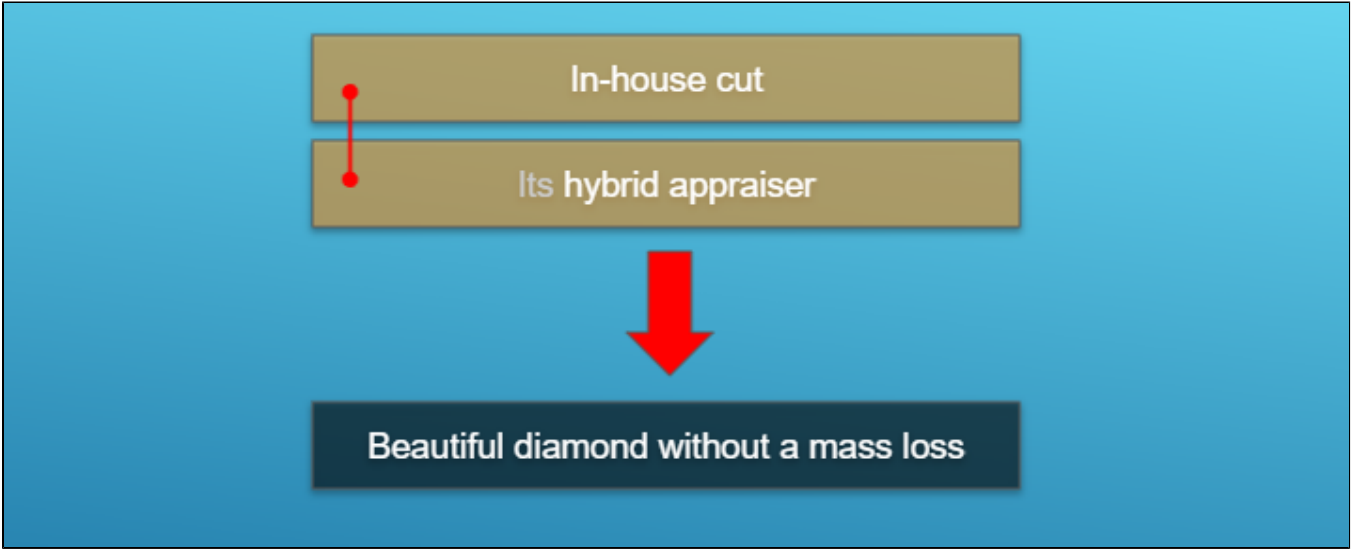
1. Add what you consider beautiful as [your in-house cut](#).
2. Add [variations of forms](#).
3. Allocate future plans close to your forms by a *hybrid appraiser*.



A hybrid appraiser has both absolute and relative parts:

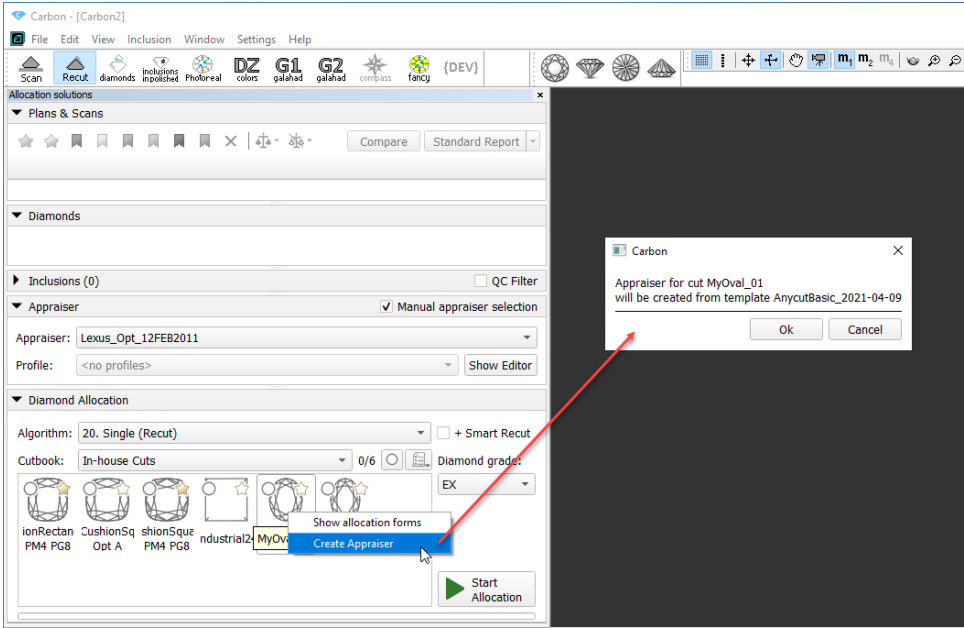
- The absolute part will provide a maximum mass without a grade loss (industry-standard intervals).
- The relative part will bind plans to your own forms with the excellent optical performance.

And thus:



To create for in-house cut its hybrid appraiser:

1. In the **Recut** mode, in the left panel, in the **Diamond Allocation** section, from the **Cutbook** select "In-house Cuts".
2. In the cut list, right-click your cut, and then from the context menu select **Create Appraiser**. The dialog is displayed.



3. In the dialog, read the information about the template and then click **OK**. Your new appraiser is created, named the same as the cut. Two profiles are automatically created for it.



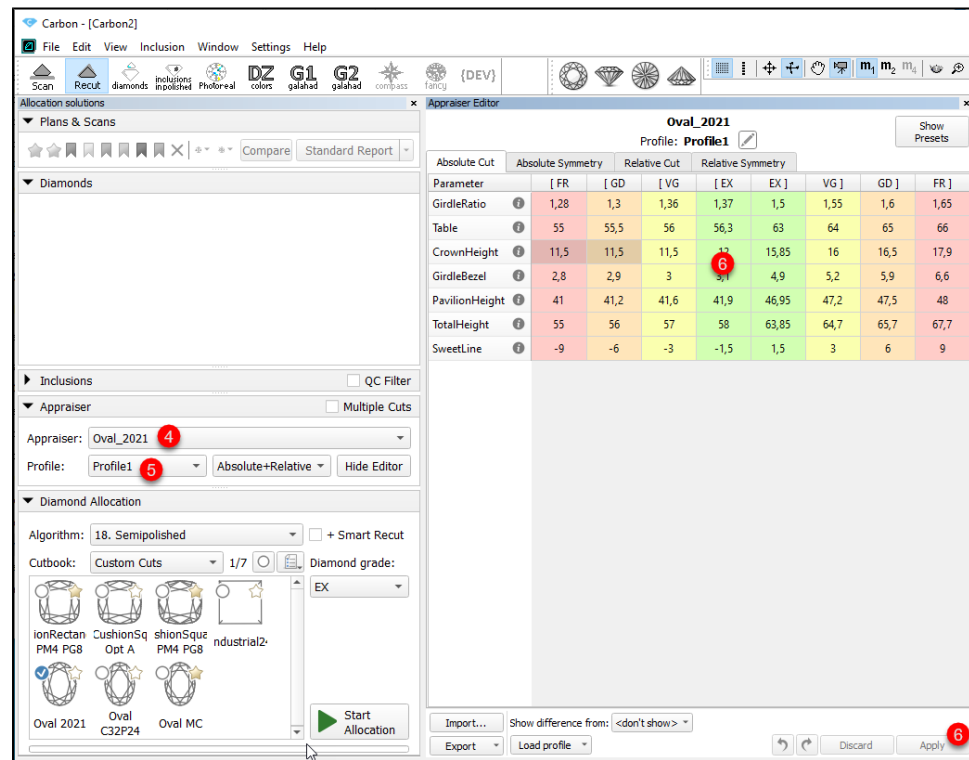
Notes

- * The new appraiser is created by **copying** the template. As for now, the only available template is the "AnycutBasic_2020-12-09" which is identical to the "MyAnyCut".
- * If you previously already created the appraiser for this cut, the system will suggest **rewriting** it - for the cut, only one **its** appraiser can be presented in the system.

4. In the **Appraiser** section, from the **Appraiser** list, select your appraiser.
5. Select the profile to be edited, then click **Show Editor**. The **Appraiser Editor** window is displayed.
6. In the **Appraiser Editor** set boundaries for your parameters and then click **Apply**. For hints on how to edit profiles, see [Configuring Profiles](#) [here](#).



Pay special attention that the *absolute* part must be filled with the parameters corresponding to your cut.

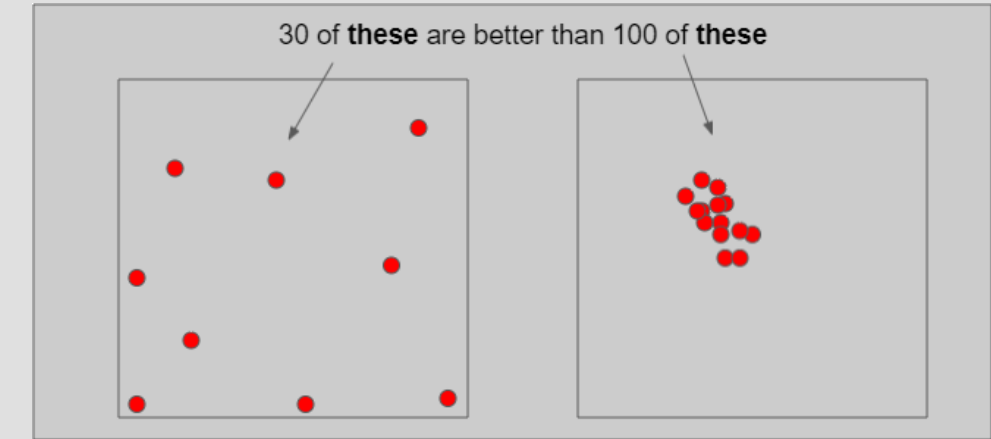


7. If necessary, set boundaries for the second profile as well.
8. As a hybrid appraiser only works when the linked cut has a good set of **allocation forms**, do not forget to add these forms to the cut (see details at [In-house cut registration](#) > "Adding allocation forms" and some questions and answers on allocation forms below).

Some questions and answers on allocation forms:

1. How many and what forms should be added?

You need at least 20-30 forms. It is better to have more*. The quantity depends on the quality:



In a multidimensional array of diamond parameters**, the more these parameters differ, the better (array coverage). Also the greater the GirdleRatio of your cut is, the more allocation forms are recommended to achieve a better result.

NOTES

* But how much more? And may adding a form make hybrid appraiser worse? The answer is that the more forms it has, the slower the appraiser is, therefore it is not recommended to have more than 100. Also if the relative part allows getting A from B or vise versa during allocation (click Show Picture... below) then one of them is redundant and again - only slows down the appraiser.

| Calc | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
|------|----|----|----|----|----|----|----|----|----|
| 36.5 | FR | FR | FR | FR | FR | FR | GD | GD | GD |
| 37 | FR | FR | FR | FR | GD | GD | VG | VG | VG |
| 37.5 | FR | FR | GD | GD | VG | VG | EX | VG | VG |
| 38 | FR | GD | VG | VG | EX | EX | EX | VG | GD |
| 38.5 | GD | VG | EX | EX | EX | EX | VG | VG | GD |
| 39 | VG | EX | EX | EX | EX | VG | GD | GD | FR |
| 39.5 | VG | EX | EX | EX | VG | VG | GD | FR | FR |
| 40 | EX | EX | EX | VG | VG | GD | FR | FR | FR |
| 40.5 | VG | VG | VG | GD | GD | FR | FR | FR | FR |
| 41 | VG | VG | VG | GD | FR | FR | FR | FR | FR |
| 41.5 | GD | GD | GD | FR | FR | FR | FR | FR | FR |
| 42 | FR | FR | FR | FR | FR | FR | FR | FR | FR |

A can be obtained from **B** during allocation (close, a deviation is allowed by the relative part).
cannot be obtained from **B** during allocation (far, a deviation is not allowed by the relative part)

Thus:
either **A** or **B** is redundant and only slows down the appraiser,
it is good to have in addition to **A** or **B**.

** When we say "parameters" we mean not only the ones presented in the appraiser but also the **additional** (for example, azimuths of non-main facets of crown and pavilion). Precisely, changing the additional parameters in many cases provides the best form distribution over the array.

2. If no allocation forms, is it a hybrid appraiser?

A cut always has at least one form available immediately after cut registration (*base form*). That is why you need only 10 minutes to start using the new in-house cut (see "Ready for use" in [this](#) diagram). Does a linked hybrid appraiser stay hybrid in this situation? See next question.

3. If only one form was added, is it a hybrid appraiser?

If your cut has only one allocation form or few forms and the relative part of its hybrid appraiser is narrow enough, this creates a great risk of mass loss, as the solution will be searched not along all the array provided by the absolute part but only close to this form. On the other hand, if you significantly widen the relative part, it may become wider than the absolute which means the appraiser degenerates into a simple absolute.

4. How the SweetLine parameter should be specified in a hybrid appraiser?

The **SweetLine** slope is specified for an entire cut as described [here](#). As forms belong to the same cut, the slopes of the SweetLines they belong to will be similar. But as good forms are distributed over the array, the position of their SweetLines may be different:

| Calc | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
|------|----|----|----|----|----|----|----|----|----|
| 36.5 | FR | FR | FR | FR | FR | FR | GD | GD | GD |
| 37 | FR | FR | FR | FR | GD | GD | VG | VG | VG |
| 37.5 | FR | FR | GD | GD | VG | VG | EX | VG | VG |
| 38 | FR | GD | VG | VG | EX | EX | EX | VG | GD |
| 38.5 | GD | VG | EX | EX | EX | EX | VG | VG | GD |
| 39 | VG | EX | EX | EX | EX | VG | GD | GD | FR |
| 39.5 | VG | EX | EX | EX | VG | VG | GD | FR | FR |
| 40 | EX | EX | EX | VG | VG | GD | FR | FR | FR |
| 40.5 | VG | VG | VG | GD | GD | FR | FR | FR | FR |
| 41 | VG | VG | VG | GD | FR | FR | FR | FR | FR |
| 41.5 | GD | GD | GD | FR | FR | FR | FR | FR | FR |
| 42 | FR | FR | FR | FR | FR | FR | FR | FR | FR |

Therefore, for the absolute part of the hybrid appraiser, we should turn off the SweetLine (set all values to "100" which will remove the fixed green zone from the picture above) and only in the relative part set the possible deviation from the SweetLine of each particular allocation form.

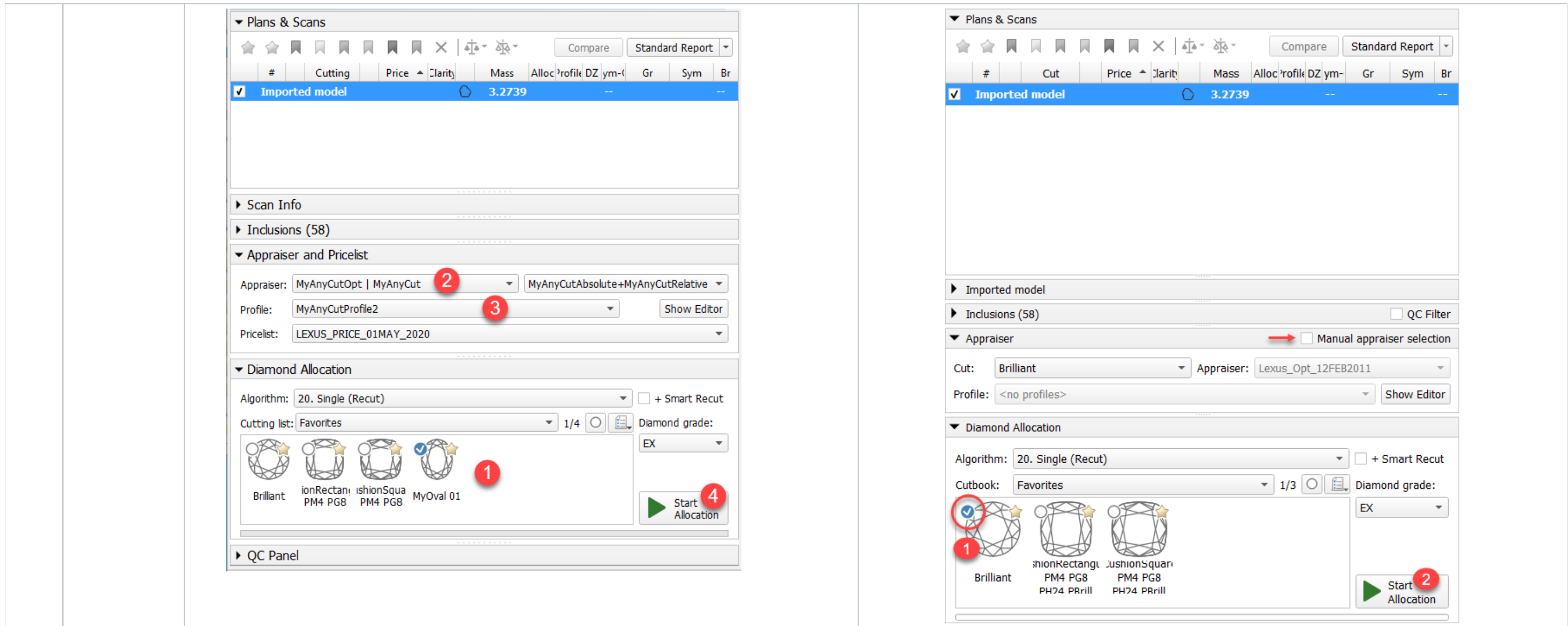
Automatic appraiser selection

There are two cases when you need to select an appraiser:

- For allocation (creating solutions)
- For appraisal (appraising of already existing solutions)

For appraiser selecting, the system behavior and thus what you need to do is changed now:

| | | Was | Now |
|-----------------|---|--|--|
| System behavior | Allocation, 1 cut | <p>Process: In Recut mode, in the Diamond Allocation section, you select the cut, then, in the Appraiser section, from the Appraiser list, manually select the appropriate appraiser and Profile, then click Start Allocation.</p> <p>Result: If you selected the wrong appraiser, there may be no results or they can be bad.</p> | <p>Process: you select the cut, then click Start Allocation.</p> <p>Result: The <i>linked appraiser</i>* will be used automatically (and the last selected Profile of it)</p> |
| | Allocation, more than 1 cut | <p>Process: In Recut mode, in the Diamond Allocation section, you select your cuts, then manually select the "Lexus_Opt..." (must include selected cuts) appraiser and start allocation.</p> <p>The "Lexus_Opt..." should be pre-configured by an expert (no modifications via UI - only editing as file).</p> <p>Result: If your cut was not described in the "Lexus_Opt...", there may be no results or they can be bad.</p> | <p>Process: you select the cuts, then click Start Allocation.</p> <p>Result: The <i>linked appraiser</i>* will be used automatically (and the last selected Profile of it) for each included cut.</p> |
| | Appraisal of already existing solutions | In the Plans & Scans section, you click the solution, then, in the Appraiser section, from the Appraiser list, manually select the appropriate appraiser and Profile , then click Show Editor . | In the Plans & Scans section, you click the solution, in the Appraiser section, the system automatically displays the linked appraiser. When your switch between the solutions of different cuts, the appraiser changes correspondingly. |



* In the system, cuts and appraisers are *linked* like this:

| Cut | Appraiser*** |
|--|---------------------------|
| In-house cut that has its** appraiser | Its appraiser |
| In-house cut without its appraiser | MyAnyCut |
| Brilliant | "GIA Facetware + MyRound" |
| CushionSquare_PM4_PG8_PH24_PBrill_C32 | CushionSquare |
| CushionRectangular_PM4_PG8_PH24_PBrill_C32 | CushionRectangular |
| Some oval cuts | MyOval |
| Other cuts | Lexus_Opt... **** |

** **Its** appraiser means created specifically for this particular cut

*** For each appraiser, its **active profile** will be used - the one that was last selected in the user interface **Profile** field.

**** Cuts linked to the "Lexus_Opt..." appraiser have limitations:

- The cut will not give the appropriate result if its description is not presented in the "Lexus_Opt..." appraiser.
- The **+ Smart Recut** option will not work for them

See details in the sections below.

When automatic appraiser selection is useful

The *automatic appraiser selection* eases your work with multiple cuts:

- Allocation cases:
 - You want to try getting solutions of different cuts for your scanned model.
 - You want to try getting diamonds of different cuts within your solutions for multi-diamonds algorithms.
- Other cases:
 - In your solution list, you have solutions of different cuts and you want the *appropriate appraiser to be selected automatically* when you switch to this solution.
 - You want to know which appraiser is linked to some cut and/or switch the *active profile* for it. The active profile is the last selected in the user interface **Profile** field for this appraiser. It is saved by the system automatically.

For single cut allocation

- Select cut and run allocation. No need to worry about the appraiser.

For multiple cut allocation

How to use:

1. From the **Cutbook**, select several cuts.
2. Run allocation.

▼ Plans & Scans

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Compare

Standard Report ▼

| # | Cut | Price | Clarity | Mass | Alloc | Profile | DZ | ym | Gr | Sym | Br |
|---|----------------|-------|---------|--------|-------|---------|----|----|----|-----|----|
| ✓ | Imported model | | | 3.2739 | | -- | | | | | |

▼ Imported model

| | Diam # | Cut | Price | Discount | PPC | Mass | Clarity | C | Grade |
|--------------------------|--------|-----|-------|----------|-----|----------|---------|---|-------|
| <input type="checkbox"/> | Scan | | | | | 3.2739ct | | | |

► Inclusions (58)

☐ QC Filter

▼ Appraiser

☐ Manual appraiser selection

Cut: MyOval_01

Appraiser: MyOval_01

Profile: Profile1

Absolute+Relative

Show Editor

▼ Diamond Allocation

Algorithm: 20. Single (Recut)

☐ + Smart Recut

Cutbook: Favorites

3/4

☐

☒

Diamond grade: EX

✓

★

Brilliant

○

★

FusionRectang
PM4 PG8
PH74 PRill

✓

★

FusionSquare
PM4 PG8
PH74 PRill

✓

★

MyOval 01

1

2

Start Allocation

Note that you do not need to do anything but selecting wished cuts and running allocation.

Optionally: to view the linked appraiser and its current active profile in the **Appraiser** section, select **Cut** from the list. Change active **Profile** if needed.

Note that the **Profile** field will be empty if the appraiser does not have any profiles.

For multi-diamond algorithms

The *automatic appraiser selection* greatly eases getting excellent diamonds of different cuts within one solution (via the multi-diamond algorithms, such as [13. Cascade-2M](#) and **+ Smart Recut** option).

New: now you can get a combination of your in-house cut and one of standard (for example, Brilliant linked to "GIA Facetware + MyRound") cuts within one solution.

Running multi-diamond allocation with Smart Recut

(*Prerequisites*: gold stars will be used - see instruction on how to configure them in the section below)

1. Use the **Recut** mode.
2. Select several cuts.
3. Set **Algorithm** to "13. Cascade-2M".
4. Select the **+ Smart Recut** option.
5. Click **Start Allocation**. The multi-diamond solutions are displayed in the list.

To get "Smart Recut + Smart Recut" solutions with the different Smart Recut presets:

1. In the **Diamond Allocation** section set **Algorithm** to smart recut one.
2. In the solution list, select the "Recut + Recut" solution.
3. In the diamonds section, select one of the solution diamonds. In the **Appraiser** section, the appraiser linked to the cut of the selected diamond is displayed automatically. Its active **Profile** is displayed as well.
4. From the **Presets** list, select the preset you want to be used.

Allocation solutions

Plans & Scans

Compare

Standard Report

| # | Price | Mass | BBB | Yield | Diam 1 | Mass | Alloc | Clarity |
|---|---------|--------|--------|--|--|--------|-------|---------|
| <div>Imported model</div> <div>3.2739</div> | | | | | | | | |
| 19 | 10368\$ | 1.9633 | CB 20 | 59.87% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 | 1.6522 | SR | SI1 |
| 18 | 10308\$ | 1.9600 | CB 19 | 59.56% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 | 1.6475 | SR | SI1 |
| 1 | 9691\$ | 1.8507 | 56.20% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 | 1.5482 | | | SI1 |
| 2 | 9691\$ | 1.8492 | CB 2 | 56.20% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 | 1.5473 | | SI1 |

Plan 1

| Diam # | Cut | Price | Discount | PPC | Mass | Clarity | C | Grade |
|-----------|-----------|--------|----------|--------------|----------|---------|---|-------|
| Diam 1 | Cushion | 9286\$ | -10% | 6030.00\$/ct | 1.5482ct | SI1 | H | EX |
| Diam 2 | Brilliant | 405\$ | -10% | 1350.00\$/ct | 0.3025ct | SI2 | H | EX |
| Layer 1 1 | | Diam 1 | Diam 2 | 0.0827ct | 0.13mm | | | |

Inclusions (58)

QC Filter

Appraiser

Manual appraiser selection

Cut: CushionRectangular_PM4_PG8_PH24_PBrill_C: Appraiser: CushionRectangular

Profile: Cushion_2 Absolute Show Editor

Diamond Allocation

Algorithm: 19. SmartRecut (Brilliant, Oval, AnyCut)

Allow Girdle Extra Facets

Fix Girdle

Fix Crown

Fix Pavilion

Fix finished facets

Presets:

Cut grade:

Symmetry grade:

Safe Boundary

All presets

1.AllNarrowed

2.VerticesNarrowed

3.AnglesNarrowed

4.GirdleNarrowed

5.GirdleWidened

6.AnglesWidened

7.VerticesWidened

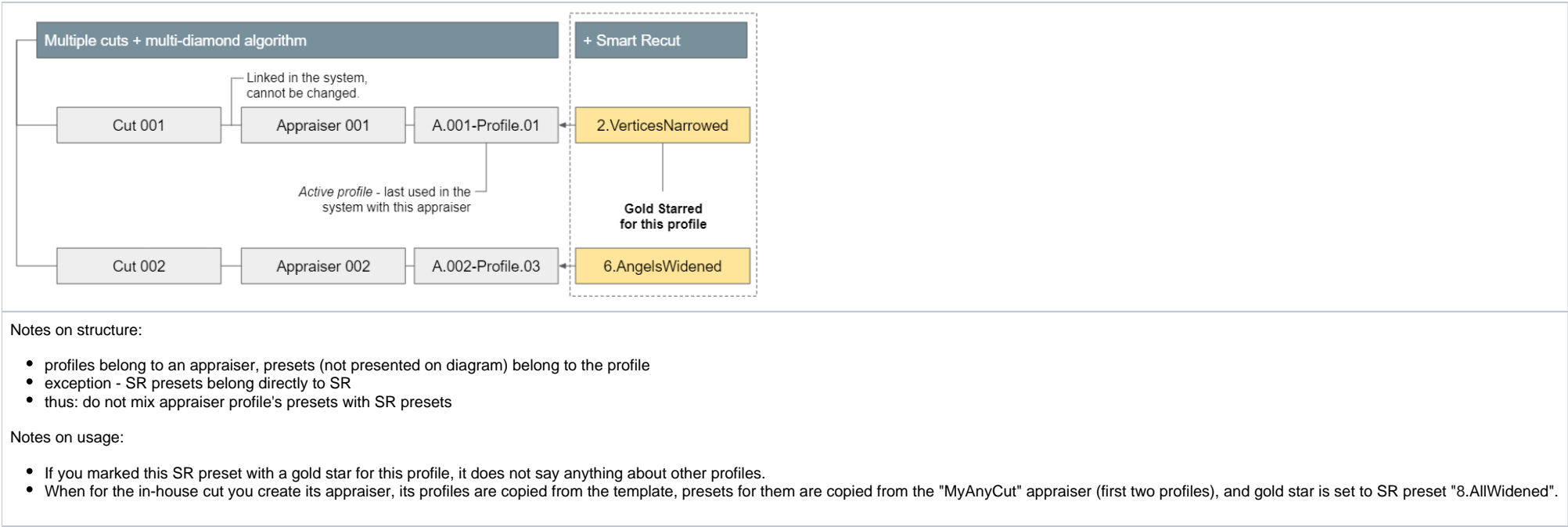
8.AllWidened

Start Allocation

5. Run allocation for the selected diamond. The new "Smart Recut + Recut" solution is added to the list, where Smart Recut is built with the selected preset.
6. Repeat configuration for the diamond remaining Recut.
7. Run allocation for the second diamond. Now you have a new "Smart Recut + Smart Recut" solution with each SR produced by the new preset.

"Gold stars" configuring

The *"gold star"* shows which Smart Recut preset will be used for the *active profile* of the linked appraiser when running allocation for multiple cuts with a multi-diamond algorithm with **+ Smart Recut** option. There is a default gold star for each profile of each appraiser working with Smart Recut. Thus, you can skip configuring gold stars - in this case, the default will be used (for MyRound profiles - preset 4, for MyOval and MyOvalPerformanceWare - 6, for MyAnyCut and alike - 8).



The gold stars can be configured before running allocation as described below.

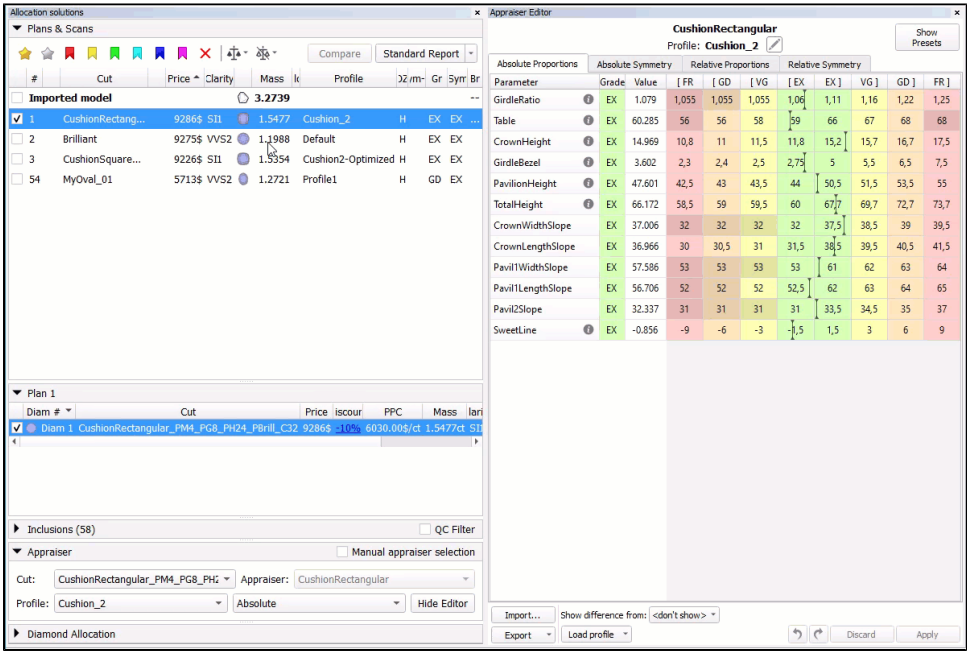
To configure gold stars:

1. Use the **Recut** mode.
2. in the **Appraiser** section, select **Manual appraiser selection**.
3. Select **Appraiser**.
4. Set active **Profile**.
5. In the **Diamond Allocation** section set **Algorithm** to smart recut one.
6. Expand the **Presets** list, then in the list, set the gold star to the right of the preset you want to be used during allocation for multiple cuts with a multi-diamond algorithm.

For viewing grades in Appraiser Editor

If, in your solution list, you have solutions of different cuts and you want the *appropriate appraiser to be selected automatically* when you switch to this solution:

1. Click **Show Editor**. The **Appraiser Editor** window is displayed.
2. In the **Plans & Scans** section, switch to the required solution. The **Appraiser Editor** window will automatically switch to the appraiser linked with the cut/*active profile*.



For switching active profile

To know which appraiser is linked to some cut and/or switch the *active profile*:

1. Do one of the following:

- If you have a solution of the appropriate cut in the list, click it. Its cut is displayed in the **Appraiser** section, **Cut** field.
- If you do not have a solution, select directly from the **Appraiser** section, **Cut** list.

For the selected cut, it's linked **Appraiser** and its active **Profile** is displayed. Note that the **Profile** field will be empty if the appraiser does not have any profiles.

- If necessary, change the **Profile**. Selected new active profile for this appraiser is saved in the system automatically.

Option A: Solution of appropriate cut in the list

Allocation solutions

Plans & Scans

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Compare Standard Report

| # | Cut | Price | Clarity | Mass | lc | Profile | 2Z/m- | Gr | Sym | Br |
|-------------------------------------|-----|-------------------|---------|------|--------|--------------------|-------|----|-----|-----|
| Imported model 3.2739 | | | | | | | | | | |
| <input type="checkbox"/> | 1 | CushionRectang... | 9286\$ | SI1 | 1.5477 | Cushion_2 | H | EX | EX | ... |
| <input type="checkbox"/> | 2 | Brilliant | 9275\$ | VVS2 | 1.1988 | Default | H | EX | EX | |
| <input checked="" type="checkbox"/> | 3 | CushionSquare... | 9226\$ | SI1 | 1.5354 | Cushion2-Optimized | H | EX | EX | |
| <input type="checkbox"/> | 54 | MyOval_01 | 5713\$ | VVS2 | 1.2721 | Profile1 | H | GD | EX | |

Plan 3

Inclusions (58) QC Filter

Appraiser Manual appraiser selection

Cut: CushionSquare_PM4_PG8_PH24_Pi Appraiser: CushionSquare

Profile: Cushion2-Optimized

Cushion1-Commercial

Cushion2-Optimized

Algorithm: 20. Single (Recut) + Smart Recut

Cutbook: Favorites 4/4

Diamond grade: EX

Start Allocation

Option B: Not in the list

Allocation solutions

Plans & Scans

★ ☆ ★ ★ ★ ★ ★ ★

Compare Standard Report

| # | Cut | Price | Clarity | Mass | lc | Profile | 2Z/m- | Gr | Sym | Br |
|-------------------------------------|-----|--------------------------|---------|------|--------|-----------|-------|----|-----|-----|
| Imported model 3.2739 | | | | | | | | | | |
| <input checked="" type="checkbox"/> | 1 | CushionRectangular_PM... | 9286\$ | SI1 | 1.5477 | Cushion_2 | H | EX | EX | ... |
| <input type="checkbox"/> | 2 | Brilliant | 9275\$ | VVS2 | 1.1988 | Default | H | EX | EX | |
| <input type="checkbox"/> | 54 | MyOval_01 | 5713\$ | VVS2 | 1.2721 | Profile1 | H | GD | EX | |

Plan 1

Inclusions (58) QC Filter

Appraiser Manual appraiser selection

Cut: CushionSquare_PM4_PG8_Pi Appraiser: CushionSquare

Profile: Cushion2-Optimized

Cushion1-Commercial

Cushion2-Optimized

Algorithm: 20. Single (Recut) + Smart Recut

Cutbook: Favorites 4/4

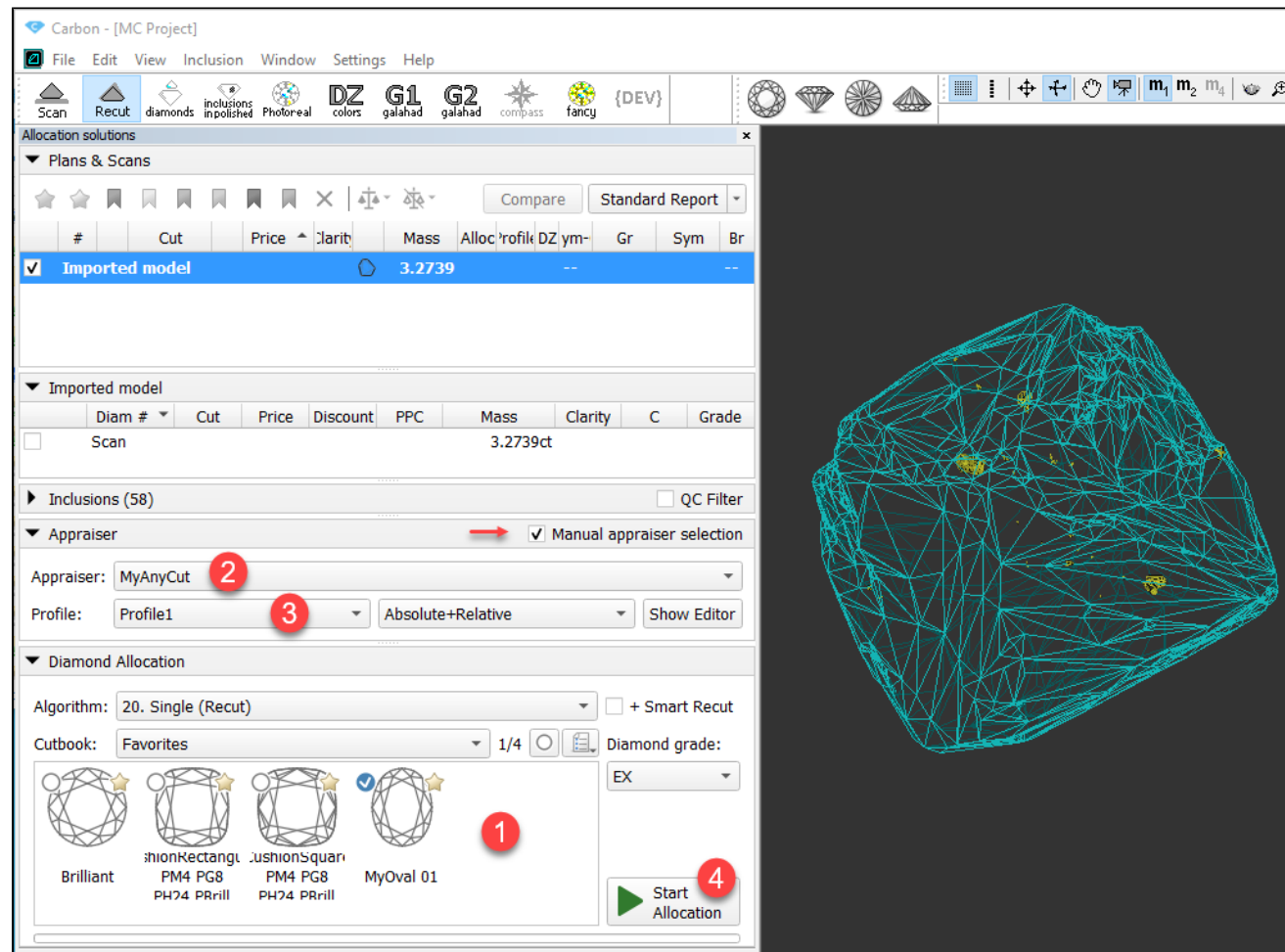
Diamond grade: EX

Start Allocation

Old mode - Manual appraiser selection

Sometimes it may be necessary to try appraisal or running allocation with the appraiser, different from the linked one.

You can switch to the old mode of working with the system where the manual selection was possible (and required). To do that, in the **Appraiser** section, select the **Manual appraiser selection** checkbox.



To switch back to the automatic appraiser selection, deselect the checkbox.

Cushion cuts of Goodwin type - check of allocation forms

For some cuts, the [Goodwin](#) cut engine is applied. At the moment they are the [cushion appraisers](#):

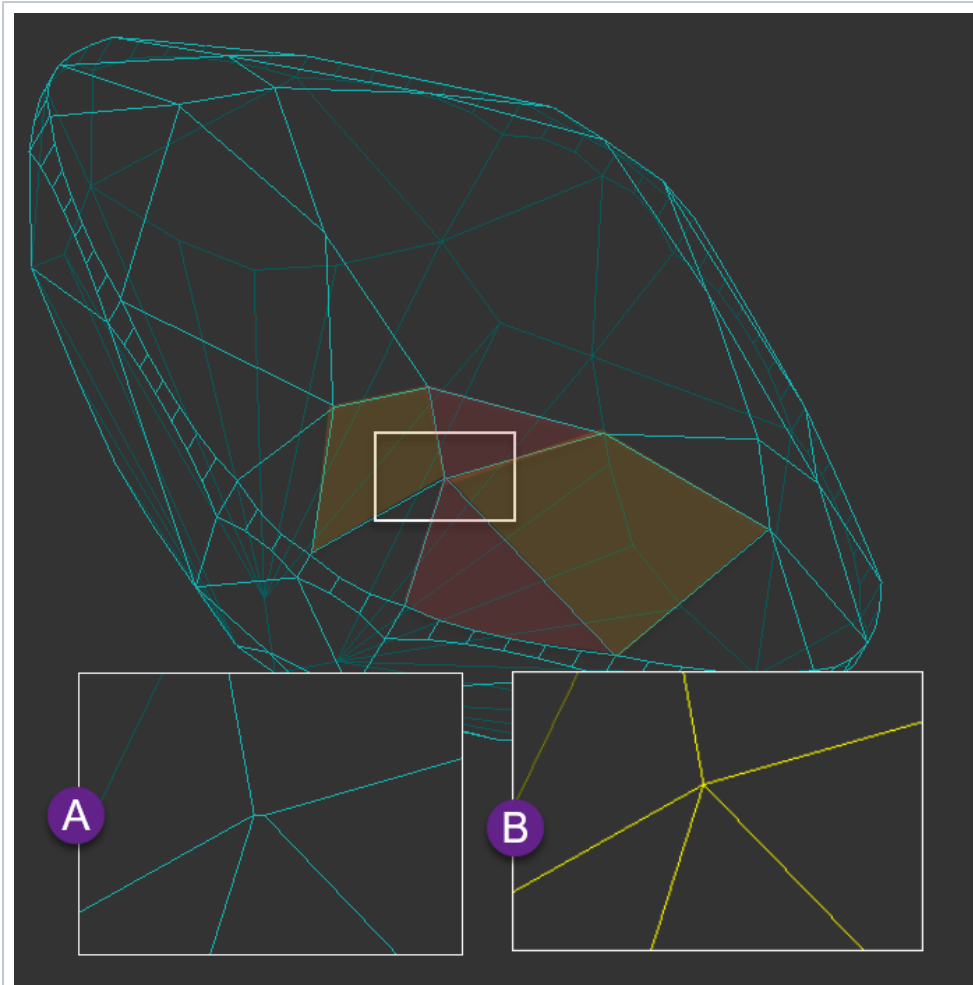
- "CushionRectangular_PM4_PG8_PH24_PBrill_C32"
- "CushionSquare_PM4_PG8_PH24_PBrill_C32"

There are some limitations to allocation forms of such cuts:

- "4+ facets" limitation:
 - "4+" facet is a facet with 4 or more vertexes (junctions are the most common reason for the triangle facets to become "4+").
 - Goodwin checks every vertex of the model.
 - At each vertex, only 3 or fewer "4+" facets should converge.



Table, culet, and facets of the girdle are not taken into account.



- A - before [Smart Normalize](#)
- B - after Smart Normilize
- Yellow facets have 4 vertexes
- Red facets have: 4 vertexes before SN, 3 vertexes after SN

Thus:

- before SN, at the center vertex, 4 facets with 4 vertexes converge - not good for Goodwin
- after SN, at the center vertex, 2 facets with 4 vertexes converge - good for Goodwin

- [Facet types](#) should not have serious errors (like some of the facets on the pavilion marked as the crown facets).

If these conditions are not met, the **Show allocation forms in solution list** command does not display the "wrong" forms in the list and ***such forms do not produce any solutions.***


What's new?

Now the additional checks are added to the system when trying to add forms to Goodwin cuts. If these checks are not passed, the form is not added, the notification window is displayed:

Form name:

Enter name

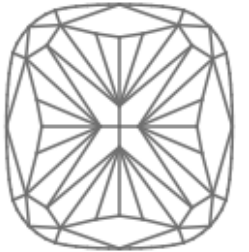
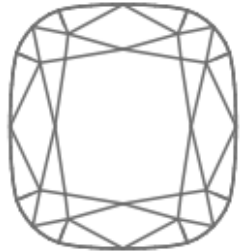
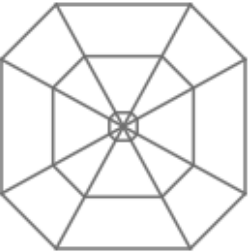
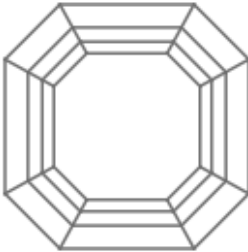
Selected model has own Facet Types!
[Open Facet Types to adjust](#)
[Mark automatically from cut CushionRectangular PM4 PG8 PH24 PBrill C32](#)

 To add this form please run [Smart Normalize](#) algorithm to prepare it for [Goodwin](#) cut engine. See details [here](#).

Cut:

CushionRectangular_PM4_PG8_PH24_PBrill_C32

Cut is [Goodwin](#) type.




Or (for already normalized forms):

Form name:

Enter name

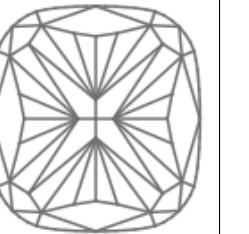
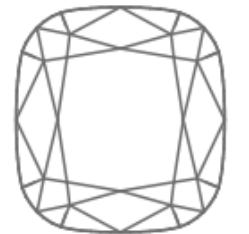
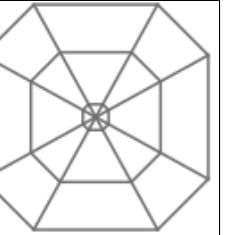
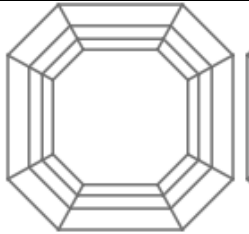
Facet Types from CushionRectangular_PM4_PG8_PH24_PBrill_C32 applied automatically
[Open Facet Types to adjust](#)

 This form is not compatible with [Goodwin](#) cut engine. See details [here](#).

Cut:

CushionRectangular_PM4_PG8_PH24_PBrill_C32

Cut is [Goodwin](#) type.



New report - Semipolish

A new report is added to the system - the *Semipolish Report*. It allows controlling (both visually and via parameter values) a table polishing process.

To access the report:

1. Select the solution.
2. On the right panel, click **Semipolish Report**. The report is displayed in the Scene.
3. If you select another solution, the report is updated to display information related to it.

The report includes:

1. Main parameters of a solution.
2. [Table processing parameters](#).
3. [Safe line parameters](#).
4. Image with the angles of the main facets on the pavilion.
5. Image with the angles of the main facets on the crown.
6. Image reflecting the process of polishing a table (angle 1).
7. Image reflecting the process of polishing a table (angle 2).

Carbon - [Oval_blocked_001_ver3]

FileEditViewInclusionWindowSettingsHelp

ScanRecutdiamondsImportedPredefinedG1G2galadgaladcompassTNG

Allocation solutions

Plans & Scans

2.2307

Imported model

1Oval_WBT...74385 VSI1.4946MyOvalDefault H VG VG

2Oval_WBT...72386 VSI1.4692MyOvalDefault H VG VG

3Oval_WBT...72886 VSI1.4585MyOvalDefault H VG VG

4Oval102498 VSI1.5665SR MyOvalDefault H EX EX

5Oval91105 VSI1.5667SR MyOvalDefault H VG VG

6Oval91105 VSI1.5665SR MyOvalDefault H VG VG

7Oval102498 VSI1.5675SR MyOvalDefault H EX EX

8Oval102498 VSI1.5647SR MyOvalDefault H EX EX

9Oval102498 VSI1.5660SR MyOvalDefault H EX EX

10Oval102498 VSI1.5636SR MyOvalDefault H EX EX

11Oval101848 VSI1.5498SR MyOvalDefault H EX EX

Diamond Info

Appraiser

Profile: Default

Diamond Allocation

Inclusions (0)

Print...Quick Print

Rotate Table Processing start azimuth to door

SettingsTable Processing and Reference Line parametersTable Processing Image legend

Point of touch by polishing disc

Initial facet with adjacent bones

Different processing depths

Final processed facet

Stone ID: Oval_blocked_001_ver3

Oval

26.03.2021 16:04

HPO11+

ParameterAvgMinMaxDevCutSym

Diameter, mm7.5406.4658.42630.34 %N/A

Pav. angle, °37.7537.6937.790.10EX EX

Crown angle, °39.7539.6239.870.35EX EX

Girdle bevel, %0.354 mm5.47 %5.425.660.33EX EX

Table, %4.946 mm65.90 %61.8569.948.09N/A EX

Total height, %4.117 mm63.68 %

Crown height, %1.032 mm15.96 %15.8315.990.16EX

Pav. height, %2.639 mm42.26 %42.1942.270.07EX

Star, %54.55

Pav. half, %75.1574.6175.380.78N/A

G-C off, %0.05 ± 0.12G-T off, %0.04 ± 0.09T-C off, %0.01 ± 0.13

Table Processing parameters

Table allowance before0.315 mmTable incline2.58 °

Table allowance parallel0.035 mmGrind depth0.260 mm

Reference Line parameters

Marking for Crown, mmCS before1.386CS after1.034

Marking for Pav, mmPS before1.478PS after1.444

Total weight, ct1.55EX EX

32.87°32.89°39.25°39.05°39.33°37.79°37.74°39.62°39.87°37.6°37.69°39.15°39.42°39.22°32.89°32.92°

Door 332°

Grind depth 0.260 mm

Table Start 137.02°

View

Model

3D Mini View

Comparative 3D Mini View

Facet Types

Solutions Report

Semipolish Report

Upload to Cutwise

Facetware

Standard Report

My Appraiser

Reports

Polish Report...

Comparative Report...

Print Label

Export Report Data

Export Model...

Model Building Info

Show Model

The images (6-7) reflecting the process of polishing a table includes information about:

- Poing of touch by polishing disc
- Positions of different planes related to polishing
- Door azimuth
- The azimuth of the table polishing start point.
- The **Grind depth** table processing parameter (see description [here](#)).

SettingsTable Processing and Reference Line parametersTable Processing Image legend

Point of touch by polishing disc

Initial facet with adjacent bones

Different processing depths

Final processed facet

Door 332°

6

Table Start 137.02°

Grind depth 0.260 mm

7

The report includes the **Rotate Table processing start azimuth to door** control (active if the hardware is connected).

Print...Quick Print

Rotate Table Processing start azimuth to door

SettingsTable Processing and Reference Line parametersTable Processing Image legend

Stone ID: Oval_blocked_001_ver3

Oval

26.03.2021 16:04

HPO11+

ParameterAvgMinMaxDevCutSym

Diameter, mm7.5406.4658.42630.34 %N/A

32.87°32.89°37.79°37.74°

P2 P1

To access report settings and reference information, at the top of the report, click **Settings**, **Table Processing and Reference Line Parameters**, **Table Processing Image Legend**. On click, the corresponding section is displayed

Print...

Quick Print

Rotate Table Processing start azimuth to door

Settings

Table Processing and Reference Line parameters

Table Processing Image legend

Cutting:

Oval

Point of touch by polishing disc

Template:

Semipolish Report for rounded fancies

Initial facet with adjacent bones

Enhanced precision:

0 digits

Different processing depths

Final processed facet

Also, click **Table Processing and Reference Line parameters** to view the brief description of parameters.

Print...

Quick Print

Rotate Table Processing start azimuth to door

Settings

Table Processing and Reference Line parameters

Table Processing Image legend

Table incline

New scan table

Grind depth

Plane A

Table allowance before

Table allowance parallel

New scan table

Table allowance parallel

P8 after

C8 after

C8 before

P8 before

Calculated after scan is bruted

?

Table Processing and Reference Line parameters documentation

To hide the displayed information, click the corresponding button again.

Appraiser for Brilliant - Changes in Profiles and Presets

For the "GIA Facetware + MyRound" appraiser (linked to the Brilliant cut), some changes were made in profiles and presets.

Profiles General Description

The general idea of each profile is presented in the table:

| | Profile | |
|---|------------|--|
| 1 | Max | Profile with as wide boundaries as possible (for Cut and Symmetry). Provides maximum mass within GIA EX. |
| 2 | ModernCut | Recommended profile. Provides solutions reflecting the current market preferences not reflected in GIA. Narrower than Max. |
| 3 | Commercial | In correspondence with solutions of large Indian companies. Narrower than ModernCut. |
| 4 | H&A | Creating Hearts & Arrows solutions. Narrow Symmetry and SweetLine, somewhat narrowed by Cut. Narrower than Commercial. |
| 5 | H&A 5ct+ | Hearts & Arrows solutions for large stones. Narrower than H&A. |

Purposes

For profiles:

- Each next profile should be **narrower than the previous** (see table above). Previously, this logic was not fully supported.
- Scanned stones should not go outside the EX grade where possible. Previously this happened often.

For presets:

- The widest preset of each next profile (see table above) should be approximately the same as the narrowest of the previous.

 #2-3 (ModerCut and Commercial) have a specific place in this logic: **both of them** intersect with their ends with Max and H&A and in most aspects intersect with each other

2. ModernCut and Commercial should provide the maximum range: presets for presenting some from Max - presets for in-between - presets presenting some from H&A (see table below).

| | | | | | | | | |
|---------------|-------------|-------------|--------------|--------------|--------------|--------------|-------------------|------------|
| 1. Max | 1X.UltraSym | 2X.HighSym | 3X.MediumSym | 4X.NormalSym | 5X.Standard | 6X.LowSym | 7X.ExtendedLimits | 8X.MaxMass |
| 2. ModernCut | 1M.H&A | 2M.UltraSym | 3M.HighSym | 4M.MediumSym | 5M.NormalSym | 6M.Standard | 7M.LowSym | 8M.MaxMass |
| 3. Commercial | 1C.H&A | 2C.H&A | 3C.UltraSym | 4C.HighSym | 5C.MediumSym | 6C.NormalSym | 7C.LowSym | 8C.MaxMass |
| 4. H&A | 1.H&A | 2.H&A | 3.H&A | 4.H&A | 5.H&A | 6.H&A | 7.H&A | 8.H&A |
| 5. H&A 5ct+ | 1.H&A5ct | 2.H&A5ct | 3.H&A5ct | 4.H&A5ct | 5.H&A5ct | 6.H&A5ct | 7.H&A5ct | 8.H&A5ct |

* General idea: presets with the same names give similar results.

* Where names repeat, highlighted shows correspondence.

Changes

For purposes "Profiles #1 - Each next profile should be narrower than the previous" and "Presets #1 - The widest profiles of each next profile (see table above) should be approximately the same as the narrowest of the previous":

1. In ModernCut, all that was narrower than Commercial was widened.

2. In H&A and H&A 5ct+, all that was wider than Commercial was narrowed.

For purpose "Profiles #2 - Scanned stones should not go outside the EX grade where possible:

1. For ModernCut and H&A, **Culet** is widened to 0.5 (as in Commercial). Done because the real culet of scanned stones is in this range. Later narrowed by presets.

2. For ModernCut and H&A, **HeightGirdleExtraFacet** is widened to 3 (as in Commercial). Done because the real girdle extra facets of scanned stone have heights in this range. Later narrowed by presets.

3. **GirdleBoneLocal**, **GirdleBezelLocal**, **GirdleValleyLocal** are widened for the same reason. Later narrowed by presets.

4. In the H&A, H&A 5ct+ for Symmetry the same values as for Commercial will be used.

5. In all profiles, except Max, Roundness parameters (22_5, 45, 90) were widened to 0,7, 0,8, 0,9 which keeps scanned stones in EX grade, but still meets GIA requirements.

6. Roundness 11_25 was added for large diamonds (see "New Parameter - Roundness at 11.25°" section of this documentation".

For purpose "Presets #2 - ModernCut and Commercial should provide the maximum range":

1. In ModernCut, a new preset is added - "1M.H&A" (corresponds to "6.H&A", see table above). It replaced the "7.ExtendedLimits".

2. In Commercial, 2 new presets are added - "1C.H&A" and "2C.H&A" (correspond to "6.H&A", "7.H&A", see table above). They replaced "5.Standard" and "7.ExtendedLimits".

Results

The table below describes changes and results.

| | Profile | |
|---|-------------|---|
| 1 | Max | There is no significant difference. |
| 2 | Modern Cut | The range of masses provided by the profile is widened (the maximum mass increased due to parameters widening, the minimum mass decreased due to more symmetrical presets). |
| 3 | Commer cial | The range of masses provided by the profile is widened (the maximum mass did not change, the minimum mass decreased due to more symmetrical presets). |
| 4 | H&A | The masses provided by the profile slightly decreased. The main input to the mass decrease is provided by the narrowing of Girdle Bezel and Valley parameters. Previously for Girdle Bezel, the boundaries were 2.25-4.75, Girdle Valley 0.75-2.94 (that is equal to Max profile). Now Girdle Bezel is 2.9-4.2, Girdle Valley is 1.35-2.4. These changes are considered reasonable as the profile is not going to be used to produce solutions too close to GIA boundaries. |
| 5 | H&A 5ct+ | The same as for H&A. |

Additional Minor Changes

Additionally, the order of profiles within the appraiser changed:

| | |
|--|--|
| | |
|--|--|

MyRound_ModernCut_2019-12-10

MyRound_SweetLine

MyRound_Commercial1

MyRound_Commercial1_SweetLine

MyRound_H&A

MyRound_H&A_5ct+

MyRound_Max

Default

MyRound_Commercial

MyRound_Commercial_SweetLine

MyRound_ModernCut_2021-04-29

MyRound_ModernCut_2021-04-29_SweetLine

MyRound_Max

MyRound_H&A

MyRound_H&A_5ct+

Default

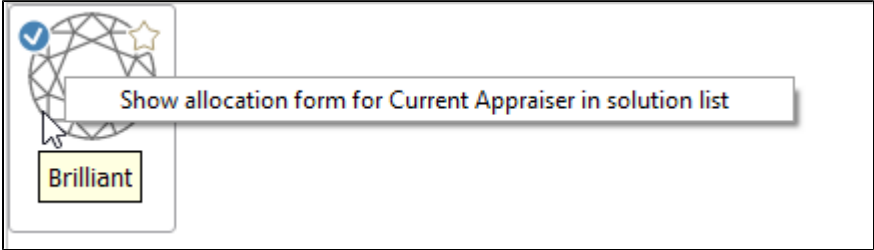
The new order is in accordance with the *frequency of use* in enterprises.

!

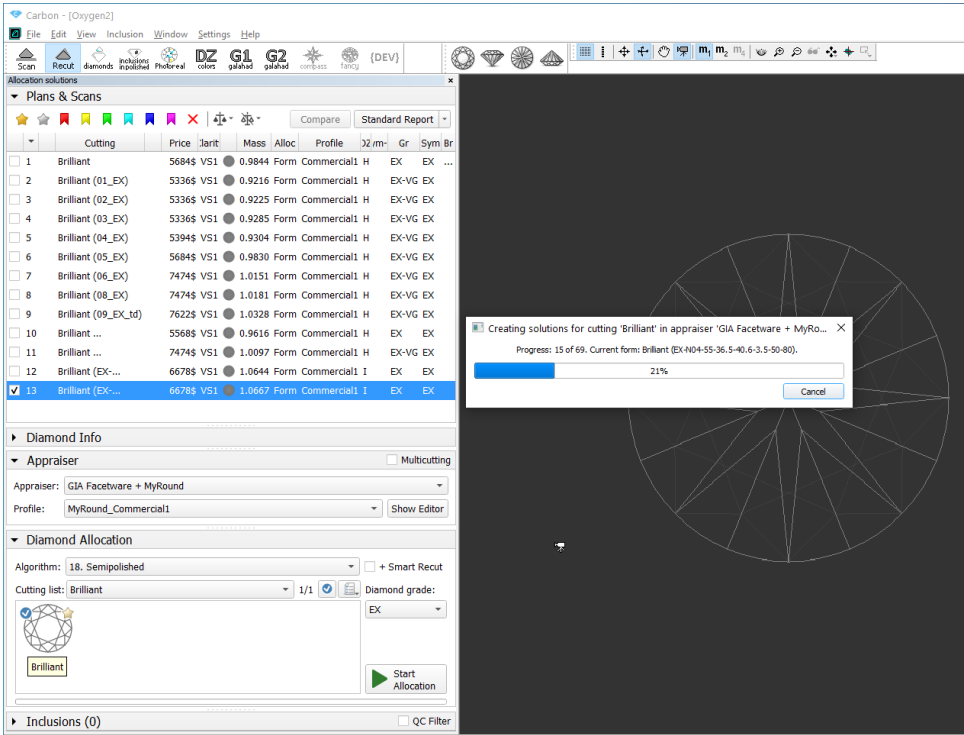
Work on the panel improvement is in progress.

Brilliant Cut - Viewing Allocation Forms

Viewing of the *cut's allocation forms* previously available only for *in-house cuts* (see the **Show allocation forms in solution list** command description in [in-house cut registration](#)), now is also available for the default Brilliant cut.

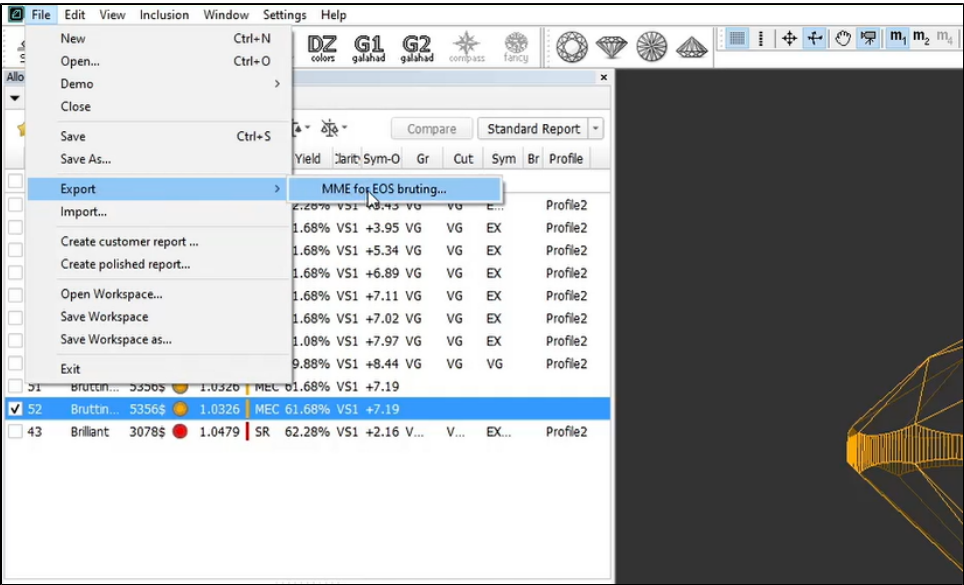


- Right-click the Brilliant cut and then select **Show allocation form for Current Appraiser in solution list**. Allocation forms will be displayed in the solution list.



Note that for the Brilliant cut this command considers the *current appraiser* - before using the command, the appropriate appraiser should be selected. The reason is that several appraisers may be able to work with default cuts - each with its own set of allocation forms. Therefore the allocation forms for the default cuts (including Brilliant) are stored within the appraisers. If you do not select the correct appraiser (the one containing the allocation forms for this cut, the command will be unavailable:

5. From the main menu, select **File > Export > MME for EOS brutng...** Set name and location for your MME model file.



6. In your brutng software, use the created MME model.

User interface - changes in element names and behavior

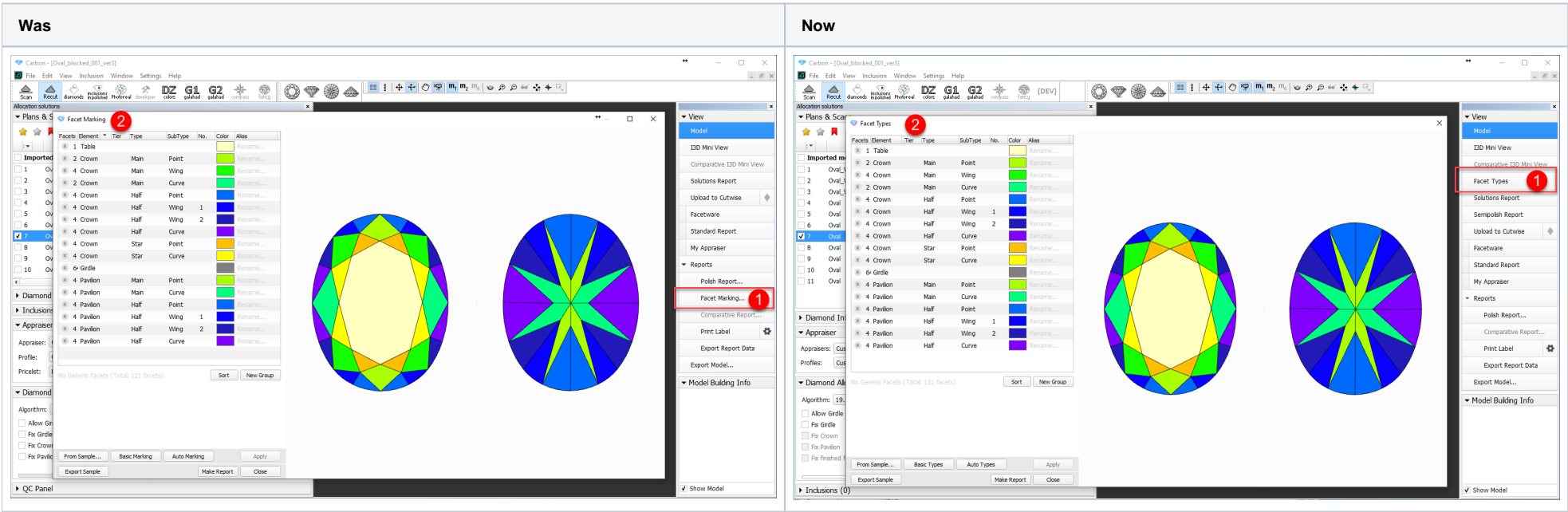
General name changes

To better match modern brilliant processing, some elements of the user interface were renamed:

| Old Term | New Term | Old Name in User Interface | New Name in User Interface |
|------------------------------|--------------|-----------------------------------|----------------------------|
| Cutting | Cut | All elements containing "Cutting" | Now contain "Cut" |
| | | Cutting list | Cutbook |
| | | Scan mode > Cutting & Method | Scan mode > Cut & Method |
| Client cutting, user cutting | In-house cut | Cutting list = "Client Cuttings" | Cutbook = "In-house Cuts" |
| Facet marking | Facet types | Right panel > Facet Marking | Right panel > Facet Types |

Facet Marking Rename to Facet Types

For more compliance with the system usage practices, the *Facet Marking* feature is renamed to *Facet Types*.



Allocation Solution Panel - Behavior and Order of Sections

For the **Recut** mode, the order of sections on the left panel was changed:

Was

Allocation solutions

Plans & Scans

★ ☆ ★ ★ ★ ★ ★ ★ ✖

Compare Standard Report

| # | Price | Mass | BBB | Yield | Diam 1 |
|---|---------|--------|-------|--------|--|
| <input type="checkbox"/> Imported model | | | | | |
| <input type="checkbox"/> 18 | 10308\$ | 1.9600 | CB 19 | 59.56% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 |
| <input checked="" type="checkbox"/> 1 | 9691\$ | 1.8507 | CB 1 | 56.20% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 |
| <input type="checkbox"/> 2 | 9691\$ | 1.8492 | CB 2 | 56.20% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 |

Diamond Info

1

Cutting: CushionRectangular_PM4_PG8_PH24_PBrill_C32

Model Mass: 1.5482 ct

Price: 9 286 \$

Clarity: SI1

Discount: -10.00 %

DZ Color: H

PPC: 6030 \$/ct

Grade: EX

Diamonds

| Diam # | Cut | Price | iscour | PPC | Mass | la |
|--|--|--------|--------|--------------|--------|----|
| <input checked="" type="checkbox"/> Diam 1 | CushionRectangular_PM4_PG8_PH24_PBrill_C32 | 9286\$ | -10% | 6030.00\$/ct | 1.54ct | S |
| <input checked="" type="checkbox"/> Diam 2 | Brilliant | 405\$ | -10% | 1350.00\$/ct | 0.30ct | S |

Appraiser

Multicutting

Cutting: CushionRectangular_PM4_PG8_PH

Appraiser: CushionRectangular

Profile: Cushion_1

Absolute+Relative

Show Editor

Diamond Allocation

Algorithm: 18. Semipolished

+ Smart Recut

Cutting list: Favorites

1/4

Diamond grade: EX

ionRectan shionSque

Start Allocation

Inclusions (17 of 58)

QC Filter

Clarity: IF VVS1 VVS2 VS1 VS2 SI1 SI2 SI3 I1 I2 I3

Diamond: #1 *

inside 0 5 10 20 50 100 200 500 1000 off 100µm

outside

Now

Allocation solutions

Plans & Scans

★ ☆ ★ ★ ★ ★ ★ ★ ✖

Compare Standard Report

| # | Price | Mass | BBB | Yield | Diam 1 | Mass | Alloc |
|---|---------|--------|-------|--------|--|--------|-------|
| <input type="checkbox"/> Imported model | | | | | | | |
| 3.2739 | | | | | | | |
| <input type="checkbox"/> 19 | 10368\$ | 1.9633 | CB 20 | 59.87% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 | 1.6522 | SR |
| <input type="checkbox"/> 18 | 10308\$ | 1.9600 | CB 19 | 59.56% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 | 1.6475 | SR |
| <input checked="" type="checkbox"/> 1 | 9691\$ | 1.8507 | CB 1 | 56.20% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 | 1.5482 | |
| <input type="checkbox"/> 2 | 9691\$ | 1.8492 | CB 2 | 56.20% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 | 1.5473 | |
| <input type="checkbox"/> 3 | 9683\$ | 1.8922 | CC 11 | 57.73% | CushionRectangular_PM4_PG8_PH24_PBrill_C32 | 1.5513 | |

Plan 1

| Diam # | Cut | Price | Discount | PPC | Mass | Clarity | C | Grade |
|--|------------|--------|----------|--------------|----------|---------|---|-------|
| <input checked="" type="checkbox"/> Diam 1 | Cushion... | 9286\$ | -10% | 6030.00\$/ct | 1.5482ct | SI1 | H | EX |
| <input checked="" type="checkbox"/> Diam 2 | Brilliant | 405\$ | -10% | 1350.00\$/ct | 0.3025ct | SI2 | H | EX |
| Layer 1 1 | | Diam 1 | Diam 2 | 0.0827ct | 0.13mm | | | |

Inclusions (17 of 58)

QC Filter

Clarity: IF VVS1 VVS2 VS1 VS2 SI1 SI2 SI3 I1 I2 I3

Diamond: #1 *

inside 0 5 10 20 50 100 200 500 1000 off 100µm

outside

I1 I1 3D-2 I1

I1 I1 3D-6 I1

SI1 SI1 3D-8 SI1

SI1 SI1 3D-9 SI1

Appraiser

Multiple Cuts

Cut: CushionRectangular_PM4_PG8_PH24_PBrill

Appraiser: CushionRectangular

Profile: Cushion_1

Absolute+Relative

Show Editor

Diamond Allocation

Algorithm: 18. Semipolished

+ Smart Recut

Cutbook: Favorites

1/4

Diamond grade: EX

Brilliant ionRectan PM4 PG8 shionSque PM4 PG8 Oval MC

Start Allocation

What was changed:

- order of sections (**Inclusions** moved up);
- **Inclusions** panel unified with the QC Filter (for details, see the sub-section below);
- default sizes for the sections (you do not need to resize panels as often as previously);
- **Diamond Info** unification and automatic name change (for details, see the sub-section below)

Inclusions Panel with QC Filter

The **Inclusions** panel lists diamond inclusions and allows users to manage them. Previously, the system also included a separate **QC Panel** used for inclusions filtering. To provide a more comfortable way of working with inclusions, these two panels are combined - the QC filter is included in the **Inclusions** panel and, if activated, affects the list of displayed inclusions.

Was

Allocation solutions

Plans & Scans

Diamond Info

Inclusions (14)

XRayAuto-1

SI1

XRayAuto-2

VS2

XRayAuto-3

SI1

XRayAuto-4

VS1

XRayAuto-5

VS1

XRayAuto-6

SI2

XRayAuto-7 (core)

VS2

XRayAuto-7 ex(shell)

VVS2

XRayAuto-8

VS2

XRayAuto-9

VS1

XRayAuto-10

VVS1

XRayAuto-11

VS1

XRayAuto-12

VVS2

XRayAuto-13

Appraiser and Pricelist

Diamond Allocation

QC Panel

QC Mode

Clarity: IF, VVS1, VVS2, VS1, VS2, SI1, SI2, SI3, I1, I2, I3

Diamond: Diam 1 (active)

inside

outside

0

10

20

30

40

50

60

70

80

90

100

60µm

Now

Carbon - [MC Project-1_preset-2_SR_Recut2_new]

File Edit View Inclusion Window Settings Help

Scan Recut diamonds inclusions Phobos DZ G1 G2 G3 G4 G5 G6 G7 G8 G9 G10 G11 G12 G13 G14 G15 G16 G17 G18 G19 G20 G21 G22 G23 G24 G25 G26 G27 G28 G29 G30 G31 G32 G33 G34 G35 G36 G37 G38 G39 G40 G41 G42 G43 G44 G45 G46 G47 G48 G49 G50 G51 G52 G53 G54 G55 G56 G57 G58 G59 G60 G61 G62 G63 G64 G65 G66 G67 G68 G69 G70 G71 G72 G73 G74 G75 G76 G77 G78 G79 G80 G81 G82 G83 G84 G85 G86 G87 G88 G89 G90 G91 G92 G93 G94 G95 G96 G97 G98 G99 G100

Allocation solutions

Plans & Scans

Imported model

19

103688

1.9633

CB 20

59.87%

CushionRectangular_FMM_FG8_FH24_Pbrill_C32

1.6522

SR

18

103088

1.9600

CB 19

59.56%

CushionRectangular_FMM_FG8_FH24_Pbrill_C32

1.6475

SR

1

96915

1.6307

CB 1

56.20%

CushionRectangular_FMM_FG8_FH24_Pbrill_C32

1.5482

2

96915

1.8492

CB 2

56.20%

CushionRectangular_FMM_FG8_FH24_Pbrill_C32

1.5473

3

96836

1.8922

CC 11

57.73%

CushionRectangular_FMM_FG8_FH24_Pbrill_C32

1.5513

4

96336

1.9016

CD 1

57.73%

CushionRectangular_FMM_FG8_FH24_Pbrill_C32

1.5477

5

96136

1.8687

CC 12

57.12%

CushionRectangular_FMM_FG8_FH24_Pbrill_C32

1.5396

6

96036

1.8672

CC 13

56.81%

CushionRectangular_FMM_FG8_FH24_Pbrill_C32

1.5477

7

95186

1.8528

CB 3

56.51%

CushionRectangular_FMM_FG8_FH24_Pbrill_C32

1.4993

Plan 1

Diam #

Cut

Price

Discount

PPC

Mass

Clarity

C

Grade

Diam 1

Brilliant

72742

18%

1350.006/ct

6.30225ct

SI1

I1

EX

Diam 2

Brilliant

4059

18%

1350.006/ct

6.30225ct

SI2

I1

EX

Layer 1 1

Diam 1

Diam 2

0.0827ct

0.13mm

Inclusions (17 of 58)

QC Filter

Clarity: IF VVS1 VVS2 VS1 VS2 SI1 SI2 SI3 I1 I2 I3

Diamond: #1

inside

outside

0

10

20

30

40

50

60

70

80

90

100

100µm

II I1 3D-2

II

I1 I1 3D-4

SI1

SI1 SI1 3D-8

SI1

SI1 SI1 3D-9

SI1

SI1 SI1 3D-12

SI1

SI1 SI1 Flat Crack-4

SI1

SI2 SI2 3D-7

SI2

SI2 SI2 3D-8

SI2

VVS2 VVS2 Flat Crack-2

VVS2

VVS2 VVS2 3D-5

VVS2

Appraiser

Diamond Allocation

Applying filter in the **QC Panel** affected what was displayed in the Scene, but did not affect the **Inclusions** panel.

Panels are combined. When activating the QC filter, the inclusions are filtered both in the Scene and in the **Inclusions** panel itself which makes it easier to locate and select the required inclusions.

Diamond Info Panel Unification

To avoid duplication of information, the **Diamond Info** panel information was merged into the **Diamonds** panel:

ScanRecutdiamondsInclusionsPhotorealDZG1G2galahadgalahadcompassfancy{DEV}

Allocation solutions

Plans & Scans

★☆☆★★★☆☆☆☆

CompareStandard Report

| # | ▲ | Price | Mass | Diam 1 | Mass | Alloc | Clarity | Sym-O | Gr | Cut | Sym | Profile | Diam 2 | Mass | Clarity | Sym-O | Gr | Cut | Sym | Profile |
|-----------------------|---|---------|--------|-----------|--------|-------|---------|-------|---------|-------|---------|----------------------|-----------|--------|---------|-------|----|-----|-----|----------------------|
| Imported model16.2210 | | | | | | | | | | | | | | | | | | | | |
| 28 | | 18252\$ | 2.3423 | Brilliant | 2.3423 | SR | VS1 | +2.53 | EX-FR | EX-FR | EX-FR | ModernCut_2019-12-10 | | | | | | | | |
| 27 | | 23805\$ | 2.3046 | Brilliant | 2.3046 | VS2 | +8.81 | EX | EX | EX | EX | ModernCut_2019-12-10 | | | | | | | | |
| 26 | | 25155\$ | 2.1515 | Brilliant | 2.1515 | VS1 | +9.06 | EX | EX | EX | EX | ModernCut_2019-12-10 | | | | | | | | |
| 25 | | 65127\$ | 4.8284 | Brilliant | 3.2514 | SR | VS2 | +6.93 | EX | EX | EX | ModernCut_2019-12-10 | Brilliant | 1.5770 | IF | +8.51 | EX | EX | EX | ModernCut_2019-12-10 |
| 24 | | 74995\$ | 4.8057 | Brilliant | 3.2287 | SR | VS1 | +7.84 | EX | EX | EX | ModernCut_2019-12-10 | Brilliant | 1.5770 | IF | +8.52 | EX | EX | EX | ModernCut_2019-12-10 |
| 23 | | 59874\$ | 4.8517 | Brilliant | 3.2748 | SR | VS2 | +5.46 | EX-VG | EX | EX-VG | ModernCut_2019-12-10 | Brilliant | 1.5770 | IF | +8.51 | EX | EX | EX | ModernCut_2019-12-10 |
| 22 | | 65280\$ | 4.8420 | Brilliant | 3.2651 | SR | VS2 | +6.71 | EX | EX | EX | ModernCut_2019-12-10 | Brilliant | 1.5770 | IF | +8.51 | EX | EX | EX | ModernCut_2019-12-10 |
| 21 | ✓ | 38046\$ | 4.9139 | Brilliant | 3.3370 | SR | VS2 | +1.70 | EX-Poor | EX-VG | EX-Poor | ModernCut_2019-12-10 | Brilliant | 1.5770 | IF | +8.52 | EX | EX | EX | ModernCut_2019-12-10 |
| 20 | | 65127\$ | 4.8341 | Brilliant | 3.2572 | SR | VS2 | +6.85 | EX | EX | EX | ModernCut_2019-12-10 | Brilliant | 1.5770 | IF | +8.52 | EX | EX | EX | ModernCut_2019-12-10 |
| 19 | | 65432\$ | 4.8460 | Brilliant | 3.2601 | SR | VS2 | +6.52 | EX | EX | EX | ModernCut_2019-12-10 | Brilliant | 1.5770 | IF | +8.51 | EX | EX | EX | ModernCut_2019-12-10 |

Diamond Info

21

Cutting: Brilliant

Price: 22 644 \$

Discount: -60.00 %

PPC: 6800 \$/ct

Model Mass: 3.3370 ct

Clarity: VS2

DZ Color: H

Grade: EX-Poor

Diamonds

| | Diam # | Cut | Price | Discount | PPC | Mass | Clarity | C | Grade |
|---|-----------|-----------|---------|----------|--------------|--------|---------|--------|---------|
| ✓ | Diam 1 | Brilliant | 22644\$ | -60% | 6800.00\$/ct | 3.33ct | VS2 | H | EX-Poor |
| ✓ | Diam 2 | Brilliant | 15402\$ | -10% | 9810.00\$/ct | 1.57ct | IF | H | EX |
| ✓ | Layer 1 1 | | ---- | ---- | ---- | 0.27ct | | 0.22mm | |

Appraiser

Appraisers: GIA Facetware + MyRound

Profiles: MyRound_ModernCut_2019-12-10

Diamond Allocation

Algorithm: 19. SmartRecut (Brilliant, Oval, AnyCut)

☐ Allow Girdle Extra Facets

☐ Fix Girdle

☐ Fix Crown

☐ Fix Pavilion

Presets: 8.MaxMass

Cut grade: EX

Symmetry grade: EX

Start Allocation

Inclusions (359)

Now all the detailed information about the selected scan/solution you can find in a unified detailed information section. The section name dynamically changes to **Scan Name/Solution Nuber** (like "Imported Model", "Plan 1", "Plan 2"):

Single-diamond Solution

| | Cutting | Price | Mass | Alloc | Yield | Clarity | DZ | Gr |
|----------------------|---------|---------|--------|-------|--------|---------|----|----|
| Imported model2.2307 | | | | | | | | |
| 4 | Oval | 10249\$ | 1.5665 | SR | 69.93% | VS1 | H | |
| 5 | Oval | 9110\$ | 1.5667 | SR | 69.93% | VS1 | H | |
| 6 | Oval | 9110\$ | 1.5669 | SR | 69.93% | VS1 | H | |
| 7 | Oval | 10249\$ | 1.5675 | SR | 69.93% | VS1 | H | |
| 8 | Oval | 10249\$ | 1.5647 | SR | 69.93% | VS1 | H | |
| 9 | Oval | 10249\$ | 1.5660 | SR | 69.93% | VS1 | H | |
| 10 | Oval | 10249\$ | 1.5636 | SR | 69.93% | VS1 | H | |
| ✓ 11 | Oval | 10184\$ | 1.5490 | SR | 69.49% | VS1 | H | |

Plan 11

| Diam # | Cut | Price | Discount | PPC | Mass | Clarity | C | Gr |
|----------|------|---------|----------|--------------|----------|---------|---|----|
| ✓ Diam 1 | Oval | 10184\$ | -10% | 6570.00\$/ct | 1.5490ct | VS1 | H | EX |

Multi-diamond Solution

| | Price | Mass | BBB | Yield | Diam 1 | Mass | Clarity | DZ | Gr |
|-----------------------|----------|---------|-------|--------|-----------|---------|---------|----|----|
| Imported model47.5649 | | | | | | | | | |
| 30 | 536797\$ | 15.2349 | BB 11 | 32.02% | Brilliant | 13.2353 | VS1 | H | |
| 31 | 533853\$ | 15.1611 | BB 12 | 31.87% | Brilliant | 13.2692 | VS1 | H | |
| 32 | 533780\$ | 15.6058 | BP 4 | 32.80% | Brilliant | 13.2692 | VS1 | H | |
| ✓ 33 | 533265\$ | 15.5298 | BP 5 | 32.65% | Brilliant | 13.2692 | VS1 | H | |
| 34 | 532163\$ | 15.3870 | BP 6 | 32.33% | Brilliant | 13.2692 | VS1 | H | |
| 35 | 532089\$ | 15.3751 | BP 7 | 32.31% | Brilliant | 13.2692 | VS1 | H | |
| 36 | 531795\$ | 15.3338 | BP 8 | 32.23% | Brilliant | 13.2692 | VS1 | H | |

Plan 33

| Diam # | Cut | Price | Discount | PPC | Mass | Clarity | C | Gr |
|-----------|-----------|----------|----------|---------------|-----------|---------|--------|----|
| ✓ Diam 1 | Brilliant | 516654\$ | -30% | 38934.00\$/ct | 13.2692ct | VS1 | H | |
| ✓ Diam 2 | Prinice | 16611\$ | -30% | 7350.00\$/ct | 2.2606ct | VVS1 | H | |
| Layer 1 1 | | | | | 0.6765ct | | 0.30mm | |

Applying Facet Types from Sample - Improved

The *apply facet types from sample* functionality introduced in the [previous release](#) have been improved. The major changes are:

- Facet Marking is renamed to Facet Types
- Grades are added to the solution list
- Grades are added to reports

The overview of how to work with the updated facet types apply from sample functionality is presented in the video below:

Video | Facet Types - Applying from Sample

Published:

2021, April 16

Last Updated:

2021, March 29

v.2.1

Your browser does not support the HTML5 video element

Video summary:

- The same parameter of a stone can be graded differently depending on how the Facet Types of cutting for this stone are defined.
- Therefore, if you control Facet Types, in some cases you control the cut grade.
- You can control the Facet Types of the scanned or rebuilt model by using your own model as a sample.
- Set the desired Facet Types for your sample, then use this sample during scanning or rebuild and the Facet Types will be automatically transferred from the sample to the created model.

Video keywords:

cut grade, facet types, sample

Published in:

Release Notes

2021-07-30 - HP Carbon 1.2.95

Documentation

NA

Playlists

NA

Also

[As Separate Page](#) | [Specification](#)

Angle between Neighboring Facets

Some changes were made for the [AdjacentFacetsAnglesEveryMin](#) parameter, allowing Smart Recut to set limitations for the angles between neighboring facets.

Adjusted Default Values

To provide better results by default, the initial values for the AdjacentFacetsAnglesEveryMin parameter were adjusted for the "MyAnyCut" appraiser.

| | | | | | | | | | | | | | | | | |
|-----|---|---|-----|---|---|---|-----|---|-----|---|-----|---|-----|---|-----|---|
| | 1.AllNarrow2.VerticesNa3.AnglesNar4.GirdleNar5.GirdleWide6.AnglesWic7.VerticesWi8.AllWide | | | | | | | | | | | | | | | |
| Was | 1 | - | 0,7 | - | 1 | - | 0,7 | - | 0,7 | - | 0,5 | - | 0,7 | - | 0,5 | - |
| Now | 3 | - | 2 | - | 3 | - | 2 | - | 2 | - | 1 | - | 2 | - | 1 | - |

Adding to MyOval Appraiser

The AdjacentFacetsAnglesEveryMin parameter previously was available only within the "MyAnyCut" appraiser - now it is also available in the presets of "MyOval" and "MyOvalPerformanceWare" appraisers.

Appraiser Editor

MyOval

Profile: Default (read only)

Hide Presets

CutSymmetryOther

| Parameter | [FR] | [GD] | [VG] | [EX] | [EX] | [VG] | [GD] | [FR] | 1.UltraSym | 2.HighSym | 3.MediumSy | 4.NormalSym | 5.Standard | 6.LowSym | 7.Extended | 8.MaxMass |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|------------|-----------|------------|-------------|------------|----------|------------|-----------|
| GirdleRatio | 1,2 | 1,2 | 1,2 | 1,25 | 1,75 | 1,8 | 1,8 | 1,8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TableGirdleSimilarity | 0 | 0 | 0 | 0 | 15 | 17,5 | 20 | 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| SquareDeviation | -10 | -5 | -3 | 0 | 6 | 8 | 10 | 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| GirdleShape_Flexure | -6 | -4 | -3 | -2 | 2 | 3 | 4 | 6 | 0 | 0,5 | 0,25 | 0,5 | 0,25 | 0,5 | 0,25 | 0,5 |
| Table | 50 | 50 | 52 | 54 | 63,5 | 65 | 66 | 66 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| CrownAngle | 29 | 29,5 | 30 | 31 | 40 | 46 | 50 | 51 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| CrownSlopeDeltaCW | -1,5 | -1 | -0,5 | 0 | 3 | 4,5 | 6 | 7,5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| CrownSlopeDeltaWP | -1,5 | -1 | -0,5 | 0 | 3 | 4,5 | 6 | 7,5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| CrownHeight | 10 | 11 | 11,5 | 12 | 16 | 16,5 | 17 | 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| PavilionAngle | 34 | 34,5 | 35 | 37,5 | 40,5 | 42 | 42,5 | 43 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| PavilionHeight | 35 | 36 | 36,5 | 39 | 44,5 | 46,5 | 47,5 | 48,5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| GirdleBezel | 1,5 | 2 | 2,2 | 2,5 | 5,5 | 6,5 | 8 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| LowerGirdleDepth | 70 | 72 | 76 | 78 | 82 | 84 | 86 | 90 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TotalHeight | 51,5 | 52,5 | 56,5 | 58 | 64,5 | 65 | 65,5 | 66,5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| StarHeight | 17 | 22 | 25 | 27 | 35 | 37 | 40 | 45 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| StarLength | 30 | 35 | 40 | 45 | 55 | 60 | 65 | 70 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Culet_mm | 0 | 0 | 0 | 0 | 0,03 | 0,09 | 0,4 | 0,8 | - | 0,5 | - | 1 | - | 1 | - | 1 |
| SweetLine | -9 | -6 | -3 | -1,5 | 1,5 | 3 | 6 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| AdjacentFacetsAnglesEveryMin | | | | | | | | | 3 | - | 3 | - | 3 | - | 3 | - |

Adding to SmartNormalize

The AdjacentFacetsAnglesEveryMin parameter is also added to the presets of the "19. SmartNormalize" and "19. SmartNormalizeLite" algorithms.

Carbon - [Oval_blocked_001_ver3]

FileEditViewInclusionWindowSettingsHelp

ScanRecutdiamondsInclusionsImpolishedPhotorealDZcolorsG1galahadG2galahadcompassfancy{DEV}

Appraiser Editor

Hide Presets

Plans & Scans

CuttingPriceJaritMassAllocProfileDZm-GrSymBr

Imported model2.2307

1Oval_WBT_C32_G...7438\$VS11.4946MyOvalDefaultHVGVG

2Oval_WBT_C32_G...7338\$VS11.4692MyOvalDefaultHVGVG

3Oval_WBT_C32_G...7288\$VS11.4585MyOvalDefaultHVGVG

4Oval10249\$VS11.5665SRMyOvalDefaultHEXEX

5Oval9110\$VS11.5667SRMyOvalDefaultHVGVG

6Oval9110\$VS11.5669SRMyOvalDefaultHVGVG

7Oval10249\$VS11.5675SRMyOvalDefaultHEXEX

8Oval10249\$VS11.5647SRMyOvalDefaultHEXEX

9Oval10249\$VS11.5660SRMyOvalDefaultHEXEX

10Oval10249\$VS11.5636SRMyOvalDefaultHEXEX

11Oval10184\$VS11.5490SRMyOvalDefaultHEXEX

Diamond Info

Appraiser

Diamond Allocation

Algorithm: 19. SmartNormalize

Allow Girdle Extra FacetsPresets: All presets

Fix GirdleCut grade: EX

Fix CrownSymmetry grade: EX

Fix Pavilion

Fix finished facets

Start Allocation

Inclusions (0)

QC Filter

Polish Report Templates

Cushion Reports - Tier Information

For the Cushion reports, the "Tier" information is added:

[illegible]

The Polish Illustrated HTML, RTF, and Standard Report templates for Cushion and Square Cushion are affected.

Cushion Reports - Grade Information

For the Cushion reports, the grades information is added:

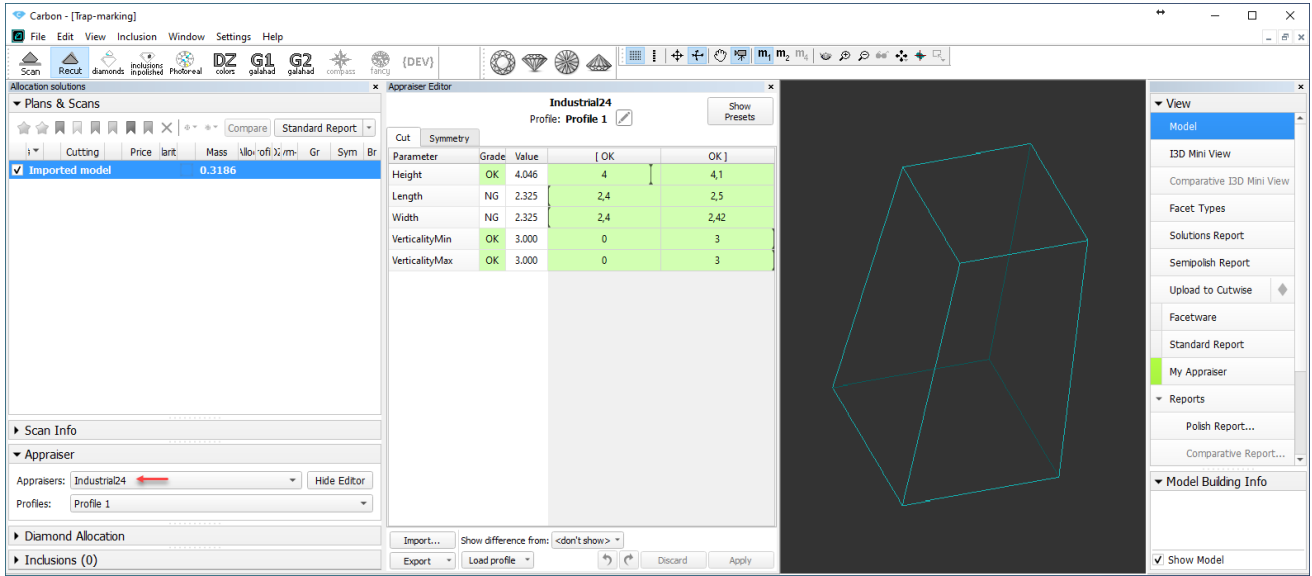
| Parameter | Avg | Min | Max | Dev | 1 | 2 | 3 | 4 | |
|--------------------------------|--------|--------|--------|------|--------|--------|-------|-------|------|
| Crown height, % | 14.89 | 14.89 | 14.89 | 0.00 | 14.89 | 14.89 | N/A | N/A | |
| Crown Width height, % | 14.89 | 14.89 | 14.89 | 0.00 | 14.89 | 14.89 | – | – | |
| Crown Length height, % | 15.10 | 15.10 | 15.10 | 0.00 | 15.10 | 15.10 | – | – | |
| Crm Main Width height, % | 14.89 | 14.89 | 14.89 | 0.00 | 14.89 | 14.89 | – | – | |
| Crm Main Length height, % | 15.10 | 15.10 | 15.10 | 0.00 | 15.10 | 15.10 | – | – | |
| Crown Corner height, % | 15.04 | 15.03 | 15.04 | 0.01 | 15.04 | 15.03 | 15.04 | 15.04 | |
| Pavilion height, % | 48.17 | 48.17 | 48.17 | 0.00 | 48.17 | 48.17 | N/A | N/A | |
| Pavilion Width height, % | 48.17 | 48.17 | 48.17 | 0.00 | 48.17 | 48.17 | – | – | |
| Pavilion Length height, % | 47.63 | 47.63 | 47.63 | 0.00 | 47.63 | 47.63 | – | – | |
| Pav Main Width height, % | 25.43 | 25.43 | 25.43 | 0.00 | 25.43 | 25.43 | – | – | |
| Pav Main Length height, % | 23.26 | 23.26 | 23.26 | 0.00 | 23.26 | 23.26 | – | – | |
| Pavilion Corner height, % | 47.49 | 47.48 | 47.49 | 0.00 | 47.49 | 47.48 | 47.49 | 47.49 | |
| Pavilion 2 Main height, % | 30.12 | 30.12 | 30.12 | 0.00 | 30.12 | 30.12 | 30.12 | 30.12 | |
| Table: Side, % | 62.61 | 61.18 | 64.05 | 2.87 | 61.18 | 64.05 | – | – | |
| Table: Corner w.r.t. Corner, % | 65.39 | 65.39 | 65.39 | 0.00 | 65.39 | 65.39 | – | – | |
| Table: Corner w.r.t. Width, % | 78.34 | 78.34 | 78.34 | 0.00 | 78.34 | 78.34 | – | – | |
| Diameter: Corner, % | 119.79 | 119.79 | 119.79 | 0.00 | 119.79 | 119.79 | – | – | |
| Crown Star Length, %: | 50.89 | 50.89 | 50.89 | 0.00 | – | – | – | – | |
| Crown Star Width, % | 51.13 | 51.13 | 51.13 | 0.00 | – | – | – | – | |
| Girdle thickness, % | 4.54 | 4.54 | 4.54 | 0.00 | – | – | – | – | |
| Culet, % | 0.00 | 0.00 | 0.00 | 0.00 | – | – | – | – | |
| Crown angle, ° | 37.47 | 37.47 | 37.47 | 0.00 | 37.47 | 37.47 | – | – | |
| Crown Main angle, ° | 37.47 | 37.47 | 37.47 | 0.00 | 37.47 | 37.47 | N/A | N/A | |
| Crm Main Width angle, ° | 37.47 | 37.47 | 37.47 | 0.00 | 37.47 | 37.47 | – | – | |
| Crm Main Length angle, ° | 38.39 | 38.39 | 38.39 | 0.00 | 38.39 | 38.39 | – | – | |
| Crown Corner angle, ° | 35.91 | 35.91 | 35.91 | 0.00 | 35.91 | 35.91 | 35.91 | 35.91 | |
| Crm Star Width angle, ° | 25.23 | 25.23 | 25.23 | 0.00 | 25.23 | 25.23 | 25.23 | 25.23 | |
| Crm Star Length angle, ° | 25.64 | 25.64 | 25.64 | 0.00 | 25.64 | 25.64 | 25.64 | 25.64 | |
| Pavilion angle, ° | 32.56 | 32.46 | 32.65 | 0.19 | 32.46 | 32.59 | 32.65 | 32.53 | |
| Pav Main Width angle, ° | 57.90 | 57.69 | 58.11 | 0.42 | 57.69 | 58.11 | – | – | |
| Pav Main Length angle, ° | 55.69 | 55.58 | 55.80 | 0.22 | 55.58 | 55.80 | – | – | |
| Pavilion Corner angle, ° | 53.87 | 53.65 | 54.08 | 0.43 | 53.65 | 53.93 | 54.08 | 53.80 | |
| Pavilion 2 Main angle, ° | 32.56 | 32.46 | 32.65 | 0.19 | 32.46 | 32.59 | 32.65 | 32.53 | |
| Girdle thickness, % | Type | Avg | Min | Max | Dev | 1 | 2 | 3 | 4 |
| G. th. Width | red | 4.54 | 4.54 | 4.54 | 0.00 | 4.54 | 4.54 | – | – |
| G. th. Length | red | 4.87 | 4.87 | 4.87 | 0.00 | 4.87 | 4.87 | – | – |
| G. th. Width | red | 5.08 | 5.07 | 5.08 | 0.01 | 5.07 | 5.08 | 5.08 | 5.07 |
| G. th. Width | green | 3.59 | 3.58 | 3.61 | 0.03 | 3.61 | 3.58 | 3.58 | 3.61 |
| G. th. Length | red | 3.94 | 3.94 | 3.95 | 0.01 | 3.95 | 3.95 | 3.94 | 3.94 |
| G. th. Corner width | green | 4.41 | 4.40 | 4.43 | 0.03 | 4.43 | 4.40 | 4.40 | 4.40 |
| G. th. Corner length | green | 4.40 | 4.39 | 4.41 | 0.02 | 4.41 | 4.40 | 4.39 | 4.40 |
| G. th. Width | yellow | 7.14 | 7.12 | 7.15 | 0.03 | 7.14 | 7.15 | 7.15 | 7.12 |
| G. th. Length | yellow | 7.51 | 7.49 | 7.53 | 0.04 | 7.50 | 7.53 | 7.52 | 7.49 |

| Parameter | Avg | Min | Max | Dev | 1 | 2 | 3 | 4 | Cut | Sym | |
|------------------------------|--------|--------|--------|------|--------|--------|-------|-------|------|-----|-----|
| Girdle Ratio (L\W) | 1.083 | – | – | – | – | – | – | – | EX | – | |
| Total height, % | 67.45 | – | – | – | – | – | – | – | EX | – | |
| Crown height, % | 13.73 | 13.73 | 13.73 | 0.00 | 13.73 | 13.73 | N/A | N/A | EX | – | |
| Crown height Width, % | 13.73 | 13.73 | 13.73 | 0.00 | 13.73 | 13.73 | – | – | – | – | |
| Crown height Length, % | 13.34 | 13.34 | 13.34 | 0.00 | 13.34 | 13.34 | – | – | – | – | |
| Crown height Corner, % | 13.59 | 13.58 | 13.59 | 0.00 | 13.59 | 13.59 | 13.59 | 13.58 | – | – | |
| Crm Main Width height, % | 13.73 | 13.73 | 13.73 | 0.00 | 13.73 | 13.73 | – | – | – | – | |
| Crm Main Length height, % | 13.34 | 13.34 | 13.34 | 0.00 | 13.34 | 13.34 | – | – | – | – | |
| Pavilion height, % | 49.96 | 49.96 | 49.96 | 0.00 | 49.96 | 49.96 | N/A | N/A | EX | – | |
| Pavilion height Width, % | 49.96 | 49.96 | 49.96 | 0.00 | 49.96 | 49.96 | – | – | – | – | |
| Pavilion height Length, % | 50.27 | 50.27 | 50.27 | 0.00 | 50.27 | 50.27 | – | – | – | – | |
| Pavilion height Corner, % | 49.59 | 49.59 | 49.59 | 0.00 | 49.59 | 49.59 | 49.59 | 49.59 | – | – | |
| Pav 1 Main Width height, % | 28.51 | 28.51 | 28.51 | 0.00 | 28.51 | 28.51 | – | – | – | – | |
| Pav 1 Main Length height, % | 25.61 | 25.61 | 25.62 | 0.00 | 25.61 | 25.62 | – | – | – | – | |
| Pavilion 2 Main height, % | 30.63 | 30.63 | 30.63 | 0.00 | 30.63 | 30.63 | 30.63 | 30.63 | – | – | |
| Table: Side, % | 65.12 | 63.00 | 67.24 | 4.24 | 63.00 | 67.24 | – | – | EX | – | |
| Table: Corn. w.r.t. Corn., % | 69.51 | 69.51 | 69.51 | 0.00 | 69.51 | 69.51 | – | – | – | – | |
| Table: Corn. w.r.t. Width, % | 83.88 | 83.88 | 83.88 | 0.00 | 83.88 | 83.88 | – | – | – | – | |
| Diameter: Corner, % | 120.68 | 120.68 | 120.68 | 0.00 | 120.68 | 120.68 | – | – | – | – | |
| Crown Star Length, %: | 50.75 | 50.75 | 50.76 | 0.01 | – | – | – | – | – | – | |
| Crown Star Width, % | 49.32 | 49.32 | 49.33 | 0.00 | – | – | – | – | – | – | |
| Girdle thickness, % | 3.76 | 3.76 | 3.76 | 0.00 | – | – | – | – | EX | – | |
| Culet, % | 0.00 | 0.00 | 0.00 | 0.00 | – | – | – | – | – | – | |
| Crown angle, ° | 36.57 | 36.57 | 36.57 | 0.00 | 36.57 | 36.57 | – | – | – | – | |
| Crown Main angle, ° | 36.57 | 36.57 | 36.57 | 0.00 | 36.57 | 36.57 | N/A | N/A | – | – | |
| Crm Main Width angle, ° | 36.57 | 36.57 | 36.57 | 0.00 | 36.57 | 36.57 | – | – | EX | EX | |
| Crm Main Length angle, ° | 36.96 | 36.96 | 36.96 | 0.00 | 36.96 | 36.96 | – | – | EX | EX | |
| Crown Corner angle, ° | 36.54 | 36.54 | 36.54 | 0.00 | 36.54 | 36.54 | 36.54 | 36.54 | – | – | |
| Crm Star Width angle, ° | 24.35 | 24.35 | 24.35 | 0.00 | 24.35 | 24.35 | 24.35 | 24.35 | – | – | |
| Crm Star Length angle, ° | 23.96 | 23.96 | 23.96 | 0.00 | 23.96 | 23.96 | 23.96 | 23.96 | – | – | |
| Pavilion angle, ° | 33.40 | 33.40 | 33.40 | 0.00 | 33.40 | 33.40 | 33.40 | 33.40 | – | – | |
| Pav 1 Main Width angle, ° | 60.08 | 60.08 | 60.08 | 0.00 | 60.08 | 60.08 | – | – | EX | EX | |
| Pav 1 Main Length angle, ° | 58.18 | 58.18 | 58.18 | 0.00 | 58.18 | 58.18 | – | – | EX | EX | |
| Pavilion 1 Corner angle, ° | 54.05 | 54.05 | 54.05 | 0.00 | 54.05 | 54.05 | 54.05 | 54.05 | – | – | |
| Pavilion 2 Main angle, ° | 33.40 | 33.40 | 33.40 | 0.00 | 33.40 | 33.40 | 33.40 | 33.40 | EX | EX | |
| Girdle thickness, % | Type | Avg | Min | Max | Dev | 1 | 2 | 3 | 4 | Cut | Sym |
| G. th. Width | red | 3.76 | 3.76 | 3.76 | 0.00 | 3.76 | 3.76 | – | – | – | – |
| G. th. Length | red | 3.84 | 3.84 | 3.84 | 0.00 | 3.84 | 3.84 | – | – | – | – |
| G. th. Width | red | 4.28 | 4.27 | 4.28 | 0.00 | 4.27 | 4.27 | 4.28 | 4.28 | – | – |
| G. th. Width | green | 2.67 | 2.67 | 2.67 | 0.00 | 2.67 | 2.67 | 2.67 | 2.67 | – | – |
| G. th. Length | green | 2.98 | 2.98 | 2.98 | 0.00 | 2.98 | 2.98 | 2.98 | 2.98 | – | – |
| G. th. Corner width | green | 2.63 | 2.63 | 2.63 | 0.00 | 2.63 | 2.63 | 2.63 | 2.63 | – | – |
| G. th. Corner length | green | 2.86 | 2.86 | 2.86 | 0.00 | 2.86 | 2.86 | 2.86 | 2.86 | – | – |
| G. th. Width | yellow | 6.08 | 6.08 | 6.08 | 0.00 | 6.08 | 6.08 | 6.08 | 6.08 | – | – |
| G. th. Length | yellow | 6.50 | 6.50 | 6.50 | 0.00 | 6.50 | 6.50 | 6.50 | 6.50 | – | – |

The Polish Illustrated HTML and Standard Report for Cushion and Square Cushion are affected.

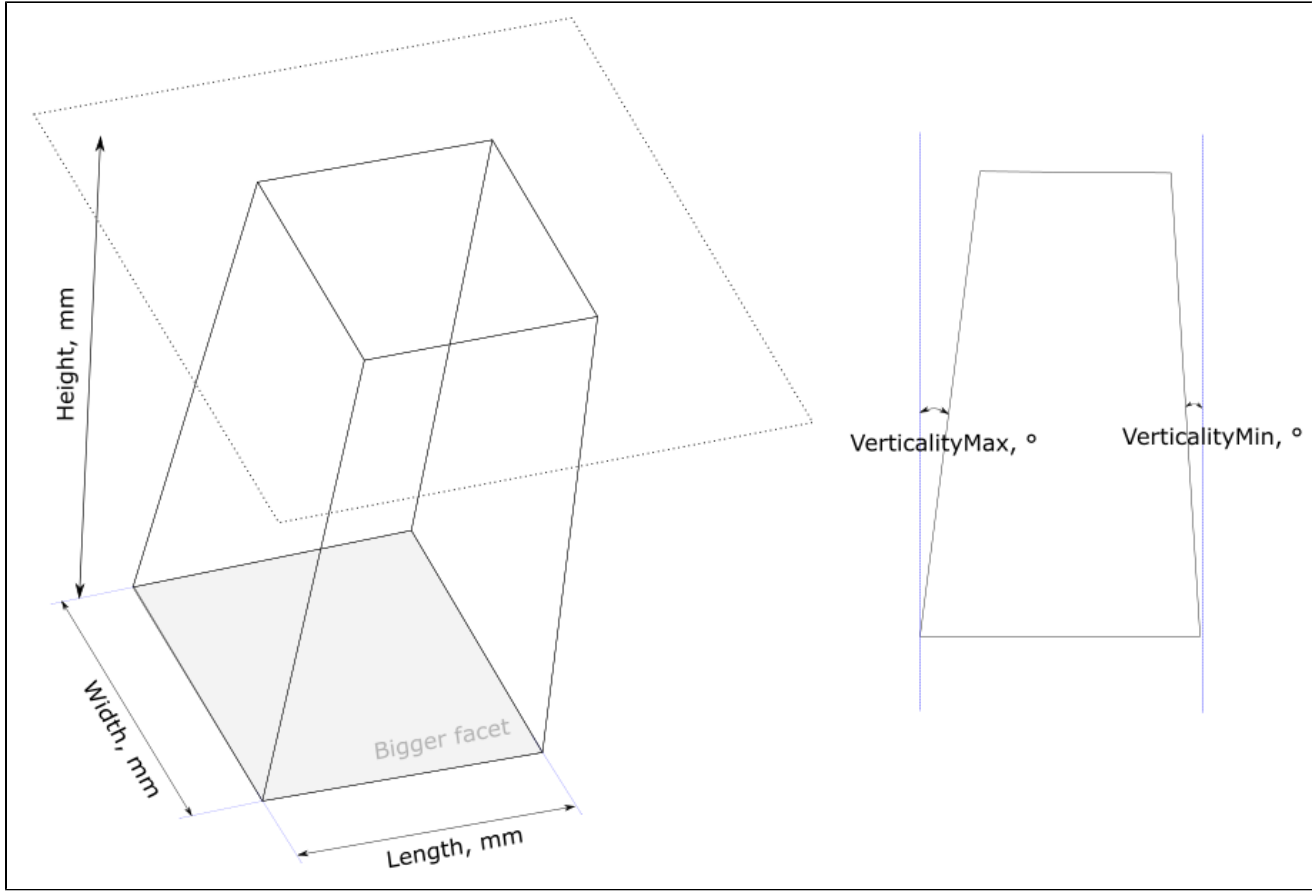
Appraiser for Trapezoid-Like Objects

You can now quickly estimate the trapezoid-like objects of the "Industrial24" standard. To do this, use the new "Industrial24" appraiser.



The "Industrial24" standard is aimed to produce:

- Width-Length of bigger facet close to 2.4 mm
- Height close to 4 mm
- Max and Min incline angles no more than 3°



Currently, the following grades are available for important parameters:

- OK - parameter is within boundaries
- NG ("NEGATIVE") - outside the boundaries

Smart Recut - Running for Both Diamonds in Multi-Diamond Solutions

Previously, when using the [13. Cascade-2M](#) algorithm with the + **Smart Recut** option, you obtained a *smart recut* solution only for the larger of two diamonds - the smaller diamond was a *recut solution*. Now you automatically obtain the smart recut solutions for both diamonds.



Plans & Scans

Compare

Standard Report

#

Price

Mass

BBB

Yield

Diam 1

Mass

Alloc

Clarity

32 Sym-C

Gr

Cut 3ym

Pro

Diam 2

Mass

Alloc

larit

32 Sym-C

Imported model

19

103685

1.9633

CB 20

59.87%

CushionRectangular_PM4_PG8_PH24_P8rill_C32

1.6522

SR

S11

H +7.38

EX

EX

EX

Cushion_1

Brilliant

0.3114

SR

S12

H +7.73

17

103555

1.9541

CB 18

59.56%

CushionRectangular_PM4_PG8_PH24_P8rill_C32

1.6522

SR

S11

H +7.38

EX

EX

EX

Cushion_1

Brilliant

0.3019

S12

H +8.00

1

96915

1.8507

CB 1

56.20%

CushionRectangular_PM4_PG8_PH24_P8rill_C32

1.5482

S11

H +8.00

EX

EX

EX

Cushion_1

Brilliant

0.3025

S12

H +8.91

2

96915

1.8507

CB 21

56.00%

CushionRectangular_PM4_PG8_PH24_P8rill_C32

1.5483

S11

H +7.05

EX

EX

EX

Cushion_1

Brilliant

0.3019

S12

H +8.00

Diamond Allocation

Algorithm: 13. Cascade-2M

+ Smart Recut

Was - Now

Smart Recut will be launched only for two best (by price) Recut solutions and only for "gold star" SR presets. Thus, there will be 2 solutions with SR. For details about gold stars, refer to the **"Gold Stars" Configuring** section of this release notes.

New Parameter - Roundness at 11.25°

On large diamonds, the difference in radius is especially noticeable within a small segment. To put this difference under the additional control, the new [Roundness](#) parameter is added - now it is additionally estimated at any selected 11.25° sector (previously the smallest segment was 15°).

Note

Unlike the other [Roundness](#) parameters measured in %(diameter), this parameter is measured in millimeters (mm).

| | |
|----------------|-------------------------|
| Appraiser | GIA Facetware + MyRound |
| Tab | Symmetry |
| Parameter Name | 2RRoundnessMM11_25 |
| Units | mm |

Automatic Actions - Post-Scan STL Export


Now you can configure the system so that after the stone scan the obtained model will be automatically exported to STL format:

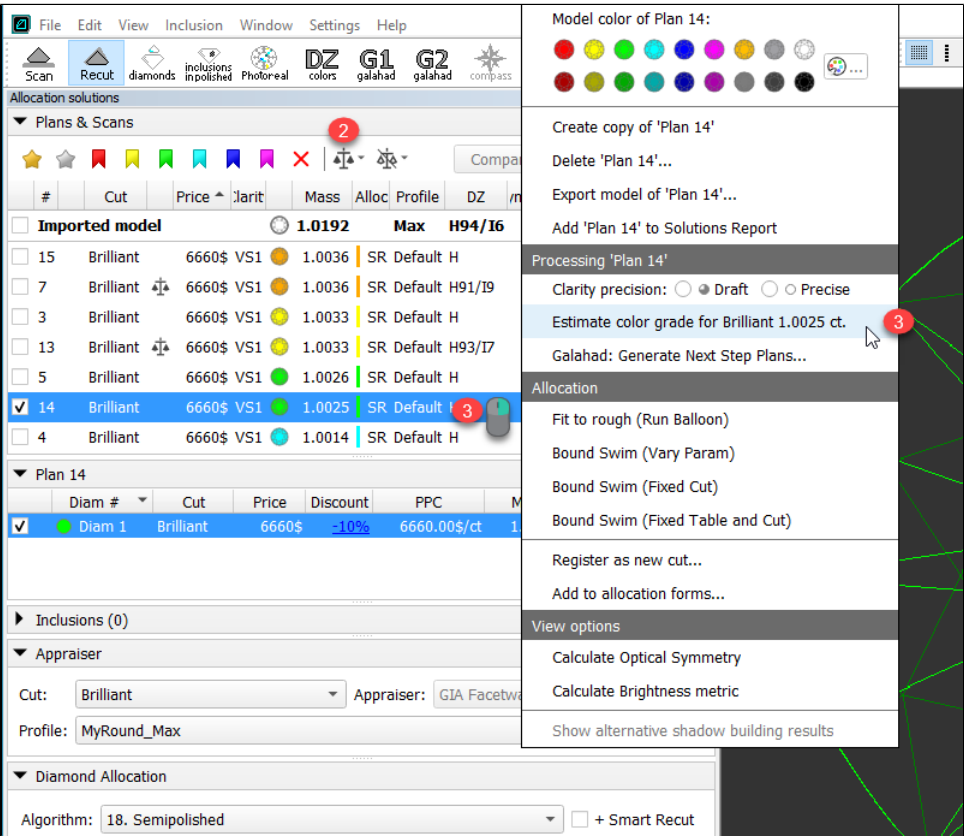
1. Select **Settings > General Settings**.
2. In the **Automatic Actions** section, click the **Post-Scan Export** tab.
3. Enable **STL text**, **STL binary**, or both, and set save locations for them.
4. Click **OK**.

Running Estimation Only for Selected Solutions

Now you are able to obtain the DZ color estimation only for the selected solutions.

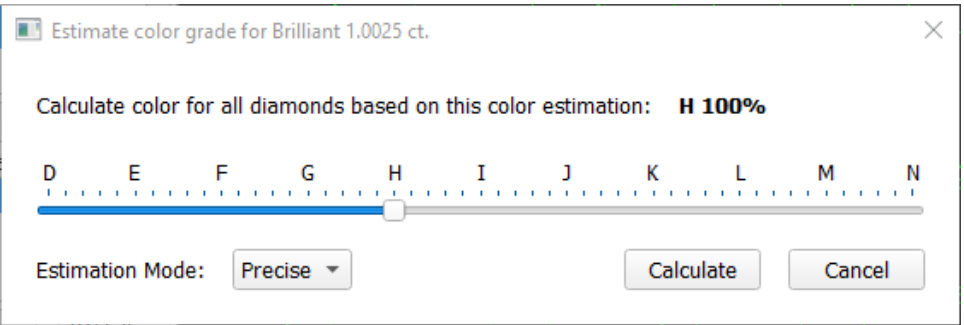
To do that:

1. In the solution list, select the checkboxes to the right of the solutions you want to get an estimation for.
2. On the toolbar of the **Plans & Scans** section, click the **Add solution(s) to Solutions Report** button. The solutions are marked with .
3. In the solution list, right-click the solutions you want to start estimation from and then select **Estimate color grade for ...**

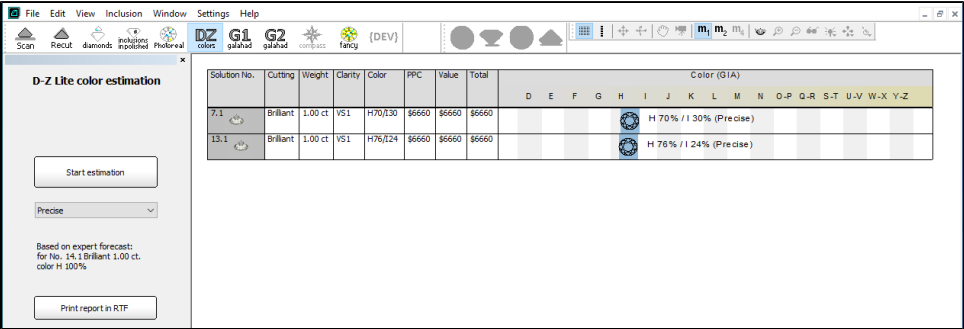


The estimate dialog is displayed.

4. In the estimate dialog, set color estimation for your starting solution and the **Estimation Mode**.



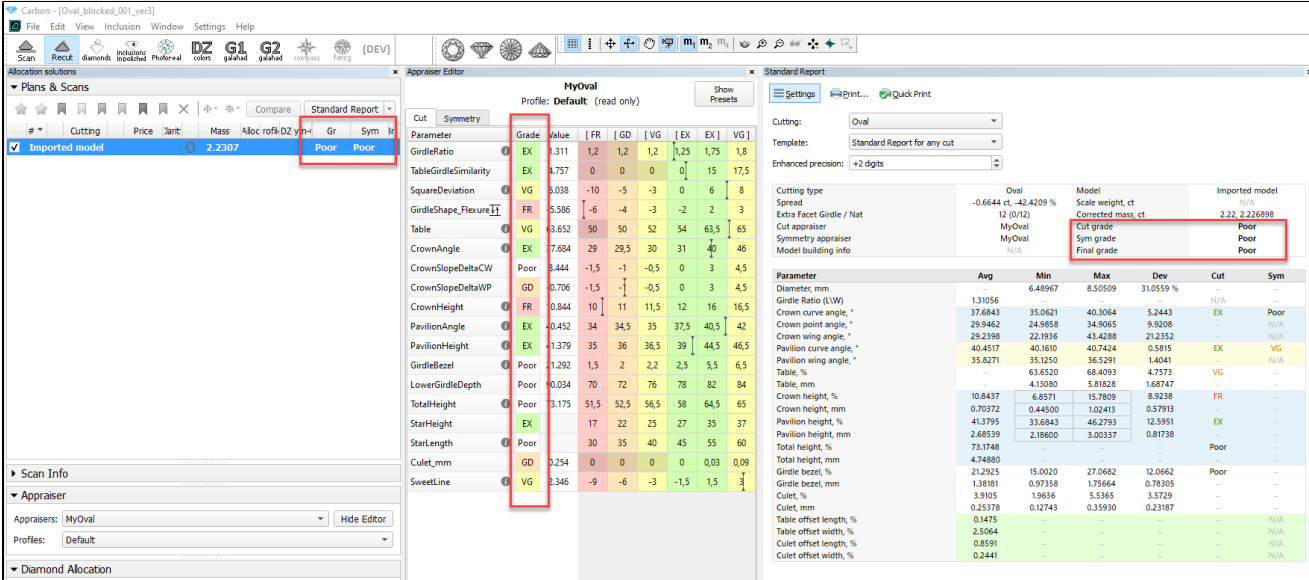
5. Click **Calculate**. The system switches to the **DZ colors** mode and displays the progress. As soon as the calculation for the selected solutions is finished, their results are displayed in the table.



Grades for Scans

In many cases, it is important to quickly *estimate scans*. To provide this possibility, the **grades** information is presented in:

- Solution list (was before)
- The **Appraiser editor**
- Reports (Standard and Polish)



Report Actualization

To be in correspondence with the modern diamond processing, some reports were updated.

Label Report

In [Label Report](#), for a more informative representation of cuts (parameters and grades), the templates were changed. Some parameters were added, some were removed. Below are examples of Cushion, Brilliant and AnyCut Label Reports:

| | Was | Now |
|-----------|-----|-----|
| Brilliant | | |

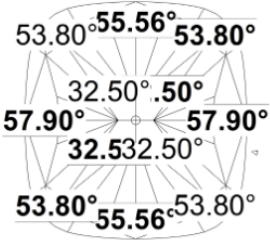
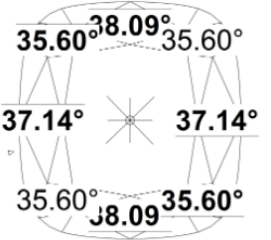
| Stone ID: Demo1ct | | | Brilliant | 07.05.2021 15:46 | HPO11+ | | | |
|-----------------------------|-------------|---------|-------------|------------------|-------------|-------------|-----|----|
| Parameter | Avg | | Min | Max | Dev | Cut | Sym | |
| Diameter, mm | 6.301 | | 6.296 | 6.304 | 0.12 % | – | EX | |
| Pav. angle, ° | 40.60 | | 40.60 | 40.60 | 0.00 | EX | EX | |
| Crown angle, ° | 36.50 | | 36.50 | 36.50 | 0.00 | EX | EX | |
| Girdle bezel, % | 0.221 mm | 3.50 % | 3.50 | 3.50 | 0.00 | EX | EX | |
| Table, % | 3.467 mm | 55.02 % | 55.02 | 55.02 | 0.00 | EX | EX | |
| Total height, % | 3.972 mm | 63.03 % | – | – | – | – | – | |
| Crown height, % | 1.049 mm | 16.66 % | 16.66 | 16.66 | 0.00 | – | EX | |
| Pav. height, % | 2.701 mm | 42.87 % | 42.87 | 42.87 | 0.00 | – | EX | |
| Star, % | 50.00 | | – | – | – | – | EX | |
| Pav. half, % | 79.00 | | 79.00 | 79.00 | 0.00 | EX | EX | |
| G-C off., % | 0.00 ± 0.12 | | G-T off., % | 0.00 ± 0.10 | T-C off., % | 0.00 ± 0.13 | | |
| Table Processing parameters | | | | | | | | |
| Table allowance before | 0.039 mm | | | incline | 0.32 ° | | | |
| Reference Line parameters | | | | | | | | |
| Marking for Crown, mm | C8 before | | 1.095 | | C8 after | 1.049 | | |
| Marking for Pav., mm | P8 before | | 1.281 | | P8 after | 1.270 | | |
| Total weight, ct | 0.97 | | | | | | EX | EX |

Diagram of a round brilliant cut diamond showing 40.60° angles for the crown facets and 8 pavilion facets labeled P1 through P8.

Diagram of an octagonal brilliant cut diamond showing 36.50° angles for the crown facets and 8 pavilion facets labeled C1 through C8.

| | | | | | | | | |
|-----------------------------|--|-----------|---------------|-----------|------------------|--------------|---------|----------|
| Stone ID: Demo1ct | | | | Brilliant | 07.05.2021 15:56 | | HPO11+ | |
| Width | | 6.296 mm | | Lenght | 6.304 mm | Total weight | 0.97 ct | |
| Parameter | | Avg | | Min | Max | Dev | Cut | Sym |
| Diameter, mm | | 6.301 mm | | 6.296 | 6.304 | 0.12 % | - | EX |
| Crown angle, ° | | 36.50 | | 36.50 | 36.50 | 0.00 | EX | EX |
| Pavilion angle, ° | | 40.60 | | 40.60 | 40.60 | 0.00 | EX | EX |
| Table, % | | 3.467 mm | 55.02 % | 55.02 | 55.02 | 0.00 | EX | EX |
| Crown height, % | | 1.049 mm | 16.66 % | 16.66 | 16.66 | 0.00 | - | EX |
| Pavilion height, % | | 2.701 mm | 42.87 % | 42.87 | 42.87 | 0.00 | - | EX |
| Girdle bezel, % | | 0.221 mm | 3.50 % | 3.50 | 3.50 | 0.00 | EX | EX |
| Total height, % | | 3.972 mm | 63.03 % | - | - | - | - | - |
| Star length, % | | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | EX | EX |
| Lower girdle length, % | | 79.00 | 79.00 | 79.00 | 79.00 | 0.00 | EX | EX |
| Table offset, % | | 0.000 mm | 0.00 ± 0.10 % | - | - | - | - | EX |
| Culet offset, % | | 0.000 mm | 0.00 ± 0.12 % | - | - | - | - | EX |
| Table-culet offset, % | | 0.000 mm | 0.00 ± 0.13 % | - | - | - | - | EX |
| | | | | | | | EX | EX |
| Table Processing parameters | | | | | | | | |
| Table allowance before | | | 0.039 mm | | incline | | 0.32 ° | |
| Reference Line parameters | | | | | | | | |
| Marking for Crown | | C8 before | | 1.095 mm | | C8 after | | 1.049 mm |
| Marking for Pavilion | | P8 before | | 1.281 mm | | P8 after | | 1.270 mm |
| | | | | | | | | |

| Stone ID: cushion_diamond_60025 with Solutions | | | Cushion | | 07.05.2021 15:23 | | HPO11+ | |
|--|-------------|-------------|-------------|-------------|------------------|-------------|--------|------------------|
| Parameter | Avg | | Min | Max | Dev | Cut | Sym | |
| Diameter, mm | 7.685 | | 6.790 | 8.156 | 20.11 % | – | N/A | |
| Pav. angle, ° | 32.50 | | 32.50 | 32.50 | 0.00 | N/A | N/A | |
| Crown angle, ° | 37.14 | | 37.14 | 37.14 | 0.00 | N/A | N/A | |
| Girdle bezel, % | 0.245 mm | 3.60 % | 3.60 | 3.60 | 0.00 | VG | N/A | |
| Table, % | 4.370 mm | 62.28 % | 60.71 | 63.84 | 3.14 | N/A | N/A | |
| Total height, % | 4.527 mm | 66.66 % | – | – | – | – | – | |
| Crown height, % | 1.011 mm | 14.89 % | 14.89 | 14.89 | 0.00 | – | N/A | |
| Pav. height, % | 3.271 mm | 48.17 % | 48.17 | 48.17 | 0.00 | – | N/A | |
| Star, % | 50.95 | | – | – | – | – | N/A | |
| Pav. half, % | N/A | | N/A | N/A | N/A | N/A | N/A | |
| G-C off., % | 0.00 ± 0.12 | | G-T off., % | 0.00 ± 0.09 | T-C off., % | 0.00 ± 0.13 | | |
| Table Processing parameters | | | | | | | | |
| Table allowance before | | 0.053 mm | | incline | | 0.46 ° | | |
| Reference Line parameters | | | | | | | | |
| Marking for Crown, mm | | C8 before | | N/A | | C8 after | | N/A |
| Marking for Pav., mm | | P8 before | | N/A | | P8 after | | N/A |
| Total weight, ct | | 1.87 | | | | | | Poor Poor |

| Stone ID: cushion diamond 60025 with Solutions | | Cushion | | 07.05.2021 16:00 | | HP011+ | |
|--|-----------|---------|----------|------------------|--------------|---------|-------|
| Width | 6.790 mm | Lenght | | 7.233 mm | Total weight | 1.87 ct | |
| Parameter | Avg | Min | Max | Dev | Cut | Sym | |
| Girdle Ratio | 1.065 | - | - | - | - | EX | - |
| Crown Main Width angle, ° | 37.14 | 37.14 | 37.14 | 0.00 | EX | EX | - |
| Crown Main Length angle, ° | 38.09 | 38.09 | 38.09 | 0.00 | EX | EX | - |
| Pavilion 1 Main Width angle, ° | 57.90 | 57.90 | 57.90 | 0.00 | EX | EX | - |
| Pavilion 1 Main Length angle, ° | 55.56 | 55.56 | 55.56 | 0.00 | EX | EX | - |
| Pavilion 2 Main angle, ° | 32.50 | 32.50 | 32.50 | 0.00 | EX | EX | - |
| Table Widthwise, % | 4.122 mm | 60.71 % | - | - | - | EX | - |
| Table Lengthwise, % | 4.618 mm | 63.84 % | - | - | - | - | - |
| Crown height, % | 1.011 mm | 14.89 % | 14.89 | 14.89 | 0.00 | EX | - |
| Pavilion height, % | 3.271 mm | 48.17 % | 48.17 | 48.17 | 0.00 | EX | - |
| Girdle bezel, % | 0.245 mm | 3.60 % | 3.60 | 3.60 | 0.00 | EX | - |
| Total height, % | 4.527 mm | 66.66 % | - | - | - | EX | - |
| Star, % | 50.95 | - | - | - | - | - | - |
| Pavilion half, % | N/A | N/A | N/A | N/A | - | - | - |
| Table offset Length, % | 0.00 | EX | Width, % | 0.00 | - | EX | - |
| Culet offset Length, % | 0.00 | EX | Width, % | 0.00 | - | EX | - |
| | | | | | | | EX EX |
| Table Processing parameters | | | | | | | |
| Table allowance before | 0.053 mm | | incline | | 0.46 ° | | |
| Reference Line parameters | | | | | | | |
| Marking for Crown | C8 before | N/A mm | | C8 after | N/A mm | | |
| Marking for Pavilion | P8 before | N/A mm | | P8 after | N/A mm | | |
| | | | | | | | |

| Stone ID: Pear-semipolish-a | | | Pear | 07.05.2021 15:33 | | HPO11+ | |
|-----------------------------|--------------|---------|-------------|------------------|-------------|--------------|-----|
| Parameter | Avg | | Min | Max | Dev | Cut | Sym |
| Diameter, mm | 6.709 | | 4.778 | 8.601 | 80.00 % | – | N/A |
| Pav. angle, ° | 34.76 | | 34.44 | 35.08 | 0.64 | N/A | N/A |
| Crown angle, ° | 32.55 | | 32.53 | 32.56 | 0.03 | N/A | N/A |
| Girdle bezel, % | 0.304 mm | 6.36 % | 4.45 | 7.45 | 3.00 | EX | N/A |
| Table, % | 4.734 mm | 68.89 % | 62.34 | 75.44 | 13.10 | N/A | N/A |
| Total height, % | 2.556 mm | 53.50 % | – | – | – | – | – |
| Crown height, % | 0.523 mm | 10.94 % | 9.71 | 12.03 | 2.31 | – | N/A |
| Pav. height, % | 1.702 mm | 36.22 % | 35.15 | 37.02 | 1.87 | – | N/A |
| Star, % | 51.20 | | – | – | – | – | N/A |
| Pav. half, % | 76.33 | | 70.43 | 79.87 | 9.44 | N/A | N/A |
| G-C off., % | 17.52 ± 0.14 | | G-T off., % | 3.66 ± 0.12 | T-C off., % | 21.17 ± 0.15 | |
| Table Processing parameters | | | | | | | |
| Table allowance before | 0.000 mm | | | incline | 0.00 ° | | |
| Reference Line parameters | | | | | | | |
| Marking for Crown, mm | C8 before | | 0.575 | | C8 after | 0.575 | |
| Marking for Pav., mm | P8 before | | 0.799 | | P8 after | 0.799 | |
| Total weight, ct | 0.65 | | | | | Poor | GD |
| | | | | | | | |

| | | | | | | | |
|-----------------------------|----------|-----------|----------|------------------|---------|----------|--|
| Stone ID: Pear-semipolish-a | | Pear | | 07.05.2021 16:32 | | HPO11+ | |
| Width | 4.551 mm | Lenght | 7.838 mm | Total weight | 0.57 ct | | |
| Parameter | Avg | Min | Max | Dev | Cut | Sym | |
| Girdle Ratio | 1.722 | – | – | – | EX | – | |
| Crown angle, ° | 33.82 | 33.81 | 33.83 | 0.02 | N/A | N/A | |
| Pavilion angle, ° | 35.54 | 35.39 | 35.68 | 0.29 | N/A | N/A | |
| Table, % | 4.284 mm | 66.82 % | 58.01 | 75.62 | 17.61 | EX | |
| Crown height, % | 0.631 mm | 13.86 % | 12.88 | 15.06 | 2.18 | EX | |
| Pavilion height, % | 1.657 mm | 37.01 % | 35.95 | 37.81 | 1.87 | EX | |
| Girdle bezel, % | 0.249 mm | 5.46 % | 4.08 | 6.66 | 2.58 | EX | |
| Total height, % | 2.570 mm | 56.47 % | – | – | – | EX | |
| Star, % | 50.62 | – | – | – | – | – | |
| Pavilion half, % | 76.32 | 70.43 | 79.86 | 9.43 | – | – | |
| Table offset Length, % | 0.65 | EX | Width, % | 0.00 | – | EX | |
| Culet offset Length, % | 9.72 | EX | Width, % | 0.30 | – | EX | |
| | | | | | EX | EX | |
| Table Processing parameters | | | | | | | |
| Table allowance before | | 0.000 mm | | incline | | 0.00 ° | |
| Reference Line parameters | | | | | | | |
| Marking for Crown | | C8 before | | 0.685 mm | | C8 after | |
| Marking for Pavilion | | P8 before | | 0.859 mm | | P8 after | |
| | | | | | | | |
| | | | | | | | |

Removed, Added

Standard Report for Rounded Fancies

The Standard Report was updated for rounded fancies:

1. **Ratio (L/W)** - **Cut** grade is added.
2. **Table offset length**, **Table offset width** parameters, and their **Sym** grades are added.
3. **Culet offset length**, **Culet offset width** parameters, and their **Sym** grades are added.

Allocation solutions

Plans & Scans

★ ☆ ★ ★ ★ ★ ★ ★ ★ ★

Compare Standard Report

Shadow scan

0.9080

+5.86 Poor Poor Poor Default

1

Pear_F

1129\$

0.5755

62.78% VS1 H +7.72

EX

EX

EX

Pear_F

2

Pear_F

572\$

0.6582

71.59% VS1 H +7.62

Poor

Poor

FR

Pear_F

Settings Print... Quick Print

Cutting type

Pear

0.123 ct, 17.607 %

Model

1

N/A

Extra Facet Girdle / Nat

No

Scale weight, ct

0.57, 0.57548

Corrected mass, ct

0.57, 0.57548

Cut appraiser

MyAnyCut

Cut grade

Relative

EX

Symmetry appraiser

MyAnyCut

Sym grade

Relative

EX

Model building info

N/A

Final grade

Relative

EX

| Parameter | Avg | Min | Max | Dev | Cut | Sym |
|-------------------------------|-----------|----------|--------|--------|-------|-----|
| Ratio (L/W) | 1.7222 | – | – | – | EX | 1 |
| Diameter, mm | 4.5510 | 4.5510 | 7.8379 | 3.2869 | N/A | – |
| Crown Curve angle, ° | 33.819 | 33.810 | 33.828 | 0.018 | N/A | N/A |
| Crown Head angle, ° | 32.216 | 32.216 | 32.216 | 0.000 | – | – |
| Crown Point angle, ° | 32.959 | 32.959 | 32.959 | 0.000 | – | N/A |
| Crown Wing angle, ° | 33.276 | 33.243 | 33.310 | 0.068 | – | N/A |
| Pavilion Head angle, ° | 35.536 | 35.393 | 35.680 | 0.287 | – | – |
| Pavilion Wing angle, ° | 34.472 | 34.317 | 34.627 | 0.310 | – | N/A |
| Table Widthwise, % | 2.6400 mm | 58.011 % | – | – | EX | – |
| Table Lengthwise, % | 5.9270 mm | 75.620 % | – | – | – | – |
| Culet, % | 0.0000 mm | 0.000 % | 0.000 | 0.000 | N/A | N/A |
| Girdle Bezel, % | 0.2487 mm | 5.464 % | 4.084 | 6.664 | 2.580 | EX |
| Girdle Bone, % | 0.2563 mm | 5.633 % | 3.956 | 9.419 | 5.463 | – |
| Girdle Valley, % | 0.1814 mm | 3.986 % | 2.443 | 6.451 | 4.008 | N/A |
| Girdle height Valley local, % | 0.713 | 0.000 | 1.403 | 1.403 | – | N/A |
| Facet twist, ° | 1.347 | 1.346 | 1.348 | 0.002 | – | N/A |
| Star length, % | 50.616 | 44.331 | 58.585 | 14.255 | – | N/A |
| Star angle, ° | 24.183 | 24.163 | 24.203 | 0.040 | – | N/A |
| Upper girdle angle, ° | 40.261 | 37.693 | 45.174 | 7.481 | – | N/A |
| Lower girdle angle, ° | 36.348 | 30.949 | 38.785 | 7.836 | – | N/A |
| Crown height, % | 0.6309 mm | 13.863 % | 12.882 | 15.060 | 2.177 | EX |
| Pavilion height, % | 1.6845 mm | 37.014 % | 35.950 | 37.815 | 1.865 | EX |
| Lower girdle length, % | 76.315 | 70.428 | 79.855 | 9.428 | N/A | N/A |
| Total height, % | 2.5697 mm | 56.466 % | – | – | EX | – |
| Table offset, % | 0.0510 mm | 1.120 % | – | – | – | N/A |
| Culet offset, % | 0.7623 mm | 16.751 % | – | – | – | N/A |
| Table-culet offset, % | 0.8133 mm | 17.871 % | – | – | – | N/A |
| Culet offset length-wise, % | 15.229 | – | – | – | – | N/A |
| Culet offset width-wise, % | 0.293 | – | – | – | – | N/A |
| Table offset length, % | 0.650 | – | – | – | – | EX |
| Table offset width, % | 0.003 | – | – | – | – | EX |
| Culet offset length, % | 9.725 | – | – | – | – | EX |
| Culet offset width, % | 0.300 | – | – | – | – | EX |

Plan 1

| Diam # | Cut | Price | Discount | PPC | Mass | Clarity | C | Grade |
|--------|--------|--------|----------|--------------|----------|---------|---|-------|
| 1 | Pear_F | 1129\$ | ±0% | 1980.00\$/ct | 0.5755ct | VS1 | H | EX |

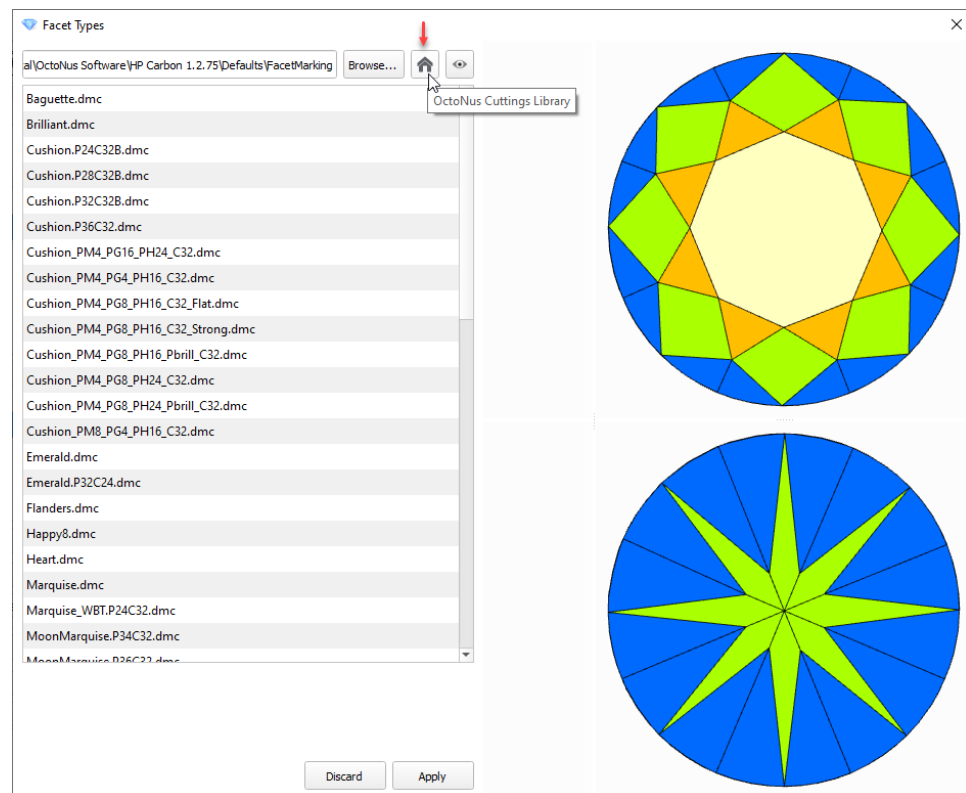
Facet Types - Octonus Cuts Library



Currently, the system includes over 50 cuts you can use as samples to get facet types from. Now the **OctoNus Cuts Library** button is added to quickly access them:

1. Click **Facet Types**. The **Facet Types** dialog is displayed.
2. In the **Facet Types** dialog, click **From Sample...**
3. In this was not done before, click  **OctoNus Cuts Library**

Samples from the library folder are added to the list.



4. If you want to access the library folder, click **Browse**.

G1 Galahad - Allowance Editing

For the **G1 Galahad** mode, it is now possible to edit the **Allowance** defined during stage generation. The **Allowance** can be edited both for stages and for separate steps.

To edit allowance for a step:

1. Right-click the step.
2. From the context menu select **Edit Step**. The edit panel is displayed.
3. In the edit panel, set the new **Depth**.
4. Click **Apply**. The new allowance depth is set for the step.

The screenshot shows the 'Next Step Plans' dialog box with the 'Edit Step "4. #12"' tab selected. The 'Allowance' section shows 'Slope: 0.00°' and 'Depth: 11.0µm'. The 'Apply' button is highlighted with a red circle 4. In the background, a table lists steps for 'Table' and 'Crown Main' stages. Step 4. #12 is highlighted, and a context menu is open with 'Edit Step' selected (red circle 2). Other menu items are 'Show Report' and 'Start work'. A red circle 1 points to the step's progress bar. At the bottom, target values are displayed: Target slope 37.39 = 36.90 + 0.49°, Target azimuth -178.51 = -179.35 + 0.85°, Target depth remaining 37.0 µm, and Distance to reference line 75.1 µm.

| # | Cutting | Price | Mass | Yield | Clarity | Color | Fluorescence |
|------------------------|-----------|--------|--------|--------|---------|-------|--------------|
| Imported model | | | 1.0192 | | | | |
| Compass/GPS Actual cut | | | 1.0192 | | | | |
| 7 | Brilliant | 6660\$ | 1.0036 | 98.11% | VS1 | H | |

Generate next faceting stage

Draw Faceting Sections

Stage/Step Cut progress

1. Table

1. #0

2. Crown Main

1. #15

2. #14

3. #13

4. #12 0.0

5. #11

6. #10

7. #9

8. #16

Target slope 37.39 = 36.90 + 0.49°

Target azimuth -178.51 = -179.35 + 0.85°

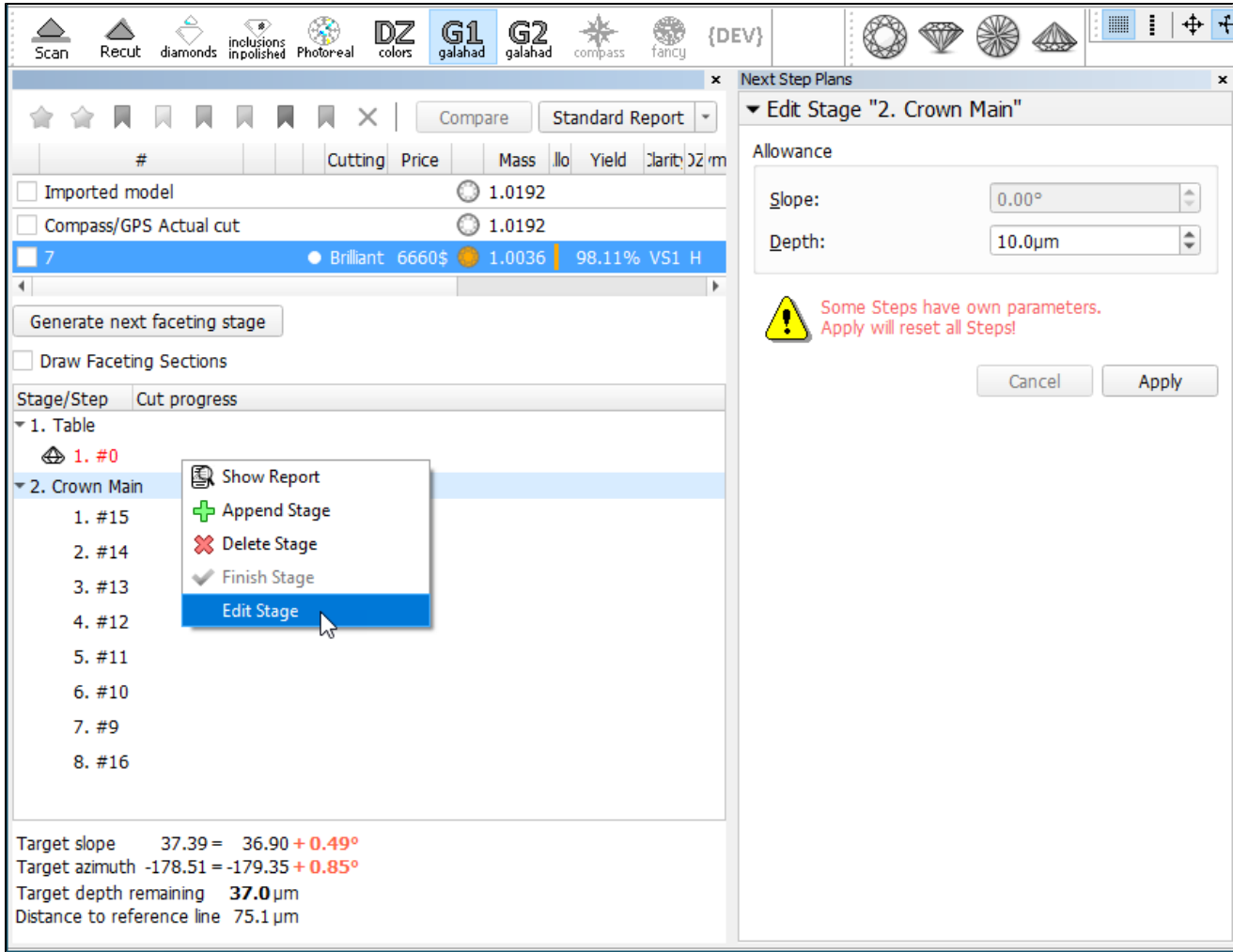
Target depth remaining 37.0 µm

Distance to reference line 75.1 µm

If you have a modified allowance for the step, you can **Discard** this difference and revert this step to the stage standard value.

The screenshot shows the 'Edit Step "2. #12" dialog box. The 'Allowance' section shows 'Slope: 0.00°' and 'Depth: 4.7µm'. The 'Discard' button is highlighted with a red arrow, indicating the option to revert the step to the stage standard value.

Allowance can also be edited for the stage. Note that if some steps of the stage have their own changed allowance, applying a new value for the stage will reset all steps, the corresponding warning is displayed:



Ximea Firmware Automatic Update

Ximea MC023MG-SY-UB cameras firmware update is now included in the HP Carbon installation procedure - on the system installation, the firmware will be updated automatically.



After the firmware update, the camera will not work with the old software - to work with this old software, the camera firmware downgrade will be required. Refer to your HP Carbon distributor for help with this downgrade.

Fixed Problems and Improvements

The following fixes for the known problems and improvements are implemented:

- The periodic low scanning speed caused by the sync cable detection problem is fixed.
- Facet types transfer to Smart Normalize solutions was broken - now it is fixed.
- For Smart Recut, the [Fix Girdle option](#) is improved to work with non-convex models.
- For **Scan** mode, in the **Cut & Method** section, now the last used cut stays selected after the system restart (previously "Brilliant" was always selected after restart).
- Previously, in **Polish Report**, the cut type was based only on parameter values - now it additionally takes into account the *Facet Types* specified for the model.
- Standard and Polish Illustrated HTML reports when working with composite appraisers (CushionRectangular, CushionSquare, MyAnyCut) now show grades only for the selected component: "Absolute", "Relative" or both of them.

| Absolute+Relative | | | | | | | | | | |
|--------------------------------|--------------------|---------|--------------------|-------|--------------|-------|-------|-------|-------|----------|
| Cutting type | Square Cushion | | Model | | 20 | | | | | |
| Spread | -1.09 ct, -28.79 % | | Scale weight, ct | | N/A | | | | | |
| Extra Facet Girdle / Nat | No | | Corrected mass, ct | | 4.87, 4.8738 | | | | | |
| Cut appraiser | CushionSquare | | Cut grade | VG | Relative | VG | | | | |
| Symmetry appraiser | CushionSquare | | Sym grade | EX | Absolute | EX | | | | |
| | | | | | Relative | EX | | | | |
| | | | | | Absolute | EX | | | | |
| Model building info | N/A | | Final grade | VG | Relative | VG | | | | |
| | | | | | Relative | VG | | | | |
| | | | | | Absolute | EX | | | | |
| Parameter | Avg | Min | Max | Dev | 1 | 2 | 3 | 4 | Cut | Sym |
| Pavilion 2 Main height, % | 2.681 mm | 28.61 % | 28.61 | 28.61 | 0.00 | 28.61 | 28.61 | 28.61 | 28.61 | — |
| Table: Side, % | 5.784 mm | 61.10 % | 60.72 | 61.48 | 0.76 | 60.72 | 61.48 | — | — | VG final |
| Table: Corner w.r.t. Corner, % | 63.51 | 63.51 | 63.51 | 0.00 | 63.51 | 63.51 | — | — | — | — |

| | | | | | | | | | | |
|--------------------------------|--------------------|---------|--------------------|-------|--------------|-------|-------|-------|-------|----------|
| Absolute | | | | | | | | | | |
| Cutting type | Square Cushion | | Model | | 20 | | | | | |
| Spread | -1.09 ct, -28.79 % | | Scale weight, ct | | N/A | | | | | |
| Extra Facet Girdle / Nat | No | | Corrected mass, ct | | 4.87, 4.8738 | | | | | |
| Cut appraiser | CushionSquare | | Cut grade | | Absolute | | EX | | | |
| Symmetry appraiser | CushionSquare | | Sym grade | | Absolute | | EX | | | |
| Model building info | N/A | | Final grade | | Absolute | | EX | | | |
| Parameter | Avg | Min | Max | Dev | 1 | 2 | 3 | 4 | Cut | Sym |
| Pavilion 2 Main height, % | 2.681 mm | 28.61 % | 28.61 | 28.61 | 0.00 | 28.61 | 28.61 | 28.61 | 28.61 | — |
| Table: Side, % | 5.784 mm | 61.10 % | 60.72 | 61.48 | 0.76 | 60.72 | 61.48 | — | — | EX ← abs |
| Table: Corner w.r.t. Corner, % | 63.51 | 63.51 | 63.51 | 0.00 | 63.51 | 63.51 | — | — | — | — |

| | | | | | | | | | | |
|--------------------------------|--------------------|---------|--------------------|-------|--------------|-------|-------|-------|-------|----------|
| Relative | | | | | | | | | | |
| Cutting type | Square Cushion | | Model | | 20 | | | | | |
| Spread | -1.09 ct, -28.79 % | | Scale weight, ct | | N/A | | | | | |
| Extra Facet Girdle / Nat | No | | Corrected mass, ct | | 4.87, 4.8738 | | | | | |
| Cut appraiser | CushionSquare | | Cut grade | | Relative | | VG | | | |
| Symmetry appraiser | CushionSquare | | Sym grade | | Relative | | EX | | | |
| Model building info | N/A | | Final grade | | Relative | | VG | | | |
| Parameter | Avg | Min | Max | Dev | 1 | 2 | 3 | 4 | Cut | Sym |
| Pavilion 2 Main height, % | 2.681 mm | 28.61 % | 28.61 | 28.61 | 0.00 | 28.61 | 28.61 | 28.61 | 28.61 | — |
| Table: Side, % | 5.784 mm | 61.10 % | 60.72 | 61.48 | 0.76 | 60.72 | 61.48 | — | — | VG ← rel |
| Table: Corner w.r.t. Corner, % | 63.51 | 63.51 | 63.51 | 0.00 | 63.51 | 63.51 | — | — | — | — |

- Appraiser profiles "Show difference from" function did not work - now it is fixed.
- The Smart Normalize and Smart Normalize Lite algorithms are improved to work better with short edges in the culet area.
- For the "GIA Facetware + MyRound" appraiser, the StarLength EX boundaries were updated to [42,5 - 57,5] for the following profiles:
 - "MyRound_ModernCut_2021-04-29"
 - "MyRound_ModernCut_2021-04-29_SweetLine"
- Incorrect estimation for Pear cut caused by the **Culet offset length** parameter wrong grade is fixed.