

2018-05-21 - HPOxygen Server 4.4.8

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Brightness metrics

Calculation of metrics **Brightness** for scans&solutions is introduced in version 4.4.8.

Calculation is not active by default. To enable calculation, right click on any scan or solution and select **Calculate Bitmap Brightness**. The program will start calculating the metrics for each scan and solution one by one. The values will appear in the **Br.** column.

While the calculation is in progress, the "..." mark will be shown in the "Br" column. Once calculated, the metrics is stored in the project and will not need to be recalculated if you save and reopen the project.

Calculation takes ~30-60 sec for one scan/solution.

Allocation solutions

Plans & Scans

Compare Standard Report

	Price	Cutting	Mass	Alloc	Yield	Clarity	Co	Sym-O	Gr	Cut	Sym	Br
Imported model			2.2307	100.00%	+5.20							0.64
1	5930\$	Oval_WBT_C32_G64_P24...	1.5337	68.59%	VS1 H +7.66	EX	EX	EX				
2	4476\$	Oval_WBT_C32_G64_P24...	1.4848	66.35%	VS1 H +8.19	EX	EX	EX				
3	8157\$	Oval			VS1 H +7.40	VG	VG	VG				
4	9120\$	Oval			VS1 H +7.24	EX	EX	EX				
5	8157\$	Oval			VS1 H +7.44	VG	VG	VG				
6	9120\$	Oval			VS1 H +7.54	EX	EX	EX				
7	9120\$	Oval			VS1 H +7.69	EX	EX	EX				
8	9120\$	Oval			VS1 H +7.65	EX	EX	EX				0.79
9	9120\$	Oval			VS1 H +7.75	EX	EX	EX				0.76
10	9120\$	Oval			VS1 H +7.45	EX	EX	EX				...

Label of 'Plan 3':

Model color of 'Plan 3':

Create copy of 'Plan 3'

Delete 'Plan 3'...

Export model of 'Plan 3'...

Processing 'Plan 3'

Clarity precision: ☐ Draft ☒ Precise

Galahad: Generate Next Step Plans...

Allocation

Fit to rough (Run Balloon)

Bound Swim (Vary Param)

Bound Swim (Fixed Cut)

Bound Swim (Fixed Table and Cut)

View options

Calculate Optical Symmetry

Calculate Bitmap Brightness

Mass: 1.6031 ct

Clarity: VS1

Color: H

Grade: VG

Changes in Default profile and new profile MyRound_4.3_2018-APR-26

Default profile has the following changes in parameters limits for EX: StarLength 67.5 57.5; LoweGirdleLength 67.5 72; Culet 1 0.2. These limits are more common in market and allow to get more beautiful round diamonds.



Appraiser Editor											
GIA Facetware + MyRound											
Profile: MyRound_4.3_2018-APR-26 (read only)											
Cut Symmetry											
Parameter	Grade	Value	[FR]	[GD]	[VG]	[EX]	[EX]	[VG]	[GD]	[FR]	
Table	EX	57.853	10	46,5	49,5	51,5	62,5	66,5	69,5	99	
CrownAngle	EX	36.188	10	21,75	26,25	31,25	36,75	38,75	40,25	90	
PavilionAngle	EX	40.569	10	38,7	39,7	40,5	41,9	42,5	43,1	90	
SweetLine	EX	0.194	-9	-6	-3	-1,5	1,5	3	6	9	
StarLength	EX	54.651	10	32,5	37,5	42,5	67,5	72,5	77,5	90	
LowerGirdleLength	EX	74.372	50	57,5	62,5	67,5	87,5	92,5	97,5	99	
GirdleBezel	EX	4.18	0	1,25	1,75	2,25	4,75	5,75	7,25	20	
GirdleValley	EX	2.438	0	0	0	0,75	2,94	4,14	6,14	20	
CrownHeight	EX	15.434	5	10,5	12	12,3	15,5	17,5	18,5	40	
TotalHeight	EX	62.441	10	54	57	58	62,5	64	66	90	
Culet	EX	0.00106	0	0	0	0	1	1,5	2	20	
CrownPainting	EX	0.0928	-9	-6	-3	-2,5	2,5	5	7	20	
PavilionPainting	EX	0.0916	-9	-5	-3	-2,5	2,5	4	6	20	
SumPainting	EX	0.184	-9	-6	-5	-3,5	5	8	10	20	
GirdleAngleMax	EX	0	0	0	0	0	2	4	6	20	
HeightGirdleExtraFacet	EX	0	0	0	0	0	5	6	7	20	
GirdleCrownExtraFacets	EX	0	0	0	0	0	0	2	4	20	
GirdlePavilionExtraFacets	EX	0	0	0	0	0	1	2	6	20	
GirdleExtraFacets	EX	0	0	0	0	0	2	4	8	20	

Note that other profiles MyRound_Profile1...MyRound_Profile5 are still editable and user can set&save limits in these profiles by his own need.

New limits in Presets for CrownPainting and PavilionPainting

There were too strict limits in Presets for CrownPainting and PavilionPainting. Since this version program has more "open" limits to get more weight in SmartRecut solutions.

Before version 4.4.8

Cut		Symmetry		Other			
Parameter				EX]			
CrownPainting				1			
PavilionPainting				1			
UltraSymme	OpticalSyn	mOpticalSy	alOpticalSy	5. Standard	xtendedLin	OpticalSyn	3. MaxMass
0,1	0,2	0,35	0,5	0,75	1	1	8
0,1	0,2	0,35	0,5	0,75	1	1	8

Cut		Symmetry		Other							
Parameter											
CrownPainting											
PavilionPainting											
UltraSymme	OpticalSyn	mOpticalSy	al								
0,5	0,5	0,7									
0,5	0,5	0,7									
0,5	0,5	0,7									

Updated GUI of Facet Marking panel

Panel **Facet Marking** (shown by **Custom report...** in the right in **Reports** tab) has some GUI changes:

- Column "Symmetry" is renamed to "SubType";
- Columns "SubType" and "No." switch places;
- Elements "Extra" and "Incidental", type "Additional", subtype "Bezel" are deleted;
- Renames: Half Halve, Knife ExtraFacet in column Type, Corner Diagonal in column SubType (obsolete Symmetry).

Before version 4.4.8

Since version 4.4.8

Facet Marking Table (Before version 4.4.8)

Facets	Element	Tier	Type	No.	Symmetry	Color	Alias
x 1	Table						
x 2	Crown				Bezel		Rename..
x 4	Girdle				Bezel		Rename..
x 2	Pavilion				Bezel		Rename..
x 16	Culet						
x 16	Extra						Rename..
x 4	Incidental						Rename..
x 4	Cavity						Rename..
x 64	Girdle						Rename..
x 4	Pavilion	Main					Rename..
x 4	Pavilion	Main					Rename..
x 16	Pavilion	Half					Rename..

Facet Marking Table (Since version 4.4.8)

Facets	Element	Tier	Type
x 1	Table		
x 16	Crown		Halve
x 2	Girdle		Main
x 4	Pavilion		Main
x 4	Culet		Main
x 2	Cavity		Main
x 4	Crown		Star
x 4	Crown		Star
x 64	Girdle		
x 16	Pavilion		Halve
x 4	Pavilion		Main
x 4	Pavilion		Main

Facets	Element	Tier	Type	No.	Symmetry	Color	Alias
x 1	Table						
x 2	Crown		Main		el		Rename..
x 4	Crown		Half		el		Rename..
x 2	Crown		Chevron		el		Rename..
x 16	Crown		Star				Rename..
x 4	Crown		Corner				Rename..
x 4	Crown		Knife				Rename..
x 4	Crown		Additional				Rename..
x 64	Girdle						Rename..
x 4	Pavilion		Main				Rename..
x 4	Pavilion		Main				Rename..
x 16	Pavilion		Half				Rename..

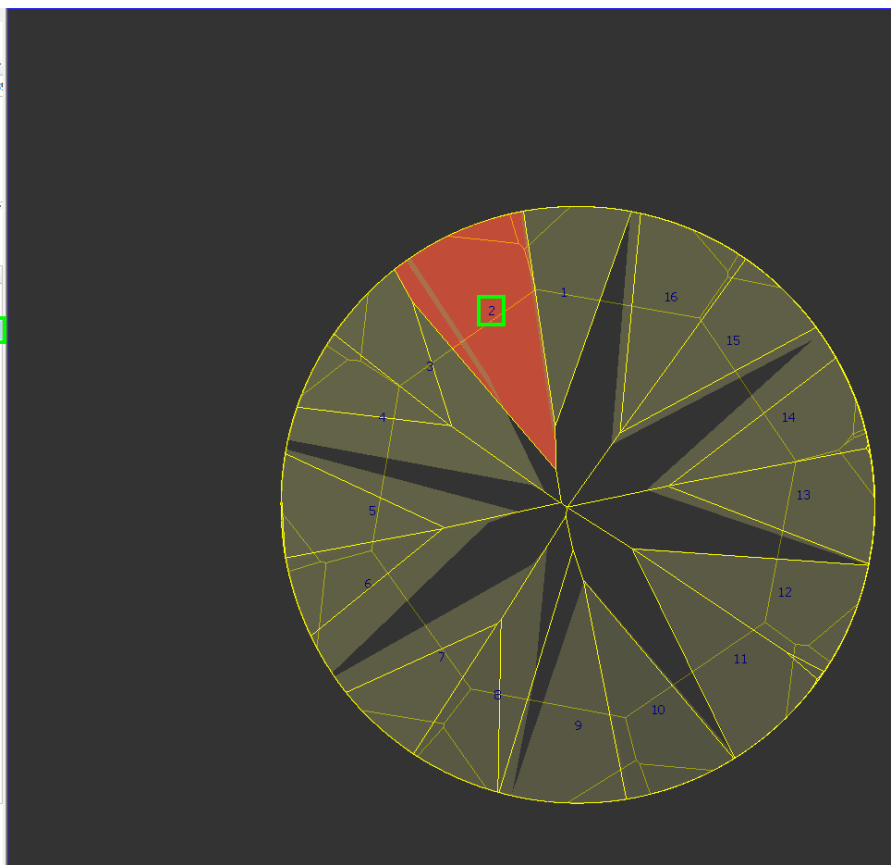
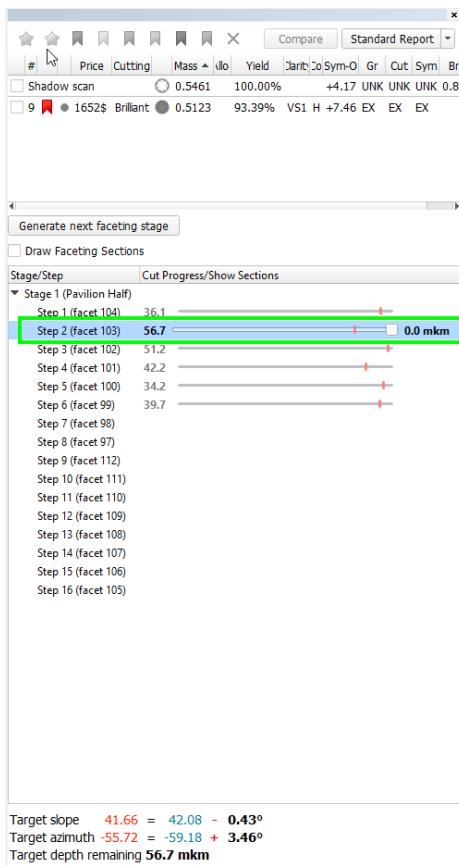
Facets	Element	Tier	Type	No.	Symmetry	Color	Alias
x 1	Table						
x 16	Crown		Chevron				
x 2	Crown		Corner				
x 4	Crown		Halve				
x 2	Crown		Main				
x 4	Crown		Star				ExtraFacet
x 4	Crown		Star				
x 64	Girdle						
x 16	Pavilion		Halve				
x 4	Pavilion		Main				
x 4	Pavilion		Main				

Facets	Element	Tier	Type	No.	Symmetry	Color	Alias
x 1	Table						
x 2	Crown		Main		Wing		ame..
x 4	Crown		Main		Point		ame..
x 2	Crown		Main		Curve		ame..
x 16	Crown		Half		Bezel		ame..
x 4	Crown		Star		Width		ame..
x 4	Crown		Star		Length		ame..
x 4	Crown		Star		Corner		ame..
x 64	Girdle						Rename..
x 4	Pavilion		Main				Rename..
x 4	Pavilion		Main				Rename..
x 16	Pavilion		Half				Rename..

Facets	Element	Tier	Type	No.	Symmetry	Color	Alias
x 1	Table						
x 16	Crown		Halve				
x 2	Crown		Main				
x 4	Crown		Main				
x 2	Crown		Main				
x 4	Crown		Star				
x 4	Crown		Star				
x 64	Girdle						
x 16	Pavilion		Halve				
x 4	Pavilion		Main				
x 4	Pavilion		Main				

Galahad1 improvements

- 5.1 Numeration of steps in facets on screen:
- 5.2. Facets of final result are highlighted by light yellow.



Recognition metrics is improved

Recognition metrics (Model mismatch: X.XX%) in Import... dialog (**Model matching preview**) is improved.

Now it gives small values for good recognition of models from different stages of polishing (e.g. when one model is from a later stage with more facets polished).