# 2017-04-24 - HPOxygen Server 3.22.14

- Scanning

   Speed up
   Edge adjustment
- Reports
- Recut
- Bugfixes

# Scanning

### Speed up

Scanning is speeded up. This is especially noticeable at scan modes that require many additional contours. Below are the averaged scan times for two stones. The measurements were made on HP 17D with HP-1 board. Acceleration line in HPODrivers.ini was turned off.

#### Round brilliant

Contours	HPP 5.6.91	HPO 3.22.1	HPO 3.22.12
50	6.6	9.7	7.0
Quick / 100	8.0	9.4	8.5
Optimum / 200	14.5	15.8	14.5
Accuracy / 400	23.9	25.5	25.7
High Accuracy / 800	46.7	48.7	47.8

#### Princess

Contours	HPP 5.6.91	HPO 3.22.1	HPO 3.22.12
50	14.7	27.7	15.8
Quick / 100	10.4	14.2	11.0
Optimum / 200	21.5	24.4	18.5
Accuracy / 400	31.2	33.5	28.8
High Accuracy / 800	52.4	55.0	51.1

### Edge adjustment

Two modes of edge addition during manual adjustment of the model are now working as expected.

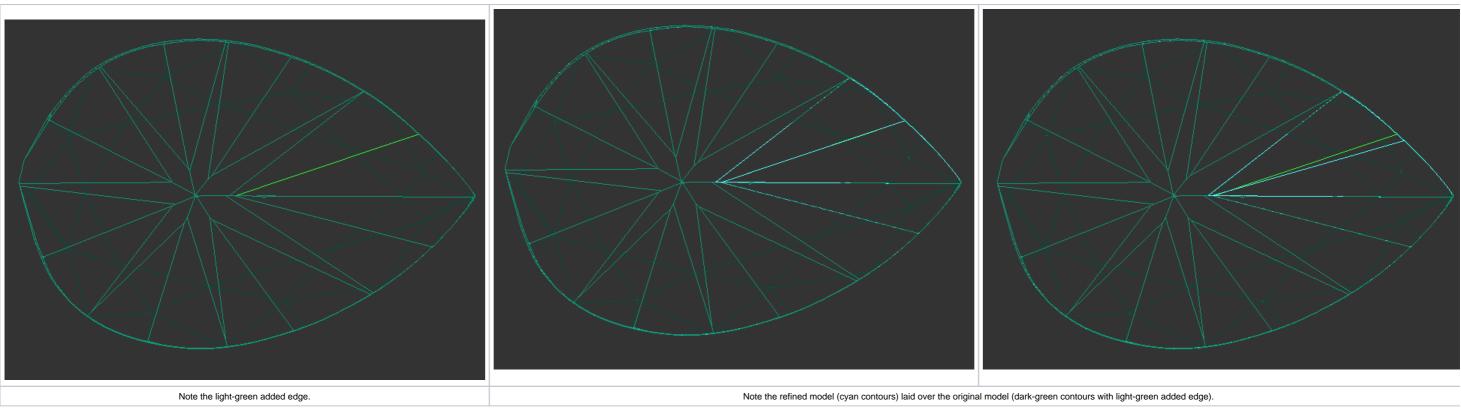


The users are advised to choose one of the modes depending on their confidence in the position of the missing edge. The program, in turn, uses the degree of reliability to determine the extent to which the added edge can be altered during the refinement:



After refinement (low precision)





#### Model used: Add\_edge\_hard\_soft.oxgz .

Note that in both cases the refinement still can affect multiple other edges, not necessarily limited to the affected facet.

## Interface

√	Shad	dow	sca	n		3.8510						
	11		٠	42048\$	Brilliant	2.9249	75.82%	VS1	н	EX	EX	EX
	9		٠	41472\$	Brilliant	2.8810	74.79%	VS1	н	EX	EX	EX
	10		٠	41328\$	Brilliant	2.8761	74.53%	VS1	н	EX	EX	EX
	4		٠	41184\$	Brilliant	2.8679	74.27%	VS1	н	EX	EX	EX
	6		٠	41184\$	Brilliant	2.8658	74.27%	VS1	н	EX	EX	EX
	5		٠	41184\$	Brilliant	2.8637	74.27%	VS1	н	EX	EX	EX
	7		٠	41184\$	Brilliant	2.8594	74.27%	VS1	н	EX	EX	EX
V	8		•	40752\$	Brilliant	2.8382	73.49%	VS1	н	FK	EX	EX
	3		•	40176\$	Brilliant	2.7918	72.45%	VS1	н	EG	IA Fa	cetwar

Previously there was no way to know the appraiser when opening an old file with recut solutions.

2. Shortcuts configuration window would not allow to assign a shortcut which is already assigned to another command.

## Reports

Settings for automatic actions now include the selection of label report template.

Settings		×
Page Filter	Automatic Actions	
General	Post-Scan Actions Post-Scan Export	
Scanning	Align first facet to door	
Automatic Actions	Generate reports	
Reports	Cutting: Brilliant   Polish report  Open  Illustrated report for brilliant (RTF)  Color  Polish report  Full report for brilliant (RTF)  Black and white  Full report  Export report  Save  Export report data, Color (INI)  Label report  Copen  Standard report  Open  Copen  Cop	

Previously the option of using custom label report templates was limited to manual generation of the label report via the right panel, and did not extend to automatic actions.

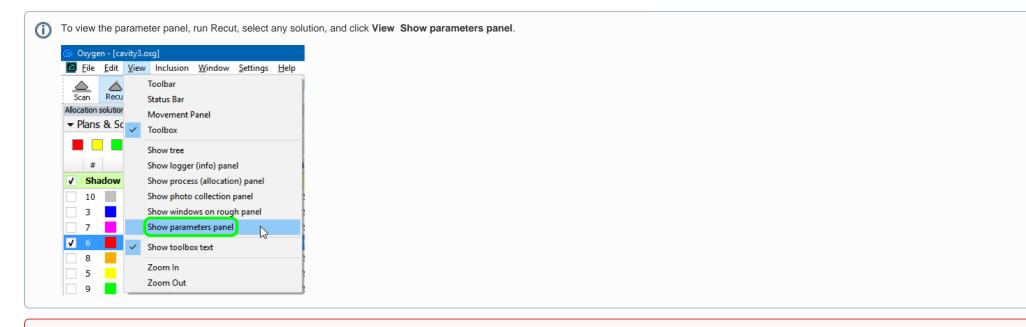
### Recut

Step size control is added to the Parameters panel (unlocked mode).

×	Brilliant 1							
	Shape Brilliant	Grade	Weight 4.23 ct	H $\sim$ VS1 $\sim$				
	Proportions Advanced Advanced 2							
	Table	57.1 %	Alt. diameter	10.25 mr + +				
	Crown height	16.9 %	Total depth	62.5 % + +				
	Girdle (bezel)	0.7 %	Girdle (valley)	0.7 %				
ŝ	Pavil.depth(mains)	44.9 %	Crown.height(valley)	16.9 % • •				
mte	Girdle ratio	1.001	Pav.depth(lowers)	44.9 %				
para	Diameter	10.24 mr + +	Girdle (bezel)	0.07 mm 🕢				
Diamond paramters	Parameters are unlo	cked	Step: Fine	Rough				

The control has five positions corresponding to the following step sizes:

Position	Step size						
	Angles	mm	%	Ratio			
1 (fine)	0.1	0.01	0.1	0.001			
2	0.5	0.05	0.5	0.005			
3	2	0.2	2	0.02			
4	5	0.5	5	0.05			
5 (rough)	10	1	10	0.1			



① Unlocking the Parameters panel is not recommended. Once the parameters have been changed manually, it is no longer guaranteed that the solution fits inside the existing stone.

### Bugfixes

- Memory leaking issue is fixed.
   Bug that led to doubling of Reflect contours during recalculation is fixed.
   Incorrect model rendering over photos and contours (shift and scaling) is fixed.
   Highlighting of facets for selection of minimum and maximum Crown height and Pavilion height in the Standard Report is temporarily switched off.
   Bug that occasionally caused recut solutions of the Semicut (final) algorithm to turn upside down is fixed.

