

What is new in the Helium Polish 3.95

April 5, 2007

1. New parameters and report illustrations for Prince & StepCuts:
Girdle facets slope & azimuth angles
2. First Facet Alignment Option
3. Fixed bug

1. New parameters and report illustrations for Prince & StepCuts: Girdle facets slope & azimuth angles

Girdle facet slope & azimuth angle are available for Prince, Step Cut / Emerald & Step cut / Trapezium.

New illustrations are included into Full reports:

- x Pavilion and crown views of the diamond with indication of girdle facets' slope angles
- x Pavilion and crown views of the diamond with indication of deviation of girdle facets' slope angles from there ideal (90°)
- x Pavilion and crown views of the diamond with indication of girdle facets' azimuth angles
- x Pavilion and crown views of the diamond with indication of deviation of girdle facets' azimuth angles

The example of the illustration «Pavilion and crown views of the diamond with indication of girdle facets' slope angles»:

Please see examples of the reports:

http://octonus.com/oct/products/helium/polish/reports/Polish_Full_Prince_Color_05-04-2007.doc

http://octonus.com/oct/products/helium/polish/reports/Polish_Full_StepCut_CL_05-04-2007.doc

The new parameters output into report with the follow bookmark names:

Girdle facets angles (for prince, emerald & trapezium)

Girdle facet angle 1 [degree] - GIRDLE_SIDE_ANGLE_DEG_1

Girdle facet angle 2 [degree] - GIRDLE_SIDE_ANGLE_DEG_2

Girdle facet angle 3 [degree] - GIRDLE_SIDE_ANGLE_DEG_3

Girdle facet angle 4 [degree] - GIRDLE_SIDE_ANGLE_DEG_4

Girdle corner facets angles (for emerald)

Girdle corner angle 1 [degree] - GIRDLE_CORNER_ANGLE_DEG_1

Girdle corner angle 2 [degree] - GIRDLE_CORNER_ANGLE_DEG_2

Girdle corner angle 3 [degree] - GIRDLE_CORNER_ANGLE_DEG_3

Girdle corner angle 4 [degree] - GIRDLE_CORNER_ANGLE_DEG_4

Girdle facets azimuths (for prince, emerald & trapezium)

Girdle facet azimuth 1 [degree] - GIRDLE_SIDE_AZIMUTH_DEG_1

Girdle facet azimuth 2 [degree] - GIRDLE_SIDE_AZIMUTH_DEG_2

Girdle facet azimuth 3 [degree] - GIRDLE_SIDE_AZIMUTH_DEG_3

Girdle facet azimuth 4 [degree] - GIRDLE_SIDE_AZIMUTH_DEG_4

Girdle corner facets azimuths (for emerald)

Girdle corner azimuth 1 [degree] - GIRDLE_CORNER_AZIMUTH_DEG_1

Girdle corner azimuth 2 [degree] - GIRDLE_CORNER_AZIMUTH_DEG_2

Girdle corner azimuth 3 [degree] - GIRDLE_CORNER_AZIMUTH_DEG_3

Girdle corner azimuth 4 [degree] - GIRDLE_CORNER_AZIMUTH_DEG_4

2. First Facet Alignment Option

This feature works in the Scan polished diamond panel for stone scanned as polished diamond only.

Scan polished diamond

Weight, ct	0.52	0.5266	Pavilion, °	41.43	41.13	41.72	
Total height	3.206 mm	62.8%	Pavilion, %	43.9	43.8	44.1	
Diameter, mm	5.105	5.892	5.118	Crown, °	35.00	35.35	35.98
Table, %	59.8	59.6	60.2	Crown, %	14.5	14.2	14.8
Bezel, %	4.9	4.8	4.7	Culet, %	0.5	0.5	0.6

Build Panel:

- Task mode: Scan & Build
- Scan mode: Diamond
- Precision: Accuracy
- Cutting: Brilliant
- Report: Auto
- Sample:
- Number of images: 400
- Step for motor: 22.50
- Left: -157.38
- Right: -157.38
- Photo Camera Image
- Movie
- Process
- Model
- Parameters
- Info
- Recutting
- Smart Recut
- Export model

Context Menu:

- Unmark the facet
- Set facet perpendicular to scene
- Align facet on Right: <R>-89.813
- Align facet on Center: <R>-179.813
- Align facet on Left: <R>90.187
- Align First Facet on Right: <R>-89.908
- Align First Facet on Center: <R>-179.908
- Align First Facet on Left: <R>90.092

Simple: Side (6), @ 179.91°: 41.551°, [52.2°] (s: 0.85) points (233 234 238 237 243 236 235), Coord (-0.683 -0.48 (32,49)

Scan polished diamond

Weight, ct	0.52	0.5266	Pavilion, °	41.43	41.13	41.72	
Total height	3.206 mm	62.8%	Pavilion, %	43.9	43.8	44.1	
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Build Panel:

- Task mode: Scan & Build
- Scan mode: Diamond
- Precision: Accuracy
- Cutting: Brilliant
- Report: Auto
- Sample:
- Number of images: 400
- Step for motor: 22.50
- Left: -179.86
- Right: -179.86
- Photo Camera Image
- Movie
- Process
- Model
- Parameters
- Info
- Recutting
- Smart Recut
- Export model

Context Menu:

- Unmark the facet
- Set facet perpendicular to scene
- Align facet on Right: <R>-89.813
- Align facet on Center: <R>-179.813
- Align facet on Left: <R>90.187
- Align First Facet on Right: <R>-89.908
- Align First Facet on Center: <R>-179.908
- Align First Facet on Left: <R>90.092

Simple: 48 (185,22)

3. Fixed bug

Fixed bug of estimation Culet length parameter which was available on some cuttings with pointed culet or small culet (prince).