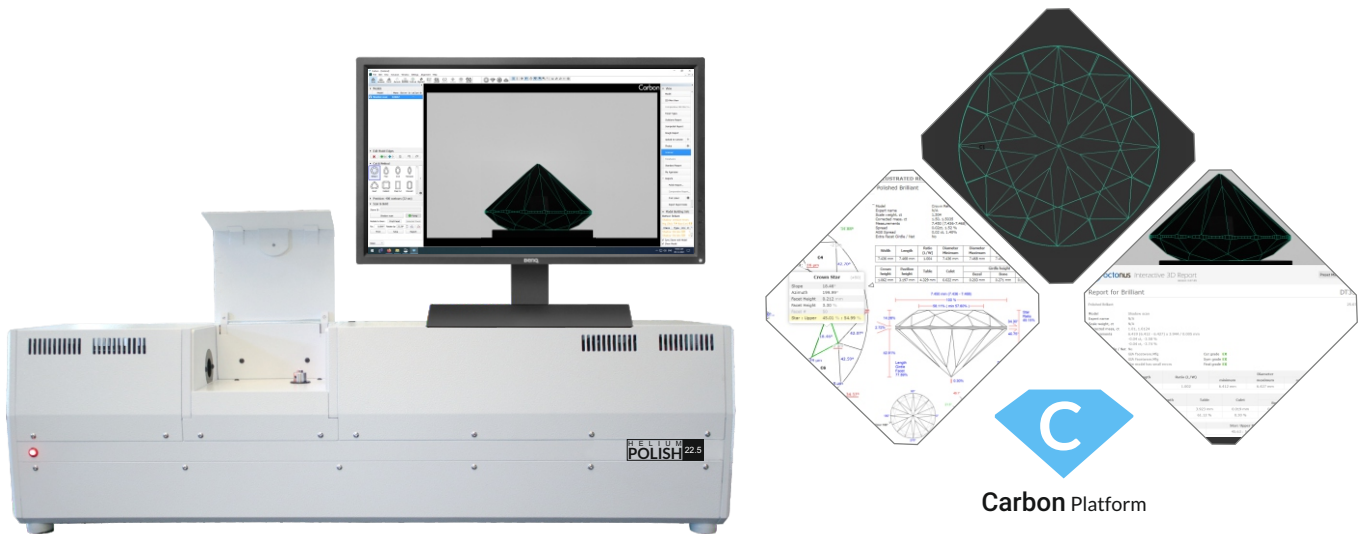


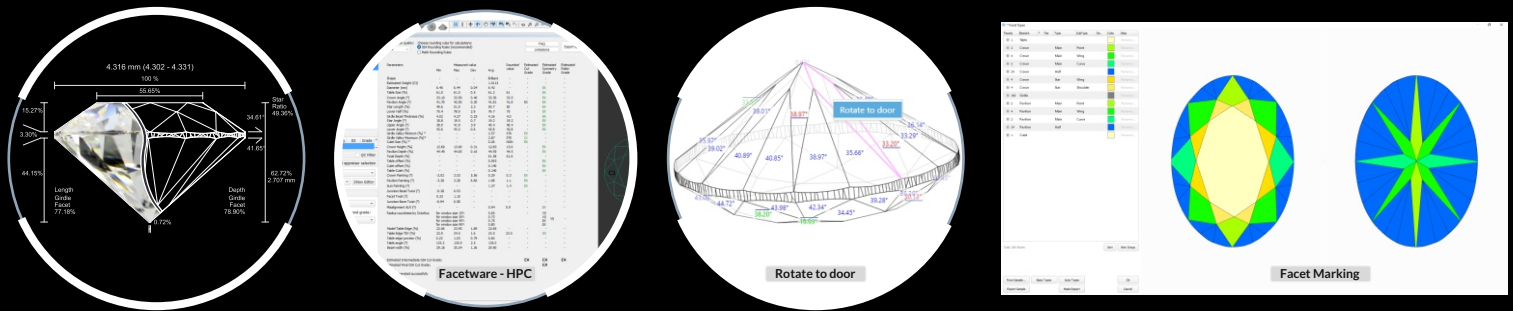


HELIUM POLISH⁺

The Most Accurate Polish Diamond Scanner



Multiple Lab Cut & Symmetry Estimation.



Introduction

HeliumPolish is an ultrahigh precision diamond scanner designed to grade the cut and symmetry of polished diamonds with exceptional accuracy. With 17 parameters introduced for objective symmetry grading, this cutting-edge scanner operates within tight 6 sigma limits, ensuring consistent and reliable results. It has become the preferred choice for labs worldwide, empowering them to confidently assess diamond cut and symmetry using its advanced 3D scanning capabilities.

Salient Features

- **Consistent Measurement Readings:** HeliumPolish provides consistent measurement readings, allowing polishers to make minor facet corrections with confidence, resulting in improved cut and symmetry grades.
- **Calibration-Free Precision:** The scanner does not require any adjustments or calibration as its precision is built-in, ensuring accurate readings regardless of the installation location or usage time. It automatically compensates for thermal expansions during use.
- **Accurate Symmetry Assessment:** HeliumPolish precisely captures even minor symmetries, enabling graders to rely on the 3D model generated by the scanner and grade the symmetry objectively.
- **Interactive 3D (i3D) Report:** The scanner generates an interactive 3D report that includes comprehensive information, photoreal images, and a fold symmetry report.
- **Custom Report Generation:** Using the Carbon program, users can prepare optional custom reports tailored to specific needs or analyses.
- **Extensive Data Export:** HeliumPolish exports more than 3000 data fields, including images for every scan, providing detailed insights and documentation.
- **Optional Asymmetric Smart Recut:** For semi-polish diamonds, the scanner offers the option of Asymmetric Smart Recut, which includes GIA Facetware + MyGIA, resulting in a significant yield increase of 2 to 3%.
- **Bruting Data Transfer:** The scanner allows direct transfer of bruting data to AQUA2, MEC Bruter, EOS Fancy machines, facilitating precise reproduction of the asymmetric recut plan.
- **Versatile Application:** Suitable for both Round and Fancy shaped diamonds, as well as semi-polish and fully polished stones.
- **Correcting Symmetry Issues:** HeliumPolish assists polishers in correcting multi-fold symmetry and junction symmetry, while enabling graders to objectively assess shape symmetry based on scan data.

Specification

Diamond Types	: Any Cut
Standard Re-Cut Option	: Available
Asymmetric Smart Recut Option based on GIA Facetware + MyGIA	: Optional (€ 3750)
GIA Facetware based Grade estimation	: Optional - Cut as well as Symmetry (€ 1060)
Soft HTML5 Report	: Very advanced interactive 3D report (i3D Report)
Print reports	: Available (Very detailed + User defined) & Galahad Reports
Custom reports	: Available
Mfg. Warranty	: 24 Months
Service Warranty	: 12 Months
CMOS Camera	: 1/1.2" - 1936x1216
Computer Requirements	: Intel Core i7/Higher, SSD HDD, Nvidia GeForce Graphics Card
Operating Systems	: Windows 10 Professional - 64bit
Power Consumption	: 220V 50Hz 300W

Machine Models

	HPC* 5.5	HPC* 11	HPC* 22.5	HPC* 45
Field of View	: 3.56 x 5.67mm	7.12 x 11.34mm	14.2 x 22.6mm	28.4 x 45.2mm
Polish Size	: 1.00 - 5.5mm	2.3 - 11.0mm	4.5 - 22.5mm	9.0 - 45.0mm
3D-model Accuracy	: 2.9 Micron	5.9 Micron	11.7 Micron	23.4 Micron
Projected RBC Range	: 0.004 - 0.60 Cts	0.05 - 4.80 Cts	0.35 - 38 Cts	3.00 - 330 Cts
Proj. Marquise Range	: 0.01 - 0.16 Cts	0.09 - 1.30 Cts	0.60 - 10.7 Cts	5.00 - 86 Cts
Lens	: 2x	1x	0.5x	0.25x
Weight	: 13 Kg	19 Kg	25 Kg	25 Kg
Dimensions (LxWxH)	: 62 x 16 x 21 (cm)	72 x 16 x 21 (cm)	92 x 16 x 21 (cm)	92 x 16 x 21 (cm)

Illustrated Report For Step Cut
05.07.2011

Facetware: Simple
Facetware Lab: Optics Lab
Facet weight: ct: 0.06 (0.002)
Sample weight: ct: 0.05 (0.002)
Error Facet Grade / Net: -0.01 (-0.27%)

Item	Actual	Min	Max	Dev	Min	Max	Dev
Table	4.50	4.50	4.50	0.00	4.50	4.50	0.00
Girdle	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Table	4.50	4.50	4.50	0.00	4.50	4.50	0.00
Girdle	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Table	4.50	4.50	4.50	0.00	4.50	4.50	0.00
Girdle	1.00	1.00	1.00	0.00	1.00	1.00	0.00

Approx. size: 4.50 x 4.50 mm
Overall cut quality: Excellent
Symmetry quality: Excellent
Polish quality: Excellent
Model height: 1.21 mm

REPORT VIEWER

PAVILION

42.82	42.81	42.54	42.88
40.44	40.58	40.51	40.60
42.82	42.81	42.54	42.88
40.44	40.58	40.51	40.60

CROWN

15.74	36.05	15.82	36.21
33.96	15.82	36.21	15.74
15.74	36.05	15.82	36.21
33.96	15.82	36.21	15.74

Cutwise

LAB-GROWN DIAMOND

PENTAGONAL

SHAPE NORMALIZED PERFORMANCE

OU EX VG G F P

CutGrade & DiLog

PERFORMANCE CERTIFICATE

DIGITAL REPORT

CUT SHAPE PENTAGONAL
CUT QUALITY EXCELLENT
CARAT WEIGHT 1.21 CT
COLOR E
CLARITY VS1
POLISH EXCELLENT
SYMMETRY EXCELLENT

CutGrade & DiLog

MiniReport

PROPORTIONS
6.655 x 6.43 x 4.216 MM

W: 6.430 mm, L: 6.655 mm, LW: 1.035
G: 62.70% (min 62.63%)

Star Ratio: N/A
Length/Girdle/Facet: N/A
Girdle: 0.226 mm
Crown Angle: 42.35°

TABLE
TOTAL HEIGHT: 62.7% 4.102 MM
GIRDLE: 3.52% 0.226 MM
CROWN ANGLE: 42.35°
PAVILION ANGLE: -