

GIA iD100

Overview

The GIA iD100 is a portable diamond verification instrument for loose and mounted stones, designed to separate diamonds from synthetic diamonds and diamond simulants. It is manually operated but gives an automatic test result.

The instrument tests individual stones by applying the provided probe to the surface of stone. It will automatically display one of the following results:

1) Pass

2) Refer

The 'Refer' category may contain diamonds, diamond simulants or synthetic diamonds. These referrals should be tested further for full verification.

An automatic calibration to ambient light conditions will occur when turning on the iD100. This should be performed daily, or whenever environmental light conditions are changed.

Stone Testing Capabilities

Weight range:	>= 0.005 ct
Colour range:	D to K
Stone shape:	All
Diamond simulants:	Yes
Mounted stones:	Yes

Instrument Capabilities

Automated feed:	No
Automated results:	Yes
Automated dispense:	No
Detect or Refer (synthetic diamonds):	Refer
Detect or Refer (diamond simulants):	Refer
Multiple stones at once:	No
Training required:	Yes

ASSURE 2.0 Performance

Key ASSURE 2.0 test results for the iD100:

	Primary Loose	Smalls Loose	Primary Mounted
Diamond False Positive Rate (Optimal rate 0%)	0.0% +/- 0%	0.0% +/- 0%	0.0%
Diamond Referral Rate (Optimal rate 0%)	10.4% +/- 1.3%	13.6% +/- 1.8%	7.4%
Diamond Accuracy Rate (Optimal rate 100%)	89.6% +/- 1.3%	86.4% +/- 1.8%	92.6%
Test Speed Stones per hour	208 +/- 6		

Notes:

Uncertainty ranges (+/-) are based on repeatability testing (three trials) and represent spread of results in absolute terms.

Test Speed based on time to screen the full Primary Loose sample set, and includes time taken to retest Referrals.

See Laboratory Report for full set of performance results.

Instrument Specifications



Contact

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