

The American Gem Society (AGS) Gem Science Committee is working to keep our Accredited Gem Lab® (AGL) relevant and able to educate and protect consumers. As a result, the requirements to qualify as an AGS Accredited Gem Lab® are currently being reviewed and updated. Please note that these requirements must be met by a Retail or ICGA firm member holding, or applying for the AGL designation:

- a. The firm must have a Certified Gemologist (CG)® or Certified Gemologist® Appraiser (CGA or ICGA) in its employ to directly supervise the gem laboratory;
- b. The firm must have the laboratory located within the premises of the firm member and have physical facilities permitting the proper use and display of the gem testing equipment;
- c. The firm must have and maintain an adequate and current gemological library which may be virtual or online and must include an edition of *The Practical Guide to Jewelry Appraising by Cos Altobelli*; and
- d. The firm must have the laboratory equipped with the following testing instruments, tools and reference material, as a minimum:
 - i. AGS Color Master Diamond Comparator Set, consisting of at least five AGS Master Diamonds which have been graded by the AGS Laboratories for color according to the AGS color scale. The girdles must be polished or faceted and laser inscribed to identify them as Master Diamonds. For more information, please reference the Color Master Requirements flyer at www.ags.org/accreditedgemlab.
 - ii. Color comparison set for colored gemstones and fancy colored diamonds such as Gem Dialogue, Munsell, GIA, GemWizard, AGL ColorCodex or similar
 - iii. Darkfield binocular microscope (minimum 10x with overhead fluorescent light attachment)
 - iv. Diamond scales to 1/100 carat, scale attachments/hydrostat for determining specific gravity recommended
 - v. Dichroscope
 - vi. Internet connection
 - vii. Lighting source: Daylight equivalent (approximately 6500 degrees Kelvin)
 - viii. Measuring device (Leveridge gauge or millimeter gauge)
 - ix. Metals tester
 - x. Photography equipment (cell phone or digital camera acceptable)
 - xi. Polariscopes
 - xii. Refractometer with polarizing plate and RI fluid
 - xiii. Laboratory-grown diamond screening and detection equipment with minimum standards (see Addendum)
 - xiv. Ultra-violet light, both longwave and shortwave

It is also recommended, but not required that the firm have:

- i. Diamond probe tester (thermal and electrical conductivity meters to test for diamond simulants)
- ii. Fiber Optic Light Source
- iii. Non-Contact Optical Scanner
- iv. Spectroscope

An Accredited Gem Lab® must be operated in a professional and ethical manner, in accordance with the Membership Standards of the American Gem Society. Any member who operates a laboratory in such manner as to bring discredit upon the Society, by unwarranted discrediting of a competitor's merchandise, or by any other unethical conduct, shall be subject to probation, suspension, or expulsion from the Society or any other action recommended by the Grievance & Review Subcommittee.

An Accredited Gem Lab® is subject to audit without notice for compliance for the above elements. If the audit identifies non-compliant elements, the titleholder that oversees the AGL (AGL Principal) will have two years from the date of Notice of Non-Compliance to rectify any issues that would cause non-compliance.

If you have any questions regarding this document, please contact membership@ags.org. To apply for the AGL® designation, please visit www.ags.org/accreditedgemlab to access the application.

The following table outlines the minimum standards laboratory-grown diamond screening and detection equipment must meet in order to qualify for the Accredited Gem Lab® designation.

	Definition	Parameter	RECOMMENDATIONS
Core Sample	Ratio of laboratory-grown diamonds and diamond simulants incorrectly classified as natural diamond to the total number of laboratory-grown diamonds and diamond simulants	Diamond False Positive Rate	0%
	Ratio of natural diamonds being referred for further testing to the total number of natural diamonds	Referral Rate	5% or less
	Ratio of natural diamonds correctly classified as natural diamonds to the total number of natural diamonds	Diamond Accuracy	95% or more
	Ratio of laboratory-grown diamonds being referred for further testing to the total number of laboratory-grown diamonds	Laboratory-grown Diamond Referral Rate	100% if listed
Smalls Sample	Ratio of laboratory-grown diamonds and diamond simulants incorrectly classified as natural diamond to the total number of laboratory-grown diamonds and diamond simulants	Diamond False Positive Rate	0% if listed
	Ratio of natural diamonds being referred for further testing to the total number of natural diamonds	Referral Rate	5% or less, (recommended)
	Ratio of natural diamonds classified as natural diamonds to the total number of natural diamonds	Diamond Accuracy	95% or more
	Ratio of laboratory-grown diamonds being referred for further testing to the total number of laboratory-grown diamonds	Laboratory-grown Diamond Referral Rate	100% if listed

<p>The following equipment from the ASSURE Directory of Diamond Verification Instruments* will qualify for the Accredited Gem Lab® designation:</p>		
<p>Testers under \$10,000</p> <ul style="list-style-type: none"> • GIA iD100 • DiamondDect 3 • ALROSA Diamond Inspector • Sherlock Holmes Device 	<p>Testers over \$10,000</p> <ul style="list-style-type: none"> • AMS2 (melee only) • DiamondSure • DiamondView 	<ul style="list-style-type: none"> • GIA DiamondCheck • M-Screen+ (melee only) • SYNTHdetect

*If expert and novice results were reported for for the ASSURE Directory, the expert results are used for this analysis. Otherwise the single reported result was used.

Novice Results: Results attained by someone who had never used the device before and has received training.

Expert Results: Results are designated by the device manufacturer.

For the most up-to-date information, please visit the ASSURE website at <https://www.naturaldiamonds.com/council/assure-diamond-verification>. Testing is ongoing on new equipment and new instruments may be added/eligible after the release of this document

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