



CERTIFIED HYBRID DIAMOND MASTER SET The Hybrid Solution for Diamond Color Grading

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The GIA certified diamond master set is certainly the universally recognized standard for diamond color grading. It has always been considered an essential requirement for gemological instrumentation where the issue of reports that include the diamonds color grading is expected. It is also considered indispensable by numerous gemological and appraisal associations in the case of requesting accreditation as a gemological laboratory. Obtaining a GIA master set has always been complicated and expensive, the requirements for samples are decidedly stringent and the few companies that over the years have had the ability to have material in sufficient quantity and quality have gradually decreased to the point of interrupting the supply for years now. The problem is even more serious considering that the Cubic Zirconia series have worsened in quality over the years, the only company that supplied stabilized and consistent CZ master set has run out of rough and does not plan to produce it again in the future. In 2023, a group of American gemological associations and appraisers called several meetings with the intention of finding a solution, but without being able to take a single direction. Following discussions with several colleagues within the board of the AGA (Accredited Gemologists Association), they began to think about the hypothesis of a “hybrid” series composed of synthetic diamonds for the “higher” colors and natural diamonds for the lower ones. This was a totally new approach, so far only diamonds from the “Cape series” have been used, which owe their yellow hue to the nitrogen aggregate N3. Thinking of including totally nitrogen-free type II synthetic diamonds, was not, on paper, a feasible option. The theory had to be validated through a



“visual” point of view completely detached from the spectrophotometric approach. Once it was established that the GIA, given its unavailability to release master set reports for synthetic diamonds, could not contribute to verifying the feasibility of the project, the collaboration of the Sarine-GCAL laboratory was requested, which, with the recent implementation of instrumentation for the automatic grading of color and clarity, had the credentials to contribute to the solution of the problem. The first tests provided encouraging results, so we proceeded to identify Stuller as the company that had the operational capacity to have both natural and synthetic material in sufficient quantity and quality. As a condition for participating in the project, a formal assurance was requested that the product, once on the market, would remain there indefinitely, regardless of the number of master set sold. It was clear that for all participants in the program this is an effort not motivated by mere economic reasons, but by the desire to provide an indispensable service for entire categories of professionals who deal with diamonds. The Stuller-Sarine/GCAL collaboration began in August 2024 and as a result led to the presentation of the first “hybrid” comparison series at the AGA conference on February 5th in Tucson. The prototype series includes 8 samples, synthetic diamonds for the colors E-F-G and naturals for the colors H-I-J-K-L. Those present at the event had the opportunity to test the Hybrid series with a group of certified diamonds and verify its effectiveness *de visu*. The AGA has modified the requirements for obtaining CGL (Certified Gemological Laboratory) status to include the GCAL laboratory in addition to the GIA for the release of certified master series, several other associations have already indicated their availability to do the same. For anyone interested in more information, the AGA website has a dedicated page with FAQs (<https://accreditedgemologists.org/hybrid-diamond-master-sets/>) and an email address where you can register to stay up to date and possibly book when the first sets will be available, according to Guy Borenstein, Stuller's representative for the project, between next September and October 2025.