



**DOERR DALLAS
VALUATIONS**



Annabell Parry
Jewellery and
Watches Specialist

UNVEILING THE BRILLIANCE LAB-GROWN DIAMONDS

When is a diamond not a diamond?

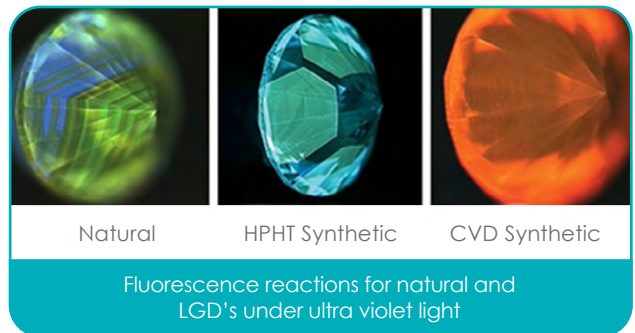
What do you call diamonds that are not formed underground but grown in a controlled environment that mimics the conditions under which natural diamonds develop? So, are they synthetic, lab-grown or factory grown or simply 'diamonds'?

First of all, let's look at how you 'grow' those divine diamonds.

There are two popular ways to grow a diamond. Both involve starting with the 'seed' of another diamond. The first lab diamond was made in the 1960's and the industry has changed massively in size and complexity in the intervening 65 years.

The growing of LGD's is a little like the VHS and Betamax fight in the 1980's. The first option is using a High Pressure High Temperature (HPHT) system, where the seed is then placed amidst some pure graphite carbon and exposed to temperatures of about 1,500C and pressurised to approximately 1.5 million pounds per square inch in a chamber. The alternative model to make diamonds is called Chemical Vapor Deposition (CVD). This was slower out of the starting blocks but the quality and size of diamonds produced using this method is arguably superior to HPHT.

This system involves putting the seed in a sealed chamber filled with carbon-rich gas and heating to around 800C. Under these conditions the gases begin to "stick" to the seed, growing a diamond carbon atom by atom.



Fluorescence reactions for natural and LGD's under ultra violet light

No one knows quite yet who will win the fight like VHS did back in the day. Vast research development and investment is being put into both practises with neither side prepared to admit defeat yet.

LGD's represent nature at its most perfect, at a fraction of the price of a natural diamond.

Retail
3ct G VS1 round brilliant cut LGD in 2021 – £16,500
3ct G VS1 round brilliant cut LGD in 2023 – £7,500
3ct G VS1 round brilliant cut certificated natural in 2021 – £55,000
3ct G VS1 round brilliant cut certificated natural in 2023 – £70,000

Some of the questions we are asked are 'Are they real diamonds?' and 'Can you tell them apart from a natural diamond?'

The answer is yes to the first question. They test as a diamond (2.412 on a refractometer) visually and chemically identical to a natural diamond.

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However, they can be told apart by those in the know.

Using LWUV and SWUV (long wave ultraviolet and short wave UV) the fluorescence of a factory made stone is an absolute giveaway. They often have a strong turquoise or purple colour that you never find in the natural world. The growth structure can also give away a man-made diamond because they were grown so quickly, the atomic structure does not have the same chance to settle into a classic framework.

The pricing of diamonds, whether natural or lab-grown, depends on various factors such as carat weight, cut, colour, and clarity. While lab-grown diamonds are generally more affordable than their natural counterparts, the price difference is becoming more pronounced as technology advances and demand grows.

Natural diamonds are esteemed for their rarity, formed over millions of years deep within the Earth. Lab-grown diamonds, despite sharing the same physical and chemical properties, are sometimes perceived as less valuable due to their manufactured origin. Costs over the last two years has dropped in value of these stones while natural diamonds are keeping their value.

The latest findings propose that there is very little resale value for a LGD. Many auction houses will not take them and many of the large fine jewellery houses will not sell them including De Beers who set up their own LGD factory and company for their 'Lightbox' ranges. They stopped making engagement rings in 2022.

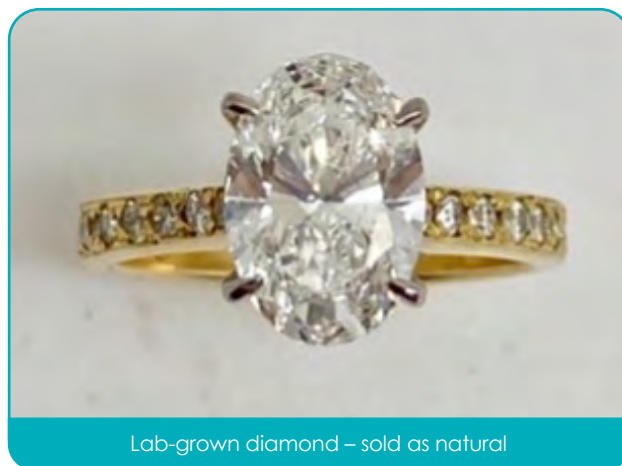


The marked retail price difference gives rise to the challenge in ensuring transparency and proper disclosure to the consumer. Some critics argue that buyers may not always be adequately informed about whether the diamond they are purchasing is natural or lab-grown.

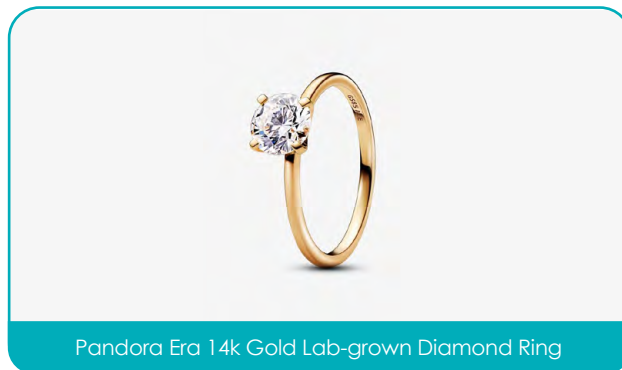
Due to the price differential this could be a devastating find?

Did you know; if a diamond is marketed or sold or valued as a 'diamond', without a pre-fix such as lab-grown, synthetic etc, then it is assumed to be an earth grown natural diamond? All lab-grown diamonds of any shape or size must have a pre-fix to aid a consumer's educated decision process.

During a recent valuation, a diamond ring was presented from a charming young man, who had purchased it to propose to his girlfriend. However, during our appraisal, Annabell had to give him the devastating news that it was not a natural diamond. He had purchased the stone for £38,000 when in fact, the price should have been around £9,000— did the jewellers know it was lab grown?



This type of miss-selling has caused the potential for market confusion. Consumers might face challenges distinguishing between natural and lab-grown diamonds, impacting the perceived value of their purchases. So, it is important to buy your jewellery from a recognised jewellery company.



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Having reviewed some of the challenges for LGDs versus natural diamonds, they are still hugely popular. In August 2023, LGD amounted to 50% of all diamonds purchased in America. Pandora, who are one of the world's largest jewellery companies, uses LGD for many of their designs. Gems TV and 'fashion jewellery' brands are developing price sensitive ranges for LGDs and because of the size of the market and the lower margins being made, the producers are concentrating on melee size cut goods for watches and 'halo' rings and larger (2ct plus) ultra high quality diamonds, such as E & F colour VVS clarity.



4ct centre stone LGD from Grownbrilliance
This as a natural diamond would be in the £80K range!

So, are Lab-Grown Diamonds here to stay... the rise of lab-grown diamonds is indicative of a broader trend toward sustainable and ethical practices in the jewellery industry. While traditional diamonds maintain their allure and value, lab-grown diamonds are carving a niche for themselves, driven by consumer demand for more price sensitive choices. As technology continues to advance and consumers prioritise ethical considerations, lab-grown diamonds are likely to remain a significant player in the market. However, the coexistence of natural and lab-grown diamonds is expected, with each catering to different preferences and values. The issues associated with lab-grown diamonds against natural stones are multifaceted, touching upon perceived value, ethical considerations, disclosure, and market dynamics.

Will natural diamond values increase due to scarcity? Will women prefer to have a natural diamond on their finger rather than a lab-grown diamond or will price decide?

We wait and watch!