

Composition

Chemically, physically and optically, there is no difference between mined and lab-grown diamonds. A lab-grown diamond can only be distinguished from mined alternatives using specialised equipment that can detect the minor differences in trace elements and crystal growth. To the human eye, they are the same.

Origin

Mined diamonds are created deep within the earth and are the result of heat, pressure, and carbon, over billions of years. Sustainable diamonds are grown above ground in a controlled laboratory environment that replicates similar conditions using a High Pressure High Temperature (HPHT) or Chemical Vapour Deposition (CVD) process. Both methods can produce a gem-quality diamond rough in around 4-8 weeks. Our diamond buyers strictly source CVD grown diamonds as this process replicates natural formation as close as possible. Once formed, the rough diamond will follow the same cutting and independent grading process as a mined alternative.

Sustainability

Our suppliers are focused on carbon neutrality, renewable energy and vertically integrated supply chains to create a better future of diamonds, and our planet. Many of our vendors are local, family-run businesses, supporting sustainable reform within the industry. When discussing the sustainability and ethics of mined compared to lab-grown diamonds we choose to take a balanced and guided approach. Diamond mining has for many years been linked to violence, environmental destruction and foul play, but the lab-grown market is still in its infancy, with a lot of misinformation circulating. Currently, 50-60% of lab-grown diamonds are grown in China using a cheaper HPHT manufacturing method, rather than the cleaner CVD process. Not all lab-grown diamonds are environmental, and it is important to lead your own research so that you understand that what you are purchasing is true and authentic.

Quality

Lab-grown diamond innovation is continuously improving as technology develops and evolves. The CVD growing process is particularly noted for its ability to produce the most chemically pure Type IIa diamonds, which are incredibly rare in nature. CVD created diamonds have different growth morphology, and their specific growth conditions influence the shape of the diamond rough. A mined diamond has organic growth patterns that form in an octahedron shape, whereas CVD-created diamonds grow in one direction and form a cube shape rough. This allows diamond cutters to carefully plan and carve the rough to ideal diamond proportions for every lab-created stone. Put simply, all CVD created diamonds are graded with excellent or ideal cut grades, ensuring the highest quality brilliance and sparkle for your diamond.

Value

Sustainably created diamonds offer excellent value for couples looking for a mine-free alternative and a larger diamond for their budget. They are more affordable than mined diamonds of comparable size and quality, partly due to their shorter growing time, but also because they require less man-power in their creation than in the mining process. As with any gemstone, the resale value can vary over time. As lab-grown diamonds are a more recent introduction to the market, there is more uncertainty on future value, when compared to mined diamonds. While Lab-grown diamonds are still a considerable investment, respectful pricing reflects the quality of the materials and the level of workmanship involved to bring each diamond to life.

Certification

All diamonds are submitted to grading laboratories and are assessed on their quality. Like mined diamonds, lab-grown diamonds are graded on the 4C's (carat, cut, clarity, and colour), along with other relevant qualities of the stone. Our lab-grown diamonds are certified by esteemed laboratories that highlight the manufacturing process of each diamond, so you know exactly what you're buying, and how our diamonds are being produced. All sustainably-grown diamonds greater than 0.30ct come with digital and hard-copy certificates provided by the International Gemological Institute (IGI), Gemological Institute of America (GIA) or the Gem Certification and Assurance Lab (GCAL). We strictly source diamonds that have been marked and certified as grown, to ensure the genuine quality of our materials. The diamond's girdle is laser inscribed with the report number as well as the word 'lab-grown' or 'LG'. These steps are taken in the interest of clear delineation for consumers.