LA BRILLIANTE

DIAMONDS CREATED FOR YOU

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WHO WE ARE

Over the past years LaBrilliante has managed to build strong relationships with many companies across the world. We keep fulfilling requests that many manufacturers would consider impossible. It was challenges that made us the leaders and allowed us to achieve the records that still can't be surpassed to this day. Going the extra mile to keep our customers satisfied is our primary goal that we strive to achieve and maintain on daily basis.

WE MIND IF IT'S MINED

MISSION

To lead the market of jewelry and diamonds into the innovative future and seamlessly integrate technology into art and beauty by being the absolute best versions of ourselves at every step of the process.

VISION

We're strong believers in transparent diamond pipeline. It's important for us to offer both our diamonds and expertise, so that everyone could make their own educated decision.


LABRILLIANTE LLC
LABRILLIANTE LLC
LABRILLIANTE LLC
LAB
LAB-GROWN DIAMONDS
LABRILLIANTE LLC
BOOTH 4147
WE GROW
YOU PROSPER
Save
Explore
Create
PLASSYS

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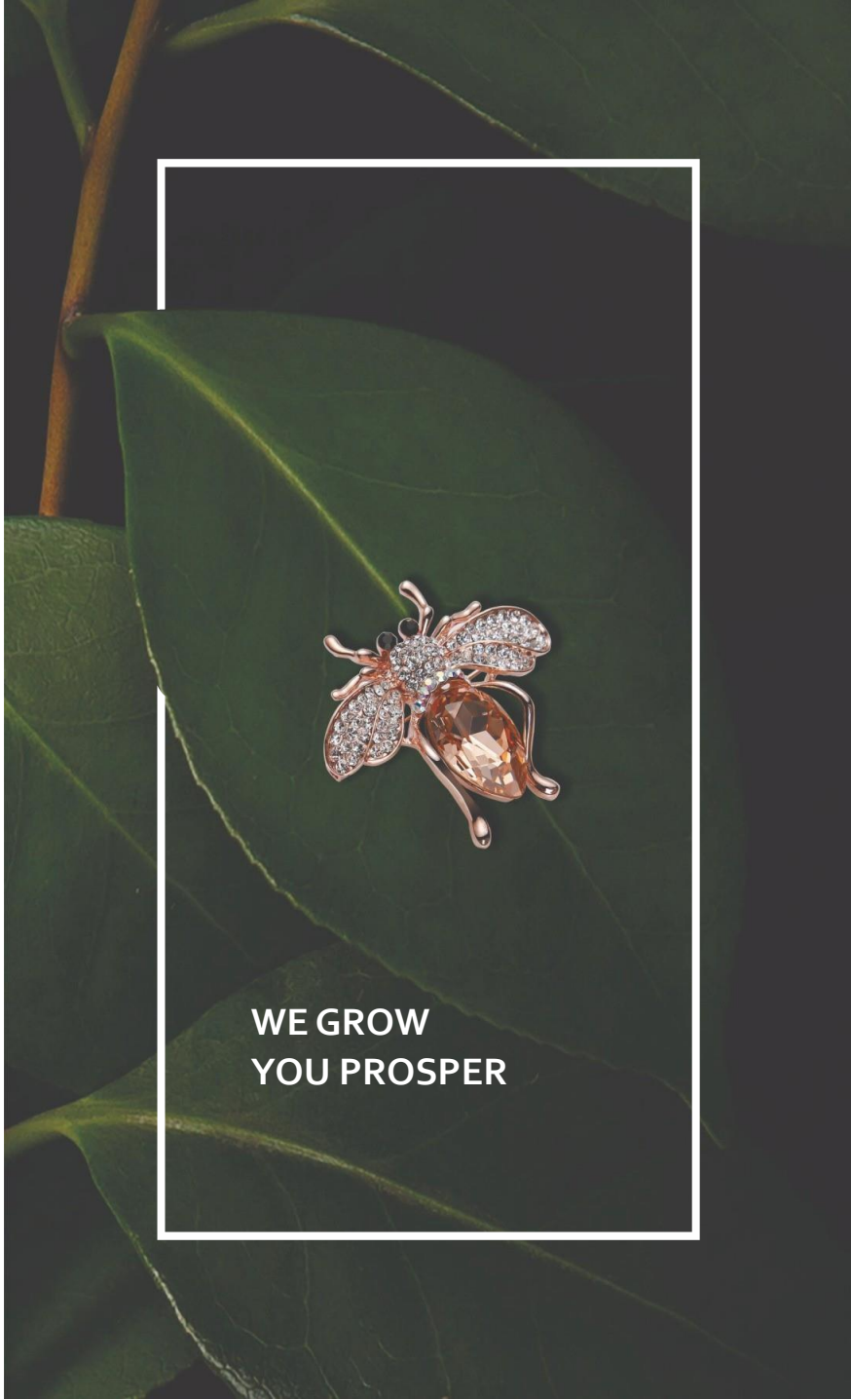
About us

LaBrilliante was established when a group of diamond professionals teamed up to create something completely new in the diamond industry. Since then, several world records have been set that aren't surpassed even to this day. We associate our company with innovative and ecologically sustainable production of high quality lab-grown diamonds

Our production consists of both commonly used methods:
High Pressure High Temperature (HPHT)
and Chemical Vapor Deposition (CVD)



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FTC Drops 'Natural' from Definition of Diamond

According to the section "Definition and misuse of the word diamond" of the Guides for the Jewelry, Precious Metals and Pewter Industries, the FTC states: "A diamond is a mineral consisting essentially of pure carbon crystallized in the isometric system", whereas it previously read "natural mineral".

The FTC no longer defines a "diamond" by using the term "natural" since it's now possible to grow products that have essentially the same optical, physical and chemical properties as mined diamond.

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WE GROW YOU PROSPER

There are currently two well known and globally applied methods of growing diamonds — High Pressure High Temperature (HPHT) and Chemical Vapor Deposition (CVD)

HPHT

HPHT process starts from the following: we stack a diamond seed, graphite & metals (growth catalysts) inside the small cubic cell and then we place that cell into hydraulic press. Under enormous pressure (5-6 GPa) and scorching temperature (~1500 ºC) graphite and metals start to melt to eventually form a diamond around the seed. The whole process takes about 2-3 weeks from start to finish.

CVD

CVD process starts from the following: we put a diamond plate inside the vacuum chamber and heat this plate up to 800 ºC. Then the chamber is filled with carbon- rich gas (usually methane) which is also heated up to 3000 ºC with a microwave beam. It is done in order to break molecular bonds and release carbon atoms which are then deposited onto the diamond plate. Slowly but surely the diamond grows upwards (its length and width are limited by the size of the plate). CVD process requires 1-4 weeks from start to finish (depending on required weight).


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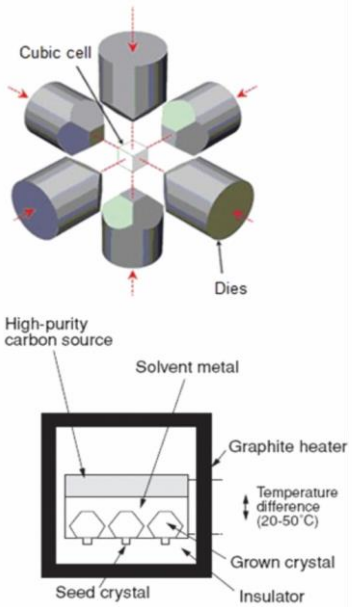
HIGH PRESSURE HIGH TEMPERATURE

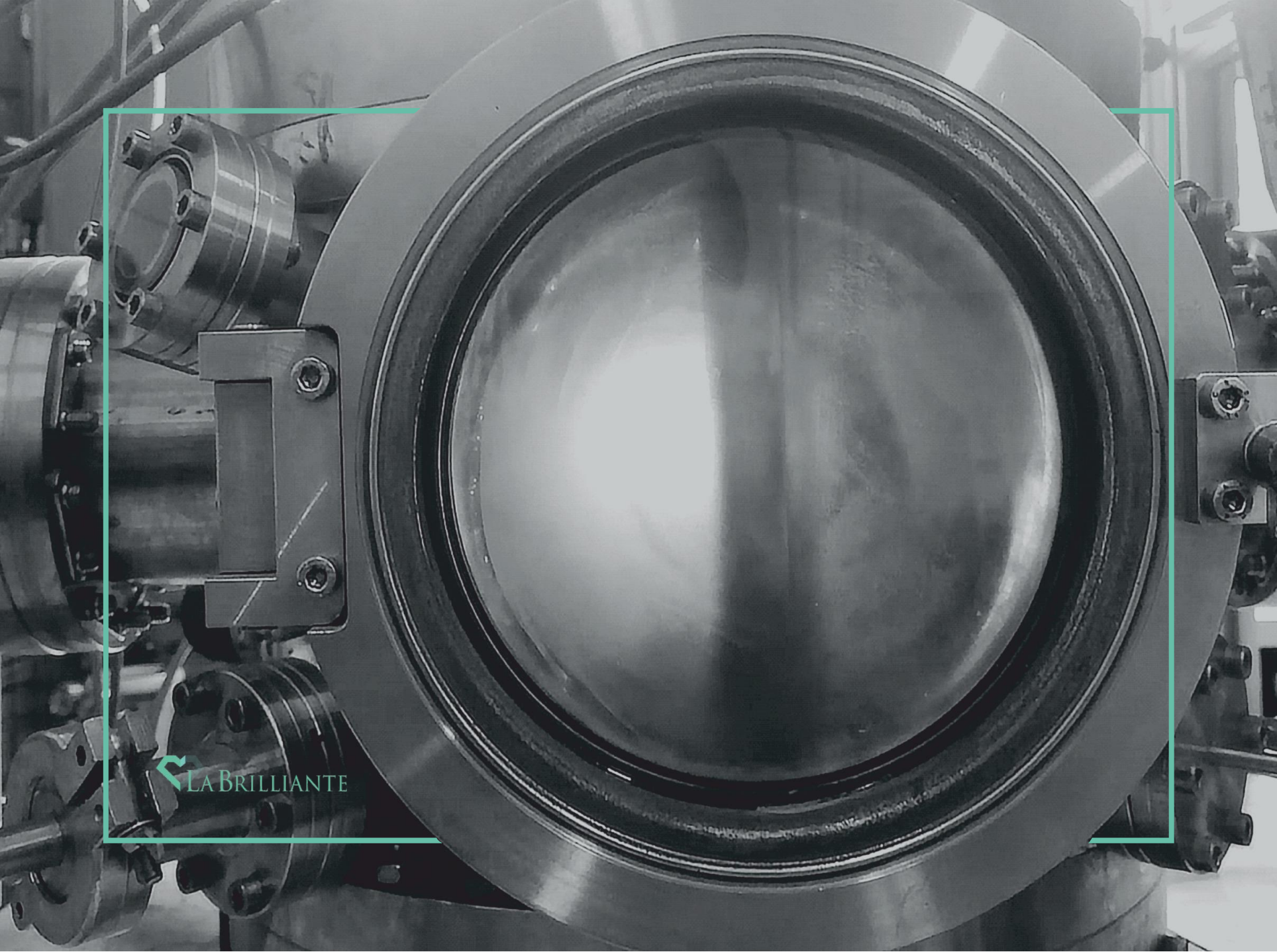
PROCESS
Crystallization of a diamond from carbon source (high–purity graphite) under controlled conditions

PRESSURE AND TEMPERATURE
In order to recreate the natural process of diamond formation, the pressure close to 5 GPa and the temperature about 1500°C are required

SHAPE
HPHT rough diamond is cubo-octahedral in its shape

COLOR
Up to D without post–treatment

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CHEMICAL VAPOR DEPOSITION

PROCESS

CVD utilizes carbon-containing gases (such as methane) inside a vacuum chamber. A microwave beam heats the gas and creates plasma, thus separating carbon from the rest (which is pumped out from the chamber). The carbon then precipitates on a thin slice of a diamond plate and compresses to create a diamond

PRESSURE AND TEMPERATURE

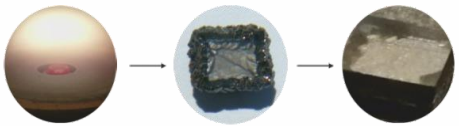
CVD process does not require high pressures, as the growth typically occurs at pressures under 27 KPa (185185,185 times less pressure than in HPHT) and temperatures close to 800 °C (bottom) and 3000 °C (top)

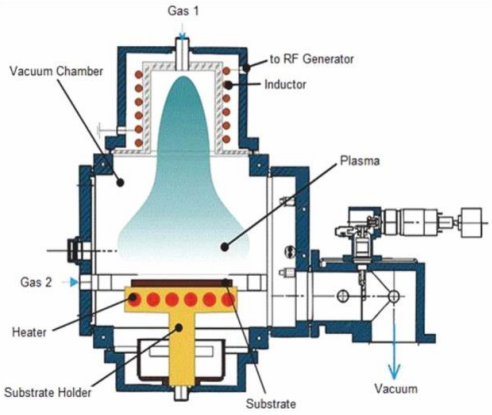
SHAPE

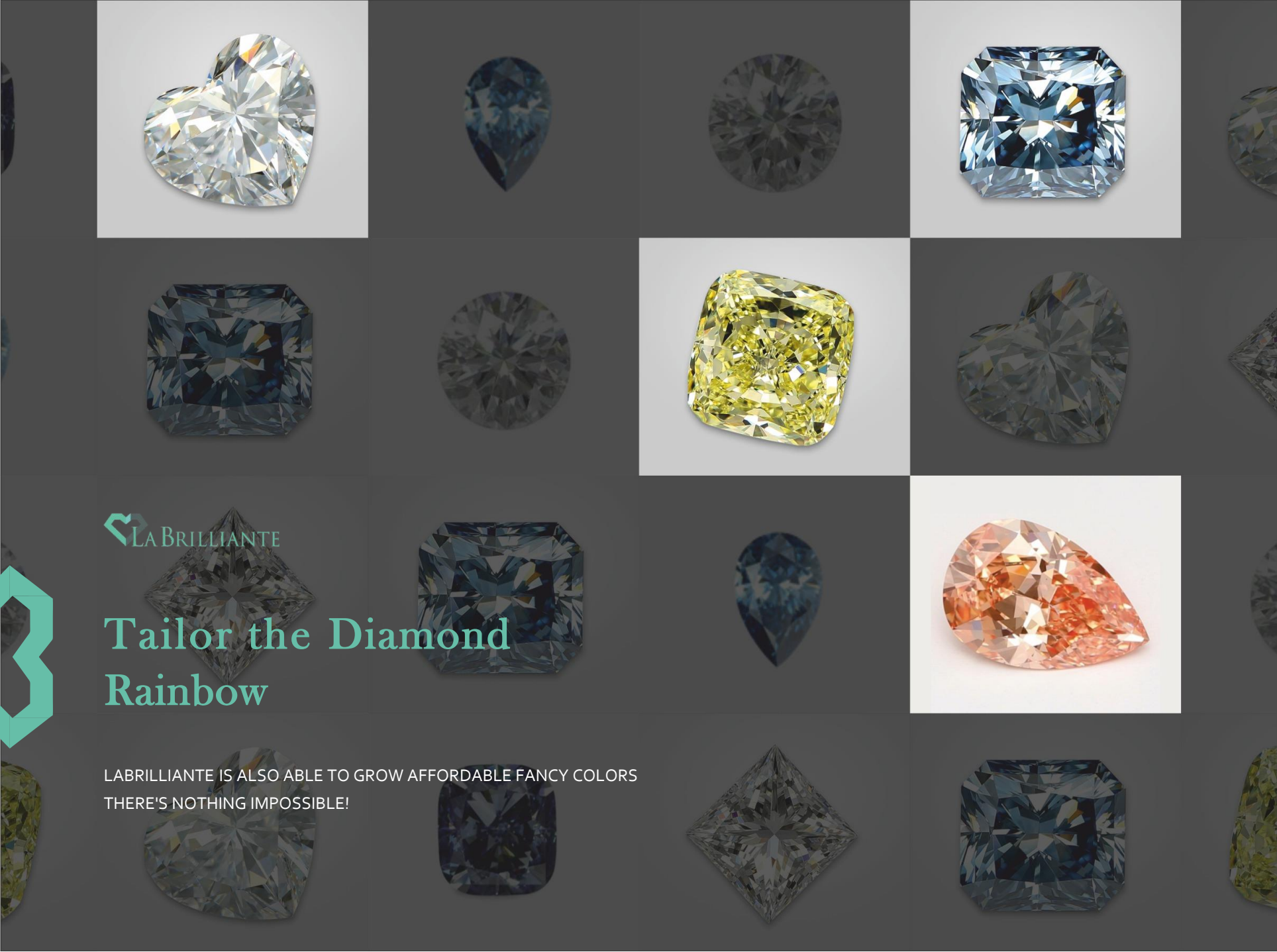
CVD rough diamond recreates the shape of a diamond plate upon which it's grown

COLOR

Up to D with post-treatment, most of the stones are near-colorless



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Tailor the Diamond Rainbow
LABRILLIANTE IS ALSO ABLE TO GROW AFFORDABLE FANCY COLORS
THERE'S NOTHING IMPOSSIBLE!

3 OUR PRIDE

THE BIGGEST DIAMONDS |TOP QUALITY
WIDE RANGE OF CAPTIVATING COLORS

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Cushion 3.13 CT
Fancy Intense Yellow VS2

Fancy Yellow diamonds in light, intense and vivid color intensities

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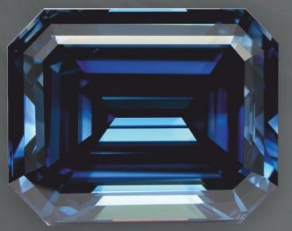
Round 9.05 CT
E VVS2

All imaginable shapes are available in D-J colors, IF-SI clarity



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Emerald 7.29 CT
Fancy Deep Blue VS1

One of a kind as grown non–treated Fancy Blue diamonds

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CUSTOMIZE YOUR ORDER

LaBrilliante is able to custom cut a diamond into any desirable shape.

Big Ovals and Pears, elongated Cushions or a wide Marquise? There is nothing impossible!

Feel free to share your project with us!

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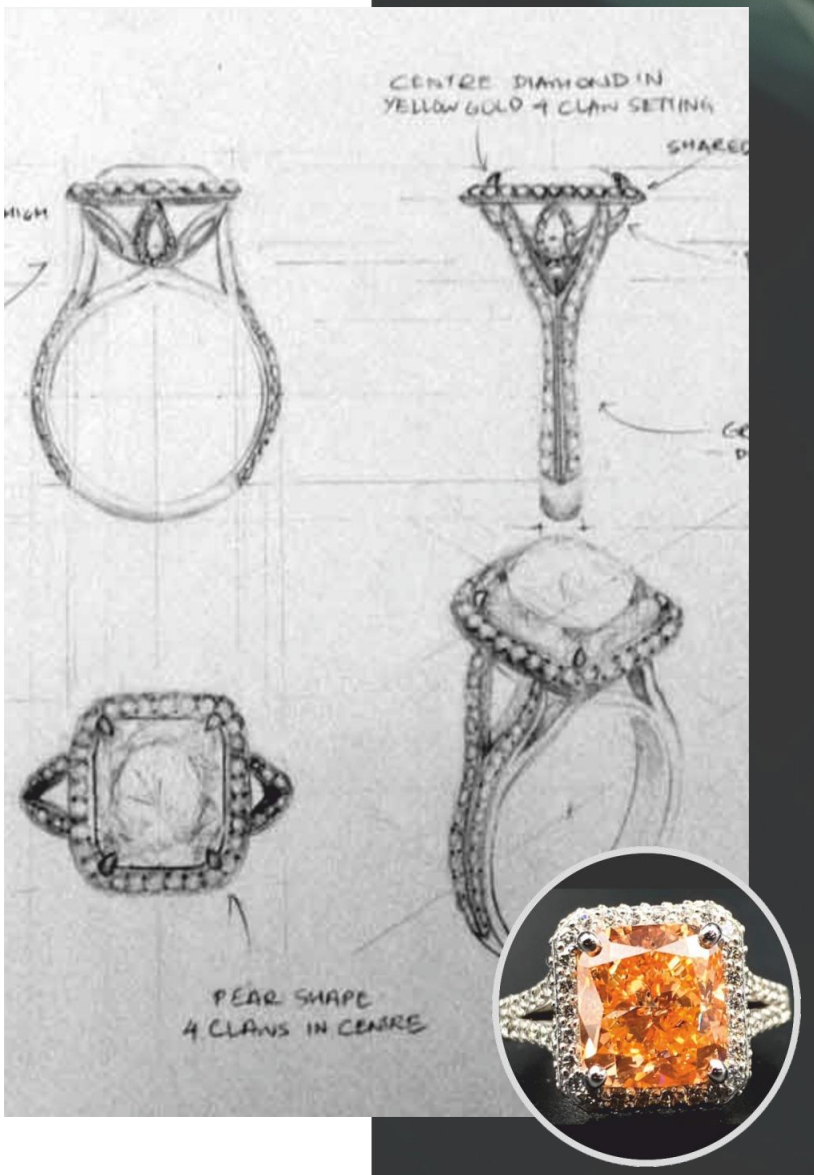
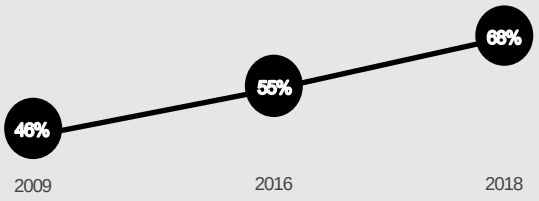
CREATE YOUR
MASTERPIECE

LaBrilliante is committed to delivering unique jewelry pieces that highlight the beauty of our diamonds and their wearers. Through out the years we've established and maintained relationships with the best jewelry craftsman, thus you can pick the desired diamonds from us and we would be happy to lead you to a personal craftsman of your choice who will help you design something special (or use your own project) for any occasion.

Make it your own One & Only!



Market Share

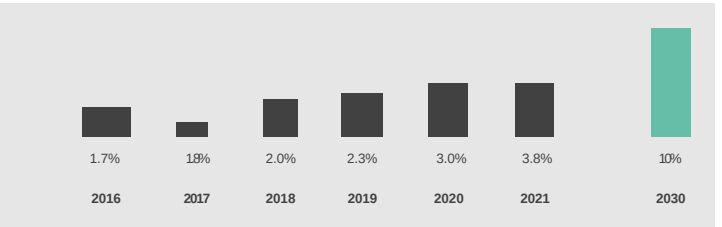


CONSUMERS WHO WOULD CONSIDER OUR DIAMONDS FOR THEIR ENGAGEMENT RING*

According to a diamond industry analyst Paul Zimnisky**: "At an estimated $1.9 billion dollars today, the lab grown diamond jewelry market is forecasted to grow at 22% annually to $5.2 billion by 2023 and to $14.9 billion by 2035, equating to a longer-term growth rate of about 9%". Furthermore, the market share of lab grown diamonds is going to rise from 2.3% in 2019 up to 10% in 2030.

SHARE

Consumer behavior towards lab-grown diamonds has changed significantly from what it used to be in 2009. According a to survey of millennial consumers actively shopping for engagement rings (conducted by MVI Marketing) 68% of all respondents said they would consider lab grown diamonds and 23% said they will definitely buy a ring with our diamonds. This is a positive indication of the impact which our product have already made in the mindset of today's engagement ring consumer.



PROJECTED LAB–GROWN DIAMOND MARKET SHARE**

Source:
*www.goldandtime.org/pdf/THEIGDA2019.pdf
** www.paulzimnisky.com/lab-grown-diamond-jewelry-market-forecast

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LET THE NUMBERS
SPEAK FOR US

HERE IS A SIMPLE **COST/BENEFIT ANALYSIS BREAKDOWN**

$2 050 **Our price per stone***	**≈50%** **Your profit** (based on the price of a ring)*	**$3 500** **Your price for a ring*****
*** Round 1.00 ct F VS2**	**** Based on RBC 1.00 ct F VS2 set in a ring**	***** RRP for a solitaire ring**
RBC 1.50ct G VS2 – 4 050 USD	$ ≈ 45%	≈ 6 200 USD
RBC 2.01ct E VS2 – 8 300 USD	$ ≈ 48%	≈ 12 600 USD
Oval 3ct D Si1 – 12 200 USD	$ ≈ 36%	≈ 17 000 USD
BUY NOW	**EARN NOW**	**SELL NOW**

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DIAMOND 4C'S

Lab grown diamonds are graded by the same 4C's as their mined counterparts – each of them is unique in terms of color and clarity.

CLARITY

Clarity determines how clean a diamond is. Different inclusions may appear during the growth process due to changes in pressure & temperature (same happens to mined diamonds).

CUT

Cut refers to a diamond's proportions. It's widely accepted that cut is one of the most crucial features of a diamond. The role of the cutter is of utmost importance, since he will discover and uncover the beauty of each diamond that goes through his hands (be it mined or lab- grown).

CARAT WEIGHT

Carat is a unit of weight which is used in the trade (most think of a carat in terms of size though). The word "carat" comes from the "carob" tree seed which was used as an original unit of measure by diamond traders. Today, a carat is equal to exactly 0.2 grams

COLOR

Color refers to the color of a diamond mono-crystal and not to the reflection of special colors that flash when a diamond moves. Most diamonds naturally exhibit slight tints of yellow, brown or gray. These tints are caused by trace elements (such as nitrogen) or deformations of the crystal's inner structure

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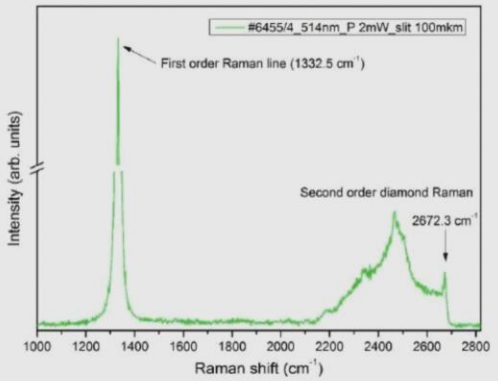
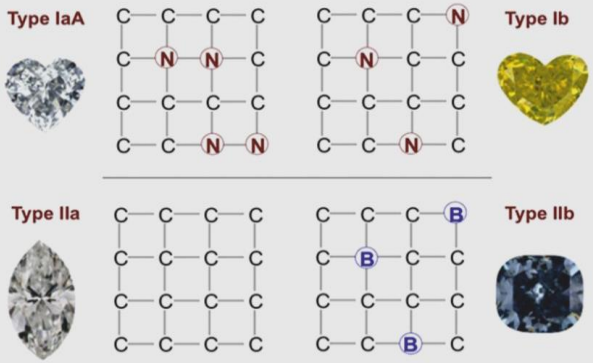
FOR CURIOUS MINDS

Raman Spectroscopy — Raman spectra are all consistent with our samples being extremely high quality single-crystal diamonds. No evidence of impurities (such as N, Si or B) was found, with only peaks due to the first and second–order Raman spectra of sp3 diamond present.

Raman spectrum of the second order registered in our samples is specific only for high–quality diamond crystals with near perfect structure.





N>5PPM
Type I - Contains nitrogen Average 100- 3000ppm

N<5PPM
Type I I - Contains very low nitrogen concentration

>98%
of natural diamond

Most lab grown diamond

Very rare in nature

Type Ib Contains single substitutional nitrogen

Type Ia Contains aggregated nitrogen

Type IaA
Contains nitrogen in the A aggregate form

Type IaB Contains nitrogen in the B aggregate form

Type IIa
Pure carbon

Type IIb
Boron as the major impurity

Diamonds are classified according to their optical properties. The majority (Type I) has an absorption edge of around 330nm. Another small group (Type II) has an absorption edge of about 220nm.

Over the years this natural classification scheme has been extended and further linked to different predominant defects, such as nitrogen and nitrogen clusters. In its broadest sense, this classification scheme remains relevant to lab-grown diamonds – most HPHT and CVD grown diamonds fall into Type IIa.

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Methods of Identification

It's widely known that the best way to determine the quality of a diamond is to grade it at a well-known institute such as IGI, GIA, GCAL etc. However, some people tend to use equipment which does not provide 100% accuracy.

When it comes to checking the authenticity of a diamond - diamond pen tester is the most commonly used tool. However, the only way to be 100% sure in the quality of a diamond is by grading it at a well known gemological lab.

Why? Due to the applied technology.

Diamond pen-testers are made to check electro and heat- conductivity. They operate by sending heat or electrical charge and measuring how well any particular gemstone conducts them. Since diamond is an excellent electrical insulator, sending a current will do nothing to it – confirming its authenticity.

Since HPHT process requires small amounts of metal to be used as a catalyst for growth, this metal may get into the crystal structure of a finished rough diamond - resulting in a false reading as moissanite. Same thing happens to blue mined diamonds though - they conduct electricity due to their boron content and also read as moissanite.

It may also happen that checking different zones of the same stone may lead to different results. Another great reason not to use any pen tester is its inability to detect CVD coated moissanite.

Any reputable gemological laboratory would use more sophisticated equipment (Raman spectroscopy, photoluminescence, X-ray etc.) to test lab-grown diamonds and they would confirm that they are indeed real diamonds.

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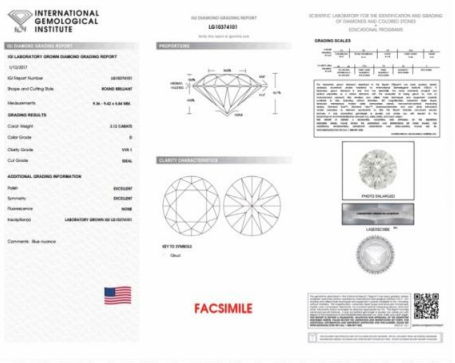
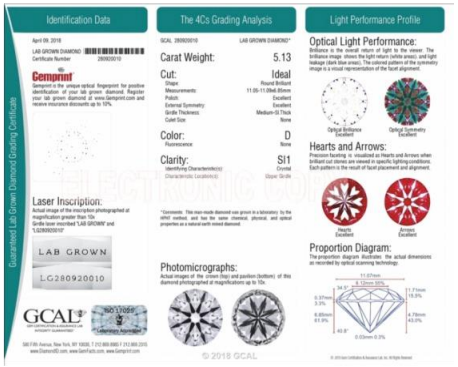
GRADING AND CERTIFICATION

Full transparency is something we care deeply about. Each and every diamond is graded by the most trusted and reliable institutes, the certificates provided with grading can be checked online at any time.





INTERNATIONAL GEMOLOGICAL INSTITUTE

You can check the certificate online at **igi.org**

GEM CERTIFICATION & ASSURANCE LAB

You can check the certificate online at **www.gemfacts.com**

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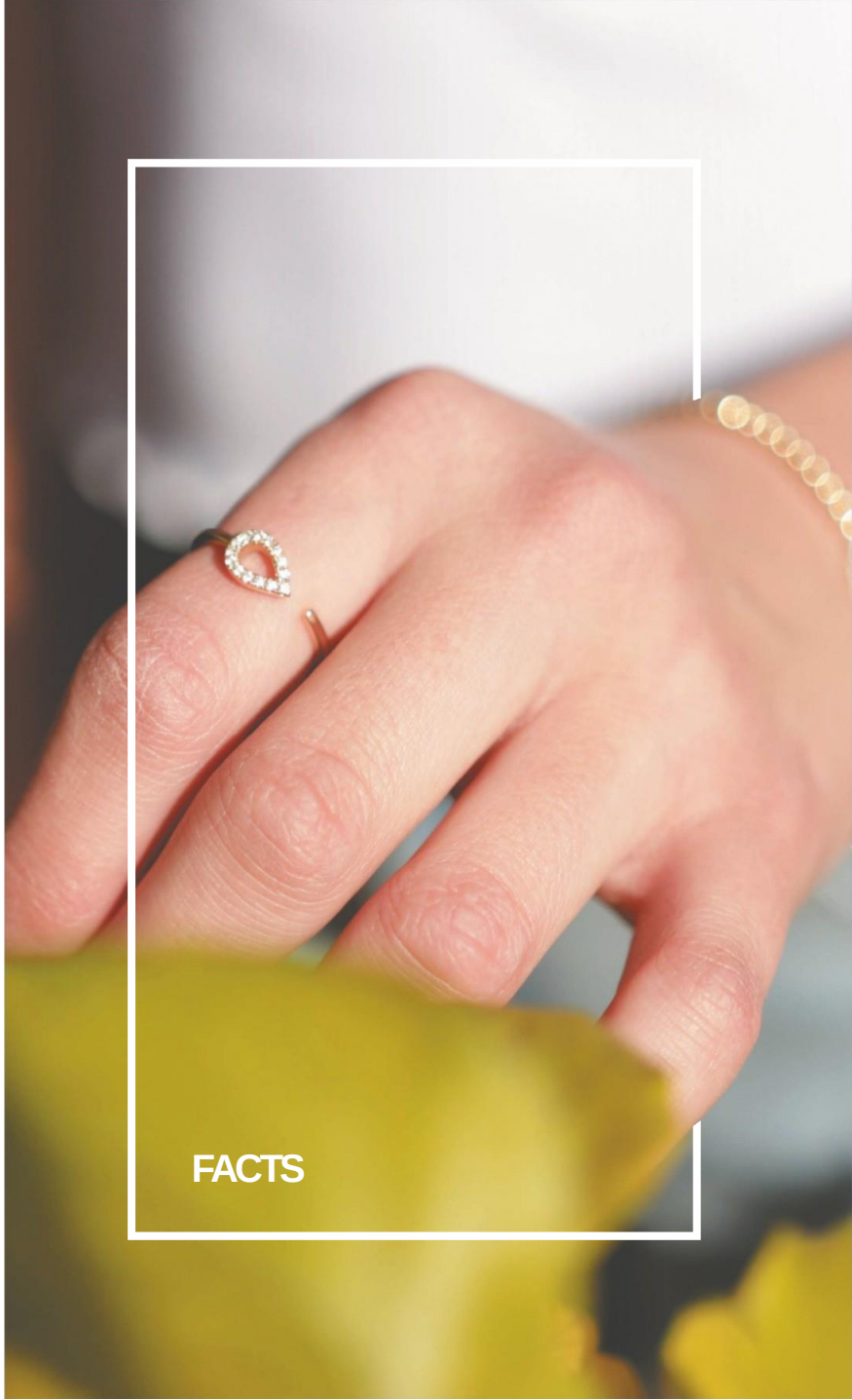
FOR CURIOUS MINDS

	CC	RI	DI	MSH	Density	Structure
Mined Diamonds	C	2.42	0.044	10	3.52	CUBIC
Lab grown Diamonds	C	2.42	0.044	10	3.52	CUBIC
Cubic Zirconia	ZrO_2	2.2	0.066	8.25	5.7	CUBIC
Moissanite	SiC	2.65	0.104	9.25	3.21	HEX

As you can see from the chart above, lab grown diamonds have the same characteristics and are physically and optically identical to mined diamonds.



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APPLICATIONS APART FROM JEWELRY

- Micro and power electronics, semiconductors;
- Optics and lasers;
- Detectors and sensors;
- Diodes and Semiconductors;
- Vacuum and diamond windows;
- X–ray and medical equipment;
- Aerospace and military–industrial complex;
- Quantum Computers and Photonics;
- Acoustics and electrochemistry;
- Epitaxy Substrates (CVD);
- Abrasive materials, cutters, rock destructive material;
- Jewelry

Diamond Anvils

Diamond Lenses

SF Diamond Anvils

SC Diamond Plates

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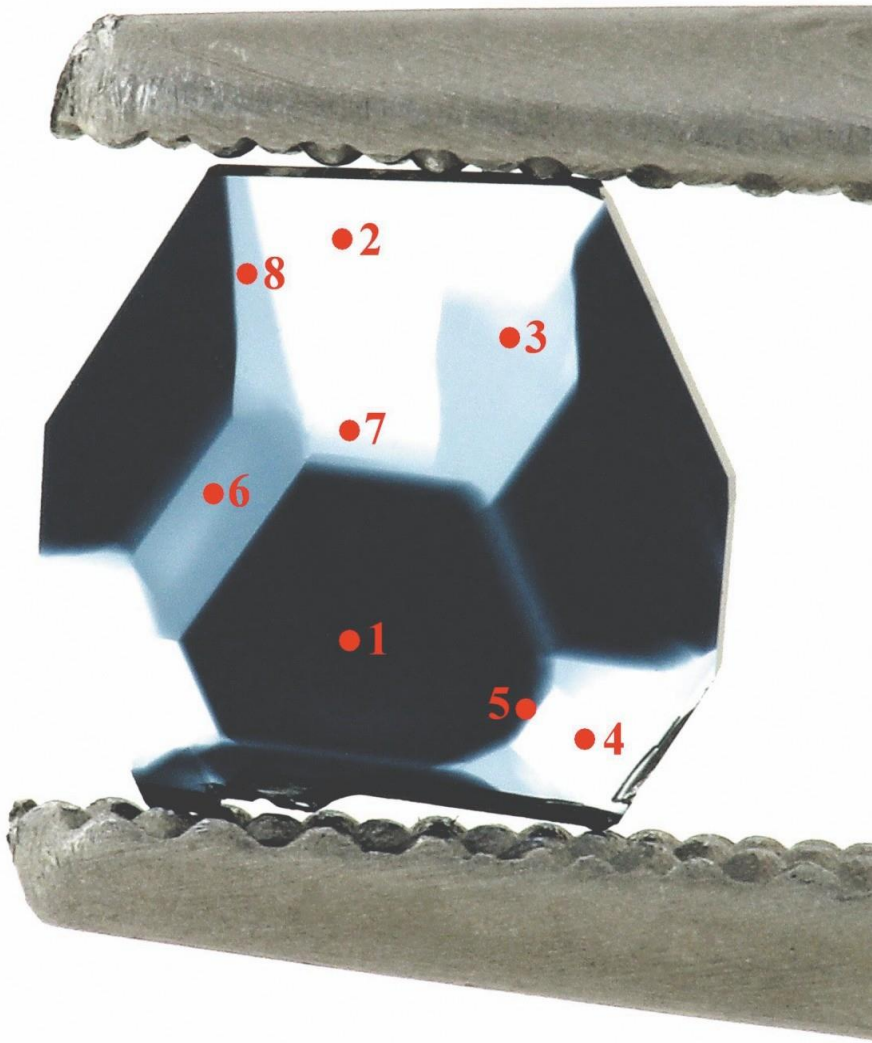
High-Tech Products

LaBrilliante production capacity and technology allows:

- To produce unique (hybrid of IIa and IIb Types) single-crystal diamond plates with different concentrations of trace elements (e.g. with Boron doping);
- To produce substrates for CVD with special angle to enlarge the surface of a diamond being grown;
- To control and manage a diamond's morphology (which allows to make needed sectors larger);
- To reach the lowest dislocations density possible.



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CHOOSE WHAT YOU LOVE

AT THE END OF THE DAY – LAB GROWN DIAMOND IS A CHOICE!

ENVIRONMENT

1ct of mined diamond

- nearly 100 sqft of disturbed land
- Almost 6000 lbs of mineral waste

1ct of lab grown diamond

- Disrupt just 0.07 sqft of land
- Only 1 lb of mineral waste

SUSTAINABILITY

- Full in-house production, from growing to polish, everything is made by our highly experienced professionals

PRICE

- Lab grown diamonds are 30-50% less expensive than mined diamonds. This is a great opportunity to get a larger diamond for the same price!

An Environmental Expert on the Ecological Impact of Lab-Grown Diamonds

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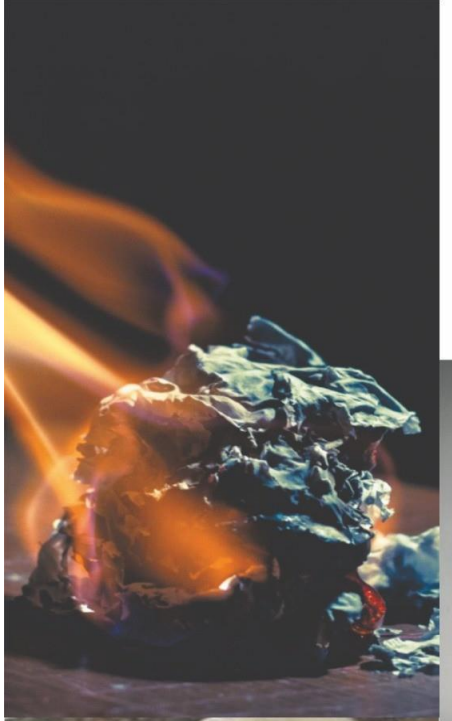
DONOR GRAPHITE

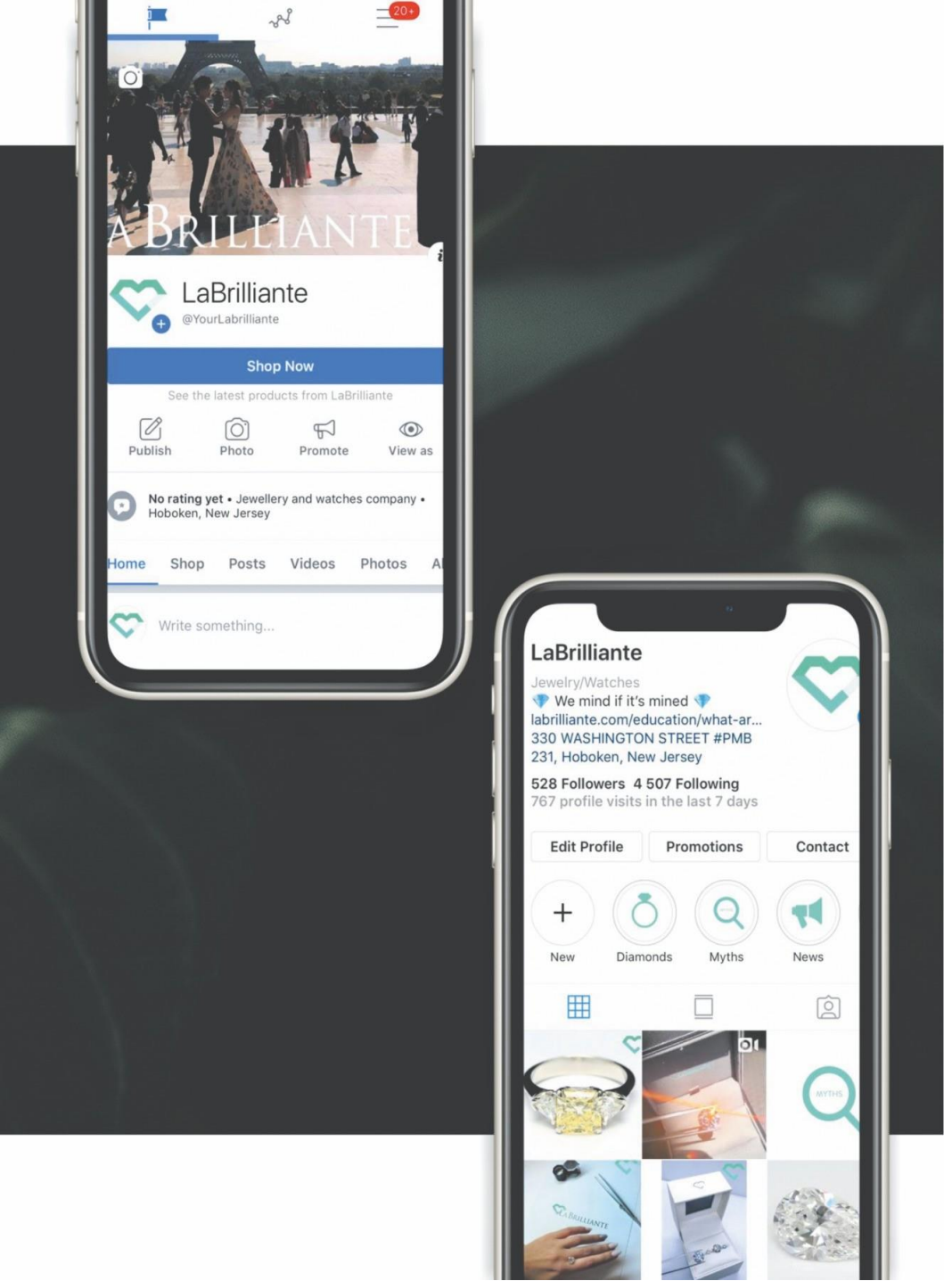
You can use your smartphone to capture a moment that is special for you. But what if you could capture it in an almost indestructible substance? What if you could make a diamond out of your most cherished belongings?

Favorite book? Wedding bouquet? Not a problem!

We can grow a diamond out of almost anything that can be burned to ashes.

Amazing way to capture your memories forever!





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WE ARE ON SOCIAL MEDIA

Stay tuned to **LaBrilliante!** Don't miss the latest news and updates on our website, Instagram and Facebook!

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