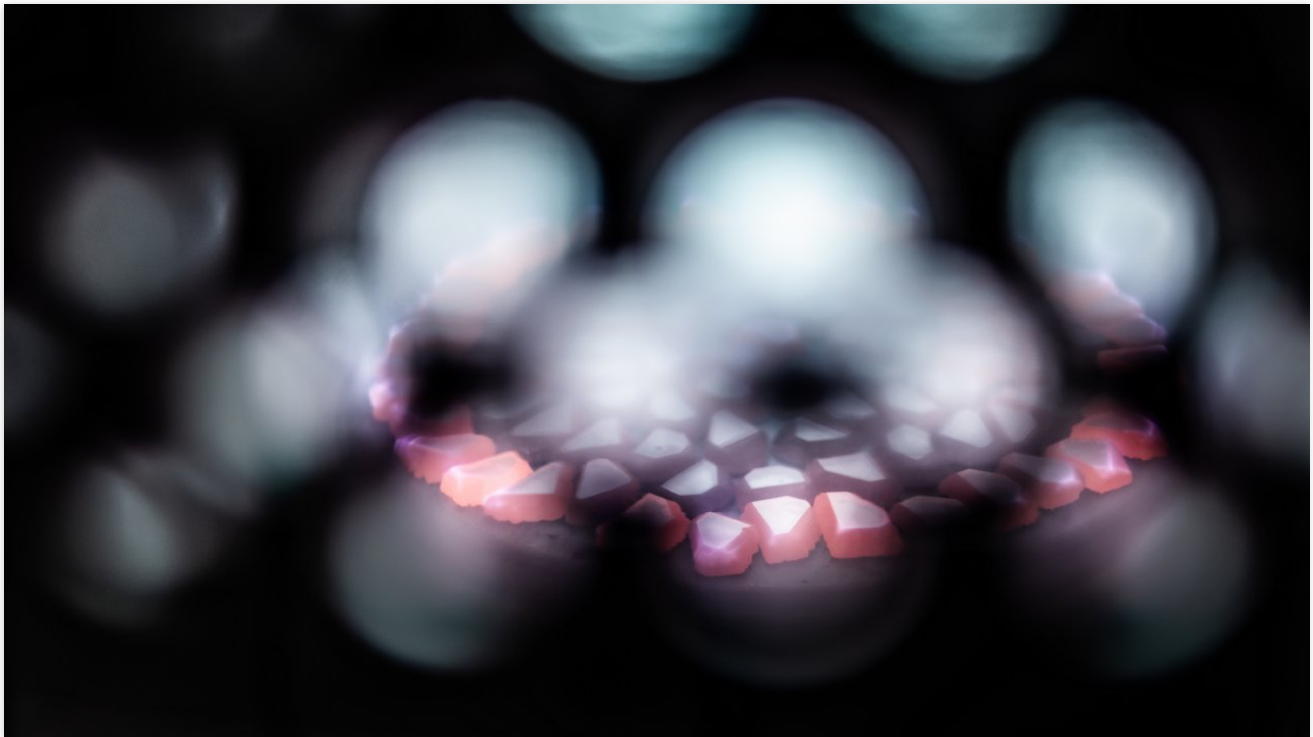


DIY DIAMONDS ARE TURNING THE LUXURY SECTOR UPSIDE DOWN



Synthetic stones are grown in an oven under enormous heat and pressure. In one month, this produces a rough stone that an outsider cannot distinguish from natural diamonds. ©Debby Termonia

PIETER SUY

January 6, 2024 01:10

Is this the future for the diamond industry or Frankenstein's monster that will bring the sector down? Traditional players in the diamond sector are more nervous now that lab-made stones are breaking through en masse. 'Anyone who has not prepared for this will face big problems.'

For a moment, it looks like Vikram Shah is starting an early office raffle, but we are wrongly concerned. The bowl with numbered pictures that the CEO of the start-up Heyaru takes from the safe turns out to be the raw material for the above-ground diamond mine that the Indian entrepreneur has developed on the former Philips site in Lommel.

With his tech company Heyaru, Shah has been imitating the chemical process by which natural diamonds are formed underground for about ten years. While this takes millions of years, the 16 continuously running machines take about four weeks.

We call those numbered pictures seeds," says Shah as he carefully arranges the slices under a bright lamp. 'We place them here in 16 ovens, which work like a mini sun: hydrogen and methane gas are heated into a plasma of several thousand degrees. In combination with the high pressure in the machine, a new layer of diamond is gradually deposited on the plates.



Lab diamonds start their life as small numbered plates, diamond discs also called 'seeds'. ©Debby Termonia

In one month, we create a full-fledged rough diamond. We then send it to India for polishing. The quality is even better than natural diamonds because 98 percent have defects, while lab diamonds have only 2 percent. Artificial diamonds have existed since the middle of the last century, but they were initially too small and not bright enough to be sold on the luxury market. Moreover, production was so expensive that competing with natural diamonds made little economic sense.

This has changed in recent decades. New production processes made it possible to develop cheaper, larger, brighter, and colorless stones on a larger scale. Retail prices for a lab diamond can be up to 70 percent lower than those for a natural stone. Shah points to a bowl with some finished stones. 'See that pink, heart-shaped diamond? That costs 15,000 euros. That would have been a lot for a natural stone.'

Conflict-free ring finger

The lower price tag makes lab diamonds attractive to a new generation of consumers, who, since Corona, want to keep a closer eye on their money, such as when buying an engagement ring. "Customers also feel less inhibited about purchasing larger stones," says Shah. 'In the past, buying a diamond was almost a family decision because so much money was involved. That has changed. A customer wanted to buy a ring for his three daughters. If he had chosen natural diamonds, it would probably have been a 0.30 carat stone. I convinced him he could give each of his daughters a 2-carat diamond for the same amount.'

With synthetic diamonds, customers feel less inhibited about purchasing larger stones.

VIKRAM SHAH
CEO OF DIAMOND COMPANY HEYARU

Lab diamonds are not only cheaper, but consumers increasingly see them as a more sustainable alternative to their natural counterparts, which are often extracted from the ground through harmful mining. Although producing lab diamonds requires enormous energy, stories regularly emerge about health problems among cutters.

Producers of lab diamonds invariably use the argument that their stones are conflict-free. The war between Ukraine and Russia, Russia being the world's largest exporter of rough diamonds, makes that argument even louder.

This translates into booming sales figures. While consumers turned their noses up at lab diamonds for a long time, 2023 was the year of the big breakthrough. Synthetic stones accounted for half of global diamond sales for the first time last year, according to Israeli research firm Tenoris. Fashion and luxury companies and jewelry chains have also understood that lesson. Last fall, the Italian Prada launched a new range of jewelry containing lab stones with a specific Prada cut. Previously, the jewelry chains Signet and Pandora also invested millions in expanding their range with lab diamonds.



Vikram Shah, the founder of the Heyaru diamond company. ©Debby Termonia

1,290 euros
LAB STONE PRICE

While in 2016, you had to pay more than 5,000 dollars for a polished stone of 1 carat, now you only need to pay 1,425 dollars (1,290 euros).

Closer to home, Baunat, the Belgian pioneer in the online sale of diamonds in which industrialist Urbain Vandeurzen also invests, launched a new platform for synthetic stones under the name Valquère.

“We are getting more and more customers asking for this, especially for fashionable and colorful jewelry,” said Steven Boelens and Leslie Ruijs of Baunat. “There is a rapidly growing demand among the younger generation. Customers from Belgium, the Netherlands, and Germany are currently open to this. We also sell jewelry in China and Switzerland, but they still prefer natural diamonds. Although we expect that interest will increase there too.”

Heyaru, where 55,000 carats or 11 kilos of diamonds rolled off the production line last year, also noticed that the lab-grown business has become booming. “We expect to achieve a turnover of 8 million euros in 2023, double last year,” says Shah. “We have seen our turnover double each time over the past four years. We are now also profitable.”

The entrepreneur, a scion of an Indian diamond merchant family, sees it as just a start. In the course of next year, Heyaru, which can count on the support of the investment companies PMV and LRM and the Flemish Agency for Innovation & Entrepreneurship Vlaio, will open a new branch in Lommel—price tag: 26.5 million euros. Shah already dreams of investing more than 260 million euros in additional production capacity by 2030.

Lab diamonds are not only used in jewelry. Even more applications are possible, from quantum computers to air filters or speakers. And yes, the competition with countries like China and India is fierce. “But we can make a difference with the ‘made in Europe’ label and our much more sustainable production.”

Antwerp nervous

The seemingly unstoppable rise of lab stones makes miners and traders of traditional diamonds particularly nervous. They see their market share further eroding when they are already experiencing a significant crisis due to hesitant Chinese consumers, uncertain economic prospects, and new sanctions against Russia. In a recent report, the National Bank explicitly referred to synthetic stones – as a new disruptor for the Antwerp diamond trade.



The rough lab stones are grown in Lommel and polished in India. ©Debby Termonia

"Although we must be careful not to shift all the blame to lab diamonds," explains Ravi Bhansali, the CEO of Rosy Blue, the largest diamond company in Antwerp. 'While European consumers see diamonds as a real luxury product, they are sold at almost all levels of society in the US: a wealthy person in New York and a teacher in Iowa buy or receive a diamond ring or pendant. Lab diamonds are more tempting for the latter type of customers because they are cheaper. But I see little change in the real luxury segment, partly because lab stones decrease value much faster than their natural counterparts. If the top segment is under pressure, it is mainly due to the uncertain economic prospects and the war in Ukraine.'

According to Bhansali, anyone who is mainly active in that lower segment and needs to prepare for the rise of lab diamonds properly could run into problems. 'Large producers who have built up huge stocks of lower quality polished stones in recent years will be left with them or have to sell them at a loss.'

But I see little change in the real luxury segment, partly because lab stones decrease value much faster

RAVI BHANSALI

CEO OF DIAMOND COMPANY ROSY BLUE

The boom in lab diamonds is so spectacular that some observers call it a bubble. In recent months, there has been such an oversupply of synthetic diamonds that prices have plummeted even more than those for natural diamonds. While in 2016, you had to pay more than 5,000 dollars for a polished stone of 1 carat, now you only need to pay 1,425 dollars (1,290 euros).

Several manufacturers have had a hard time in recent months. The American WD Lab Grown Diamonds, seen as one of the pioneers in the business, went under in October. Some believe it is the harbinger of a bloodbath in the sector. 'I was recently at a jewelry fair in Hong Kong. I have never seen the auction prices that were asked there for lab diamonds. That sector is destroying itself,' says an Antwerp diamond expert who wishes to remain anonymous.

Shah shakes his head when we ask him if a 'lab crisis' is coming. 'Prices are indeed falling, but thanks to innovation, they are also becoming cheaper to produce. Compare it to Apple's iPhones. You can now get the latest model for the price you bought an iPhone 3 15 years ago. When you buy lab diamonds, you pay for technology. It is the old technology that is now losing value. Prices for new bricks remain at the same level. If Belgium still wants to maintain a diamond sector, it has no choice but to invest in lab diamonds.'