

You get this plus article for free: enjoy your reading!

As a registered visitor you can read 5 plus articles for free every month. Do you want unlimited access to our journalism?

**Read De Standaard for a month for just € 1! > ([https://www.standaard.be/abonnement/actie/opvolgingpw?utm\\_campaign=poreuzepaywall&utm\\_source=standaard&utm\\_medium=paywall-site&utm\\_term=stickyheader&ca\\_id=4180](https://www.standaard.be/abonnement/actie/opvolgingpw?utm_campaign=poreuzepaywall&utm_source=standaard&utm_medium=paywall-site&utm_term=stickyheader&ca_id=4180)).**



# Indians want to become Europe's largest diamond maker in Lommel

12/31/2018 at 10:28 by jan bex



The Kristalpark in Lommel, where the diamond factory will soon settle. Photo: © Robin Reynders

A diamond factory. It sounds paradoxical for a noble mineral that has been extracted from the substrate with hard labor for many centuries. The hardest material on earth is nothing more than pure carbon, albeit formed after a long geological process under high pressure and high temperatures. However, people can also make diamonds: by imitating the natural process under high pressure (with pressing machines), or by allowing layer by layer to condense carbon-containing gas heated in microwave ovens.

Diamond making is still young, in Flanders it is completely new. 'Only 2 percent of the natural diamonds have the necessary hardness that is needed to be used in industrial and technological applications such as optics, telecommunications or energy. Synthetic diamond therefore fills an important gap there,' says Flemish Minister of Economy Philippe Muyters (N-VA). Flanders gives the company 2 million euros in investment support.

## The difference between natural and synthetic diamonds

"If you look at the chemical composition, synthetic diamond is exactly the same as natural diamond," says Ken Haenen, professor of physics at UHasselt. Haenen has been studying synthetic diamond and its many applications with colleagues at the Institute for Materials Research (IMO) for 21 years.

'Synthetically made diamonds can even be purer than what is extracted from the earth. The sparkle of the jewel is of course due to the grinding of the rough diamond. But diamond is not only a jewel but also suitable for high-tech applications. For example, diamond can be the ultimate material for switching electricity from high-voltage lines to 220 volts. Diamonds can also be useful for quantum technology - although additional research is needed for this. The EU decided two months ago to invest 1 billion euros in quantum computers and sensors over the next ten years. "

## Antwerp expertise

In Myanmar, China and the United States there are companies that make diamonds, mainly for the jewelry market. When you say diamond in Belgium, you think of Antwerp, the global hub of the diamond trade.

"In recent years we have also seen more companies making synthetic diamonds to Europe," says Margaux Donckier, spokesperson for the Antwerp World Diamond Center. 'Antwerp has been the world leader in diamonds for 570 years. Here is the expertise. We mainly trade natural diamonds. The proportion of synthetic diamonds in this is negligible. Although that share is likely to rise in the coming years. Because Antwerp also focuses on innovation. For example, we launched a first automatic grinding machine in May. That is also perfect for synthetic diamonds. That too must still be sharpened first. I suspect that the proximity to Antwerp is one of the reasons why this company chooses Belgium. The only question is: do they want to make jewelry diamonds or do they opt for industrial applications? "

### **Start with jewelry diamonds**

"In the first three years, our focus in Lommel will be on synthetic jewelry diamonds," says Vikram Shah, the representative of Heyaru Engineering in Belgium. 'In the longer term - but the discussions are still ongoing - there is the ambition to further investigate the possibilities of synthetic diamonds for quantum computers and sensors together with Imo-Imomec, Imec's cooperation with UHasselt. One of the reasons that we are coming to Lommel is the diamond research at UHasselt. "

"The signal from Flanders, which will support us with 2 million euros, is of course also important. We will be the first diamond-producing company of that size in Europe. The first phase involves an investment of 30 million dollars (26.2 million euros), good for 12 to 15 employees. But in the longer term, in five to ten years, we want to multiply that investment to 300 million dollars (262 million euros). That means work for 120 to 150 people. "

---