

# Business

Dow Jones: +2.06% +554.98 27,480.03  
S&P 500: +1.78% +58.78 3,369.02

NASDAQ: +1.85% +202.96 11,160.57  
Wilshire 5000: +1.93% +660.31 34,788.76

Oregonian Index: 3.43% +36.00 1,084.56  
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At its new Gresham manufacturing laboratory,  
De Beers will create up to 400,000 diamonds every year

## Betting on lab-crafted sparkle

Mike Rogoway *The Oregonian/OregonLive*

Does a diamond lose its luster if it comes from a factory in Oregon?

De Beers is betting nearly \$100 million on big demand for a new class of gem manufactured in a Gresham laboratory instead of emerging from millennia of natural forces under the earth. And it's gambling the manufactured diamonds won't undercut its core market for the far more valuable traditional variety.

The Gresham gems, marketed under the Lightbox brand, sell for just \$800 a carat. A comparable natural diamond might run somewhere between \$3,000 and \$6,000 per carat.

"That's really what creates the big growth opportunity because it gives consumers the opportunity to buy this product more frequently," said Steve Coe, CEO of Lightbox, which is owned by De Beers.

After long resisting encroachment from lab-grown diamonds, De Beers reversed course two years ago and announced plans for the Gresham factory. Oregon has relatively inexpensive and reliable power and a high-tech workforce, both essential for the power-intensive chemical vapor deposition technique used to produce the diamonds.

"It is quite a high-tech manufacturing process and I think that area is quite well established as a technology hub," Coe said.

The Gresham facility employs 60 and will use 5 to 6 megawatts of electricity, equivalent to the power consumption of roughly 4,000 Northwest homes. It's in an enterprise zone, which Gresham estimates will save the company \$4.5 million over several years. The facility also received a \$300,000 state subsidy, which it must repay with interest if it doesn't maintain current hiring levels.

When production is running full steam next year, Coe said it could produce 200,000 carats of polished diamonds annually — about 400,000 diamonds altogether.

Lightbox said Thursday it will market an exclusive collection of its gems on the Blue Nile website, the first time that company has carried the lab-grown diamonds. Those items — earrings, pendants and rings — will cost between \$450 and \$1,600.

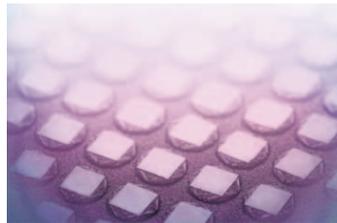
Technological advances have enabled lab-grown diamonds that are essentially indistinguishable from natural ones. Laboratories can tell the difference with sophisticated equipment, but to the naked eye — or even one aided with a magnifying glass — experts say they sparkle just the way polished diamonds always have. (Lightbox's diamonds are marked with a tiny indicator, invisible without a magnifying glass.)

Essentially, De Beers wants to have its cake and eat it, too. The company hopes people will continue to buy natural diamonds for special occasions such as engagements or momentous anniversaries, and will settle the lab-grown version for more pedestrian occasions.

"This is potentially something you could have every birthday rather than significant birthdays with a zero on the end," Coe said.



Lightbox, owned by De Beers, anticipates making up to 400,000 diamonds annually at its Gresham factory, beginning in 2021. Photos courtesy Lightbox



Natural diamonds are difficult to find and extract, so their supply is always constrained. But the production capacity of lab-grown diamonds is theoretically unlimited.

The risk, of course, is that lab-grown diamonds might undercut the far more lucrative market for natural ones. But De Beers is far from the only company making lab-grown diamonds, so those economic forces will play out whether or not De Beers enters the market.

"It comes down to consumer psychology and one of the things that really drives consumer psychology is marketing," said diamond industry analyst Paul Zimmisky.

People buy jewelry and other luxury goods because of the way it makes them feel, or because of the statement that it sends. The challenge in differentiating natural and lab-grown diamonds, he said, will be to persuade people that they are different even though they look just the same.

That might sound implausible, but Zimmisky notes that lab-grown rubies and emeralds and sapphires have been around for decades and a big price gap remains. He said a man-made emerald might cost \$100, while an equivalent natural one



Lightbox, owned by De Beers, has the space to triple its output in Gresham if consumer demand warrants that.

could fetch \$4,000 to \$6,000.

"The price alone is enough to differentiate the product in consumer's minds," he said.

Natural diamonds are difficult to find, and to extract, so their supply is always constrained. The production capacity of lab-grown diamonds is theoretically unlimited. Marketed properly, Zimmisky said big companies like De Beers may be able to differentiate the two in consumers' minds and enjoy the fruits of both markets.

"We desire rare, valuable things that look pretty," Zimmisky said. "As long as humans continue to function that way, I think there's going to continue to be demand for natural diamonds."

### OREGON COMPANIES

## Nike says HQ layoffs will hit 700 by January

Mike Rogoway  
*The Oregonian/OregonLive*

Nike said Monday it expects to eliminate 700 jobs at its headquarters near Beaverton by early January, part of a broader restructuring the company announced last summer.

The footwear and apparel company had previously pegged its Oregon layoffs at roughly 500.

The 700 cutbacks announced Monday, in a brief legal filing with state workforce officials, includes that prior tally and expands the total number of job losses by 200.

Oregon's jobless rate climbed from 3.5% in the months before the pandemic to 8.0% in September as the recession took hold. Nike's layoffs, though, aren't a response to the weaker economy — the company's sales and profits are strong. Rather, Oregon's largest business is changing strategies.

Nike announced in July that it will spend up to \$250 million cutting jobs worldwide as new CEO John Donahoe refocuses its business to emphasize online sales directly to consumers. The company employed 75,400 at the end of May, down 1,600 from a year earlier. Nike employs about 13,000 at its headquarters campus.

"We are building a flatter, nimbler company and transforming Nike faster to define the marketplace of the future," Nike said in a statement Monday.

"The changes are expected to lead to a net loss of jobs, which is always difficult," the company said. "Through this process, we are leading with our values and are committed to acting with compassion and respect for our employees."

The company hasn't said how many jobs it will cut altogether. Its Oregon layoffs include 200 at its company childcare center, which is closing permanently.

Nike's layoffs began last summer with the dismissal of more than 100 vice presidents. In October, it began cutting upper-level managers.

Nike's new business strategy, "Consumer Direct Acceleration," shifts its sales from third-party retailers in favor of more profitable sales channels the company controls itself. Nike has restructured to focus on three product categories — men's, women's and kids.

The early days of the coronavirus pandemic knocked Nike off its footing, but the company's business has recovered strongly since then.

The company reported in October that quarterly sales during the summer months totaled \$10.6 billion, roughly even with the prior year. Quarterly profits climbed from \$1.4 billion a year ago to \$1.5 billion in the most recent quarter.

Nike shares closed Monday at \$122.39, up 1.9% and just a tad below an all-time high off \$131 in mid-October.

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