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# As Wolfspeed facility rises, 'new era' beckons in Chatham



Image: Lauren Ohnesorge

TBJ got a sneak peek at Wolfspeed's Chatham County plant Tuesday.

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With the crank of a towering crane, the ceremonial topping of a **\$5 billion, long-planned semiconductor facility was complete**, but there's a way to go before it matches the ambitions of Wolfspeed, a next-generation semiconductor company aggressively trying to meet the demand of the electric vehicle industry.

The last beam was placed in front of a tent alongside the under-construction facility, attracted executives and dignitaries, from CEO Gregg Lowe to Sen. Thom Tillis.

"We are ushering in a new era for Wolfspeed," Lowe told the crowd Tuesday, adding that

it's being named after one of the company's founders, the "visionary" John Palmour.

"Ladies and gentlemen, welcome to the John Palmour Facility for Silicon Carbide," he said.

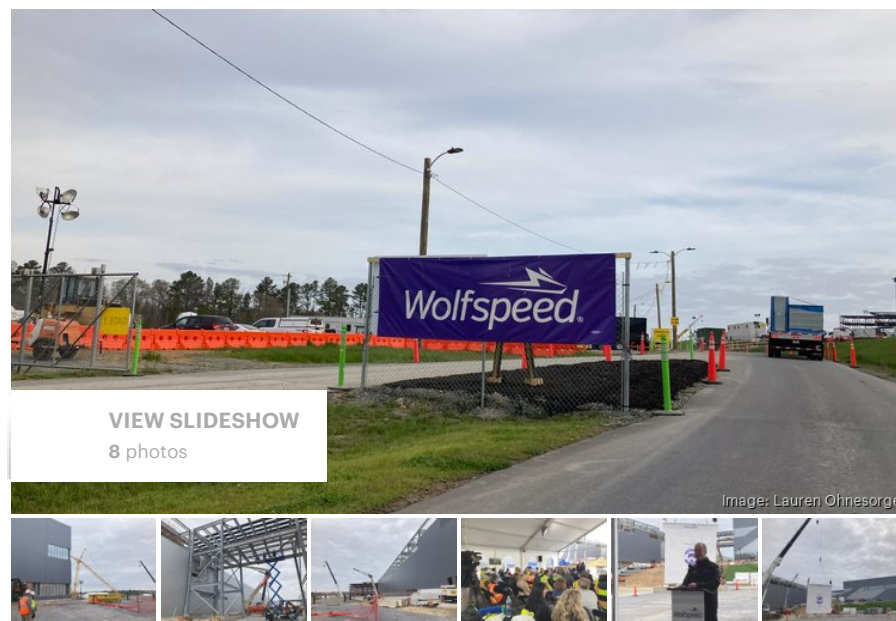


Image: Lauren Ohnesorge

Only photos of the outside were allowed, as officials said the proprietary processes are just too critical to leak to competitors.

The facility is massive, planned to be the only purpose-built, automated plant for 200-millimeter silicon carbide wafers in existence, "further positioning America as the world's greatest country for semiconductor automation," Lowe said.

Executives repeatedly used the word "revolutionary" to describe the facility which, if all goes as planned, will be ready to scale up in 2025.

"Everything is going to flow through here," said Shawn Lilly, director of facilities at the Durham headquarters. "From a strategic standpoint, this is the essential cog in the wheel."

Eventually, **the project will be home to 1,800 permanent jobs**, the company has said. Already, 150 people have been hired, ahead of schedule, said Margaret Chadwick, chief human resources officer.

"We are meeting or exceeding our headcount goals but we're focused not only on the immediate ... but people who will work here four, five years out," she said. "We won't be able to meet our goals if we are passive about recruiting."

And the construction, too, is creating local jobs.

***Closer look: CEO outlines plan for Siler City plant***

As of Tuesday, 2,007 workers were milling about the site, where crystal growers have already been installed in advance of the "minimal production" expected to start by the end of the year.

Chief Technology Officer Elif Barkas told TBJ that the first grower could come online in the next "quarter or so." The plan is to test it, certify it, and then gradually bring other growers online.

"I'm so excited," she said. "It's amazing how, a year ago, there was nothing here."

The project was officially announced in September of 2022 and within days, clearing started. The first steel beam was placed last June.

The project will be constructed in multiple phases, with the first two already envisioned. One person close to the project said the plan is to continue expanding at the site for the next decade.

The Phase 1 facility alone, which is already towering over U.S. 64 in Silver City, is 2 million square feet on 445 acres. 225 of those acres are earmarked for the complex that's been swiftly rising on the hillside.

### **Inside the plant**

Much of the project is secret. While a handful of people gathered for the topping-out ceremony early Tuesday and toured the site, no photographs were allowed.

And no specific questions about crystal growth were answered. If they were to, say, give specifics on how large the twin "crystal growth farms" are, competitors might have an idea of the output, Wolfspeed said. If they were to let cameras, or even people, behind the black plastic curtains at the far end of one of the farms, competitors might get insight into the proprietary crystal growth process, which uses massive furnaces that heat up to temperatures of 2,600 degrees – half the temperature of the sun.

It's so secretive that even President Joe Biden, on his tour of the site, wasn't allowed behind the curtains, one official told TBJ.

Wafers coming out of this factory will be headed to Wolfspeed's state-of-the-art power device plant in Mohawk Valley, New York, or directly to customers. They'll eventually be the next-generation semiconductors powering future electric vehicles and power plants.

The drive to the main plant, the "backbone" of the operation, takes you past a 3 million-gallon water tower, tanks that will serve as vaporizers for bulk gasses, truck-sized back-up generators and a central utilities building the size of three football fields.

The main spine of the big building is 1,900 feet long, a corridor that, next year, will be the busiest place on campus, with automated vehicles, equipment movers and a dedicated safety lane. Walk this corridor and you'll see the secret grow farms on the left give way to cleanrooms of varying degrees.

It's all built on a site that is primarily blue granite, requiring manipulation and blasting. The site itself, **said one person involved in its selection**, was picked because of its proximity to workers in the Triangle and in Greensboro, as well as its closeness to the Durham headquarters.

And it's **expecting support from the CHIPS Act**, though it also has private financing, including a nearly \$1.3 billion note secured **from an investment group that includes Apollo (NYSE: APO)**.

"I'm also glad to see some of the investments we're trying to make in Washington pay off," Tillis said during his remarks. "Folks, this kind of success breeds more success."

The state, too, stepped up in terms of funding, offering \$159.4 million in incentives, with Chatham County and Siler City kicking in nearly \$615 million in additional incentives in

the form of tax breaks over 30 years.