

Nike Sock-Like Flyknit Transforming Shoes as Shares Rise: Retail 2012-03-07 05:00:01.4 GMT

By Matt Townsend

March 7 (Bloomberg) -- Nike Inc.'s latest running shoe got its start when designers tried to solve a longstanding request from athletes: make shoes as comfortable as socks.

"We think a lot about what-ifs," said Ben Shaffer, studio director of Nike's so-called innovation kitchen. "This was a what-if. What if we made sock shoes?"

Nike had tried bringing sock attributes to shoes before, starting in the 1980s with a flimsy mesh sneaker called the Sock Racer. More attempts followed, and while offering comfort, they were insufficiently durable for running and other sports.

The world's largest sporting-goods maker now says it has the solution with Flyknit, a 5.6-ounce running shoe made from synthetic yarn woven together by a knitting machine. Besides giving Nike an edge in the fast-growing lightweight running category, executives say the new weaving process could cut costs enough to move production outside Asia and one day allow anyone to personalize shoes to their exact specifications.

"This is a complete game changer," said Charlie Denson, president of the Nike brand, while holding a Flyknit after its debut in New York last month. The process cuts costs so much "that eventually we could make these shoes anywhere in the world, which makes things very interesting."

Flyknit, which costs \$150 and hits U.S. stores in July, is the latest product aimed at the minimalist running movement, whose devotees advocate lightweight shoes to reduce injuries.

The lightweight category accounted for 30 percent of the \$6.5 billion U.S. running shoe market last year and was responsible for all of its 14 percent growth, according to SportsOneSource, a research firm based in Charlotte, North Carolina.

Top-Selling Shoe

The lightweight Nike Free, originally a niche product when it appeared in 2004, is now the top-selling running shoe in the U.S., SportsOneSource said. It helped push Nike's North American footwear sales up 21 percent to \$1.31 billion in the three months ended Nov. 30. Running is Nike's biggest category, generating \$2.8 billion in annual global sales, about 50 percent more than basketball and soccer.

Those sales gains have coincided with a surge in Nike's shares, which have advanced 19 percent in the past 12 months.

Nike reached an all-time closing high of \$109.24 on March 5.

The sock shoe project started four years ago with a prototype of a sock attached to a foam bottom. The concept got early support when Chief Executive Officer Mark Parker, who joined Nike as a shoe designer in 1979, made one of his regular visits to the innovation kitchen at Nike headquarters in Beaverton, Oregon, and saw the sock.

What's This?

"I was going in to look at some other things, and it was sort of like, 'What's this?'" said Parker, whose design credits include a patent for Nike Air. "We got into it, and it was like 'Wow, this has huge potential."

The designers soon decided that in order to create a shoe that replicates a sock they had to mimic how a sock is made.

Nike hired a team of computer programmers and engineers to take a machine used to knit sweaters and socks, and re-engineered it to weave the upper part of a sneaker.

Spools of colored polyester yarn are fed into the 15-foot long machine, which weaves together the top of the shoe and creates a "second skin" with tiny synthetic cables knitted into the weave around the mid-foot for support.

In a process the company calls "micro-level precision engineering," in-house software instructs the machine to minutely alter a shoe's stability and aesthetics. If the toe needs more stretch, the design can be digitally altered instantly to add Lycra-infused thread. For added strength in the heel, the computer can use multiple layers of yarn of varying thickness. Nike plans to patent the process.

Faster Production

Unlike Nike's other shoes, there is no cutting out pieces and assembling them. The upper is made in one piece and then fastened to the sole. That makes production quicker with less labor and larger profit margins, Parker said. The process also fits into Nike's sustainability push because the amount of material wasted weighs as much as a sheet of paper.

"If you think about shoemaking, it largely hasn't changed for decades, arguably centuries, because it's cut material that is sewn together," Parker said. "There is no more cutting and stitching with this. The most labor-intensive part of the footwear manufacturing process is gone from the picture."

U.S. Manufacturing

The manual work needed to attach pieces is the main reason sneakers are made in Asia's cheaper labor markets, according to Matt Powell, an analyst for SportsOneSource. Without that step, Nike could reduce production time by making shoes in the U.S.

and other major markets. Nike makes 96 percent of its shoes in Vietnam, China and Indonesia, according to a public filing.

"One of the critical issues our industry hasn't figured out is how to get products to market more quickly," said Powell, who is based in Scarborough, Maine. "The biggest time in the life cycle of getting a shoe to the U.S. is the time it spends on a boat coming from Asia. If you could eliminate that, that's a huge chunk out of the time line."

The flexibility created by cheaper, more automated shoemaking could eventually lead to a day when a person can visit a Nike store and have their foot scanned. The customer would be able to design the shoe by color and style down to a single thread. The software would then use the information to make personalized shoes.

"The potential for this is almost infinite," said Denson, who started as a Nike store manager in 1979.

The impact of shoe weaving on Nike's bottom line will depend on whether it meets consumers' demands for performance and style, according to Sam Poser, an analyst for Sterne Agee & Leach Inc. in New York. Flyknit is also just one shoe at a company with about \$23 billion in annual sales, he said.

Gross Margin

Flyknit may help Nike boost gross margin, the percentage of sales left after costs of goods sold, which has narrowed for three straight quarters and is projected to decline for a fourth owing to rising labor and material costs.

"The margins can be great, but if it doesn't sell they've got a problem," said Poser, who recommends buying Nike shares.

"These are all steps in the right direction, but individually it's not material" to the company's short-term results.

Nike's approach to innovation is to develop technology for one category and then apply it to others. Flywire, which uses synthetic cables to increase support, was released in 2008, and is now used in 60 percent of Nike's footwear. Air has even been implemented in dress shoes at subsidiary Cole Haan. Management has similar, if not bigger, plans for Flyknit.

"Because this is so revolutionary, and so comfortable, this one is going to hit from a revenue standpoint much quicker" than recent innovations, Denson said. "What this gives us the ability to do is almost unlimited."

For Related News and Information:

Consumer & Retail headlines: RTOP <GO>
Company News: NKE US <Equity> CN <GO>

Peer comparison: NKE US <Equity> PPC <GO> Relative value: NKE US <Equity> RV <GO>

--Editors: Robin Ajello, Rick Schine, Kevin Orland

To contact the reporter on this story:

Matt Townsend in New York at +1-212-617-1853 or mtownsend9@bloomberg.net

To contact the editor responsible for this story: Robin Ajello at +1-212-617-7261 or rajello@bloomberg.net