

RUNNING GEAR

The Addendum team has seen the future of running, and it's geared. adidas-Salomon AG has come out with a running shoe that has gears in it, a whole train of them.

Unfortunately, they aren't gears that you shift into. If they were, the Addendum team would be ecstatic. Imagine: lacing up your sneakers, putting them in third gear, and going for a good, long jog—just carried along by your mechanized feet.

Geared though they are, adidas 1s aren't Fiats for your feet. But these sneaks are geeked, and the Addendum team found out how from adidas.

The geeking starts in the heel of an adidas 1. Each heel has a specially designed plastic cushion with a sensor on the top and a magnet on the bottom. During each footfall, the cushion is compressed, and the sensor measures the distance between itself and the magnet based on changes in magnetic flux density. So far, the electrical engineering: fairly cool.

The geeking continues in the mid-sole. The distance measures are sent to a tiny computer. It figures whether cushioning is too hard or too soft. If it's too hard, the heel cushion needs softening.

If it's too soft, it needs hardening. In either case, the computer sends a signal to the shoe's motor. This computer engineering: also fairly cool.

Things get cooler, though, when we get to the mechanical engineering. Also in the mid-sole is a lead screw connected to a cable that runs through the cushion. If the screw is extended, the cushion is hardened. If the screw is contracted, the cushion becomes softer.

And, at last, there's the *really* cool mechanical engineering. Between the motor and lead screw, at the heart of the system, is a gear train of white, plastic spur gears. The gears are even on display. Turning over an adidas 1, we can see the spurs through a small window in the sole. It's like looking at a masterpiece through a rubberized picture frame. As cool as adidas shoes are, they're even cooler with gears in 'em.

Now, with all this machinery, no one should be surprised the adidas 1 is a high-end sneaker. Still the Addendum team was surprised at *how* high-end. We've paid as much as \$130 for a pair of basketball shoes. That was nothing. \$130 would buy *an* adidas 1, but not a pair of 'em. These sneaks will retail for \$250 a pair. Only serious runners should even try on these shoes.

The Addendum team is holding out for the ultimate running shoe, though. The shoe may not come for many years, but the adidas 1 is a first step in the right direction. It has gears and has to be turned on, so we think it's only a matter of time before the shoe company comes out with Fiats for the feet, fully mechanized running shoes.

Imagine: shoes that run for us, taking the effort out of exercise. We can hardly wait, sitting here on our couch. And once we get those shoes, we'll get doctors to get rid of the sweat thing. We're not keen on that, either. ⚙️



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