
Graphene-infused E-bike Tyres with Reduced Rolling Resistance

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Vittoria say the higher torque of e-bikes require specific e-bike tyres, and the reduction of rolling resistance on their 'E-Tires' can actually extend your range.

Tyre experts Vittoria have launched their first e-bike tyre range, and boldly claim they can actually extend your battery life. This is thanks to the [graphene](#) compound that reduces rolling resistance, say Vittoria, and they also claim the 'E-Tire' range features the most robust construction they've ever developed for ultimate puncture resistance.

The five tyres in the range are the E-Randonneur (for urban e-bikes), E-Barzo (XC), E-Aggaro (trail), E-Martello (enduro) and E-Mazza (enduro). The battery-saving claims appear to be aimed at e-mountain bikers, with Vittoria saying that the extra weight and power of an electric bike requires a tread that doesn't wear out fast.

Their Graphene compound is the answer, say Vittoria, because the '4C' layering technology that places four different layers of rubber compound into the same tread improves the strength and flexibility of the tyre knobs. This in turn means that the tyre can better resist the more rapid accelerations coming from an e-bike, and a more durable tread that rolls well for longer can positively effect battery consumption.

Vittoria don't give any numbers as to exactly how much extra battery range you could expect by switching to their E-Tires, but essentially it's the reduction in rolling resistance from the graphene-enhanced compound that is responsible for this. Graphene features on many other high-performance road racing tyres in Vittoria's range, but this is the first time we've seen it applied to an e-bike tyre.

Aside from the battery-saving claims, Vittoria say the E-Tires are the most robust they've ever made in terms of puncture resistance, with all tyres in the range getting a 2-ply casing with sidewall protection to better cope with the extra weight and power of an e-bike. The e-

Randonneur for urban and hybrid bikes (above) has a reflective sidewall for extra visibility, and a super reinforced 3 mm thick puncture resistance belt.

There's also an Air-Liner insert in the range, which Vittoria say provides "a tuneable system that gives a progressive feel". Essentially air liners gives the wheels even more protection from impacts, can increase rider comfort and also allow e-mtb riders to run their tyres at even lower pressures.

As far as we know the E-Tire range hasn't landed in the [UK](#) yet, but we'll update when we find out pricing and availability. In the meantime, you can head over to the [Vittoria website](#) for more info.

Read the [original article](#) on eBikeTips.